

WELCOME TO THE CITY OF ST. PAUL ASPHALT PLANT



ST. PAUL HAS OWNED AND OPERATED AN ASPHALT PLANT SINCE 1912. THE PRESENT PLANT WAS BUILT IN 1962 AND IS A BATCH PLANT



BATCH PLANTS



- Can produce a variety of mixes on any day by using different size aggregates and different types of asphalt cement
- Batches of 1 to 3 tons are mixed as they are needed

At the plant:





Truck driver calls the tower to place an order



 Driver sprays down the truck bed with an environmentally friendly asphalt release agent Aggregate is delivered by truck from the gravel pit and stored in the yard





• Loader puts aggregate into the cold bins





Aggregate is fed through the tunnel on conveyor belt



and dumps into the dryer





• The dryer heats and dries the aggregate



The heated aggregate travels up the hot elevator



- Hot elevator dumps the heated aggregate into the hot bins
- Aggregate is stored in the hot bins until ready for mixing



 Asphalt cement is delivered by tanker and stored in above ground tanks until ready for mixing



- Asphalt Cement (AC) is stored in the larger tanks
- Slow Cure (SC) is stored in the shorter tanks





- Aggregate is dropped on the materials scale and weighed
- Asphalt cement is pumped from the storage tanks and weighed



 Plant operator combines the aggregate and asphalt cement in the pugmill to create asphalt

Trucks line up for asphalt





• Hot asphalt is dumped into truck



• Trucks are weighed on the truck scale





• The clerk prints up a weigh ticket for the customer

Pollution Control Equipment

 Fine aggregate particles from the hot elevator and the mixer are exhausted through the cyclone





 In the cyclone the larger particles are deposited below and reintroduce to the usable aggregate piles The finest particles (clay and silt) go through the scrubber where water attaches to the particles and deposits them into the settling pond



Exhaust leaves the stack with less
particulate matter





• In the settling pond flocculent helps the clay and silt settle to the bottom



• The pond is periodically drained and emptied into a containment area to dry



 After the material is dried it can be loaded into trucks and hauled away

On the job site:



Hot asphalt arrives on site and is dumped into the paver







Paving crew works to place the asphalt





The pavement is compacted and smoothed with rollers





Lane markerings are placed



The road is opened for traffic

