

5/13/2009 Sinter building inflow study at 3 sigma **Non-Operating Scenario** **Attachment C5**
Proposed limit of 100,000 acfm Combination Trail Flow
Combination Trail Flow during the study range was 99,740 acfm to 101,399 acfm
(2 sigma =120,486 acfm, 3 sigma = 92,920)
Started reading at 09:00 cdst and ended readings at 10:00 cdst
Wind speeds ranged roughly 12mph to 20mph during the period
worse case senario doors measured

	top Flow (fpm)	mid Flow (fpm)	bottom Flow (fpm)	
S1 Man door on 4th floor west of Control Rm.				Installing Quality door & seals by 7/30/09
S2 Man door on 4th floor east of Control Rm				Interior door to enclosed conveyor area.
S3 Northwest Man door at ESP unit				Putting in a Double door air lock by 7/30/09
S4 Southwest Man door at ESP unit				This door opening has been sealed with building side paneling.
S5 South end Man door on 4th floor				Installing Quality door & seals by 7/30/09
S6 Southeast Man door 4th floor at Cooler bghse				Putting in a Double door air lock by 7/30/09
S7 East Man door 2nd floor at Cooler baghouse North end.		126		Has steel bulkhead-style door. Install weatherstrip, add seals and lock-out procedure by 8/30/09.
S8 Northwest Man door to mix room				
S9 Middle Man door to mix room 2nd floor				
S10 Southwest Man door to RD2 North of RD5				Previous surveys: low = 285, high = 394 fpm inflow
S11 Upsairs Man door on Mix room northeast side				To be permanently sealed by 7/30/09
S12 Mix room Northwest side #1 man door upstairs				Mix room settling chamber door, N/A, previously no inflow readings (separated by siding and floor)
S13 Mix room Northwest side #2 man door upstairs				Mix room settling chamber door, N/A, previously no inflow readings (separated by siding and floor)
S14 Mix Room East Middle Man door upstairs				Mix room settling chamber door, N/A, previously survey
S15 Mixing Room Northwest Man door #3 upstairs				Mix room settling chamber door, N/A, previously no inflow readings (separated by siding and floor)
S16 East mix room man door upstairs to RD-2				small door approximately 13ft ²
S17 Southwest man door upstairs in mixing room				Mix room settling chamber door, N/A, previously no inflow readings (separated by siding and floor)
S18 South mix room man door upstairs				Mix room settling chamber door, N/A, previously no inflow readings (separated by siding and floor)
S19 Man door South of top side of 76" Rolls	400	440	380	
S20 South man door Bottom of mixing room	480	350	280	
S21 Man door east of #5 bin in mix room to Sinter Plant				Will seal with siding panel by 7/30/09
S22 Northwest man door @ bottom of mix room				Wind gust prevented reading

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top mid bottom
 Flow Flow Flow
 (fpm) (fpm) (fpm)

{< measure @ <= 5 mph wind d:

	top Flow (fpm)	mid Flow (fpm)	bottom Flow (fpm)	
S23 Northeast man door @ bottom of mixing room				Wind gust prevented reading
S24 Main equipment door bottom floor North end				unable to test undergoing siding repairs was 380-400 on 5/12/2009 Automatic roll-up door to be installed by 7/30/09
S25 #1 west man door from North on Bottom floor				No longer there due to construction of connecting wall
S26 #3 west man door from North on Bottom floor				No longer an exterior door, wall section opened to ventilate lower level mix room to sinter plant.
S27 East man door on bottom floor @ 12 fan				
S28 #4 west side man door on bottom floor				Will seal with siding panel by 7/30/09
S29 Equip. doors East side Bottom floor under FE-11				
S30 Southeast man door @ Head of CV-37-B				
S31 South equipment doors @ tail of CV-23				Additional Vinyl strip curtains were installed
S32 South equipment doors under 76" rolls				Additional Vinyl strip curtains were installed
S33 Man door at top of 150 ton bin	260	270	380	tested and relocked
S34 SE man door at middle of CV-37-B				