

October 25, 2021

Via E-mail (Katie.Carlson@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: Michael Otworth

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 September 2021 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 September 30, 2021 (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. This Report is not intended to, and may not be construed to benefit any party other than the Trustee and the Bondholders (as defined in the Indenture).

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 and nothing has come to our attention during the review and observation that should cause us to believe that the progress made through the Relevant Period was not commensurate with Project objectives.

The next monthly Project review meeting is scheduled for November 11, 2021 at the PureCycle office in Ironton, Ohio. If you have any questions regarding this Report, or other aspects of the Project, please contact me by phone at 508.935.1606 or via email at <a href="Nicholas.Drobot@leidos.com">Nicholas.Drobot@leidos.com</a>.

Sincerely,

**LEIDOS ENGINEERING, LLC** 

Nicholas Drobot

**Construction Manager** 

ND/KMN

Attachment

Ec: Karen Napoli, James (Jim) Newell – Leidos Engineering, LLC



Leidos Engineering, LLC ("Leidos" or "we"), in its capacity as the Construction Monitor ("CM") reviewed the progress of engineering, procurement and construction of the PureCycle Polypropylene Phase II Project (the "Project") including: monthly reports 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 September 301, 2021 (the "Relevant Period"). We visited the Project job site in Ironton, Ohio on October 14, 2021 and participated in a progress meeting held at the PureCycle office near the Project site in Ironton, Ohio. Terms used in this Project Status Report ("Report") without definition shall have the meaning ascribed thereto in the Credit Agreement or the EPC Contract.

# **Project Technical Description**

The Project will be 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 and Denham-Blythe presented detailed updates highlighting the progress of EPC contractor 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 is 38.4 percent complete as compared to a re-baselined plan of 44.0 percent complete. As previously reported, Denham-Blythe and 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 the design of sanitary sewer collection, domestic water distribution and natural gas distribution utility systems. Development of the ISBL 3D model continued as did integration of controls. Design of ISBL foundations, augercast and stone columns for deep foundations and foundations for the wastewater treatment system were completed as was site lighting design. Procurement activities continued with the receipt of proposals for the butane tanks and Fire Pump House and Commons Building. Requests for proposals for knockout drums and catch tanks were issued. Monitoring of delivery schedules for all major equipment continued. Construction activities by Denham-Blythe continued with installation of drywall and painting in office areas of existing buildings as well as existing building slab modifications and installation of pads and foundations. Installation of masonry walls in Building 504 "E-House" was completed and setting of the electrical gear commenced. Installation of fire suppression system and lighting in Building 507 was completed. Installation

of underground fire protection continued as did installation of the stormwater drainage system. In summary, the Project appears to be materially on schedule, if lagging somewhat, and within budget.

The Owner continued to report that the required activities to support the PureCycle-supplied OSBL equipment continued materially on schedule to ensure timely coordination with ISBL and OSBL design. Deliveries of equipment continued during the Relevant Period.

During the Relevant Period there were no Occupational Safety and Health Administration ("OSHA") recordable safety incidents reported. No reportable environmental incidents were reported at the Project Site during the Relevant Period.

# **Project Status**

The Owner's construction manager reported the actual and planned schedule progress percentage complete for engineering, procurement and construction activities. We note that a new baseline schedule was established at the end of June 2021. The schedule progress is shown in Table 1.

Table 1
Completion Progress – PureCycle Polypropylene Phase II Project (1)

Project Phase	Cumulative Through September 2021 Planned % <sup>(2)</sup>	Cumulative Through September 2021 Actual %	Cumulative Through August 2021 Actual %
Engineering	83.9	82.1	71.9
Procurement	39.9	36.0	28.5
Construction	37.5	26.3	23.8
Start-Up	0.0	0.0	0.0
Weighted Total	44.0	38.4	32.3

<sup>1)</sup> All progress is shown in percent ("%") unless noted.

## **EPC Contract Activities**

EPC Contract activities reported by the Owner, the Owner's construction manager, Denham-Blythe and major equipment suppliers included engineering, procurement and construction activities as described herein.

## Engineering

Overall, the Owner's construction manager reported that 82.1 percent of the engineering and design effort was completed against a planned 83.9 percent of the new baseline plan. The Owner reported that detailed engineering coordination meetings are continuing, as required, with Denham-Blythe, the ISBL equipment supplier and the OSBL equipment supplier. Denham-Blythe, the major equipment suppliers and the Owner continued to coordinate information exchanges specific to material handling interfaces with the ISBL systems.

<sup>2)</sup> The "planned" percentage complete represents the re-baseline established in June 2021 maintaining the contractual dates.

ISBL, OSBL and major equipment engineering activities through the Relevant Period include, but are not limited to, the following:

- Continued development of site utilities;
- Continued engineering of wastewater pre-treatment system ("WWPTS");
- Continued the design of sanitary sewer collection, domestic water distribution and natural gas distribution utility systems;
- Continued engineering for ISBL flare header and knockout drums;
- Completed 3D modeling of the solids removal system knockout drums for the OSBL flare header;
- Completed bid package for knockout drums and catch tanks;
- Continued ISBL module structural design;
- Continued development of the ISBL 3D model;
- Continued level of protection analysis ("LOPA") reviews;
- Continued controls integration;
- Completed design of ISBL foundations;
- Completed design of augercast and stone columns for deep foundations;
- Completed Rail Loading Building structural design;
- Continued finalizing "issued for construction" plans for the Rail Loading Building;
- Completed review and approval of operator work station locations and orientation;
- Completed process building structural design;
- Completed process building architectural and structural drawings;
- Completed design of foundations for wastewater treatment system;
- Completed preliminary ISBL foundation design;
- · Completed site lighting design; and
- Completed site fiber network architecture design.

Our review of engineering activities indicates progress materially in support of Project objectives.

#### Procurement

Overall, the Owner's construction manager reported that 36.0 percent of the procurement effort was completed against a planned 39.9 percent of the new baseline plan.

ISBL, OSBL and major equipment procurement activities through the Relevant Period include, but are not limited to, the following:

- Commenced review of received proposals for the butane tanks;
- Commenced review of received proposals for Fire Pump House and Commons Building;
- Issued request for proposals for knockout drums and catch tanks;
- Continued monitoring of long lead substation equipment delivery schedule;
- Continued to monitor timing of vendor engineering submittals;

- Continued ISBL supplier and sub-vendor information exchange; and
- Continued to accept and offload deliveries of equipment, including, but not limited to, shipments of material handling and dust collection equipment, ducting, piping and transformers for "E-Houses".

We note that the delivery of long lead electrical equipment for the substation and interconnection is scheduled for December 2021. The pre-processing wash-line components have shipped and were scheduled to arrive by the end of October 2021.

Although procurement is tracking materially on schedule, the Owner reported that they and the EPC Contractor are closely monitoring market conditions and supply chain impacts from COVID-19 to track and minimize risk, if any, to the schedule. As an example, current market conditions are contributing to longer lead times for structural steel.

### Construction

Overall, the Owner's construction manager reported that 26.3 percent of the construction effort was completed against a planned 37.5 percent of the new baseline plan. Denham-Blythe construction activities through the Relevant Period include, but are not limited to, the following:

- Continued installation of sanitary sewer;
- Continued installation of stormwater drainage system;
- Continued installation of site fire water distribution system;
- Completed installation of drywall and commenced painting in administrative area of Building 504;
- Completed installation of overhead doors in Building 504;
- Completed installation of Building 504 truss reinforcing;
- Completed installation of masonry walls in Building 504 "E-House" and commenced setting of electrical gear;
- Continued installation of Building 504 canopy structural steel;
- Continued slab modifications and foundation installation in Building 504;
- Continued rough-in of mechanical and electrical in the equipment area and loading dock areas of Building 504;
- Continued installation of lighting in Building 504;
- Completed installation of fire suppression system in Building 507;
- Completed installation of lighting in Building 507;
- Continued rough-in of electrical in Building 507;
- Continued installation of drywall and painting in office area of Building 507;
- Continued installation of masonry walls at Building 509 "E-House";
- Continued under-slab rough in "E-House" area of Building 509;
- Continued cleaning and painting of Building 509 structural steel;
- Continued slab modifications for equipment foundations and pads in Building 509;
- · Continued installation of trench drains in Building 509; and
- Continued installation of feedstock silos.

Our review of the construction activities indicates progress materially in support of Project objectives, even if lagging somewhat. The Owner is currently working with Denham-Blythe to address potential impacts, if any, to the critical path or the completion date.

# **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 permitting activities for the upcoming phases of the Project were progressing materially as planned. Work is progressing on obtaining the remaining permits. As previously reported, a tracking procedure has been implemented and is being tracked for schedule compliance.

### ISBL Equipment Supply

As previously reported, the procurement process has begun and several schedule critical supply and fabrication subcontracts were awarded, including but not limited to, high-pressure vessels and extruders. Review of ISBL equipment supplier's drawings continued. Required interface coordination continued for the extruder and material handling as well for the flare, knock-out drum and vent relief design. Placement of purchase orders to sub-suppliers for material and equipment continued. Fabrication of module structural steel continued. The Owner reported that progress was materially on schedule.

### Pre-processing Equipment Supply

As previously reported, the pre-processing equipment supplier's initial engineering kickoff meeting was held on October 14, 2020. The pre-processing equipment supplier continued with engineering and design activities and development of detailed equipment drawings and operations and maintenance ("O&M") manuals. The pre-processing wash-line components have shipped and were scheduled to arrive by the end of October 2021.

# Material Handling Equipment Supply

As previously reported, the material handling equipment supplier's initial engineering kickoff meeting was held on October 15, 2020. The material handling equipment supplier continued with the development of their portion of the rail load out system, the development of the finished material handling and the development of the ISBL waste streams and bi-product conveyance system. Coordination with extrusion equipment in Building 610 continued as did the fabrication of the raw material handling and storage systems. Delivery of feedstock silos and conveyance system components continued.

## Degassing Equipment Supply

As previously reported, the degassing equipment supplier's initial engineering kickoff meeting was held on October 12, 2020. As previously reported, the degassing equipment supplier reported that engineering was complete and that procurement of material and fabrication was in progress. Delivery of degassing system components continued during the Relevant Period.

### Interconnections

The Owner previously reported that the natural gas line to the Facility was installed. Installation of the metering related foundations was completed, the gas metering skid was set and installation of "point-of-distribution" items continued.

As previously reported, the kick-off meeting with AEP was held on January 12, 2021 and regular progress meetings continue. Ordering of long lead substation equipment was completed. The Owner previously reported that construction was scheduled to commence in November 2021 and be completed in March 2022.

The wastewater tie-in to the County system effort continued during the Relevant Period with the coordination of OSBL site connections. As previously reported, the selected contractor confirmed a December 2021 installation completion schedule.

# Start-Up, Commissioning and Operations

The Owner reported that activities in support of start-up and commissioning of the Project were not scheduled to commence.

The plant manager continued planning for the hiring of plant personnel and has established the required level of personnel as well as their duties. The training program and manuals are in development. As previously noted, a number of plant personnel positions will be filled by specific current Owner personnel. Hiring of the remaining plant personnel is scheduled to commence in late 2021.

Development of the operator training program continued as did the review of O&M manuals submitted to date by sub-suppliers.

# Safety/Environmental/Permits

# Safety and Environmental

The following items were reported through the Relevant Period:

- During the Relevant Period, the Owner's construction manager and Denham-Blythe reported there
  were no OSHA recordable incidents and no lost time incidents. Since the commencement of work
  at the Project Site, there was one recordable incident and no lost time incidents.
- The Owner reported that there were 12,477 manhours worked during the Relevant Period and 71,977 cumulative manhours worked through the end of the Relevant Period.

The Owner reported that COVID-19 trends continued to be monitored and that policies have been modified to reflect current CDC guidelines. To date, there has been one reported case of COVID-19 on the construction site. However, during the Relevant Period several crews had to quarantine due to site COVID-19 policies.

### **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;
- · Received the permit-to-install for the industrial wastewater collection system; and
- Continued working on the building permits and obtaining those permits required for the current phase of construction. As previously reported, Denham-Blythe finalized the SWPPP plan for construction. The SWPPP plan identified the Best Management Practices ("BMPs") that were to be installed prior to disturbing the Facility Site. These BMPs will be maintained until the SWPPP permit is closed.

The Owner reported that all necessary permits required for the current construction activities have been or are being secured. The Owner also reported that the required activities for the air permit modifications are in progress and are on schedule. The modifications are associated with material handling and purification.

# **Quality Assurance**

As previously reported, Denham-Blythe, in cooperation with the Owner, developed a detailed quality surveillance plan for the Project which will be updated, as required, to address any additional quality surveillance required for the then-current phase of construction. As part of the execution of the Project, each supplier and contractor is required to submit a copy of their quality control plan to the Owner.

During the Relevant Period, the Owner reported no material quality assurance issues. Denham-Blythe reported that the required compaction testing of subgrade installation and backfilling continued as did the concrete sampling and gathering of test cylinders. Inspection of masonry installation was also being performed. During the Relevant Period a nonconformance report ("NCR") was issued related to a Building 507 sprinkler system design and installation item. The NCR was dispositioned, addressed and closed.

The Owner reported that the boiler factory pressure testing was successfully performed during the Relevant Period.

## **Schedule**

Table 2 displays key Project milestone dates. The "Start Raw Material Handling Equipment Installation" key Project milestone was achieved during the Relevant Period.

Table 2
Key Project Milestone Dates (1)

Key Event	Planned Date <sup>(1)</sup>	Forecasted/ Actual Date (2) (3)
ISBL Equipment Supplier Delivery Schedule	Trainied Bate	Actual Butc
Stair and Pipe Rack Modules Arrive at Site	December 13, 2021	December 14, 2021
Non-Long Lead Vessel Modules Arrive at Site	May 12, 2022	May 17, 2022
Long Lead Vessel Modules Arrive at Site	June 1, 2022	July 19, 2022
Packaged and Ship Loose Equip. Arrive at Site	June 22, 2022	June 22, 2022
Construction Contract Schedule		
Issue OSBL Major Equip. Purchase Orders	October 7, 2020	October 7, 2020 (A)
OSBL Construction Start	November 30, 2020	November 30, 2020 (A)
Start Initial Earthwork (Mass Grading)	January 7, 2021	January 15, 2021 (A)
Start Site Utilities – Natural Gas, Water, Sewer	February 11, 2021	April 28, 2021 (A)
Start Degassing Equipment Installation	January 10, 2022	February 15, 2022
Start Raw Material Handling Equip. Installation	September 2, 2021	September 13, 2021(A)
Start Finished Material Handling Equip. Installation	October 20, 2021	December 7, 2021
OSBL Mechanical Completion – Phase A	January 10, 2022	August 29, 2022
OSBL Substantial Completion – Phase A	February 11, 2022	September 20, 2022
Start Packaged Equipment Module Setting	June 27, 2022	June 27, 2022
All Modules Set and Leveled	August 4, 2022	July 21, 2022
OSBL Mechanical Completion – Phase B	July 14, 2022	July 29, 2022
OSBL Substantial Completion – Phase B	July 21, 2022	August 30, 2022
All Modules Installed and Interconnected	August 31, 2022	September 5, 2022
Detail ISBL Integration with OSBL Complete	August 31, 2022	September 5, 2022
Start Hot Commissioning	September 11, 2022	September 20, 2022
OSBL Mechanical Completion – Phase C	September 11, 2022	September 19, 2022
OSBL Substantial Completion – Phase C	November 26, 2022	November 29, 2022
ISBL Mechanical Completion	October 17, 2022	October 12, 2022
Start Performance Testing	November 20, 2022	November 18, 2022
Commercial Plant Producing Final Product	December 1, 2022	December 1, 2022

- 1) Original baseline dates.
- 2) An (A) after a date indicates an actual date or completed activity.
- 3) From August 2021 Monthly Construction Schedule

As mentioned above, a new baseline schedule was established at the end of June 2021 maintaining the contractual dates. The Owner and Denham-Blythe reported that the Project's summary critical path is through ISBL design, procurement, delivery, installation, commissioning, and start-up. The Owner also reported that, to date, there has been no material variance to the critical path from the original contract schedule.

# **Change Orders**

There were no change orders ("COs") approved or finalized by the Owner with Denham-Blythe or major equipment suppliers during the Relevant Period. Table 3 shows approved COs under the EPC Contract and major equipment supply contracts through the end of the Relevant Period. The total out-of-scope cost approved and/or pending under the EPC Contract and major equipment supply contracts as of the end of the Relevant Period was approximately \$14,563,346 of which Contingency will fund \$7,781,032, the Sponsor has funded \$1,225,565 and \$5,556,749 is being funded by Budgeted Allowances and realized savings.

We note that PCT has identified additional change orders which are supply chain related due to COVID-19 and a project de-risking activity that allows PCT to process higher levels of solids and Polyethylene in the feedstocks. These potential change orders are in the range of \$30,000,000 to \$40,000,000 and will be paid for by PCT with existing funds and not by the Project.

Table 3
Construction Contract Approved and Pending Change Orders

Item No.	Contract/Area	Cost Impact	Schedule Impact	Status
1	Total ISBL Equipment Supply (1)	\$ 2,107,089	None	Approved
2	Total EPC Contract (1)	11,552,614	None	Approved
3	Material Handling	754,286	None	Approved
4	Pre-processing Equipment (2)	155,880	None	Approved
5	Degassing Equipment Contract (1) (2)	(6,523)	None	Approved
	Total	\$14,563,346		

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

# **Summary of Cost and Contingency**

Subsequent to the Relevant Period, the Borrower submitted the Borrower's Requisition for Payment Certificate dated October 15, 2021 (the "Construction Requisition") covering work completed during September 2021.

The budget and expenditures, as presented by the Owner are:

Table 4
Facility Budget and Expenditures through the Relevant Period (1)

Cost Category	Facility Budget (1)	Payments Made to Date	Pending (2)	Remaining Budget
Facility Costs (3)	\$ 242,079,604	\$ 87,966,421	\$ 20,000,041	134,113,141
Financing Costs	99,809,918	33,191,868		66,567,470
Capitalized Interest Reserve (4)	55,723,700	11,948,446		43,775,254
Debt Service Reserve (5)	20,987,800			20,987,800
Letter of Credit (6)	1,830,000	1,830,000		0
Cost of Issuance (7)	21,268,418	19,413,422	50,580	1,804,416
Development Costs (8)	55,735,603	<u>55,735,603</u>		
Total	\$397,625,125	\$176,893,893	\$20,050,621	\$200,680,611

- 1) "Facility" refers to the production facility located in Ironton, Ohio and referred to by PCT as "Plant 1".
- 2) Current Requisition.
- 3) 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.
- 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) Letter of Credit ("LOC") is related to an LOC for the Facility and is included in restricted cash on the PCT balance sheet. The current LOC is \$2,110,000 with a currently estimated spending of \$280,000 of full amount.
- 7) Cost of Issuance represents remaining reimbursable costs for engineering reviews, legal fees, etc.
- 8) Development Costs include: cost to construct the FEU, land purchases and other development related expenses.

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

We note that the total Facility budget includes \$21,153,011 of construction contingency. Cumulative Project expenditures reported by the Borrower (including the Construction Requisition above) were \$196,944,473. Through the Relevant Period, net allocation of contingency and allowances was reported to be \$7,781,032. We note that although this amount was allocated, the funding of contingency remains at the required \$21,153,011 level.

### **Miscellaneous**

The Owner reported that COVID-19 trends continued to be monitored and that policies have been modified to reflect current CDC guidelines. To date, there has been one reported case of COVID-19 on the construction site. However, during the Relevant Period several crews had to quarantine due to site COVID-19 policies.

Although procurement is tracking materially on schedule, the Owner reported that they and the EPC Contractor are closely monitoring market conditions and supply chain impacts from COVID-19 to track and minimize risk, if any, to the schedule. As an example, current market conditions are contributing to longer lead times for structural steel.

### **Areas of Concern**

None at this time.

# **Photographs**

Photographs included in Attachment 1 were taken on October 14, 2021.

**Attachment 1: Photographs** 



Figure 1: Erection of Material Storage Silos







Figure 3:Completed Partitions and Drywall in Building 504 Administrative Area







Figure 5: Installation of Site Drainage System



