

Vent Measurements: APRIL 27rd 2016

Mass Emission is calculated from Ideal Gas Law

mass emission mg/min = ppm x flow rate x molecular weight x P /RT

$n = PV/RT$

V = measured flow rate (m3/min)	0.00
P = 101325 Pa (760 mm Mercury)	101325
T = 293 K	293
R = molar gas constant 8.314 (m3Pa/mol K)	8.314
Molecular weight for solvent = 90	90
R x T	2436.002
P/RxT	41.595

		Solvent Tank to Mixer	Homogenisation Tank to Tank	Mixer to Buk Tank
		ST2-SLC2	BT5-BT2	SLC2-BT1
Mean ppm	ppm	3.78	13.01	0.45
Flow Volume	m3/min	2.77	2.77	2.77
Emission rate	gm/min	0.03921	0.13500	0.00463
Emission Rate MR	kg/min	0.00004	0.00014	0.00000
Prebalanced Rate (PBR)	kg/min	0.18000	0.18000	0.04400
MR/PBR		0.00022	0.00075	0.00011
Efficiency 1-MR/PBR		0.99978	0.99925	0.99989
EFFICIENCY PERCENT	%	99.978	99.925	99.989

Vent Measurements: 26th OCTOBER 2016

Mass Emission is calculated from Ideal Gas Law

mass emission mg/min = ppm x flow rate x molecular weight x P /RT

$n = PV/RT$

V = measured flow rate (m3/min)	0.00
P = 101325 Pa (760 mm Mercury)	101325
T = 293 K	293
R = molar gas constant 8.314 (m3Pa/mol K)	8.314
Molecular weight for solvent = 90	90
R x T	2436.002
P/RxT	41.595

		Solvent Tank to Mixer	Homogenisation Tank to Tank	Mixer to Buk Tank
		ST2-SLC1	BT3-BT1	SLC1-BT5
Mean ppm	ppm	na	na	na
Flow Volume	m3/min	2.77	2.77	2.77
Emission rate	gm/min	0.00065	0.00032	0.01250
Emission Rate MR	kg/min	0.00000	0.00000	0.00001
Prebalanced Rate (PBR)	kg/min	0.18000	0.18000	0.04400
MR/PBR		0.00000	0.00000	0.00028
Efficiency 1-MR/PBR		1.00000	1.00000	0.99972
EFFICIENCY PERCENT	%	100.000	100.000	99.972

Part D

Solvent/Product Analysis: 2016 *(Base Data for VOC Calculation)*

Solvent Analysis

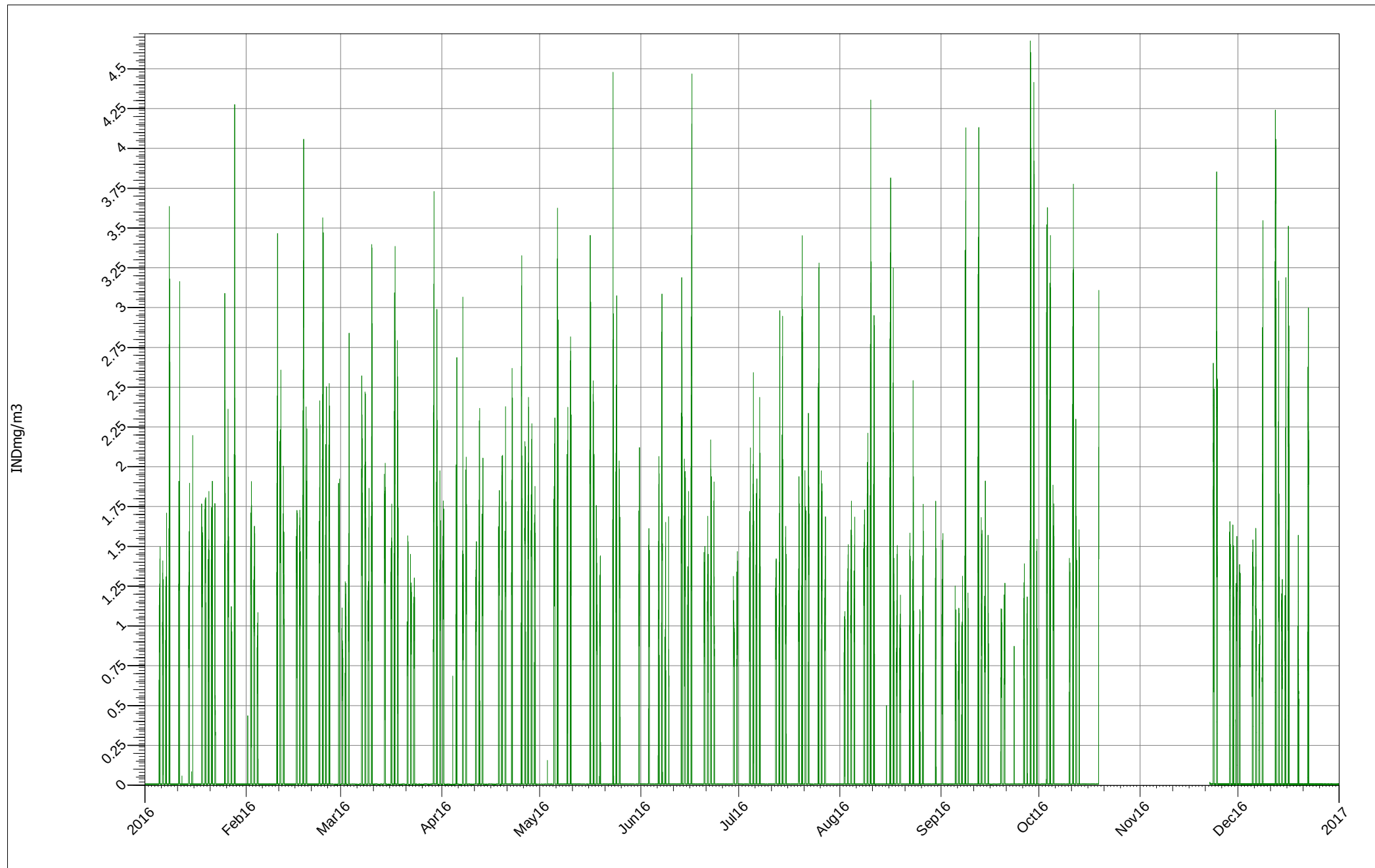
Solvent	Op. Bal.	Receipts	Cl. Bal.	Usage
ACETONE	564	2,863	159	3,268
ISOPROPANOL	726	24,000	0	24,726
N-PROPANOL	131	165	124	172
HEPTANES	2,840	78,474	0	81,314
HEXANES	0	0	0	0
CYCLOHEXANE	0	0	0	0
HYDROCARBON	19,834	1,568,310	19,543	1,568,601
ETHANOL (IMS)	333	2,370	412	2,291
TOTAL	24428	1676182	20239	1680371

Emission Report Banbury

Company:Darex Uk Ltd ContactGlenn Draper

From:01 Jan 16 00:00:00 To:01 Jan 17 00:00:00

Device 1 : Stack1 Banbury Cal Factor: 0.11 (constant) Average:0.220 Averaging Period:15 mins Maximum:4.680



Emission Report Conveyor

Company:Darex Uk Ltd ContactGlenn Draper

From:01 Jan 16 00:00:00 To:01 Jan 17 00:00:00

Device 1 : Stack2 Conveyor Cal Factor: 2.00 (constant) Average:0.205 Averaging Period:15 mins Maximum:6.300

