

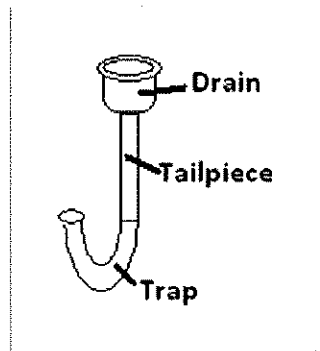
Sinks and Drains Scoping Survey**Contents**

Page

1	Introduction
2-12	Wipe test data for sinks and drains

Introduction

Each of the 225 sinks in the laboratory wing was numbered. This included deep sinks, cup sinks, eyewash stations and any other type of sink found. A minimum of two wipe tests were taken in each sink, one in the sink drain and one down inside the drain tailpiece (with a long wooden cotton-tipped applicator). See the illustration below. Where sink traps were accessible and could be disassembled, a wipe was taken inside the trap.



RSA Laboratories
A Division of Radiation Safety Associates
Radiochemistry Analysis Data Sheet

Page 1 of 11

Report No. Report 3

Customer: Chemtura

Customer Samp No. N/A

Location: Sinks/drains

RSA Lab Sample No. 0

Project: Lab Decommissioning

Date Collected: 03/03/2011 - 03/08/2011

Samp. Description: Wipes

Date Counted: 03/03/2011 - 03/08/2011

Matrix: Wipes

C-14 LLD dpm= 35.84

RSA ID#	CUST. ID#	Location	0 CPM	0 DPM	C-14 CPM	dpm/100 cm sq
	BG	BACKGROUND			27.00	
1		ROOM 1201 Bowl, Sink 1			26.00	30.10
2		ROOM 1201 Drain, Sink 2			26.70	30.40
3		ROOM 1201 Bowl, Sink 2			45.20	52.80
4		ROOM 1201 Drain, Sink 2			30.70	34.70
5		ROOM 1201 Bowl, Sink 3			15.30	18.30
6		ROOM 1201 Drain, Sink 3			44.10	49.50
7		ROOM 1201 Bowl, Sink 4			18.40	21.60
8		ROOM 1201 Drain, Sink 4			24.20	27.20
9		ROOM 1201 Bowl, Sink 5			24.30	29.30
10		ROOM 1201 Drain, Sink 5			35.10	39.80
11		ROOM 1201 Bowl, Sink 6			17.00	19.70
12		ROOM 1201 Drain, Sink 6			20.50	23.10
13		ROOM 1201 Bowl, Sink7			14.80	17.30
14		ROOM 1201 Drain, Sink 7			27.40	30.70
15		ROOM 1201 Bowl, Sink 8			22.50	26.30
16		ROOM 1201 Drain, Sink 8			26.90	30.40
17		ROOM 1201 Bowl, Sink 9			18.80	21.50
18		ROOM 1201 Drain, Sink 9			31.20	35.10
19		ROOM 1201 Bowl, Sink 10			24.60	29.10
20		ROOM 1201 Drain, Sink 10			32.30	36.40
21		ROOM 1201 Bowl, Sink 11			32.20	37.10
22		ROOM 1201 Tail Piece, Sink 11			15.10	18.20
23		ROOM 1201 Trap, Sink 11			22.20	25.20
C-14		QC C-14			125081.90	135311.40
24		ROOM 1201 Drain, Sink 11			35.60	40.30
25		ROOM 1201 Bowl, Sink 12			35.90	40.90
26		ROOM 1201 Tail Piece, Sink 12			43.70	49.30
27		ROOM 1201 Trap, Sink 12			9.90	11.30
28		ROOM 1201 Drain, Sink 12			24.50	27.30
29		ROOM 1202 Bowl, Sink 13			4.90	5.50
30		ROOM 1202 Drain, Sink 13			69.60	78.30
31		ROOM 1202 Bowl, Sink 14			24.80	28.00
32		ROOM 1202 Drain, Sink 14			43.70	49.00
33		ROOM 1202 Bowl, Sink 15			36.10	42.30
34		ROOM 1202 Drain, Sink 15			40.60	45.70

RSA Laboratories
A Division of Radiation Safety Associates
Radiochemistry Analysis Data Sheet

Page 2 of 11

RSA ID#	CUST. ID#	LOCATION	0 CPM	0 DPM	C-14 CPM	dpm/100 cm sq
35		ROOM 1202 Bowl, Sink 16			32.90	38.30
36		ROOM 1202 Drain, Sink 16			52.70	59.70
37		ROOM 1202 Bowl, Sink 17			108.50	127.40
38		ROOM 1202 Drain, Sink 17			27.00	30.20
39		ROOM 1202 Bowl, Sink 18			35.90	41.40
40		ROOM 1202 Drain, Sink 18			175.10	197.40
41		ROOM 1202 Bowl, Sink 19			5.70	6.50
42		ROOM 1202 Drain, Sink 19			31.30	35.00
43		ROOM 1202 Bowl, Sink 20			27.00	30.40
44		ROOM 1202 Drain, Sink 20			47.40	53.20
45		ROOM 1202 Bowl, Sink 21			52.20	59.50
46		ROOM 1202 Drain, Sink 21			24.10	27.00
BL		QC Blank			25.70	27.90
47		ROOM 1202 Bowl, Sink 22			23.50	26.80
48		ROOM 1202 Drain, Sink 22			31.10	35.00
49		ROOM 1202 Bowl, Sink 23			38.50	43.90
50		ROOM 1202 Tail Piece, Sink 23			24.00	27.10
51		ROOM 1202 Trap, Sink 23			46.90	53.80
52		ROOM 1202 Drain, Sink 23			9.40	10.70
53		ROOM 1202 Bowl, Sink 24			16.20	18.60
54		ROOM 1202 Tail Piece, Sink 24			31.50	35.80
55		ROOM 1203 Bowl, Sink 25			33.90	38.80
56		ROOM 1203 Drain, Sink 25			38.90	44.10
57		ROOM 1203 Bowl, Sink 26			220.90	257.40
58		ROOM 1203 Drain, Sink 26			37.10	41.80
59		ROOM 1203 Bowl, Sink 27			26.80	31.00
60		ROOM 1203 Drain, Sink 27			41.50	46.70
61		ROOM 1203 Bowl, Sink 28			34.70	39.80
62		ROOM 1203 Drain, Sink 28			32.80	36.90
63		ROOM 1203 Bowl, Sink 29			22.80	26.30
64		ROOM 1203 Drain, Sink 29			23.30	26.20
65		ROOM 1203 Bowl, Sink 30			36.10	41.00
66		ROOM 1203 Drain, Sink 30			23.70	26.70
67		ROOM 1203 Bowl, Sink 31			48.90	55.10
68		ROOM 1203 Drain, Sink 31			25.70	29.00
69		ROOM 1203 Bowl, Sink 32			25.60	29.20
C-14		QC C-14			11771.20	133557.80
70		ROOM 1203 Drain, Sink 32			26.90	30.10
71		ROOM 1203 Bowl, Sink 33			27.90	32.90
72		ROOM 1203 Drain, Sink 33			32.10	36.10
73		ROOM 1203 Bowl, Sink 34			31.70	36.30
74		ROOM 1203 Drain, Sink 34			24.30	27.50
75		ROOM 1203 Bowl, Sink 35			49.20	57.00
76		ROOM 1203 Drain, Sink 35			55.40	62.70
77		ROOM 1203 Bowl, Sink 36			7.90	8.90
78		ROOM 1203 Tail Piece, Sink 36			28.90	33.80
79		ROOM 1203 Trap, Sink 36			12.20	13.90

RSA Laboratories
A Division of Radiation Safety Associates
Radiochemistry Analysis Data Sheet

Page 3 of 11

RSA ID#	CUST. ID#	LOCATION	0 CPM	0 DPM	C-14 CPM	dpm/100 cm sq
80		ROOM 1203 Drain, Sink 36			18.90	21.70
81		ROOM 1203 Bowl, Sink 37			10.00	11.40
82		ROOM 1203 Drain, Sink 37			24.00	27.00
83		ROOM 1203 Bowl, Sink 38			36.10	41.10
84		ROOM 1203 Drain, Sink 38			40.30	45.20
85		ROOM 1204 Bowl, Sink 39			5.60	6.30
86		ROOM 1204 Drain, Sink 39			21.10	23.70
87		ROOM 1204 Bowl, Sink 40			36.30	40.70
88		ROOM 1204 Drain, Sink 40			20.90	23.50
89		ROOM 1204 Bowl, Sink 41			22.20	25.30
90		ROOM 1204 Drain, Sink 41			29.00	32.50
91		ROOM 1204 Bowl, Sink 42			31.80	36.20
92		ROOM 1204 Drain, Sink 42			23.00	25.90
BL		QC Blank			0.00	0.00
93		ROOM 1204 Bowl, Sink 43			2.70	3.00
94		ROOM 1204 Drain, Sink 43			30.60	34.40
95		ROOM 1204 Bowl, Sink 44			29.40	33.50
96		ROOM 1204 Drain, Sink 44			31.40	35.50
97		ROOM 1204 Bowl, Sink 45			22.60	25.50
98		ROOM 1204 Drain, Sink 45			38.90	43.70
99		ROOM 1204 Bowl, Sink 46			37.90	43.00
100		ROOM 1204 Drain, Sink 46			17.10	19.20
BG		Background			40.50	0.00
101		ROOM 1204 Bowl, Sink 47			19.70	21.80
102		ROOM 1204 Drain, Sink 47			8.50	9.40
103		ROOM 1204 Bowl, Sink 48			29.20	32.50
104		ROOM 1204 Drain, Sink 48			10.00	11.40
105		ROOM 1204 Bowl, Sink 49			15.90	17.60
106		ROOM 1204 Drain, Sink 49			6.60	9.80
107		ROOM 1204 Bowl, Sink 50			10.30	11.40
108		ROOM 1204 Drain, Sink 50			7.30	8.10
109		ROOM 1204 Bowl, Sink 51			9.50	10.50
110		ROOM 1204 Tail Piece, Sink 51			5.70	6.30
111		ROOM 1204 Trap, Sink 51			12.20	13.70
112		ROOM 1204 Drain, Sink 51			10.60	11.70
113		ROOM 1204 Bowl, Sink 52			1.80	1.90
114		ROOM 1204 Tail Piece, Sink 52			4.60	5.10
115		ROOM 1205 Bowl, Sink 53			7.20	7.90
116		ROOM 1205 Drain, Sink 53			10.70	11.80
117		ROOM 1205 Bowl, Sink 54			12.00	13.40
118		ROOM 1205 Drain, Sink 54			8.70	9.60
119		ROOM 1205 Bowl, Sink 55			5.30	5.90
120		ROOM 1205 Drain, Sink 55			0.10	0.10
121		ROOM 1205 Bowl, Sink 56			13.00	14.40
122		ROOM 1205 Drain, Sink 56			14.70	16.20
123		ROOM 1205 Bowl, Sink 57			3.80	4.20
C-14		QC C-14			117491.30	133573.50

RSA Laboratories
A Division of Radiation Safety Associates
Radiochemistry Analysis Data Sheet

Page 4 of 11

RSA ID#	CUST. ID#	LOCATION			C-14 CPM	dpm/100 cm sq
124		ROOM 1205 Drain, Sink 57			4.50	5.00
125		ROOM 1205 Bowl, Sink 58			24.20	26.70
126		ROOM 1205 Drain, Sink 58			14.80	16.40
127		ROOM 1205 Bowl, Sink 59			31.40	34.90
128		ROOM 1205 Drain, Sink 59			13.40	14.80
129		ROOM 1205 Bowl, Sink 60			43.80	48.60
130		ROOM 1205 Drain, Sink 61			15.20	16.70
131		ROOM 1205 Bowl, Sink 62			18.40	20.70
132		ROOM 1205 Drain, Sink 62			8.80	9.70
133		ROOM 1205 Bowl, Sink 63			12.50	13.80
134		ROOM 1205 Drain, Sink 63			14.80	16.20
135		ROOM 1205 Bowl, Sink 64			0.00	0.00
136		ROOM 1205 Drain, Sink 64			9.70	10.70
137		ROOM 1205 Bowl, Sink 65			30.20	33.50
138		ROOM 1205 Drain, Sink 65			13.80	15.30
139		ROOM 1205 Bowl, Sink 66			8.50	9.30
140		ROOM 1205 Tail Piece, Sink 66			30.10	3.30
141		ROOM 1205 Trap, Sink 66			3.10	3.50
142		ROOM 1205 Drain, Sink 66			0.00	0.00
143		ROOM 1205 Bowl, Sink 67			9.20	10.20
144		ROOM 1205 Tail Piece, Sink 67			14.50	15.90
145		ROOM 1206 Bowl, Sink 68			10.90	12.00
146		ROOM 1206 Drain, Sink 68			23.60	25.90
BL		QC Blank			40.90	44.40
147		ROOM 1206 Bowl, Sink 69			8.70	9.60
148		ROOM 1206 Drain, Sink 69			4.40	4.80
149		ROOM 1206 Bowl, Sink 70			20.60	22.90
150		ROOM 1206 Drain, Sink 70			0.20	0.20
151		ROOM 1206 Bowl, Sink 71			15.00	16.60
152		ROOM 1206 Drain, Sink 71			13.90	15.20
153		ROOM 1206 Bowl, Sink 72			16.50	18.40
154		ROOM 1206 Drain, Sink 72			7.00	7.70
155		ROOM 1206 Bowl, Sink 73			25.60	28.40
156		ROOM 1206 Drain, Sink 73			16.60	18.20
157		ROOM 1206 Bowl, Sink 74			14.50	15.90
158		ROOM 1206 Drain, Sink 74			15.20	16.70
159		ROOM 1206 Bowl, Sink 75			13.60	15.00
160		ROOM 1206 Drain, Sink 75			28.40	31.10
161		ROOM 1206 Bowl, Sink 76			32.00	35.50
162		ROOM 1206 Drain, Sink 76			0.00	0.00
163		ROOM 1206 Bowl, Sink 77			3.20	3.50
164		ROOM 1206 Drain, Sink 77			11.60	12.80
165		ROOM 1206 Bowl, Sink 78			23.40	25.80
166		ROOM 1206 Drain, Sink 78			13.80	15.10
167		ROOM 1206 Bowl, Sink 79			24.70	27.30
168		ROOM 1206 Drain, Sink 79			22.40	24.60
169		ROOM 1206 Bowl Sink 80			6.30	6.90

RSA Laboratories
A Division of Radiation Safety Associates
Radiochemistry Analysis Data Sheet

Page 5 of 11

RSA ID#	CUST. ID#	LOCATION	0 CPM	0 DPM	C-14 CPM	dpm/100 cm sq
C-14		QC C-14			121391.70	134119.70
170		ROOM 1206 Tail Piece, Sink 80			11.50	12.70
171		ROOM 1206 Trap, Sink 80			23.50	26.00
172		ROOM 1206 Drain, Sink 80			14.00	15.60
173		ROOM 1206 Bowl, Sink 81			0.30	0.70
174		ROOM 1206 Tail Piece, Sink 81			20.20	22.20
175		ROOM 1207 Bowl, Sink 82	see rewipe page 12		2319.50	2561.90
176		ROOM 1207 Drain, Sink 82			26.20	28.80
177		ROOM 1207 Bowl, Sink 83			192.20	211.20
178		ROOM 1207 Drain, Sink 83			30.00	33.00
179		ROOM 1207 Bowl, Sink 84			16.00	17.90
180		ROOM 1207 Drain, Sink 84			19.70	21.70
181		ROOM 1207 Bowl, Sink 85			51.50	57.60
182		ROOM 1207 Drain, Sink 85			5.70	6.30
183		ROOM 1207 Bowl, Sink 86			15.60	17.40
184		ROOM 1207 Drain, Sink 86			2.20	2.40
185		ROOM 1207 Bowl, Sink 87			36.10	39.80
186		ROOM 1207 Drain, Sink 87			9.50	10.40
187		ROOM 1207 Bowl, Sink 88			94.90	106.30
188		ROOM 1207 Drain, Sink 88			11.10	12.30
189		ROOM 1207 Bowl, Sink 89			9.90	11.10
190		ROOM 1207 Drain, Sink 89			9.20	10.30
191		ROOM 1207 Bowl, Sink 90			35.60	39.50
192		ROOM 1207 Drain, Sink 90			16.00	17.50
BL		QC Blank			29.90	32.50
193		ROOM 1207 Bowl, Sink 91			120.30	132.90
194		ROOM 1207 Drain, Sink 91			18.30	2.10
195		ROOM 1207 Bowl, Sink 92			19.90	22.20
196		ROOM 1207 Drain, Sink 92			3.10	3.40
197		ROOM 1207 Bowl, Sink 93			43.90	48.90
198		ROOM 1207 Drain, Sink 93			3.30	3.70
199		ROOM 1207 Bowl, Sink 94			99.70	110.10
200		ROOM 1207 Tail Piece, Sink 94			16.40	18.00
201		ROOM 1207 Trap, Sink 94			5.50	6.00
202		ROOM 1207 Drain, Sink 94			26.00	29.50
203		ROOM 1207 Bowl, Sink 95			33.70	38.10
204		ROOM 1207 Tail Piece, Sink 95			23.50	26.40
205		ROOM 1208 Bowl, Sink 96			38.10	43.60
206		ROOM 1208 Drain, Sink 96			11.60	13.00
207		ROOM 1208 Bowl, Sink 97			200.60	226.50
208		ROOM 1208 Drain, Sink 97			20.30	22.80
209		ROOM 1208 Bowl, Sink 98			27.20	30.90
210		ROOM 1208 Drain, Sink 98			27.50	30.90
211		ROOM 1208 Bowl, Sink 99			120.70	135.70
212		ROOM 1208 Drain, Sink 99			22.40	25.10
213		ROOM 1208 Bowl, Sink 100			47.60	54.60
214		ROOM 1208 Drain, Sink 100			36.10	40.60

RSA Laboratories					
A Division of Radiation Safety Associates					
Radiochemistry Analysis Data Sheet					
			Page 6 of 11		
RSA ID#	CUST. ID#	LOCATION	C-14 CPM	dpm/100 cm sq	
215		ROOM 1208 Bowl, Sink 101	17.9	20.3	
C-14		QC C-14	124285.5	134566.4	
216		ROOM 1208 Drain, Sink 101	21.3	24	
217		ROOM 1208 Bowl, Sink 102	16.6	19	
218		ROOM 1208 Drain, Sink 102	0.6	0.7	
219		ROOM 1208 Bowl, Sink 103	31.1	35.4	
220		ROOM 1208 Drain, Sink 103	18.4	20.8	
221		ROOM 1208 Bowl, Sink 104	761.2	857	
222		ROOM 1208 Drain, Sink 104 See 221R on p. 12	19.6	22.1	
223		ROOM 1208 Bowl, Sink 105	24.3	27.4	
224		ROOM 1208 Drain, Sink 105	16	18.4	
225		ROOM 1208 Bowl, Sink 106	74.5	84	
226		ROOM 1208 Drain, Sink 106	35.5	39.9	
227		ROOM 1208 Bowl, Sink 107	16.9	19	
228		ROOM 1208 Drain, Sink 107	5.1	5.7	
229		ROOM 1208 Bowl, Sink 108	28.1	32.4	
230		ROOM 1208 Tail Piece, Sink 108	21.7	24.5	
231		ROOM 1208 Trap, Sink 108	29.4	33.2	
232		ROOM 1208 Drain, Sink 108	30.3	34	
233		ROOM 1208 Bowl, Sink 109	3.9	4.5	
234		ROOM 1208 Tail Piece, Sink 109	30.7	34.5	
235		ROOM 1209 Bowl, Eye Wash Sink 110	16.5	18.8	
236		ROOM 1209 Tail, Sink 110	8.5	9.6	
237		ROOM 1209 Trap, Sink 110	23.2	26.9	
238		ROOM 1209 Bowl, Cup Sink 111	28.6	32.2	
BL		QC Blank	0	0	
239		ROOM 1209 Drain, Cup Sink 111	16.6	18.7	
240		ROOM 1209 Bowl, Cup Sink 112	21.3	24.2	
241		ROOM 1209 Drain, Cup Sink 112	24.7	27.8	
242		ROOM 1209 Bowl, Cup Sink 113	25.7	29	
243		ROOM 1209 Drain, Cup Sink 113	21.7	24.4	
244		ROOM 1209 Bowl, Cup Sink 114	21.9	24.7	
245		ROOM 1209 Drain, Cup Sink 114	18.6	22.6	
246		ROOM 1209 Bowl, Cup Sink 115	25.1	28.3	
247		ROOM 1209 Drain, Cup Sink 115	17.5	20.3	
248		ROOM 1209 Bowl, Cup Sink 116	10.1	11.5	
249		ROOM 1209 Drain, Cup Sink 116	24	27.4	
250		ROOM 1209 Bowl, Cup Sink 117	42	47.4	
251		ROOM 1209 Drain, Cup Sink 117	47.8	54.5	
252		ROOM 1209 Bowl, Cup Sink 118	22.7	25.6	
253		ROOM 1209 Drain, Cup Sink 118	19.3	21.8	
254		ROOM 1209 Bowl, Deep Sink 119	5.9	6.9	
255		ROOM 1209 Drain, Deep Sink 119	22.1	25.1	
256		ROOM 1209 Bowl, Cup Sink 120	18.7	21.3	
257		ROOM 1209 Drain, Cup Sink 120	4.7	5.4	
258		ROOM 1209 Bowl, Cup Sink 121	24.6	27.9	
259		ROOM 1209 Drain, Cup Sink 121	14.5	16.4	

**Sinks and Drains Scoping Survey
RSA Laboratories**

Attachment W

A Division of Radiation Safety Associates Page 7 of 11

Radiochemistry Analysis Data Sheet

RSA ID#	CUST. ID#	LOCATION	0 CPM	0 DPM	C-14 CPM	dpm/100 cm sq
260		ROOM 1209 Bowl, Hood Cup Sink 122			43.60	49.70
261		ROOM 1209 Drain, Hood Cup Sink 122			41.50	47.20
C-14		QC C-14			117317.40	133300.10
262		ROOM 1209 Bowl, Hood Cup Sink 123			32.90	37.50
263		ROOM 1209 Drain, Hood Cup Sink 123			29.00	32.80
264		ROOM 1210 Bowl, Hood Cup Sink 124			23.30	26.90
265		ROOM 1210 Drain, Hood Cup Sink 124			15.30	17.40
266		ROOM 1210 Bowl, Hood Cup Sink 125			38.60	44.00
267		ROOM 1210 Drain, Hood Cup Sink 125			29.80	34.30
268		ROOM 1210 Bowl Deep Sink 126			29.30	33.40
269		ROOM 1210 Drain, Deep Sink 126			13.20	15.30
270		ROOM 1215 Bowl, Eye Wash Sink 127			16.50	18.60
271		ROOM 1215 Drain, Eye Wash Sink 127			16.40	19.20
272		ROOM 1215 Bowl, Cup Sink 128			15.00	17.00
273		ROOM 1215 Drain, Cup Sink 128			16.90	19.50
274		ROOM 1215 Bowl, Cup Sink 129			5.10	5.70
275		ROOM 1215 Drain, Cup Sink 129			20.10	22.70
276		ROOM 1215 Bowl, Cup Sink 130			38.50	43.90
277		ROOM 1215 Drain, Cup Sink 130			21.90	26.70
278		ROOM 1215 Cup Bowl Sink 131			28.90	32.70
279		ROOM 1215 Drain, Cup Sink 131			12.30	138.00
280		ROOM 1215 Bowl, Cup Sink 132			18.50	20.90
281		ROOM 1215 Drain, Cup Sink 132			16.00	18.00
282		ROOM 1215 Bowl, Cup Sink 133			21.00	23.60
283		ROOM 1215 Drain, Cup Sink 133			29.30	33.20
284		ROOM 1215 Bowl, Cup Sink 134			49.00	57.10
285		ROOM 1215 Drain, Cup Sink 134			13.40	14.60
BL		QC Blank			34.20	39.80
286		ROOM 1215 Bowl, Cup Sink 135			39.70	45.30
287		ROOM 1215 Drain, Cup Sink 135			11.90	13.40
288		ROOM 1215 Bowl, Cup Sink 136			6.30	7.30
289		ROOM 1215 Drain, Cup Sink 136			12.10	13.80
290		ROOM 1216 Bowl, Eye Wash Sink 137			26.00	30.50
291		ROOM 1216 Drain, Eye Wash Sink 137			23.30	27.70
292		ROOM 1216 Bowl, Hood Cup Sink 138			45.20	52.10
293		ROOM 1216 Drain, Hood Cup Sink 138			33.01	37.40
294		ROOM 1216 Bowl, Hood Cup Sink 139			96.50	110.40
295		ROOM 1216 Drain, Hood Cup Sink 139			21.30	24.00
296		ROOM 1216 Bowl, Cup Sink 140			15.60	18.10
297		ROOM 1216 Drain, Cup Sink 140			25.90	29.30
298		ROOM 1216 Bowl, Cup Sink 141			6.80	7.70
299		ROOM 1216 Drain, Cup Sink 141			34.90	39.40
300		ROOM 1216 Bowl, Deep Sink 142			22.80	25.90
BG		Background			33.20	0.00
301		ROOM 1216 Drain, Deep Sink 142			20.10	22.70
302		ROOM 1216 Bowl, Cup Sink 143			38.10	42.90
303		ROOM 1216 Drain, Cup Sink 143			31.40	35.80

RSA Laboratories

A Division of Radiation Safety Associates Page 8 of 11

Radiochemistry Analysis Data Sheet

RSA ID#	CUST. ID#	LOCATION	0 CPM	0 DPM	C-14 CPM	dpm/100 cm sq
304		ROOM 1216 Cup Bowl Sink 144			28.20	31.60
305		ROOM 1216 Drain, Cup Sink 144			7.40	8.40
306		ROOM 1216 Bowl, Cup Sink 145			19.90	22.60
307		ROOM 1216 Drain, Cup Sink 145			55.60	63.80
308		ROOM 1216 Bowl, Cup Sink 146			47.40	53.90
309		ROOM 1216 Drain, Cup Sink 146			22.90	28.30
310		ROOM 1216 Bowl, Cup Sink 147			22.20	25.10
311		ROOM 1216 Drain, Cup Sink 147			13.40	15.20
312		ROOM 1216 Bowl, Cup Sink 148			29.00	33.00
313		ROOM 1216 Drain, Cup Sink 148			16.10	18.60
314		ROOM 1216 Bowl, Cup Sink 149			16.40	17.90
315		ROOM 1216 Drain, Cup Sink 149			164.40	180.30
316		ROOM 1216 Bowl, Cup Sink 150			30.50	33.40
317		ROOM 1216 Drain, Cup Sink 150			10.10	11.00
318		ROOM 1217 Bowl, Eye Wash Sink 151			4.00	4.40
319		ROOM 1217 Drain, Eye Wash Sink 151			16.40	18.10
320		ROOM 1217 Bowl, Cup Sink 152			15.80	17.40
321		ROOM 1217 Drain, Cup Sink 152			5.40	6.00
322		ROOM 1217 Bowl, Cup Sink 153			0.00	0.00
323		ROOM 1217 Drain, Cup Sink 153			13.70	15.00
C-14		QC C-14			118247.20	134158.30
324		ROOM 1217 Bowl, Cup Sink 154			10.90	12.00
325		ROOM 1217 Drain, Cup Sink 154			0.20	0.20
326		ROOM 1217 Bowl, Cup Sink 155			12.50	13.70
327		ROOM 1217 Drain, Cup Sink 155			0.00	0.00
328		ROOM 1217 Bowl, Deep Sink 156			16.50	18.10
329		ROOM 1217 Drain, Deep Sink 156			10.50	11.60
330		ROOM 1217 Bowl, Cup Sink 157			17.40	19.20
331		ROOM 1217 Drain, Cup Sink 157			3.20	3.50
332		ROOM 1217 Bowl, Cup Sink 158			8.40	9.20
333		ROOM 1217 Drain, Cup Sink 158			0.00	0.00
334		ROOM 1217 Bowl, Cup Sink 159			0.00	0.00
335		ROOM 1217 Drain, Cup Sink 159			7.40	8.00
336		ROOM 1217 Bowl, Cup Sink 160			11.20	12.40
337		ROOM 1217 Drain, Cup Sink 160			13.30	14.80
338		ROOM 1217 Bowl, Hood Cup Sink 161			8.70	9.60
339		ROOM 1217 Drain, Hood Cup Sink 161			3.30	3.60
340		ROOM 1217 Bowl, Hood Cup Sink 162			8.10	8.90
341		ROOM 1217 Drain, Hood Cup Sink 162			3.10	3.50
342		ROOM 1217 Bowl, Cup Sink 163			13.30	14.70
343		ROOM 1217 Drain, Cup Sink 163			9.00	9.90
344		ROOM 1217 Bowl, Cup Sink 164			0.00	0.00
345		ROOM 1217 Drain, Cup Sink 164			10.70	11.70
346		ROOM 1218 Bowl, Eye Wash Sink 165			13.00	14.50
BL		QC Blank			7.30	7.90
347		ROOM 1218 Drain, Eye Wash Sink 165			11.40	12.50
348		ROOM 1218 Bowl, Hood Cup Sink 166			989.00	116.40

Sinks and Drains Scoping Survey
RSA Laboratories

Attachment W

A Division of Radiation Safety Associates Page 9 of 11

Radiochemistry Analysis Data Sheet

RSA ID#	CUST. ID#	LOCATION	0 CPM	0 DPM	C-14 CPM	dpm/100 cm sq
349		ROOM 1218 Drain, Hood Cup Sink 166			27.50	30.70
350		ROOM 1218 Bowl, Hood Cup Sink 167			204.80	227.80
351		ROOM 1218 Drain, Hood Cup Sink 167			10.70	11.80
352		ROOM 1218 Bowl, Cup Sink 168			38.80	43.20
353		ROOM 1218 Drain, Cup Sink 168			0.00	0.00
354		ROOM 1218 Bowl, Cup Sink 169			10.30	11.50
355		ROOM 1218 Drain, Cup Sink 169			5.00	5.50
356		ROOM 1218 Bowl, Wash Sink 170			27.80	30.60
357		ROOM 1218 Tail Piece, Wash Sink 170			6.80	7.40
358		ROOM 1218 Bowl, Cup Sink 171			14.00	15.40
359		ROOM 1218 Drain, Cup Sink 171			5.30	5.80
360		ROOM 1218 Bowl, Cup Sink 172a			7.00	7.70
361		ROOM 1218 Drain, Cup Sink 172a			5.10	5.60
362		ROOM 1218 Bowl, Cup Sink 172b			11.10	12.20
363		ROOM 1218 Drain, Cup Sink 172b			16.10	17.80
364		ROOM 1218 Drain, Cup Sink 173			12.10	13.50
365		ROOM 1218 Bowl, Cup Sink 173			9.50	10.40
366		ROOM 1218 Bowl, Cup Sink 174			16.90	18.60
367		ROOM 1218 Drain, Cup Sink 174			11.50	12.80
368		ROOM 1218 Bowl, Cup Sink 175			16.20	18.00
369		ROOM 1218 Drain, Cup Sink 175			17.50	19.30
C-14		QC C-14			124609.80	134727.90
370		ROOM 1218 Bowl, Cup Sink 176			6.60	7.20
371		ROOM 1218 Drain, Cup Sink 176			9.40	10.50
372		ROOM 1218 Bowl, Cup Sink 177			3.60	4.00
373		ROOM 1218 Drain, Cup Sink 177			13.00	14.30
374		ROOM 1219 Bowl, Eye Wash Sink 178			13.33	14.60
375		ROOM 1219 Drain, Eye Wash Sink 178			9.30	10.20
376		ROOM 1219 End of Trap, Eye Wash Sink 178			0.00	0.00
377		ROOM 1221 Bowl, Eye Wash Sink 179			9.80	10.80
378		ROOM 1221 Drain, Eye Wash Sink 179			7.10	7.80
379		ROOM 1221 Trap, Eye Wash Sink 179			13.00	14.40
380		ROOM 1221 Bowl, Cup Sink 180			13.40	14.70
381		ROOM 1221 Drain, Cup Sink 180			3.00	3.30
382		ROOM 1221 Bowl, Cup Sink 181			17.10	18.70
383		ROOM 1221 Drain, Cup Sink 181			7.20	7.90
384		ROOM 1221 Bowl, Cup Sink 182			4.60	5.00
385		ROOM 1221 Drain, Cup Sink 182			9.60	10.50
386		ROOM 1221 Bowl, Cup Sink 183			8.30	9.20
387		ROOM 1221 Drain, Cup Sink 183			18.60	20.40
388		ROOM 1221 Bowl, Wash Sink 184			30.10	32.90
389		ROOM 1221 Drain, Wash Sink 184			11.30	12.40
390		ROOM 1221 Bowl, Cup Sink 185			3.40	3.70
391		ROOM 1221 Drain, Cup Sink 185			4.50	4.90
392		ROOM 1221 Drain, Cup Sink 186			9.60	10.70
BL		QC Blank			11.40	12.40
393		ROOM 1221 Bowl, Cup Sink 186			14.30	15.70
394		ROOM 1221 Drain, Cup Sink 187			29.50	32.30

RSA Laboratories
A Division of Radiation Safety Associates
Radiochemistry Analysis Data Sheet

Page 10 of 11

RSA ID#	CUST. ID#	LOCATION	0 CPM	0 DPM	C-14 CPM	dpm/100 cm sq
395		ROOM 1221 Bowl, Cup Sink 187			0.00	0.00
396		ROOM 1221 Drain, Cup Sink 188			18.30	20.20
397		ROOM 1221 Bowl, Cup Sink 188			22.80	25.10
398		ROOM 1221 Drain, Cup Sink 189			13.20	14.70
399		ROOM 1221 Bowl, Cup Sink 189			9.90	11.00
400		ROOM 1221 Drain, Cup Sink 190			13.10	14.50
401		ROOM 1221 Bowl, Cup Sink 190			10.60	11.60
402		ROOM 1221 Bowl, Hood Cup Sink 191			22.30	24.40
403		ROOM 1221 Drain, Hood Cup Sink 191			16.50	18.20
404		ROOM 1221 Bowl, Hood Cup Sink 192			39.00	42.60
405		ROOM 1221 Drain, Hood Cup Sink 192			12.30	13.60
406		ROOM 1222 Bowl, Eye Wash Sink 193			13.60	15.00
407		ROOM 1222 Drain, Eye Wash Sink 193			4.50	4.90
408		ROOM 1222 Trap, Eye Wash Sink 193			11.10	12.20
409		ROOM 1222 Bowl, Hood Cup Sink 194			17.20	18.90
410		ROOM 1222 Drain, Hood Cup Sink 194			10.50	11.60
411		ROOM 1222 Bowl, Hood Cup Sink 195			11.20	12.30
412		ROOM 1222 Drain, Hood Cup Sink 195			9.50	10.50
413		ROOM 1222 Bowl, Cup Sink 196			11.50	12.60
414		ROOM 1222 Drain, Cup Sink 196			7.90	8.70
415		ROOM 1222 Bowl, Cup Sink 197			15.80	17.30
C-14		QC C-14			122010.10	134713.60
416		ROOM 1222 Drain, Cup Sink 197			12.10	13.40
417		ROOM 1222 Bowl, Wash Sink 198			17.10	18.70
418		ROOM 1222 Drain, Wash Sink 198			16.30	17.90
419		ROOM 1222 Cup Bowl Sink 199			0.00	0.00
420		ROOM 1222 Cup Drain Sink 199			10.80	11.80
421		ROOM 1222 Cup Bowl Sink 200			0.40	0.40
422		ROOM 1222 Cup Drain Sink 200			4.50	4.90
423		ROOM 1222 Cup Bowl Sink 201			23.30	25.50
424		ROOM 1222 Cup Drain Sink 201			11.60	12.70
425		ROOM 1222 Cup Bowl Sink 202			29.20	32.10
426		ROOM 1222 Cup Drain Sink 202			0.00	0.00
427		ROOM 1222 Bowl, Hood Cup Sink 203			15.40	16.90
428		ROOM 1222 Drain, Hood Cup Sink 203			20.50	22.70
429		ROOM 1222 Bowl, Hood Cup Sink 204			2.40	2.70
430		ROOM 1222 Drain, Hood Cup Sink 204			4.60	5.10
431		ROOM 1223 Bowl, Eye Wash Sink 205			0.00	0.00
432		ROOM 1223 Drain, Eye Wash Sink 205			4.10	4.50
433		ROOM 1223 Trap, Eye Wash Sink 205			7.30	8.10
434		ROOM 1223 Bowl, Hood Cup Sink 206			0.00	0.00
435		ROOM 1223 Drain, Hood Cup Sink 206			15.40	16.90
436		ROOM 1223 Bowl, Hood Cup Sink 207			0.00	0.00
437		ROOM 1223 Drain, Hood Cup Sink 207			3.60	3.90
438		ROOM 1223 Bowl, Wash Sink 208			13.30	14.70
BL		QC Blank			5.30	5.70
439		ROOM 1223 Drain, Wash Sink 208			12.00	13.20
440		ROOM 1223 Bowl, Cup Sink 209			51.10	55.80

RSA Laboratories
A Division of Radiation Safety Associates
Radiochemistry Analysis Data Sheet

Page 11 of 11

RSA ID#	CUST. ID#	LOCATION	0 CPM	0 DPM	C-14 CPM	dpm/100 cm sq
441		ROOM 1223 Drain, Cup Sink 209			13.10	14.40
442		ROOM 1223 Bowl, Cup Sink 210			27.50	30.40
443		ROOM 1223 Drain, Cup Sink 210			7.30	8.10
444		ROOM 1223 Bowl, Cup Sink 211			10.90	12.00
445		ROOM 1223 Drain, Cup Sink 211			23.70	26.60
446		ROOM 1223 Bowl, Cup Sink 212			0.00	0.00
447		ROOM 1223 Drain, Cup Sink 212			15.30	16.80
448		ROOM 1223 Bowl, Hood Cup Sink 213			18.00	19.70
449		ROOM 1223 Drain, Hood Cup Sink 213			13.20	14.50
450		ROOM 1223 Bowl, Hood Cup Sink 214			18.80	20.80
451		ROOM 1223 Drain, Hood Cup Sink 214			5.90	6.50
452		ROOM 1223 Bowl, Cup Sink 215			26.10	29.30
453		ROOM 1223 Drain, Cup Sink 215			23.70	26.30
454		ROOM 1223 Bowl, Cup Sink 216			9.60	10.50
455		ROOM 1223 Drain, Cup Sink 216			19.30	21.20
456		ROOM 1223 Bowl, Eye Wash Sink 217			25.30	27.80
457		ROOM 1223 Drain, Eye Wash Sink 217			10.80	11.70
458		ROOM 1223 Trap, Eye Wash Sink 217			9.70	10.80
459		ROOM 1224 Bowl, Hood Cup Sink 218			5.70	6.40
460		ROOM 1224 Drain, Hood Cup Sink 218			0.00	0.00
461		ROOM 1224 Bowl, Hood Cup Sink 219			0.00	0.00
C-14		QC C-14			117272.20	133052.20
462		ROOM 1224 Drain, Hood Cup Sink 219			21.90	24.20
463		ROOM 1224 Bowl Cup Sink 220			10.60	11.60
464		ROOM 1224 Drain, Cup Sink 220			12.10	13.40
465		ROOM 1224 Bowl, Cup Sink 221			16.10	17.70
466		ROOM 1224 Drain, Cup Sink 221			0.00	0.00
467		ROOM 1224 Bowl, Wash Sink 222			8.80	9.70
468		ROOM 1224 Drain, Wash Sink 222			12.00	13.30
469		ROOM 1224 Bowl, Cup Sink 223			18.40	20.20
470		ROOM 1224 Drain, Cup Sink 223			0.00	0.00
471		ROOM 1224 Bowl, Cup Sink 224			29.20	31.90
472		ROOM 1224 Drain, Cup Sink 224			10.00	11.00
473		ROOM 1224 Bowl, Cup Sink 225			5.80	6.40
474		ROOM 1224 Drain, Cup Sink 225			11.60	12.80
57R		Bowl sink 26 rewipe			13.10	14.10
175R		Bowl sink 82 rewipe			25.40	27.30
177R		Bowl sink 83 rewipe			22.70	24.40
207R		Bowl sink 97 rewipe			64.20	69.10
221R		Bowl sink 104 rewipe			14.00	15.00
350R		Hood cup sink bowl 167 rewipe			34.30	37.10

Scoping Survey—Large Area Wipes

Note

Large Area Wipes (LAW) are sometimes used to quickly screen areas that are not likely to be contaminated. *Numbers obtained are not intended for quantification but for indication of an unanticipated problem.*

A series of LAWs were taken in these laboratories, each covering approximately 6m² (65ft² = 3.12E+5cm²), on the floors, laboratory benches, shelves and walls. No significant¹ contamination was found.

The activity reported on the following pages per 100 cm² takes into account *only* the area of the LAW medium and the detector, approximately 425cm² each. It does *not* account for the area sampled. Therefore if one wanted to try to quantify the activity on a LAW, the equation would be

$$\frac{\text{gross cpm} - \text{bkgd cpm}}{\text{Eff}_{\text{counter}} \times \frac{A_{\text{wipe}}}{100}} = \frac{\text{dpm}}{100\text{cm}^2}$$

Where A = the area wiped, 3.12E+5cm² in this case.

When the entire area of the wipe is factored in, the activity concentration for each LAW becomes a few dpm/100cm².

¹ “Significant” contamination would be greater than 2,000 dpm/100cm² (10% of the applicable release limit [DCGL] which is 20,000 dpm/100cm² for structures) as described in this report.

Chemtura Corporation, Middlebury, CT

Large Area Wipes

Date: 4/29/2011

Page 1 of 3

Meter #2: Ludlum 2224 s/n 119815 w/43-37 s/n 160827

MDA: 309 dpm/100 cm²

C-14 efficiency (%):

4.7

Background (5 min. count):

2450

Beta cpm:

490

#	Location	Gross Beta (2 min. count)	Gross Beta cpm	Beta dpm/100 cm sq
1	Room 1201 - Counters	992	496	30
2	Room 1201 - Walls 1	970	485	-25
3	Room 1201 - Walls 2	942	471	-95
4	Room 1201 - Floors	1250	625	676
5	Room 1202 - Counters	976	488	-10
6	Room 1202 - Walls 1	982	491	5
7	Room 1202 - Walls 2	926	463	-135
8	Room 1202 - Floors	1160	580	451
9	Room 1203 - Counters	1070	535	225
10	Room 12032 - Walls 1	946	473	-85
11	Room 1203 - Walls 2	918	459	-155
12	Room 1203 - Floors	1154	577	436
13	Room 1204 - Counters	994	497	35
14	Room 1204 - Walls 1	896	448	-210
15	Room 1204 - Walls 2	948	474	-80
16	Room 1204 - Floors	1238	619	646
17	Room 1205 - Counters	1256	628	691
18	Room 1205 - Walls 1	982	491	5
19	Room 1205 - Walls 2	942	471	-95
20	Room 1205 - Floors	1374	687	986
21	Room 1206 - Counters	1092	546	280
22	Room 1206 - Walls 1	1008	504	70
23	Room 1206 - Walls 2	990	495	25
24	Room 1206 - Floors	1342	671	906
25	Room 1207 - Counters **	2134	1067	2889
26	Room 1207 - Walls 1 **	1398	699	1046
27	Room 1207 - Walls 2	1174	587	486
28	Room 1207 - Floors **	1762	881	1957
29	Room 1208 - Counters **	1468	734	1222
30	Room 1208 - Walls 1	1312	656	831
31	Room 1208 - Walls 2	1022	511	105
32	Room 1208 - Floors	1292	646	781
33	Room 1209 - Counters	1116	558	340
34	Room 1209 - Walls 1	1060	530	200

** See NOTE on page 1 for explanation.

Chemtura Corporation, Middlebury, CT

Large Area Wipes

Date: 4/29/2011

Page 2 of 3

Meter #2: Ludlum 2224 s/n 119815 w/43-37 s/n 160827

MDA: 309 dpm/100 cm²

C-14 efficiency (%):

4.7

Background (5 min. count):

2450

Beta cpm:

490

#	Location	Gross Beta (2 min. count)	Gross Beta cpm	Beta dpm/100 cm sq
35	Room 1209 - Walls 2	1056	528	190
36	Room 1209 - Floors **	1510	755	1327
37	Room 1210 - Counters	1104	552	310
38	Room 1210 - Walls 1	972	486	-20
39	Room 1210 - Walls 2	1000	500	50
40	Room 1210 - Floors	1170	585	476
41	Room 1215 - Counters	1066	533	215
42	Room 1215 - Walls 1	998	499	45
43	Room 1215 - Walls 2	968	484	-30
44	Room 1215 - Floors	1322	661	856
45	Room 1216 - Counters	1046	523	165
46	Room 1216 - Walls 1	878	439	-255
47	Room 1216 - Walls 2	996	498	40
48	Room 1216 - Floors	1338	669	896
49	Room 1217 - Counters	1110	555	325
50	Room 1217 - Walls 1	902	451	-195
51	Room 1217 - Walls 2	1014	507	85
52	Room 1217 - Floors	1162	581	456
53	Room 1218 - Counters	1110	555	325
54	Room 1218 - Walls 1	1322	661	856
55	Room 1218 - Walls 2	1024	512	110
56	Room 1218 - Floors	1308	654	821
57	Room 1219 - Counters	958	479	-55
58	Room 1219 - Walls 1	962	481	-45
59	Room 1219 - Walls 2	964	482	-40
60	Room 1219 - Floors	1128	564	370
61	Room 1220 - Counters	980	490	0
62	Room 1220 - Walls 1	976	488	-10
63	Room 1220 - Walls 2	960	480	-50
64	Room 1220 - Floors	1068	534	220
65	Room 1221 - Counters	1196	598	541
66	Room 1221 - Walls 1	976	488	-10
67	Room 1221 - Walls 2	998	499	45
68	Room 1221 - Floors **	1430	715	1126

** See NOTE on page 1 for explanation.

