



SUSQUEHANNA RIVER BASIN COMMISSION

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ABR(e) Application Consumptive Use from Public Water Supply New/Renewal Application Project Summary

SRBC Pending No.: 2025-060

This summary is only a portion of the application materials and is meant to provide general information about the proposed project.

Project Sponsor

Company Name:	Dart Container Corporation of Pennsylvania - Lancaster	State:	PA
Address:	110 Pitney Road	Zip Code:	17602
City:	Lancaster	Title:	
Contact Person:	Vas Benner	Fax:	
Telephone:	(717) 987-8541	Email:	vas.benner@dart.biz
Mobile:	(717) 987-8541		

Facility Location

Street Address: 110 Pitney Road
State: PA
County: Lancaster
Municipality: East Lampeter Township
Zip Code: 17602-2616

Public Water Supply Information

System: City of Lancaster (Public of Water Supply)

State System ID No: PA7360058

Requested Consumptive Use Quantity

Project Design Year: 2040

Projected Consumptive Use: 0.0704 (mgd)

2.1 Facility/Project Information - Dart Container Molded Fiber Addition Project Description

Dart Container Corporation of Pennsylvania's Lancaster Plant is located at 110 Pitney Rd, Lancaster PA 17602.

c. Type of Facility

The site currently operates an expandable polystyrene EPS steam chest molding operation (SIC 3086) and is expanding to include a fiber molding operation (SIC 2679) as well. Both of these processes are used to make disposable food service containers.

d. Water Use and Consumptive Use/Lose Generating Activities

Water is used to produce steam for the EPS process and to produce a fiber slurry that is used to transport the fiber in the fiber molded process. Water is also used for non-contact cooling, by the use of cooling towers, and for wash up purposes in both processes.

The consumptive use will come from the cooling towers used for non-contact cooling and from evaporation of water from the slurry as the finished fiber molding product is molded and dried in the fiber molding process.

e. Requested Quantity of water and sources of consumptive Use.

The table below shows the expected site side water usage, discharges, and consumptive use at maximum operating conditions after all 12 fiber molders are installed and operating.

Fiber Design Details from Isomer				Current EPS Process Data	Molding Fiber Data	sums	Consumptive Usage App
				GPD			
Incoming Water	112	incoming tube	22	27,700	160,000	187,700	190,000
RO Rejects							
Seal Water	19						
RO to WW	21						
Vacuum System/PCT Make up	29						
CIP Screen	2.4						
12 Molder		10	1.5 per form				
Chemical make down		0.55					
Wash and bleed		22	51				
Sewer	73			14,400	105,120	119,520	119,600
Water Delta	39			13,300	56,160	69,460	70,400
Mgallon/month				0.4123	1.74096		2.1824

Dart is requesting to be permitted for up to 70,400 gallons per day of consumptive use.

f. Description of Site Activities

The site's EPS process produces polystyrene foam food service containers though the use of Rodman pre-expanders and the steam chest molding process. The raw EPS is sent to a pre-expander where steam is added to expand the bead to a given/set density. The prepuff is then dried, screened for size, and clumping

and sent to holding bags on the molding floor to age for between 2- 8 hours. After it is aged, it is drawn to each cup molding machine where it is feed into cup molds that are heated with hot water and steam to set the shape and fuse the prepuff together and then cooled.

The finished cups are either packaged or printed using UV paste ink and then packaged and sent to the warehouse and out to customers.

The process uses steam boilers which use water from the city. The condensate is returned and recycled as non-contact cooling water after passing through a cooling tower or back into the boiler feed system.

Dart discharges any excess condensate from the process as well as boiler blowdown and softener rinse and backflow waters. The wastewater is monitored so the pH can be adjusted before being sent to the City of Lancaster under discharge permit # 1123.

Since we are seeing a reduction in the demand for EPS food containers, last year Dart decided that it would remove its paper wrapped EPS container process and add a new fiber molding process.

This fiber container molding process mixes water, which has passed through an RO member to remove contaminates, and fiber into a slurry in a series of tanks. Small amounts of additives are mixed into the slurry. Those chemicals help the fibers move through the system more efficiently and also help produce a finished product that resists moisture and there is no chemical reactions involved in the process.

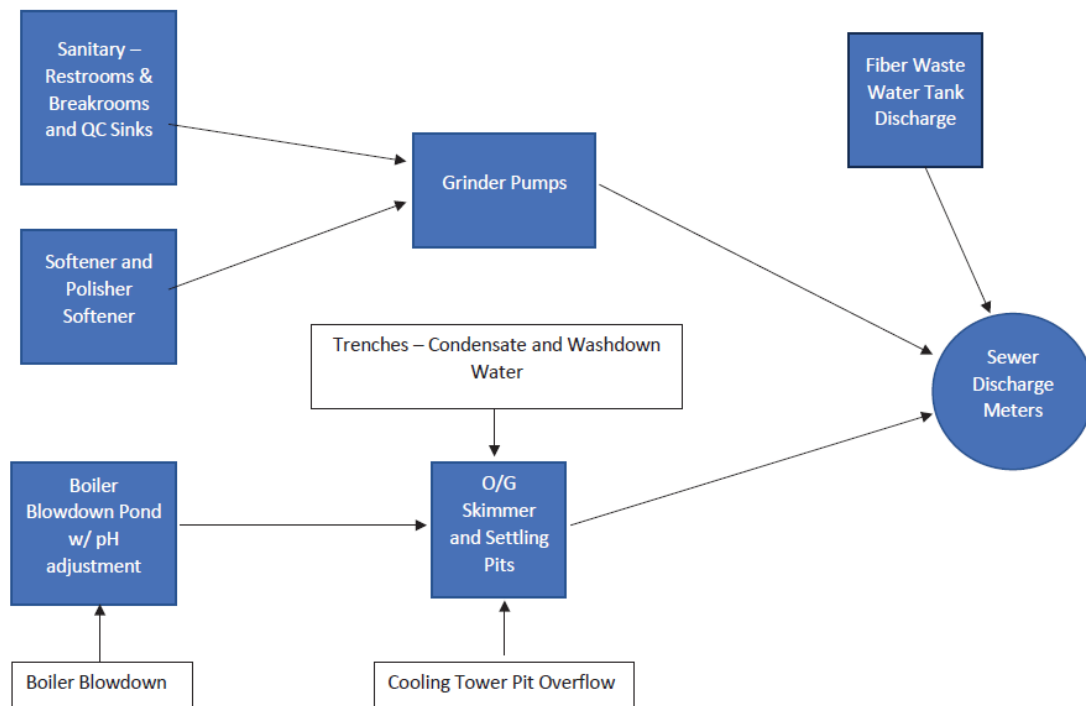
After the correct freeness is obtained, the mixed slurry is then run into fiber molding machines. Molds are then dunked into fiber slurry and carry the fibers up into a portion of the machine where the fiber is compressed to form a shape where heat and vacuum are applied to remove the water.

As the fiber is removed additional slurry is added and a portion of the fiber slurry and water is bled off and removed from the molding machines to prevent buildup of hardness. The removed bleed water is sent to the water recycling tanks as shown in the attached flow diagrams.

From there the water is recycled back into the system with a small portion of the bleed going to the wastewater tank that will discharge to the city wastewater system. Dart has purchased 160,00 gpd worth of additional EDUs from the City of Lancaster and is in the process of getting its discharge permit modified for the increased flow now that the plan approval from PA DEP has been received allowing for the combined discharge to be up to 119600 gpd.

Dart intends to install 12 molded fiber production machines that will make plates, lids, and containers, each which can produce up to 1.4 metric ton of finished product per day. Since the molded fiber operation uses water to move the slurry to the molding machines and then recycles a portion of that water there are numerous feds and reclaim tanks and pumps associated with the process including a vacuum water reclaim system.

The drawing below shows the water usage sources and flow through the site.



g. Dates

1999 – Site was purchased and used for warehousing
 Nov 2002- EPS Molding Operation Began at this location
 May 2024- Dart began installation of first fiber machines for pre-production trails.
 June 2025 – Dart to complete installation of up to 8 fiber machines
 January 2027 – Dart to add up to 4 additional fiber machines

2.1.1 NAICS Code: 322299 All other Converted Paper Product Manufacturing

2.1.2 Facility Dates : Initial EPS Startup was on November 11, 2002