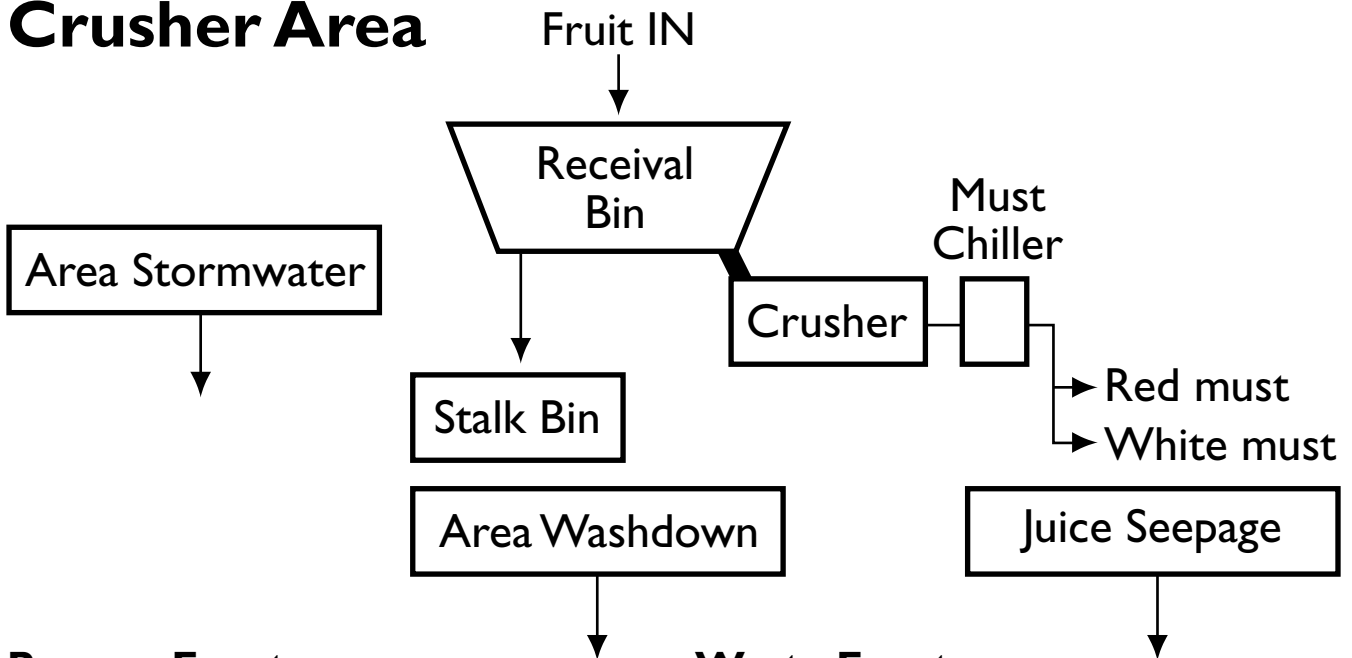


Crusher Area



Process Events:

- Fruit delivery and crushing
- Chill and transfer of must
- Disposal of stalks and leaves

Water Events:

- Bin cleaning
- Crusher cleaning
- Product transfer
- Lines cleaned
- Stormwater
- Area washdown
- Stalk conveyor or spray washdown

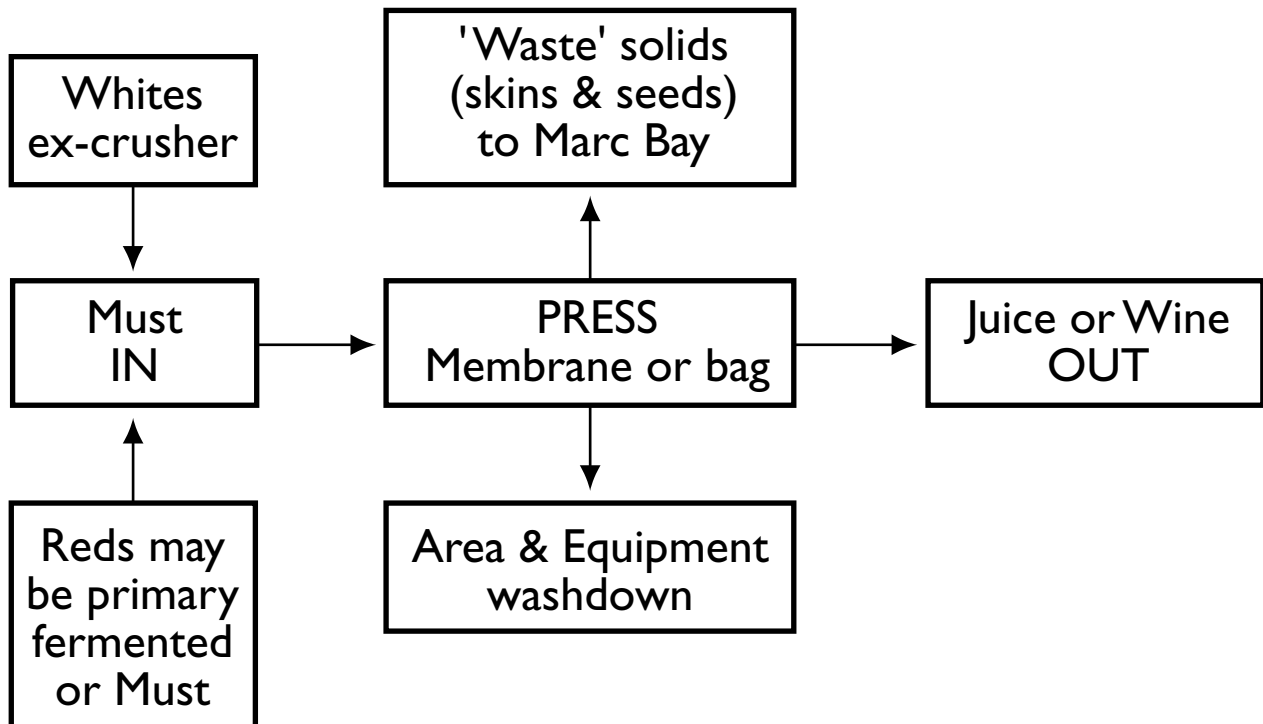
Waste Events:

- Product loss via spill/transfer
- Must loss in transfer
- Stalk and leaf disposal
- Cleaning water use
- Cleaning chemical use
- Stormwater run-off

Best Practice:

- Diversion sump on all crusher drains
- Mesh covers on drains to avoid solids skins. Seeds, stalk to drain
- 'Smart scheduling' of crush to avoid excess cleaning between batches
- Dry sweeping/shovel of spilt fruit not water hosing

Red/White Juice Press



Process Events:

- Initial solids separation
- Extraction of Juice

Water Events:

- Press cleaning
- Product transfer
- Lines cleaned
- Area washdown

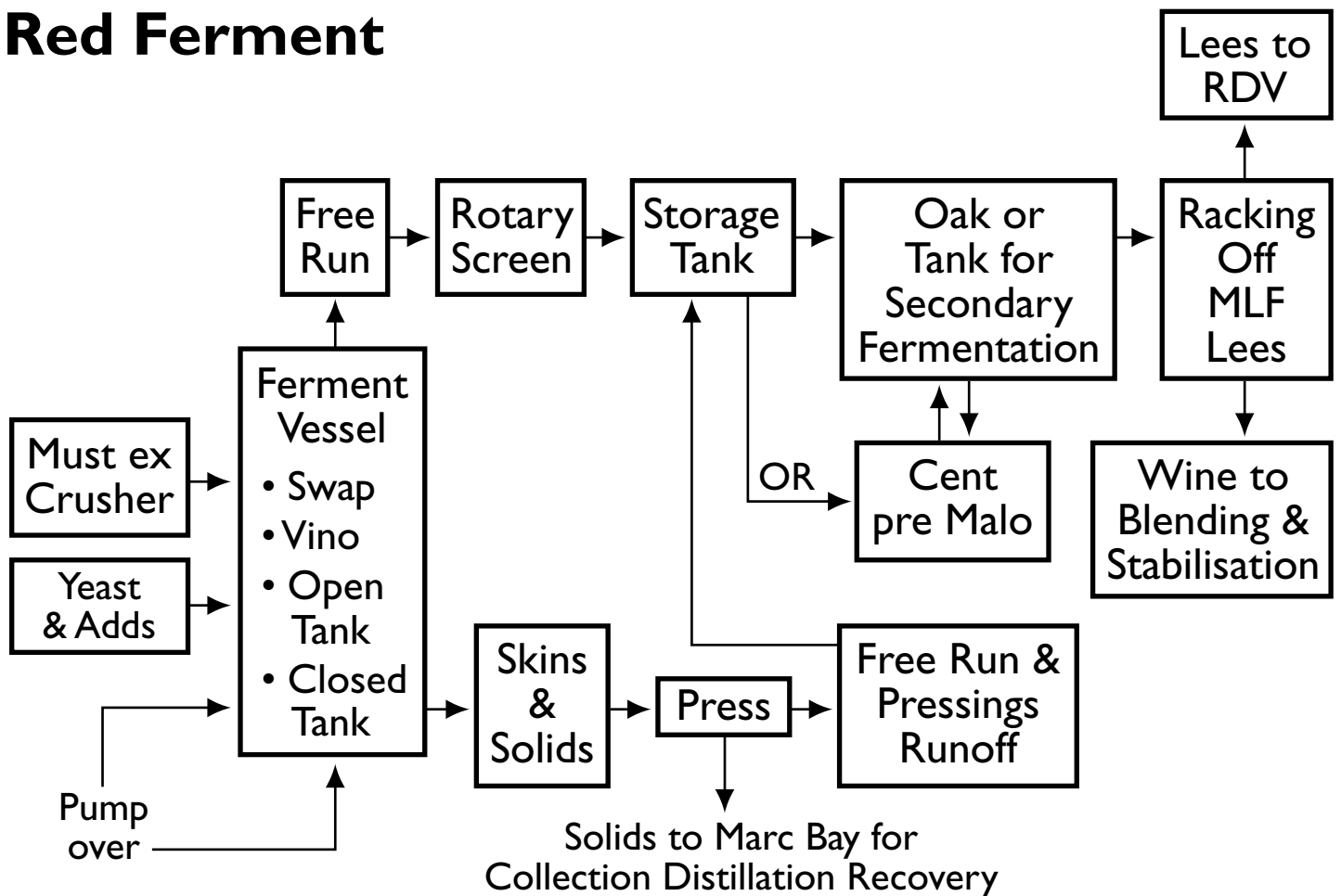
Waste Events:

- Juice/product spills
- Cleaning water use
- Cleaning chemical use
- Marc production
- Wash down water

Best Practice:

- Push water return lines on must transfer - water re-use
- Dry sweeping on solid spills then hose
- Marc bay seepage directed from WWTP stream (recovery)
- Mesh in drains to prevent entry of solids
- Adequate sight glasses in must lines for accurate cut outs
- Cleaning chemical re-use

Red Ferment



Process Events:

- Red must is fermented
- Solids are separated from the fermentation
- Product loss through water cut out at transfers
- Primary fermented wine is secondary fermented
- Wines are clarified by centrifuge
- Wine is ready for blending and stabilisation
- Solid waste is generated from pressing
- Lees are recovered via RDV/other

Waste Events:

- Product spills
- Cleaning chemicals to drain
- Wash down water to drain
- Production of skin and seed marc
- Product loss through water cut out at transfers

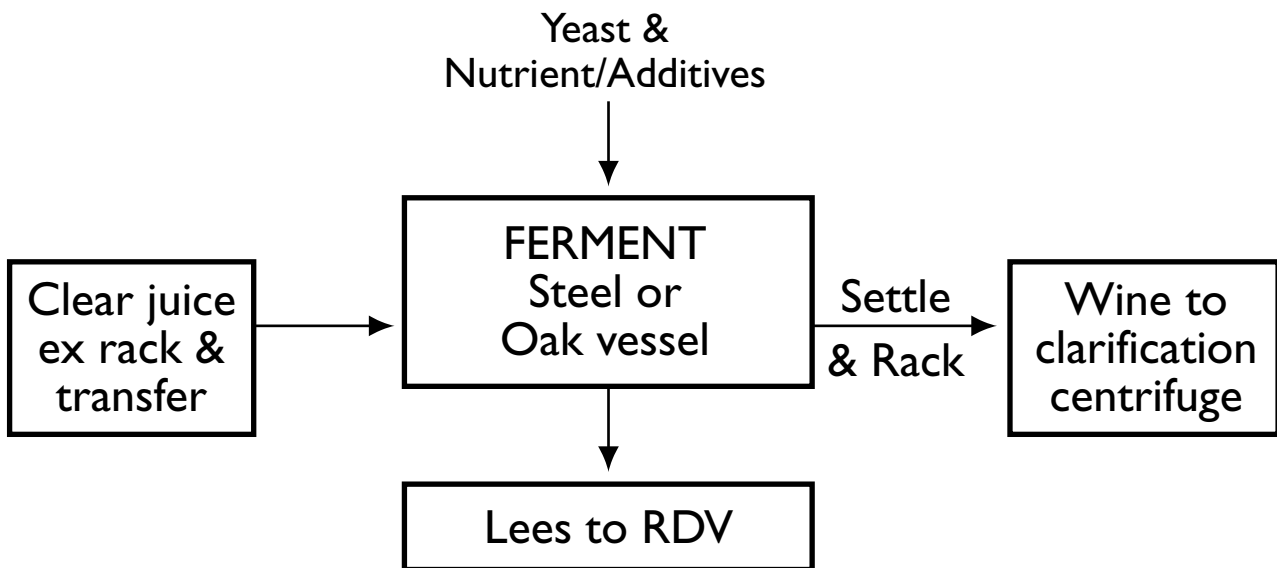
Water Events:

- Water washing of tanks, lines, press and screens
- Water use for product transfer
- Chemical use for cleaning of tanks, lines, press, barrels and screens
- Area cleans

Best Practice:

- Spill containment plan
- Cleaning agent re-use where practical
- Lees and solid waste (marc) recovery maximised
- Dry sweeping of solids spills then hose
- Marc bay seepage directed away from WWTP
- Mesh over drains to prevent entry of fermentation solids
- Minimal water use on product transfers where practical
- Inert gas push or pigging on wine transfers

White Racking and Ferment



Process Events:

- Juice cold settled for racking
- Ferments to wine
- Racked to further clarification
- Lees to RDV

Water Events:

- Cleaning ferment tanks
- Line cleaning
- Push through water
- Lees push through
- Floor cleaning

Waste Events:

- Spills of juice or lees
- Cleaning water use
- Cleaning chemical use

Best Practice:

- Insert gas transfers
- Pigging in line transfers
- Spill containment plan
- Cleaning agent re-use where practical
- Lees recovery maximised