From: Dr. Max Lee
To: McWade, Tammy
Subject: FW: 187-14-10 Argos Newberry Clinker cooler AC permitting information
Date: Wednesday, September 10, 2014 10:33:38 AM

Hi Tammy,
I got the following details that we can use to provide generic information on the new bag system for the clinker coolers AC permit technical eval.
As I mentioned before, this information is preliminary and should not be used as part of air construction permit conditions (i.e., not enforceable).

The bidders have been asked to offer glass bags with PTFE membrane for all filter conversions because of the design temperatures the bags are to be designed to withstand.

PROCESS DUST COLLECTORS

General

1. The inlet of the collector shall be designed to prevent the direct impingement of dust and large particles upon the collector bags.
2. The air-to-cloth ratio not exceed 1m3/m2min with all compartments operating, as well as when one compartment is off-line (isolated) for any reason.
3. Can velocity (100% of gas volume between the bags) - < 1 m/s
4. Transversal velocity (gas in hopper) - < 5 m/s. For retrofits, if it is higher it should be discussed and approved by Argos.

Dust Collector Fabric

1. For the clinker cooler dust collectors, the maximum design temperature of the filter fabric will be 240°C, with continuous operating temperatures being 180°C.
2. The proposal will include full details of the bag material; weave features, temperature limitations, permeability, construction features and guaranteed bag life.

Bags and Cages

1. Typical Filter cloth for bags and bag collars: (a) Application for temperature above 120°C: Polyimide, Polyamide, Polyphenylene-sulfide, glass-fibre, Teflon/graphite coated or similar; (b) Main filter (kiln or kiln/raw mill) shall be equipped with glass-fibre / PTFE-membrane bags or Polyimide bags;
2. Length of bags less than 8.0 m.
3. Expected maximum number of bags per row, 16. Cleaning pressure for Glass-fibre / PTFE-membrane bags (GfM bags) not to exceed 3 bar at header.
4. Bag cages shall be corrosion-resistant, and:

    - No. of longitudinal wires: 20; 2.5 mm diameter
    - Single preferred, but split type two piece locking cages acceptable
    - Horizontal rings: placed each 150 mm; stock 2.5 mm, welded for bags of lengths up to 8.0M in length

- Cages designed for snap band bags