



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

ELECTRONIC MAIL
CONFIRMATION OF E-MAIL RECEIPT REQUESTED

Mr. Doug Filyaw
Manager
Palmetto Synthetics
663 Commerce Drive
Kingstree, South Carolina 29556
doug.filyaw@palmsyn.com

Re: Industrial User Reconnaissance Inspection Report

Dear Mr. Filyaw:

Thank you for the time and cooperation extended to the representative of the United States Environmental Protection Agency, Region 4, during the February 23, 2022, inspection of the Palmetto Synthetics facility in Kingstree, South Carolina. Enclosed is a copy of the report for this inspection. If you have any questions about the report, please contact Mr. David Phillips at (404) 562-9773 or via email at phillips.david@epa.gov.

Sincerely,
Castillo,
Jairo

Jairo Castillo, Chief
Wastewater Enforcement Section
Water Enforcement Branch

Digitally signed by
Castillo, Jairo
Date: 2022.05.04
14:36:10 -04'00'

Enclosure

cc: Mr. Brian Wisnewski
South Carolina DHEC



United States Environmental Protection Agency Region 4
Clean Water Act – Wastewater Field Report

PT – Palmetto - 022322

SECTION A: Data System Coding

NPDES No.	MO/DAY/YR	Inspection-Type	Lead Inspector	Facility-Type
N/A	2/23/2022	ROS (Reconnaissance without Sampling)	David Phillips	Unpermitted Industry

SECTION B: Basic Field Data

Name and Location of Facility Inspected: (For industrial users, add recipient POTW's NPDES permit number)	Entry Date/Time: 2/23/2022 9:15 AM	Permit Effective Date: N/A
Palmetto Synthetics 663 Commerce Drive Kingstree, SC 29556 Receiving POTW: SC0035971	Exit Date/Time: 2/23/2022 10:20 AM	Permit Expiration Date: N/A
Facility Representative(s) / Title / Contact Info: Mr. Fred Morris, Safety Officer; Mr. Doug Filyaw, Manager	Other Facility Data / Permits Held: SCR003437 (Stormwater)	
Facility Responsible Official / Contact Info: Mr. Doug Filyaw doug.filyaw@palmsyn.com (843) 382-4000	Additional Inspectors / Agency / Department: Ms. Lori Baxley / SCDHEC / Columbia Mr. Danny Nicholas / SCHDEC / Columbia Ms. Shauna Stevens / SCDHEC / Myrtle Beach	

SECTION C: Areas Evaluated

☐	Permit	☒	Potential for Discharge	☐	Regulated Processes	☐	Industrial Pretreatment System
☐	Record keeping Compliance	☐	Self-monitoring Compliance	☐	Self-reporting Compliance	☐	Municipal Sewage Treatment System
☐	Slug Discharge Controls	☐	Monitoring Data	☐	Self-Monitoring Equipment	☐	Solids Handling/Disposal
☐	Compliance with Enforcement Action	☐	Other: -				

SECTION D: Summary of Findings / Comments

See attached Section D and Supporting Documentation.

Lead Inspector Digital Signature: DAVID PHILLIPS Digitally signed by DAVID PHILLIPS Date: 2022.05.04 15:03:49 -04'00'	ECAD Unit / Phone Number / E-mail WEB/WES – (404) 562-9773 – phillips.david@epa.gov
Supervisor Digital Signature: Castillo, Jairo Digitally signed by Castillo, Jairo Date: 2022.05.04 14:35:59 -04'00'	ECAD Unit / Phone Number / E-mail WEB/WES – (404) 562-9257 – castillo.jairo@epa.gov



PT – Palmetto – 022322 (Continued)

Section D: Summary of Findings / Recommendations

On February 23, 2022, the EPA was accompanied by SCDHEC representatives to conduct an unannounced Reconnaissance Inspection (RI) of the Palmetto Synthetics facility located at 663 Commerce Drive in Kingstree, South Carolina. The inspectors were greeted by facility representatives Mr. Fred Morris, Safety Officer, and Mr. Doug Filyaw, Purchasing/Warehouse Manager.

This RI was conducted in support of a broader investigation of the pretreatment program that the receiving publicly owned treatment works (POTW) is authorized to implement. The EPA interviewed Mr. Morris and Mr. Filyaw to learn more about their facility's processes and potential for discharge. The following is a summary of the RI findings and observations.

I. Records/Reports

The EPA's Enforcement and Compliance History Online (ECHO) system indicates this facility holds a stormwater permit (SCR003437) and does not hold a direct discharge permit. The POTW servicing the vicinity (SC0035971) has not been reporting the facility to SCDHEC as an industrial user, or as a user requiring an individual pretreatment permit.

II. Facility Site Review

The facility representatives shared that Palmetto Synthetics is a specialty thermoplastic fiber manufacturer. The facility produces coarse fibers for clients in the abrasive products industry and a variety of colored polyester fibers for clients in the textile industry. The resins employed in production are purchased rather than being produced onsite (i.e., Part 414 exempt). Fibers produced onsite are treated with finishing solutions (e.g., additives such as lubricants, organic detergents, dyes/colorants, chlorinated flame retardants, and silver/copper antimicrobial solutions) to make the desired products.

The facility has been producing for 24 years. The facility manager described the majority of production wastewater as a closed-loop system, although certain finishing solutions are periodically sent to the sewer lift station when product line changes are made. The facility does not have an effluent meter to gauge its process flow to the sewer, but the supply water is metered. Based on water usage in January 2022 and the average staffing level stated, the EPA estimates this non-sanitary flow may be 5,500-6,000 gallons/day.

To their knowledge, the facility representatives believed the facility has never been requested by the POTW to complete a wastewater survey or user permit application. The facility has also not been required by the POTW to install pretreatment.

The facility manager recalled at least two finishing solutions have been routinely sent to the sewer lift station. The first is a pre-mix solution of several finishing products acquired in 300-gallon totes from Goulston Technologies, Inc. This product, called Lurol PS-L814, is composed of Lurol PS-6511 (spin finish), Lurol PS-5609 (spin finish), and Lurostat AS-23 (antistatic). The component Lurol PS-6511 is composed of 65%



PT – Palmetto – 022322 (Continued)

volatiles and has a pH of 10.0. The component Lurostat AS-23 is composed of 65% volatiles and has a pH of 5.0-5.5. An additive with a mineral oil base, called Lurol Antifoam G, is added to the finishing solutions as needed. It is supplied in 55-gallon drums.

The other finishing solution that the facility manager recalled being discharged to the sewer is supplied by Ethox Chemicals, LLC. This product, Fiberlube 2535, was stated to be widely used at the facility.

The safety data sheets for the Lurol PS-L814 components instruct users “do not allow material to reach natural waterways or drains/sewers.” The safety data sheet for the Ethox product offers limited information but notes its ecotoxicology is undetermined, and that local authorities should be consulted about environmental releases.

III. Findings/Recommendations

The production wastewater that Palmetto Synthetics has been discharging to the sewer needs further review to assess compliance with the federal discharge prohibitions in 40 CFR §§403.5(a) and (b). The significant volatile composition of the Lurol product may risk interference with the safety and integrity of the sewer system, and as the safety data information suggests, its disposal to the sewer may even be prohibited. The chemical properties and risks of disposing the Ethox product to the sewer would need further investigation with Ethox.

Based upon this interview, the facility does not appear to fall under categorical standards or have a significant process flow rate. However, if a discharge is allowed by the POTW then the facility may require an individual user permit from the POTW in order to apply necessary pretreatment standards. Either independently or as required by the POTW, the facility may need to install flow measurement and onsite pretreatment equipment for process wastewaters to ensure compliance.

To aid such determinations, the POTW should have evaluated the character and volume of the facility’s process discharge prior to allowing its disposal into the public sewer (40 CFR §403.8(f)(2)). Statements by the facility and the absence of the facility from the industrial user listing that the POTW routinely reports to SCDHEC suggest this has not occurred.

The EPA recommends that Palmetto Synthetics approach the Kingstree POTW to receive a more thorough evaluation of its existing discharge and any other potential wastewaters that may pose a risk to the physical sewer or sewer maintenance operators of the POTW. Typically, this process will begin with the completion of a survey/application followed by an inspection and sampling of the facility discharge by the POTW’s designated pretreatment coordinator.