

Technical Questionnaire Post-Consumer Plastics Recycling

Primary Reprocessing System

Date:.....

designer initials: (*Vecoplan use*)..... project: (*Vecoplan use*).....

customer: location:

address..... phone no.....

..... e-mail address.....

name of responsible person / *customer proj. mgr.*.....

1. Projected components of the system?:

- reception/sorting/handling technology
- shredding and grinding technology
- conveying technology (sorting & transport)
- separation technology
- storage & unloading technology
- metering technology

2. Recovered plastics data?:

2.1. Source of recovered plastics:

- MRF - curbside collection program
- drop-off center
- commercial
- industrial
- other.....

2.2. Type & % of plastic waste:

- containers / bottles.....%
- plastic film.....%
- vinyl siding.....%
- packaging waste.....%
- computers.....%
- other durables.....%
- reclaimed carpet.....%
- automotive scrap.....%
- other.....%

- 2.3. Resin code & % of total processing stream:**
- # 1 – PETE.....%
 - # 2 – HDPE.....%
 - # 3 – V.....%
 - # 4 – LDPE.....%
 - # 5 – PP.....%
 - # 6 – PS.....%
 - # 7 – other.....%
- 2.4. Form & % of received waste:**
- Baled.....%
 - Loose.....%
- 2.5. Ultimate end use for reprocessed feedstock:**
- carpet
 - containers/packaging
 - WTE
 - plastic lumber
 - automotive
 - agriculture
 - marine
 - road & highway
 - other

3. Logistics?:

- 3.1. How is the material delivered?**
- automatic infeed
 - by front-end loader (outdoor storage)
 - grapple / crane from bunker
 - by truck
 - others:
- 3.2. Throughput requirements:**
- input quantity** = tons per year.
 The material will be brought in / processed days per week.
 with a daily operation time of hours.
- output quantity:** to storage, transport or down stream
 processing equipment =.....tons per hour.
- continuous**
 - intermittent**
- number of the infeed intervals =..... per hour.
 period of the infeed interval =..... minutes.

4. Process technology?:

4.1. Reception of the materials according to specification of:

- **reception station**
 - discharge system
 - loading conveyor
 - multiple screws
- **outdoor storage**
- **existing conveyor systems**
- **others:**

4.2. Discharge from the reception station:

discharge capacity: yds³ / hr.....
lbs. / hr.....

will the material be discharged / blended from different sources?
yes.....or no.....

4.3. Shredding / grinding requirements:

materials requiring shredding / size reduction

.....
.....

batch.....or
continuous.....

resulting material consistency specification, if shredded:
flake or particle size: in. minus

special considerations:

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type and dimensions of possible contaminants or foreign parts
(tramp metal, dirt, rocks, hazardous materials):

.....
.....

4.4. Separation

- **ferrous separation**
- **non-ferrous separation**
- **density separation** (air classification of: stones, glass, paper, plastic, etc.).....
- **size classification** (screening types: disc, star, oscillating, trommel, vibration)
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4.5. Preferred conveying technology

- to be chosen by Vecoplan
- drag chain (paddle) conveyors
- belt conveyor
- vibration conveyors
- screw conveyors
- pneumatic conveyance

4.6. Intermediate storage required?

yes, storage volume yds³
discharge capacity yds³/hr.
No.....

type:

- std. metal bin / platform / material flow config.
- block bunker with manual unloading
- pit with walking floor
- cylindrical silo with sweep arm

4.7. Termination of Vecoplan-supplied system – transition to / integration with:

- Other downstream equipment (densification, extrusion, compounding, washing, drying, flotation).....
- Required control interlocks.....

4.8. Safety / code requirements:

- extinguishing devices
- dust exhaust
- other emissions
- ground water
- enclosures
- electrical / switches
- structural / seismic
- other environmental
- alarms

4.9. Electrical controls

- to be designed by Vecoplan
- customer specifications
- visualization (graphics)
- conductive systems
- interlocks within system:
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5. Planning?:

5.1. Do preliminary designs, layouts, conceptual sketches, etc., exist? (if so, please forward them to us)

Yes..... no.....

5.2. Does a performance specification (bid specs) exist, if so, please forward to us.

Yes..... no.....

5.3. Interface with other suppliers?

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5.4. Budget status, project timetable, miscellaneous customer desires?

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6. Project status?:

Preliminary design phase, submit:

- budget proposal / offer
- flow diagram
- descriptive materials & dimension sheets
- draft drawing

OR

Final design phase, submit:

- detailed proposal / offer
- detailed drawings
- arrange meeting

7. Miscellaneous data?:

System voltage.....V/.....ph/.....Hz.

Existing facility: yes.....or no.....

Climatic conditions:.....

Installation: yes.....or no.....

Type of organization:

- private
- municipal
- insitutional
- military
- other.....