



RPC and Other Sustainable Packaging Used At Stemilt

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Life Cycle of an RPC



RPC delivered to Stemilt and fruit is packed



RPCs with fruit arrives at retailer distribution center



RPCs with fruit is delivered to store



Empty RPC returned to retailer distribution center



Empty RPCs returned to RPC distribution center/ washing facility for cleaning



RPC vs. Corrugated Boxes



Pros & Cons

Round 1



RPC (Reusable Plastic Containers)

- Reusable (after cleaning)
- Enhanced cooling capability
- Solid pallet unit stability
- Common footprint (60 x 40 cm)

Corrugated

- New construction
- Slower cooling, less venting
- Subject to crushing
- 7 per layer

RPC vs. Corrugated Boxes



Pros & Cons

Round 2



RPC (Reusable Plastic Containers)

- Different heights available
- Knocks down
- Reporting and rejection lost RPC charge-backs
- 10,000 empties per truckload

Corrugated

- Unlimited sizes
- Recycles
- No reporting
- 30,000 empties per truckload

RPC vs. Corrugated Boxes



Pros & Cons

Round 3



RPC (Reusable Plastic Containers)

- **Less boxes per pallet per truck**
- **Double to triple handle per return**
- **Poor**
- **Poor RFID adhesion**

Corrugated

- **More per pallet** (less wood + corner boards)
- **Produces regionally**
- **Box machines at packing plants**
- **RFID sticks well**

RPC vs. Corrugated Boxes



Pros & Cons

Round 4



RPC (Reusable Plastic Containers)

- Fruit lacks snug headroom
- Rental price competitive
- High mileage item

Corrugated

- Headroom compression
- Purchase price competitive
- Regional transport



Container of the Future

- **Regional range for less travel miles**
- **Round trip boxes with product**
- **Hybrid box such as fluted plastic**
- **Built-in RFID for inventory logistics**





RPC vs. Corrugated Boxes

Truck Utilization

	Apples per Carton	Cartons per Pallet	Pallets on a Truckload	Cartons on a Truckload	Gross Weight of Truckload	Trucking Cost per Carton of Apples to Texas*
RPC 3 layer	40 lbs	35 Cartons	25 Pallets	875 Cartons	41,535 lbs	\$5.49
Corrugated 3 layer	40 lbs	40 Cartons	24 Pallets	960 Cartons	42,734 lbs	\$5.00
RPC 2 layer	27 lbs	50 cts	25 Pallets	1,250 cts	40,675 lbs	\$3.84
Corrugated 2 layer	27 lbs	60 cts	22 Pallets	1,320 cts	40,533 lbs	\$3.64

* Based on \$4,800 Truck Cost





RPC vs. Corrugated Boxes

Cost Utilization

	Carton Cost	Cartons per Pallet	Pallet Cost	Comerboard Cost (for 4)	Total Material Cost per Carton of Apples	and Trucking Cost per Carton of Apples to Texas
RPC 2 layer	\$1.00	50 Cartons	\$5.30	\$2.48	\$1.18	\$5.02
Corrugated 2 layer	\$1.10	60 Cartons	\$5.30	\$2.48	\$1.23	\$4.87

* Based on \$4,800 Truck Cost





Kraft Boxes

Kraft Boxes

While having the same benefits as corrugated boxes, Kraft boxes are more environmentally friendly

- Require 5% less wood fiber than an equivalent amount of white paper (by using Kraft in over 7 million of our cartons shipped each year, we will **save more than 350,000 cartons worth of paper**)
- Has a recycled component
- Kraft paper production requires about 20% less water than white paper production
- Kraft paper production reduces the Biological Oxygen Demand of waste water by about 50%, which reduces the electricity required to treat the water



Recycling

Cardboard recycling



- 1,890,000 lb of cardboard was recycled
- 4.5 million trays that Stemilt purchased from Keyes Fiber were manufactured from cardboard recycled by Stemilt and given to Keyes Fiber



Recycling

Plastic strap recycling



8 dumpster loads of plastic NOT going to the landfill & 25 dumpster loads of strap NOT going to the landfill





Recycling Program

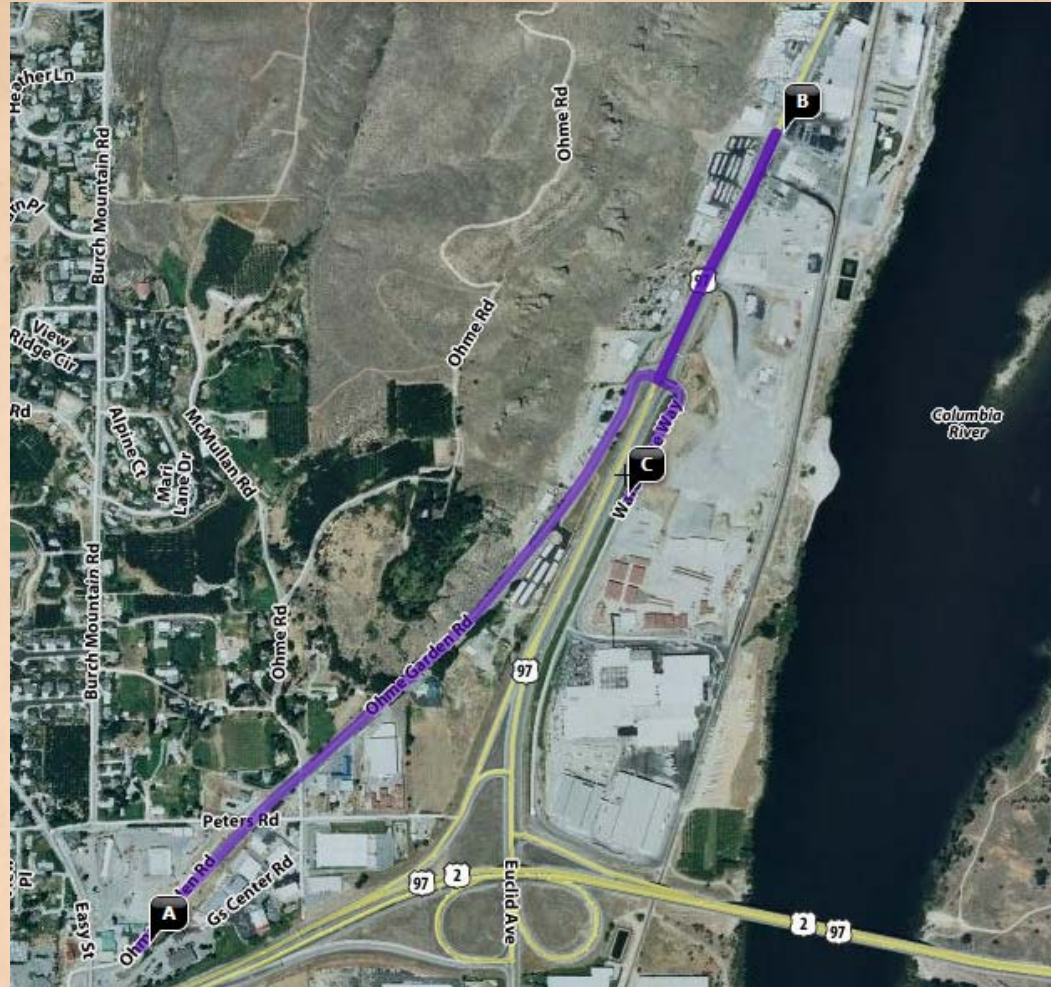


As of September 4, 2008, a new recycling program was implemented to include the main office of Stemilt. Previously, paper was being recycled by a paper shredding company, but now paper is collected and used by Keyes Fiber to make trays for Stemilt.





Recycling Program



- Recycled paper from the office (A) is delivered to Keyes Fibre (B)
- Keyes Fibre (B) delivers the trays to Stemilt's packing warehouse (C)
- Total distance (A to C) is 1.8 miles

