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Asphalt plant compliance with 0.10 gr/dscf?

Tune-up $ 5,000 – depends on condition of equipment, well maintained

Correctly tuned and 15” pressure drop can meet 0.10 gr/dscf

Scrubber (new) $25,000 – $60,000

Baghouse (new) $150,000 to $350,000 ( back half to .006)

Need to change out burner ($30,000 to $50,000) refractory-less burner

Total air burner $100,000

Low NOx burner $200,000 installed with controls (PLC Control system)

Flue gas burner $300,000 (only in CA and PSAPCA)

New asphalt plant $

If you include front and back half, the burning of diesel kills the back half. A burner on 1975 asphalt plant has a certain amount of pollutants (VOC) that get stuck in back half. For a 1974 plant that must now comply with front and back and meet 0.1, it would force them to go to low NOx burner or natural gas, brutally expensive.

The burner to burn standard diesel that came with the 1974 equipment still buy a brand new burner for $35,000.

Humbert Asphalt produces 15,000 to 40,000 tpy compared to Granite 200,000 tpy, who can afford to buy low NOx burner

Munsen paving (1960) passed 0.04 front half only

Could meet 0.10 (front and back half) if they convert fuel from diesel to NG or propane (but $$). Portable asphalt plant on NG doesn’t work. Can convert portable to propane but dangerous.

Current parallel flow plants on RFO (recycled fuel oil – 1/3 of asphalt plants use RFO, diesel or NG for the rest) and RAP (recycled asphalt product) couldn’t meet 0.10

Counter flow plant (very few 1970 and earlier = batch – don’t run RAP) can meet fairly easily as long as:

* Cannot burn RFO (heavy oils that produce soot)
* Perfectly tuned on diesel (depends on style – okay for total air burner), Maxon or Hawke databurner or Jencore flame pacer burner – inefficient. Need to change out burner ($30,000 to $50,000) to refractory-less burner and change to diesel to see if it could pass.

GOAL is usually 0.04 NSPS, don’t usually try to meet 0.10 gr/dscf

Parallel flow in Pullman (0.01) front half only

Diesel without rap (1978 Boeing Drum plant in WA) = 0.09 gr/dscf (front and back)

**Back half is about .08 or .09** with old refractory style burners, RFO parallel flow plants with RAP

Cliff would lobby for 0.15 and find out who can get there, wouldn’t have to change out burners, no changes needed besides fuel efficiency. Maxon – burns 3.5 gal of fuel/ton of asphalt should be replaced. New Asto flame burns 1.1 gallons/ton

Any scrubber can meet 0.1. Can’t meet on the back half.

$50,000 new burner cost /15,000 tpy = $3.3 /ton for each ton of mix so small source can’t compete with big companies

Helped with S2 permitting (threats from larger companies)

Tiers of standards based on average production:

50,000 tpy - 0.15 – 10% of mix

100,000 tpy - 0.10 (no grandfathered)

>250,000 tpy – 0.02 to .04 (RL Houck, Granite, Salem Road and Driveway) – 90% of mix

$12/ton profit for larger companies

$900/ton for liquid oil for smaller companies where bigger companies pay only $700/ton so smaller companies can’t compete