

ALL THINGS HAPS!

JACQUELYN LINCK, P.E.

jflinck@ftch.com

DECEMBER 1, 2016



FISHBECK, THOMPSON, CARR & HUBER

engineers | scientists | architects | constructors

HAZARDOUS AIR POLLUTANTS

Major Source HAP Thresholds:

- 10 tons/year Each HAP
- 25 Tons/year Aggregate HAP

GOAL Rule- Significantly Reduce Cancer Related Deaths

MACT

MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

MACT HAMMER



POTENTIAL TO EMIT

**PTE WORKBOOK- MDEQ (2015)
A PRACTICAL GUIDE TO CALCULATING AND
EVALUATING YOUR POTENTIAL TO EMIT AIR
CONTAMINANTS**

EMISSIONS INVENTORY

Small Business, Inc. - EMISSION TOTALS – CRITERIA POLLUTANTS

Emission Unit	CO (TON/YR)	NOx (TON/YR)	SOx (TON/YR)	PM (TON/YR)	VOC (TON/YR)	LEAD (TON/YR)	GHG
COATING BOOTHS 1-3				7.0	5.6		
OVEN	0.92	1.10	0.004	0.09	0.04	negligible	1,282
MAINTENANCE BOOTH				2.02	134.9		
PRINTING					0.14		
287(C) BOOTH				3.31	8.2		
COLD CLEANERS					0.475		
CLEANUP					6.0		
GRINDER				57.16			
WELDING				0.03			
BOILER	3.59	4.29	0.03	0.31	0.22	negligible	5,129
GENERATOR	3.25	15.1	1.0	1.06			5,160
TOTAL	7.76	20.49	1.03	70.98	155.6	0	11,571

DO I NEED TO INCLUDE **QUANTIFIABLE
FUGITIVE** HAP EMISSIONS IN MY PTE?

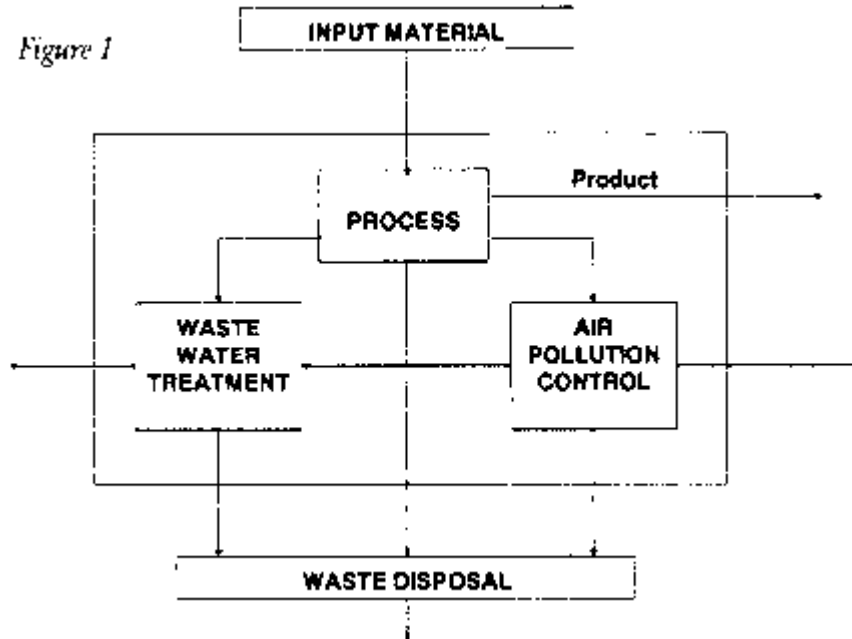
YES OR NO

YES, YOU NEED TO INCLUDE FUGITIVES.

DEFINITION OF PTE - R336.1116(N)

... HAZARDOUS AIR POLLUTANTS THAT HAVE BEEN LISTED PURSUANT TO SECTION 112(B) OF THE CLEAN AIR ACT, QUANTIFIABLE FUGITIVE EMISSIONS SHALL BE INCLUDED IN DETERMINING THE POTENTIAL TO EMIT OF ANY STATIONARY SOURCE.

MATERIAL FLOW BALANCE



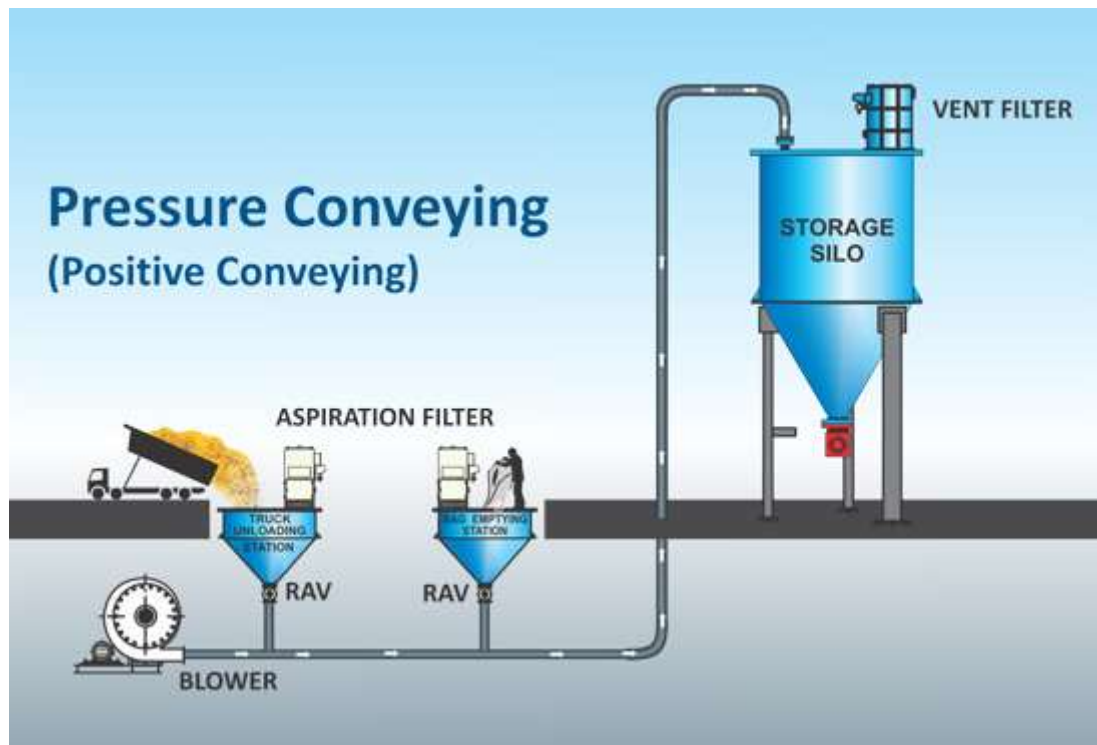
QUANTIFIABLE FUGITIVE EMISSIONS

Evaporative Sources- Waste Water Sumps



QUANTIFIABLE FUGITIVE EMISSIONS

Pneumatic Conveyance of Solids w/Residual HAPs



QUANTIFIABLE FUGITIVE EMISSIONS

Bulk Transfers- Vapor Balancing, Conservation Vents



MALFUNCTIONS OF CONTROL EQUIPMENT

ONCE IN ALWAYS IN?

THANK
YOU



FISHBECK, THOMPSON, CARR & HUBER
engineers | scientists | architects | constructors