



**Table 1 - Estimated Uncontrolled Dryer VOM/HAP Emissions  
Dryer Shutdown on March 16, 2011 at 9:45 AM**

On March 16, 2011 at 9:45 PM the dryer RTO shutdown due to a high temperature alarm which caused an emergency shutdown of the dryer causing the emergency vent to open. The distillation process exhaust was vented to the dryer RTO at the time of the shutdown. The distillation scrubber was put on line and distillation process exhaust was re-routed to the distillation scrubber at 9:48 AM. The dryer exhaust temperature dropped to 130°F (point at which point, VOC emissions are negligible ) at 10:17 AM (a period of 27 minutes).

16-Mar-11 9:45 AM Parameter	Dryer By-Pass Uncontrolled Emissions	
	(lbs)	tons
Duration of Emissions	27 min	
PM/PM10	0.83	0.000
CO	10.82	0.005
NOx	0.00	0.000
SO2	0.00	0.000
VOM	26.21	0.013
Total HAPs	2.90	0.001
Acetaldehyde	2.189	0.001
Acrolein	0.012	0.000
Formaldehyde	0.327	0.000
Methanol	0.368	0.000

Uncontrolled dryer VOM emissions based on August 2004 compliance testing.

**Table 2 - Estimated Uncontrolled Distillation Scrubber VOM/HAP Emissions  
Dryer Shutdown on March 16, 2011 at 9:45 AM**

Compound	Uncontrolled Distillation Scrubber VOM Emissions August 2003 Test (lb/hr)	Uncontrolled Distillation Scrubber VOM Emissions 0.05 hrs	
		(lbs)	(tons)
Acetaldehyde (HAP)	4.62	0.23	0.0001
Formaldehyde (HAP)	0.00	0.00	0.0000
Acrolein (HAP)	0.00	0.00	0.0000
Methanol (HAP)	0.06	0.00	0.0000
<b>Total HAPs</b>	<b>4.68</b>	<b>0.23</b>	<b>0.0001</b>
<b>Total VOM (MSF)</b>	<b>85.33</b>	<b>4.27</b>	<b>0.0021</b>

**Table 3 - Estimated Uncontrolled VOM/HAP Emissions from Deviation Event  
Dryer Shutdown on March 16, 2011 at 9:45 AM**

Compound	Estimated Uncontrolled VOM / HAP Emissions from Event	
	(lbs)	(tons)
Acetaldehyde (HAP)	2.42	0.0012
Formaldehyde (HAP)	0.33	0.0002
Acrolein (HAP)	0.01	0.0000
Methanol (HAP)	0.37	0.0002
<b>Total HAPs</b>	<b>3.13</b>	<b>0.0016</b>
<b>Total VOM (MSF)</b>	<b>30.48</b>	<b>0.0152</b>