New-Indy Catawba LLC
P.O. Box 7
5300 Cureton Ferry Road
Catawba, SC 29704

SENT VIA ELECTRONIC MAIL

January 26, 2023

Denis B. Kler
U.S. Environmental Protection Agency (U.S. EPA), Region 4
Enforcement and Compliance Assurance Division
Policy, Oversight and Liaison Office
61 Forsyth Street, S.W.
Atlanta, GA 30303
Kler.Denis@epa.gov

Re: New-Indy Catawba LLC Consent Order Response to Appendix A Condition IV

Mr. Kler:

New-Indy Catawba LLC (New-Indy Catawba) owns and operates a pulp and paper mill in Catawba, SC (Mill). The installation of the new cover and carbon filtration system on the Post Aeration Tank was completed on June 29, 2022. As required by Condition IV.c.i, New -Indy Catawba is submitting this information regarding this new installation.

Condition IV.

IV. **Post Aeration Tank:**

a. Within 60 days of the Effective Date, Defendant shall submit a plan, subject to EPA approval, to install a cover on the Post Aeration Tank that utilizes a carbon filtration system to ensure no detectable emissions of volatile organic compounds (VOCs) (defined as 500 ppm total VOC above background). Any piping and duct work shall include test sample ports on the inlet and outlet of the filtration system.

Response:

Post Aeration Basin Cover Project: Design Summary

The permanent Post Aeration Basin cover shall be comprised of a reinforced, polymer-based non-porous membrane. These filter pads are secured in place with pockets which have hook and loop (e.g. Velcro) closure strips around the perimeter of each pad. The membrane cover is positioned over a grid of supporting stainless wire rope cables, and the cover is secured around the basin perimeter with batten bars which are positioned over the cover and fastened with multiple anchors in each batten bar. Penetrations through the cover are addressed through both wide hook and loop closures and thermally welded rubberized flexible boot that are clamped to the material penetrating the cover.

The primary VOC filtration device is a carbon filtration system consisting of a TIGG Corporation tank utilizing carbon pellets. The carbon pellet tank is connected to a blower which draws air from underneath the cover (inside the basin) and then through the carbon pellets. The permanent system has nearly twice the volume (filtration capability) as the temporary system it is replacing. Furthermore, the membrane cover is also

equipped with 101 carbon filter pads which are held in place by hook and loop closures. These carbon pads are not the primary VOC filtration method, but they do offer passive filtration potential (not mechanically forced air movement) if the installed blower were to shut down.

Ductwork is installed underneath the cover to extract air above the wastewater surface inside the basin. The ductwork then connects to the inlet side of a blower which discharges the extracted air into and through the carbon pellet filtration tank. The filtered air is then discharged to the atmosphere on the Catawba River side of the basin structure. Although not drawn on the system P&ID, the system ductwork includes sample ports for both the inlet to and discharge from the carbon filtration unit.

The ductwork is comprised of large diameter corrugated plastic pipe. The routing configuration of this corrugated ducting should result in a sustained turbulent flow pattern though the full length of each respective duct run (under cover to blower inlet, blower discharge to the filter, and from the filter to the atmosphere. The P&ID shows an earlier concept using 18" diameter corrugated pipe, but final calculations revealed the need for only 16" pipe which was specified in the Project Scope of Work documentation.

Refer to the following documents for specifics (documents are in the ShareFile site hosted by Parker Poe):
Ducting: P&ID D-001 (P&ID folder)
Installation Summary: Section 4.2.4 of "New Indy PAB Bid Specs draft 3-18.pdf" (Draft Mechanical Construction Package folder)

Sincerely,

Pete Cleveland

Technical Director

TABLE 1 – Weekly VOC Check Data

	Post Aeration Basin Weekly Check - VOC's								
Allowable Limit:	500	ppm					parts per million data		
	calculated	manual entry	manual entry	calculated		manual entry	calculated		
Date	Actual vs Limit %	Discharge Conc. ppb	Inlet Conc. ppb	In - Out ppb	MONITOR Used	Comments	*Discharge Conc. ppm*	*Inlet Conc. ppm*	*In - Out ppm*
11 / 04 / 2022	0.10 %	507	935	428	PID	PID monitor, waiting for TR8+ return from OEM	*0.51*	*0.94*	*0.43*
11 / 10 / 2022	0.07 %	363	401	38	PID	PID monitor, waiting for TR8+ return from OEM	*0.36*	*0.40*	*0.04*
11 / 18 / 2022	0.02 %	100	170	70	PID	PID monitor, waiting for TR8+ return from OEM	*0.10*	*0.17*	*0.07*
11 / 23 / 2022	0.03 %	141	233	92	PID	First measurement since TR8+ was returned. TR8+ showing different	*0.14*	*0.23*	*0.09*
11 / 23 / 2022	0.00 %	0	0	0	TR8+	First measurement since TR8+ was returned. TR8+ showing different	*0.00*	*0.00*	*0.00*
12 / 02 / 2022	0.03 %	155	202	47	PID	PID monitor, waiting for TR8+ return from OEM	*0.16*	*0.20*	*0.05*
12 / 09 / 2022	0.00 %	0	0	0	TR8+	TR8+ PT022201 (value in ppm not ppb)	*0.00*	*0.00*	*0.00*
12 / 13 / 2022	0.00 %	0	0	0	TR8+	TR8+ PT022201 (value in ppm not ppb)	*0.00*	*0.00*	*0.00*
12 / 21 / 2022	0.00 %	0	0	0	TR8+	TR8+ PT022201 (value in ppm not ppb) Teddy Smith	*0.00*	*0.00*	*0.00*
12 / 30 / 2022	0.00 %	0	0	0	TR8+	TR8+ PT022201 (value in ppm not ppb) Teddy Smith	*0.00*	*0.00*	*0.00*
01 / 05 / 2023	0.00 %	0	0	0	TR8+	TR8+ PT022201 (value in ppm not ppb) Teddy Smith	*0.00*	*0.00*	*0.00*

Media Changes: No changes since project completion on June 29, 2020.