

June 29, 2023

Via E-mail (KScottMathews@umb.com)

UMB Bank, N.A., as Trustee 120 South 6th Street, Suite 1400 Minneapolis, Minnesota 55402 Attention: Corporate Trust

PureCycle: Ohio LLC

5950 Hazeltine National Drive, Suite 650

Orlando, Florida 32822 Attention: Dustin Olson

Subject: Southern Ohio Port Authority

Exempt Facility Revenue Bonds (PureCycle Project), Tax-Exempt Series 2020A Subordinate Exempt Facility Revenue Bonds (PureCycle Project), Tax-Exempt Series

2020B and Taxable Series 2020C

PureCycle Polypropylene Phase II Project

May 2023 Project Status Report

Ladies and Gentlemen:

Attached is the Construction Monitor's Project Status Report (the "Report") for the PureCycle Polypropylene Phase II Project (the "Project") for the period ending May 31, 2023 (the "Relevant Period"), being delivered to you by Leidos Engineering, LLC ("Leidos"), as Construction Monitor ("CM").

Our review of the data made available to us by PureCycle Ohio LLC (the "Owner"), Denham-Blythe Company ("Denham-Blythe") and other equipment suppliers and contractors working on the Project for the Owner was performed within the scope and terms of a Professional Services Agreement ("PSA"), dated as of May 9, 2017, between Leidos and PureCycle Technologies, LLC. On October 1, 2020, UMB Bank, N.A. as trustee (the "Trustee") under the Indenture of Trust issued by the Southern Ohio Port Authority for Exempt Facility Revenue Bonds (PureCycle Project), Tax-Exempt Series 2020A, Subordinate Exempt Facility Revenue Bonds (PureCycle Project), Tax-Exempt Series 2020B and Subordinate Exempt Facility Revenue Bonds (PureCycle Project), Taxable Series 2020C dated October 1, 2020 (the "Indenture") entered into a Consent and Agreement with Leidos outlining the terms and conditions of the Trustee's use of the reports, certificates and other work products issued by Leidos. This Report is solely for the information of and assistance to the Trustee in connection with its review of the Project and is not to be used, circulated, quoted or otherwise referred to for any other purpose. The Independent Engineer disclaims any obligation to update this Report. The information contained herein is for the benefit of the Trustee and may be used in connection with providing financing to the Company for construction and development of the Project.

To the extent that it has been practical to do so, we have verified the status of the work performed by the Owner, Denham-Blythe and the major equipment suppliers. During our review our observations indicated that progress made through the Relevant Period was not commensurate with Project objectives. As discussed further below, Mechanical Completion was achieved on April 24, 2023 and the Facility was ready for solvent introduction into the process on May 5, 2023. Solvent was introduced on May 30, 2023. Production of post-industrial recycle pellets commenced on June 20, 2023 and was confirmed by the Construction Monitor on June 28, 2023.

This Report is the last issue reporting on construction progress. Start-up and production updates will be provided as required. The next monthly Project review meeting is scheduled for July 13, 2023 at the PureCycle office in Ironton, Ohio.

Sincerely,

**LEIDOS ENGINEERING, LLC** 

Nicholas Drobot

**Construction Manager** 

ND/KMN

Attachment

Ec: Karen Napoli, Kenneth Rush – Leidos Engineering, LLC



Leidos Engineering, LLC ("Leidos" or "we"), in its capacity as the Construction Monitor reviewed the progress of engineering, procurement and construction of the PureCycle Polypropylene Phase II Project (the "Project") including: information from the Denham-Blythe Company ("Denham-Blythe"), the engineering, procurement and construction ("EPC") contractor for the Outside Battery Limits ("OSBL"), including utilities and product storage under the Construction Contract dated October 7, 2020 (the "EPC Contract") and progress information from the Inside Battery Limits ("ISBL") and OSBL major equipment suppliers. Additionally, we held discussions with the Owner's management relative to the status of the Project to review the progress for the period ending May 31, 2023 (the "Relevant Period"). We visited the Project on June 8, 2023 and participated in a progress meeting. Terms used in this Project Status Report ("Report") without definition shall have the meaning ascribed thereto in the Credit Agreement or the EPC Contract. This Report is the last issue reporting on construction progress. Start-up and production updates will be provided as required.

## **Project Technical Description**

The Project is a waste polypropylene processing facility under development by the Owner and sponsored by PureCycle Technologies, LLC (the "Sponsor"). The Project will be located on 26 acres of land in Ironton, Lawrence County (the County"), Ohio (the "Facility Site"). The Facility Site is a former Dow Chemical Company ("Dow") plant site. The Facility Site land was previously donated by Dow to the Lawrence Economic Development Corporation ("LEDC") and includes three existing buildings (Building 504, Building 507, and Building 509) totaling 150,000 square feet that will be reused for raw material delivery, processing, and storage, and for utility equipment. An affiliate of the Owner purchased the land from the LEDC, and the affiliate sold the land to the Owner for use as the Facility Site.

## **Summary**

During the progress meeting noted above, the Owner's construction manager presented detailed updates highlighting the progress of commissioning, start-up and the EPC contractor's remaining activities under the Construction Contract. The Owner also reported on progress with regard to the ISBL equipment supply contract and the PureCycle-supplied OSBL equipment.

The Owner's construction manager reported that the overall progress, as modified to reflect work added by approved change orders ("COs"), is 99.9 percent complete. As previously reported, Denham-Blythe and the major equipment supplier's engineering effort commenced with the issuance of a Notice to Proceed ("NTP") to all parties in October 2020.

During the Relevant Period, the engineering group continued work on the programming and controls integration for the distributed control system ("DCS") and documentation of as-built conditions. The EPC Contractor's activities were essentially complete with the resolution of remaining punchlist items, removal of scaffolding and demobilization continuing throughout the Facility. Expediting of replacement items continued as required.

The startup team completed the pre-startup safety review ("PSSR") walkdowns of all systems and continued final PSSR compilation. "Wet" commissioning of several extruders was completed. "Dry" commissioning of PK 720 pelletizer, dryer and classifier package was completed and "wet" commissioning commenced. Sequence testing of switching for key equipment continued and testing of adsorbent and diatomaceous earth loading sequence was completed. "Hot" leak checks were completed and introduction of solvent into ISBL systems and the ISBL start-up sequence commenced.

Mechanical Completion was achieved on April 24, 2023 and the Facility was ready for solvent introduction into the process on May 5, 2023. Solvent was introduced on May 30, 2023 allowing key ISBL start-up activities to commence. Subsequent to the visit, production of post-industrial recycle pellets commenced on June 20, 2023 and was confirmed by the Construction Monitor on June 28, 2023.

As previously noted, there are numerous delays that have previously impacted the Project or continue to impact the Project, even if not directly impacting the current critical path. These impacts include, but are not limited to, the war in Ukraine, COVID-19, supply chain issues and low water on the Mississippi River. Nevertheless, as mentioned above, major milestones have now been achieved. The Owner continues to evaluate commissioning and start-up of operations procedures so as to ensure the safe and efficient start of operations. Budget overruns beyond contingency continue to be funded by PCT.

During the Relevant Period there was one Occupational Safety and Health Administration ("OSHA") recordable safety incident reported and one lost time incident. There were no environmental incidents reported during the Relevant Period. The Owner reported that subsequent to the Relevant Period, a lost time incident occurred.

## **Project Status**

The Owner's construction manager reported the actual and planned schedule progress percentage complete for construction and start-up activities. The progress percentage reported for construction, start-up and total were 100, 96.7 and 99.9, respectively.

#### **EPC Contract Activities**

EPC contract activities were reported to be essentially complete with the resolution of remaining punchlist items, removal of scaffolding and demobilization continuing throughout the Facility. Expediting of replacement items continued as required.

Mechanical Completion was achieved on April 24, 2023 and the Facility was ready for solvent introduction into the process on May 5, 2023. Solvent was introduced on May 30, 2023 allowing key ISBL start-up activities to commence.

Subsequent to the visit production of post-industrial recycle pellets commenced on June 20, 2023 and was confirmed by the Construction Monitor on June 28, 2023.

# **Owner Activities, Off-Site and Interconnection Projects**

The Owner's construction manager and the Owner provided updates covering the Owner's responsibilities and offsite and interconnection project activities on the Project. As of the end of the Relevant Period, the Owner reported that all permits required for the current phase of construction are in place and that remaining permitting activities for operation were progressing materially as planned.

#### Interconnections

The Owner previously reported that the natural gas line to the Facility was installed. Installation of the metering related foundations was completed and the gas metering skid was set. Installation of "point-of-distribution" items was completed as was the commissioning of the gas line to the boundary line and natural gas was later brought into the Facility.

As previously reported, installation of the substation was completed and the substation was successfully energized on March 17, 2022. Energizing of all areas on permanent power was completed.

## Start-Up, Commissioning and Operations

Overall, the Owner's construction manager reported that, as modified to reflect work added by additional approved COs, 96.7 percent of the commissioning was completed.

Checkout, commissioning and start-up activities through the Relevant Period include, but are not limited to, the following:

- Continued configuration of DCS;
- · Continued loop checking;
- Completed "wet" commissioning of several extruders;
- Completed "dry" commissioning and commenced "wet" commissioning of PK-720 pelletizer, dryer and classifier package;
- Completed PPSR walkdowns;
- Continued final PSSR compilation for remaining systems;
- Continued sequence testing of switching for key equipment;
- Continued pressure testing of systems;
- Completed testing of adsorbent loading sequence;
- Completed testing of diatomaceous earth loading sequence;
- Accepted delivery of solvent;
- Completed "hot" leak checks;
- Commenced introduction of solvent into ISBL systems; and
- Commenced ISBL start-up.

At the time of the June 8, 2023 visit the Owner reported that all but seven of the 1,863 loop checks were completed. The Owner noted that the remaining loops are non-critical process information devices and are not needed for operation. All 63 systems were previously deemed mechanically complete. PSSRs were reported to be essentially complete.

As previously reported, hiring of Facility personnel was essentially complete with all salaried positions but one having been filled.

# Safety/Environmental/Permits

## Safety and Environmental

The following items were reported through the Relevant Period:

- During the Relevant Period, the Owner's construction manager reported that there was one OSHA
  recordable incident and one lost time incident. Since the commencement of work at the Project
  Site, there were five recordable incidents and two lost time incidents.
- The Owner reported that there were 11,500 manhours worked during the Relevant Period and 1,249,856 cumulative manhours worked through the end of the Relevant Period.

There were no environmental incidents reported at the Project Site during the Relevant Period.

We note that strict fire retardant personal protective equipment ("PPE") and clothing are now required, and that all work activities now require a "hot work permit" to be executed.

#### Permitting

Denham-Blythe continued to work with the Owner to secure the appropriate permits, certificates, notifications and approvals necessary to support the then-current phases of construction at the Project Site. Denham-Blythe is providing support to ensure overall compliance with applicable laws, regulations, permits and approvals.

The Owner and EPC Contractor reported that the following permitting activities were completed or continued through the Relevant Period:

- Continued to implement and monitor the stormwater pollution prevention plan ("SWPPP") at the Facility Site;
- Continued implementation of changeover to the SWPPP for industrial operations;
- Continued dust collection monitoring as per the air permit monitoring requirements in conjunction with start-up and commissioning of pre-process equipment in Building 504 and conveyance systems; and
- Continued coordination with local wastewater treatment plants and the Ohio Environmental Protection Agency ("OEPA") to ensure compliance with all environmental permits for commissioning activities.

The Owner reported that the EPC Contractor was coordinating activities with local agencies for a consolidated certificate of occupancy for the whole Facility.

### **Schedule**

Achievement of certain major schedule milestones were reviewed during the June 8, 2023 visit. The remaining key completion milestones are presented in Table 1.

Table 1
Key Completion Milestone Dates (1)

Key Event	Planned Date (1)	Forecasted/ Actual Date <sup>(2)</sup>
ISBL Hot Commissioning and Start-Up Milestones		
Facility Mechanical Completion		April 24, 2023 (A)
Facility Ready for Solvent Introduction	February 7, 2023	May 5, 2023 (A)
Initial Production on "Post-Industrial" Feed	February 15, 2023	June 20, 2023 (A)
Initial Production on (Post-Consumer) Recycled Feed	March 2, 2023	Q3 2023
Process Capable of Running at 100 Percent Rates		
(Performance Test Capable)	March 7, 2023	Q3 2023
Major Completion Milestones		
Commercial Operations (Initiation of Polymer and		
First Production of Saleable Product)	February 15, 2023	June 20, 2023 (A)
Target Substantial Completion	March 20, 2023	Q4 2023

<sup>1)</sup> Targeted dates based on the March 2023 Monthly Construction Report.

<sup>2)</sup> An (A) after a date indicates an actual date or completed activity.

Mechanical Completion was achieved on April 24, 2023. Subsequent to the June 8, 2023 visit, production of post-industrial recycle pellets commenced on June 20, 2023, and was confirmed by the Construction Monitor on June 28, 2023. Substantial Completion is to occur at the conclusion of a successful performance test and was targeted to occur in Q4 2023.

The Owner indicated that due to the newness of the process and technology of the Project, the above planned and forecasted dates are not considered fixed but are considered targets with a plus/minus range of two weeks. This plus/minus range allows for the Project team to respond to any unforeseen conditions or troubleshooting that often occur during the start-up and commissioning process.

## **Change Orders**

There were several COs approved or finalized by the Owner with Denham-Blythe or major equipment suppliers during the Relevant Period. Table 2 shows approved COs under the EPC Contract, major equipment supply contracts and other budget variances through April 30, 2023. The total out-of-scope cost approved and/or pending COs under the EPC Contract, major equipment supply contracts and other budget variances, as of April 30, 2023, was approximately \$128,755,152, of which Contingency will fund \$21,153,011. The remaining \$107,486,734 is being funded by PCT. The Owner also reported that there were several COs in the review process..

Table 2
Construction Contract Approved and Pending Change Orders
and Other Budget Variances

Item No.	Contract/Area	Cost Impact	Schedule Impact	Status
				Approved/
1	Total ISBL Equipment Supply (1)	\$12,809,637	None	Pending
				Approved/
2	Total EPC Contract (1)	121,257,955	None	Pending
3	Material Handling	1,710,595	None	Approved
4	Pre-processing Equipment (2)	252,172	None	Approved
5	Degassing Equipment Contract (1) (2)	(14,110)	None	Approved
6	Additional Shipping Costs	3,150,000		
	Sub-Total	\$139,166,249		
	Other Budget Variances/Credits	(10,411,097)		
	Total	\$128,755,152		

<sup>1)</sup> Various COs.

The Owner previously reported that the bulk of the \$107,486,734 and the additional pending COs, noted above and funded by PCT for COs and other budget variances, is related to supply chain issues reported to be due to COVID-19 and a Project de-risking activity that allows PCT to process higher levels of solids and polyethylene in the feedstocks, and other recently identified improvements. The Owner also reported that the most recent CO increases are a result of costs associated with delays caused by weather, engineering field revisions, and delivery from suppliers of minor components such as valves, pipe spools or other replacements due to damaged or faulty components.

We note that the forecasted budget will increase due to the delay of completion and additional COs as well as due to pending COs not being included in the current budget. As noted above, the Owner reported that, subsequent to the Relevant Period, an additional \$1,000,000 of COs were approved.

<sup>2)</sup> Approximate conversion from Euros.

# **Summary of Cost and Contingency**

During the Relevant Period, the Borrower made payments with PCT funds covering work completed during May 2023.

The budget and expenditures, as presented by the Owner, are shown in Table 3.

Table 3
Facility Budget and Expenditures through the Relevant Period (1)

Cost Category	Facility Budget <sup>(1)</sup>	Adjusted Facility Budget	Payments Made to Date	Remaining Budget
Facility Costs (2)	\$ 242,079,604	\$351,396,338	\$316,889,703	\$34,506,636
LOC (3)	1,830,000			0
Financing Costs	97,979,918	97,979,918	59,606,227	38,373,691
Capitalized Interest Reserve (4)	55,723,700	55,723,700	39,491,742	16,231,958
Debt Service Reserve (5)	20,987,800	20,987,800		20,987,800
Cost of Issuance (6)	21,268,418	21,268,418	20,114,485	1,153,933
Development Costs (7)	55,735,603	55,735,603	55,735,603	
Total	\$397,625,125	\$505,111,860	\$432,231,533	\$72,880,327

- 1) "Facility" refers to the production facility located in Ironton, Ohio and referred to by PCT as "Plant 1".
- 2) Facility Costs include: engineering, procurement of certain materials, construction costs, program management, inspections and testing and other various required elements for cost to complete the Facility.
- 3) Letter of Credit ("LOC") is related to an LOC for the Facility and was included in restricted cash on the PCT balance sheet.
- 4) Capitalized Interest Required Reserve represents future interest payments through December 1, 2023.
- 5) Debt Service Required Reserve represents a portion of debt service required to be in reserve.
- 6) Cost of Issuance represents remaining reimbursable costs for engineering reviews, legal fees, etc.
- 7) Development Costs include: cost to construct the FEU, land purchases and other development related expenses.

The adjusted Facility budget is \$505,111,860 and includes \$21,153,011 of construction contingency. Cumulative Project expenditures reported by the Borrower were \$432,231,533. Included in the current expenditures are total costs as shown in Table 3 in the columns titled "Payments Made to Date". Through the Relevant Period, net allocation of contingency, allowances and actual or planned payments by PCT were reported to be \$21,153,011. We note that although this amount was allocated and funds will be or have been drawn, the appropriate funds will be returned to contingency in the allowed time to maintain the required \$21,153,011 level.

## **Miscellaneous**

None at this time.

## **Areas of Concern**

As previously noted, there are numerous delays that have previously impacted the Project or continue to impact the Project, even if not directly impacting the current critical path. These impacts include, but are not limited to, the war in Ukraine, COVID-19, supply chain issues and low water on the Mississippi River. Nevertheless, Mechanical Completion was achieved on April 24, 2023 and the Facility was ready for solvent introduction into the process on May 5, 2023. Solvent was introduced on May 30, 2023 allowing key ISBL start-up activities to commence. Subsequent to the June 8, 2003 visit, production of post-industrial recycle pellets commenced on June 20, 2023 and was confirmed by the Construction Monitor on June 28, 2023.

The Owner continues to evaluate commissioning and start- up of operations procedures so as to ensure the safe and efficient start of operations.

As previously noted, the Owner also reported that several other items had earlier delayed near critical activities. These items include, but are not limited to, the Project safety management effort requiring significantly more time than planned, supply chain issues causing the preprocessing equipment to be delivered late, and significantly longer lead times for structural steel.

# **Photographs**

Photographs included in Attachment 1 were taken on June 8, 2023.

**Attachment 1: Photographs** 



Figure 1: Commissioned Extruder on Hot Stand-by







Figure 3: ISBL Miscellaneous Pumps and Piping







Figure 5: Solvent Storage and Receiving Area



