



ATTACHMENT A PROJECT UPDATE

The following is an update on the most recently completed emission reduction project listed on Attachment A to the ESCO Good Neighbor Agreement (GNA).

PROJECT #5: Option b. Substitute a low phenol binder system for the binder system on which the phenol emissions factors in the Title V Permit are based. The new low phenol binder system will achieve a combined reduction in phenol emissions from all Plant 3 sources of at least 35 to 40%.

Actions and Status: ESCO implemented a low phenol binder system at Plant 3 in July 2013, and tested emission sources in August 2013. The resulting reduction in phenol emissions from all Plant 3 sources is 70.5%, which successfully completes this project.

Results: Reductions in Organic Hazardous Air Pollutants and Odor

Method of Confirmation: Approved Tester to perform source tests for phenol on the exhaust of the pugmill and on the mold and core making vent. ESCO may elect to also perform a source test on the pouring cooling and shakeout vent if necessary to demonstrate the target percentage reduction.

Horizon Engineering, the Approved Tester, sampled the three sources of phenol emissions to demonstrate the reduction in emissions. The calculated emissions before and after binder substitution are shown below:

Table 1: Phenol Emissions Before and After the Binder Substitution

		Phenol Emissions (tons/yr)	
Source	Production	After Binder Substitution	Before Binder Substitution
PCS	18,700 tmp/yr	0.86	1.83
Pug Mill/Sand Coater	514 tons resin/yr	1.04	3.69
Mold & Core Making	514 tons resin/yr	0.22	1.65
Total		2.114	7.165