Five Star Concrete, LLC. San Marcos Plants 11 & 12 Soechting Rd. New Braunfels, TX 78130 Concrete Batch Plant with Dust Collector

Process Description

Raw materials, I.e., sand, gravel, cement, and fly ash are transported to the plant site via end dumps and pneumatic trailers, which enter the plant through the driveway. The aggregates are unloaded and stockpiled on site (Emissions Pts. EP1-4). The stockpiles are watered with sprinklers to prevent dust. The bulk cement and fly ash are unloaded into the elevated silo, through pressurized lines from the transport truck to the top of the silo (Emission Pts. EP5A/EP5B). The silos are vented through the Silo Top Filter System (Emission Points EP6A/EP6B), to filter any air displaced through the top of the silo during the offloading of the transport tanker. All haul trucks exit the plant through the driveway.

The process by which ready mix concrete is batched begins with the charging of the aggregate feed hopper (EP10A/EP10B) with aggregate from various stockpiles by a front-end loader. The material is then conveyed to the overhead aggregate bins (EP7A/EP7B). From the overhead aggregate bins, the material is gravity fed into the aggregate weigh batcher/scale (EP9A/EP9B). From the aggregate weigh batcher, the material is conveyed to the truck charging point (EP11A/EP11B).

From the silo, the cement and fly ash are gravity fed to the cement weigh batcher (EP8A/EP8B). The cement weigh batcher contains its own venting filter system (EP8A/EP8B) to keep any/all particulates from dispersing. After the cement and fly ash is weighed, the material is gravity fed through the truck charging point (EP11A/EP11B).

A proportioned amount of water is deposited into the mixer truck through the truck charging point (**EP11A/EP11B**). This helps with dust suppression.

While materials are loaded into the transit mix trucks through the truck charging point (EP11A/EP11B), emissions are controlled by the central dust collector (EP12A/EP12B) suctioning air from a three-sided enclosure surrounding the truck charging point (EP11A/EP11B). Each charging point contains its own dust collector. After the transit mix trucks have been loaded with the concrete mixture, they depart the plant via the driveway. After offloading at their destination, they return through the same driveway.

Legend	
Emission Point Label	Emission/Material
EP1	Aggregate Stockpile
EP2	Aggregate Stockpile
EP3	Aggregate Stockpile
EP4	Aggregate Stockpile
EP5A / EP5B	Cement Fly/Ash Fill Point
EP6A / EP6B	Cement Fly/Ash Fill Point
EP7A / EP7B	Overhead Aggregate Bin
EP8A / EP8B	Cement Scale
EP9A / EP9B	Aggregate Scale
EP10A / EP10B	Aggregate Stacker (Feed) Hopper
EP11A / EP11B	Load Charging Point
EP12A / EP12B	Central Dust Collector