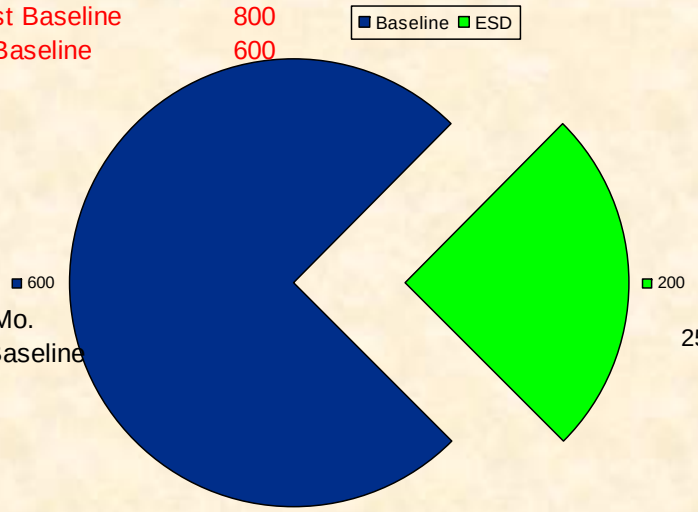
HAZARDOUS WASTE
X042 – Environmental Sciences Division (ESD)
25% Waste Minimization Goal

P2 GOAL: Reduce Routine Generation
Of All Solid Waste by 25% in FY04

FY04	(kg)
Forecast Baseline	800
Target Baseline	600

12 Mo. Status	(kg)
Forecast Baseline	800
Target Baseline	600

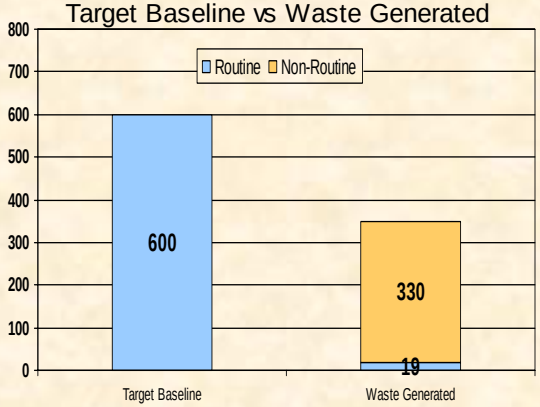


12 Mo.
Target Baseline

25% Reduction

25% Waste Miminization Goal					
FY04 (kg)			12 Mo. Status (kg)		
Forecast Baseline	25% Reduction	Target Baseline	Forecast Baseline	25% Reduction	Target Baseline
800.0	200.0	600.0	800.0	200.0	600.0

12 Mo.Status
Target Baseline vs Waste Generated



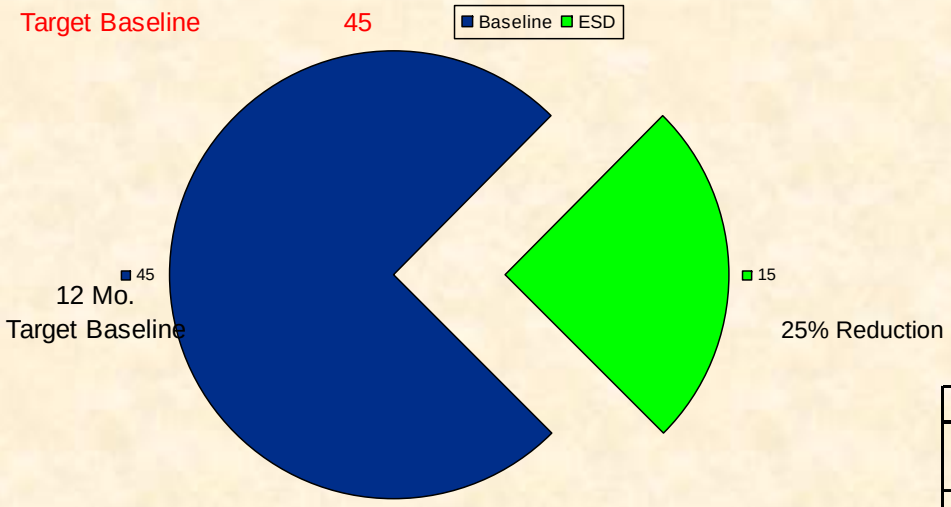
Waste Generated			
Process Category	# Containers	# Items	(kg's) Quantity
Routine			
Research & Development	1	2	19
Total Routine	**1**	**2**	**19**
Non-Routine			
Excess	28	120	330
Total Non-Routine	**28**	**120**	**330**
Total Hazardous Waste	**29**	**122**	**349**

P2 GOAL: Reduce Routine Generation
Of All Solid Waste by 25% in FY04

FY04	(kg)
Forecast Baseline	60
Target Baseline	45

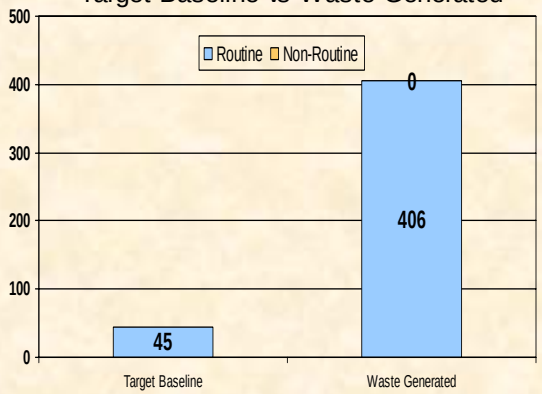
12 Mo. Status	(kg)
Forecast Baseline	60
Target Baseline	45

MIXED WASTE
X042 – Environmental Sciences Division (ESD)
25% Waste Minimization Goal



25% Waste Miminization Goal					
FY04 (kg)			12 Mo. Status (kg)		
Forecast Baseline	25% Reduction	Target Baseline	Forecast Baseline	25% Reduction	Target Baseline
60	15	45	60	15	45

12 Mo.Status
Target Baseline vs Waste Generated



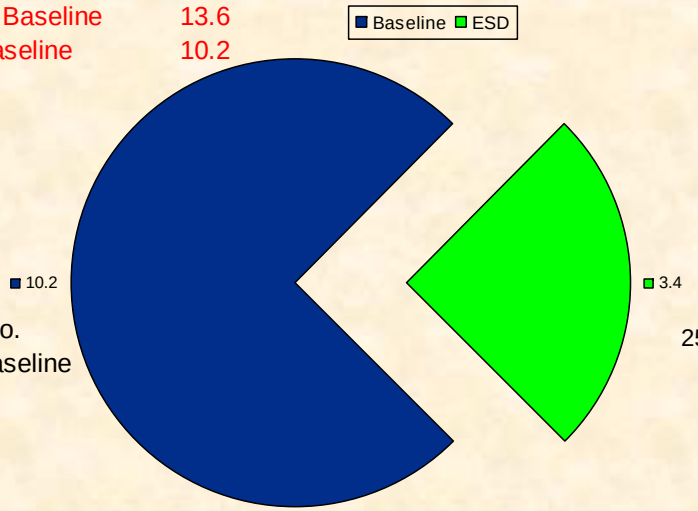
Waste Generated			
Process Category	# Containers	# Items	(kg's) Quantity
Routine			
Research & Development	5	16	406
Total Routine	**5**	**16**	**406**
Non-Routine			
Total Non-Routine	**-**	**-**	**-**
Total Mixed Waste	**5**	**16**	**406**

LOW-LEVEL WASTE
X042 – Environmental Sciences Division (ESD)
25% Waste Minimization Goal

P2 GOAL: Reduce Routine Generation
Of All Solid Waste by 25% in FY04

FY04
Forecast Baseline 13.6
Target Baseline 10.2

12 Mo. Status
Forecast Baseline 13.6
Target Baseline 10.2

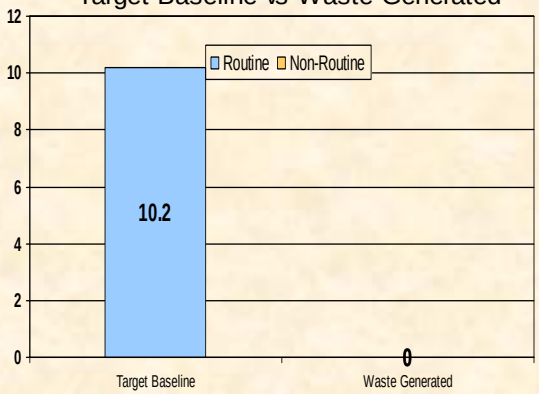


12 Mo.
Target Baseline

25% Reduction

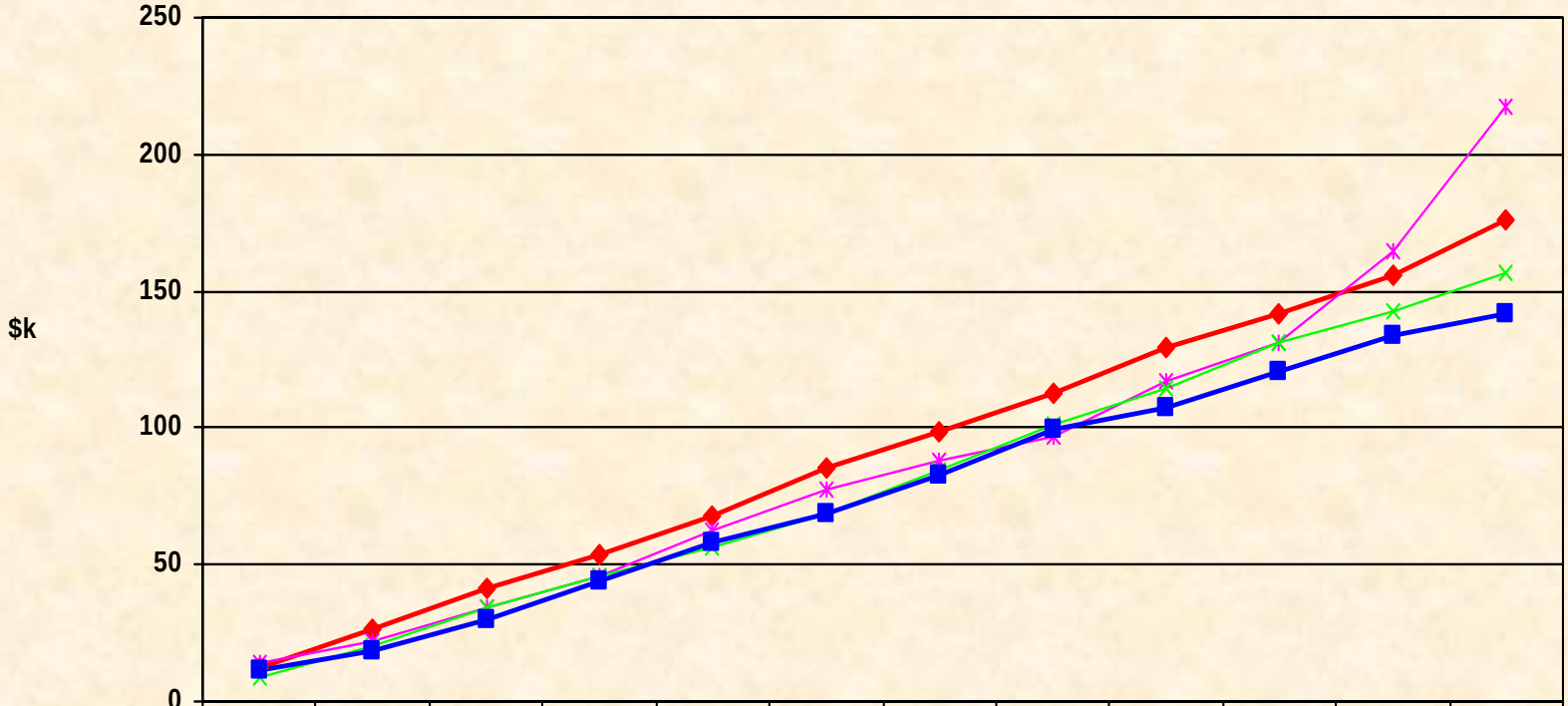
25% Waste Miminization Goal					
FY04 (m³)			12 Mo. Status (m³)		
Forecast Baseline	25% Reduction	Target Baseline	Forecast Baseline	25% Reduction	Target Baseline
13.6	3.4	10.2	13.6	3.4	10.2

12 Mo.Status
Target Baseline vs Waste Generated



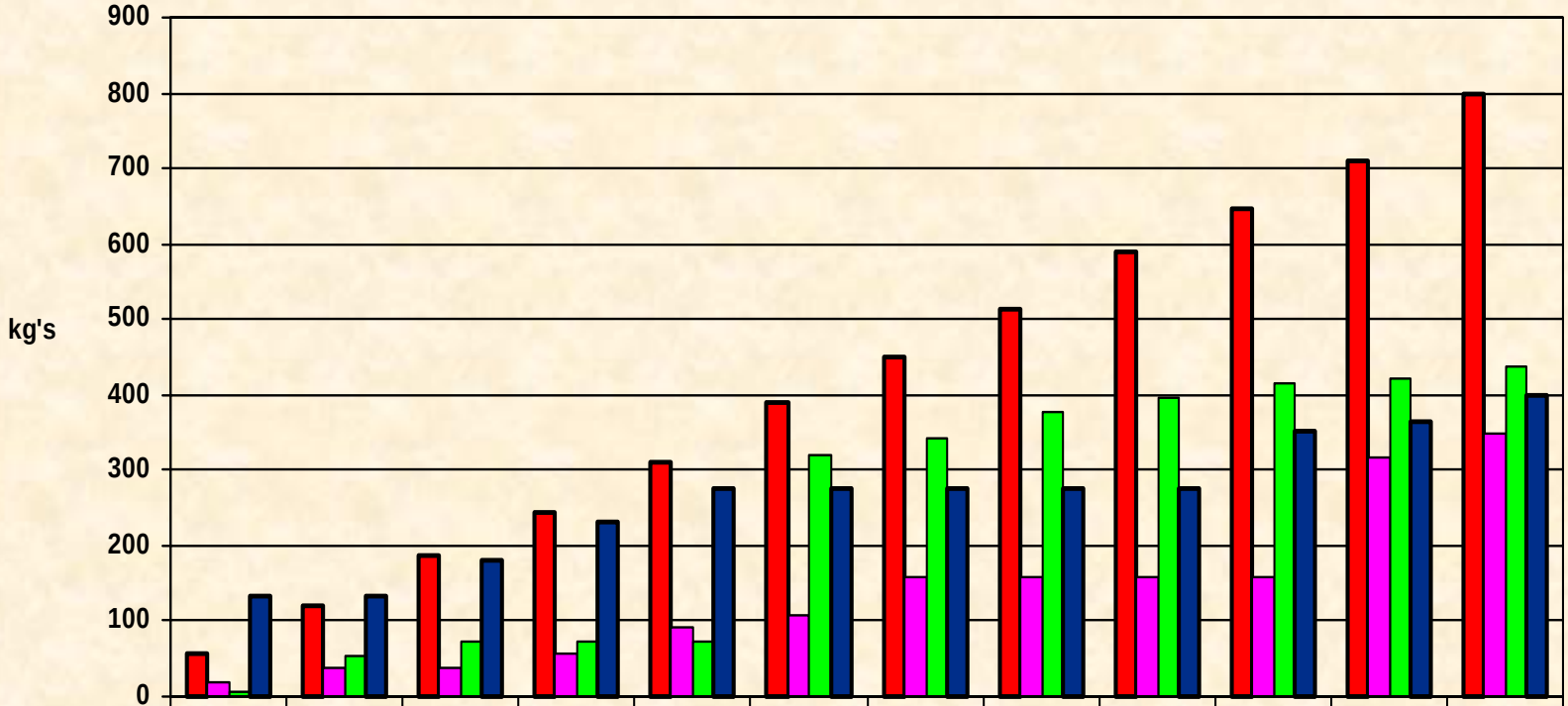
Waste Generated			
Process Category	# Containers	# Items	(M³) Quantity
Routine			
Total Routine	-	-	-
Non-Routine			
Total Non-Routine	-	-	-
Total Low Level Waste	-	-	-

ORNL Laboratory Waste Services
Charge Back Cost Performance for
X042 - Environmental Sciences Division (ESD)



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FY04 Forecast	12.6	26.6	41.3	53.9	67.9	85.4	98.7	112.7	129.5	142.1	156.1	175.7
FY04 Actuals	13.8	21.8	34.5	46.1	62.4	77.9	87.8	96.4	117.1	131.6	164.2	217.5
FY03 Actuals	9	20.4	34.2	45.7	56	69	84.8	101.3	114.6	130.9	142.3	156.8
FY02 Actuals	11.4	18.4	29.8	43.8	57.8	68.8	82.6	99.1	107.2	120.9	134.2	141.8

ORNL Laboratory Waste Services
Hazardous Waste Generated
X042 - Environmental Sciences Division (ESD)

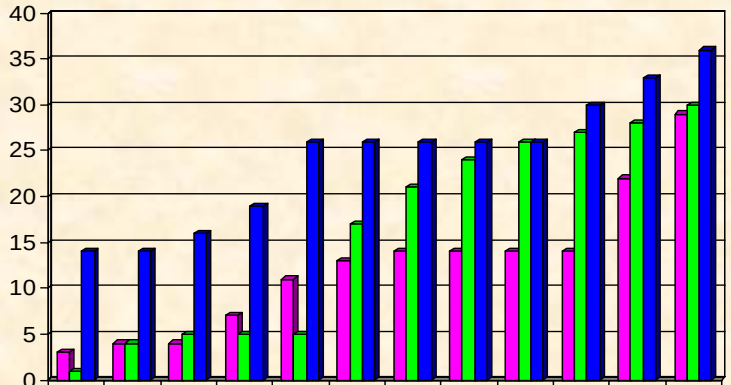


	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FY04 Forecast	57.0	121.0	188.0	245.0	309.0	389.0	449.0	513.0	590.0	647.0	711.0	800.0
FY04 Actuals	20.0	39.0	39.0	56.0	91.0	107.0	157.0	157.0	157.0	157.0	316.0	349.0
FY03 Actuals	5.5	55.3	73.1	73.1	73.1	318.8	340.8	377.8	397.4	415.4	420.4	438.4
FY02 Actuals	134.5	134.5	181.5	231.8	275.9	275.9	275.9	275.9	275.9	351.5	365.6	399.5

NOTE: Actual Waste Generated includes Routine and Non-Routine. FY02, FY03 and FY04 Waste Generated is reported by Division assigning Charge Number (as referenced on 2109). FY02, FY03 and FY04. This change in reporting was made during July and August 2004.

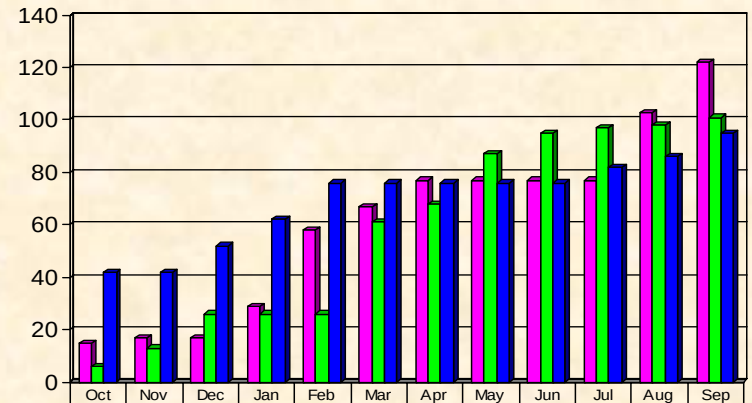
ORNL Laboratory Waste Services
Hazardous Waste Generated
X042 – Environmental Sciences Division (ESD)

Containers Processed



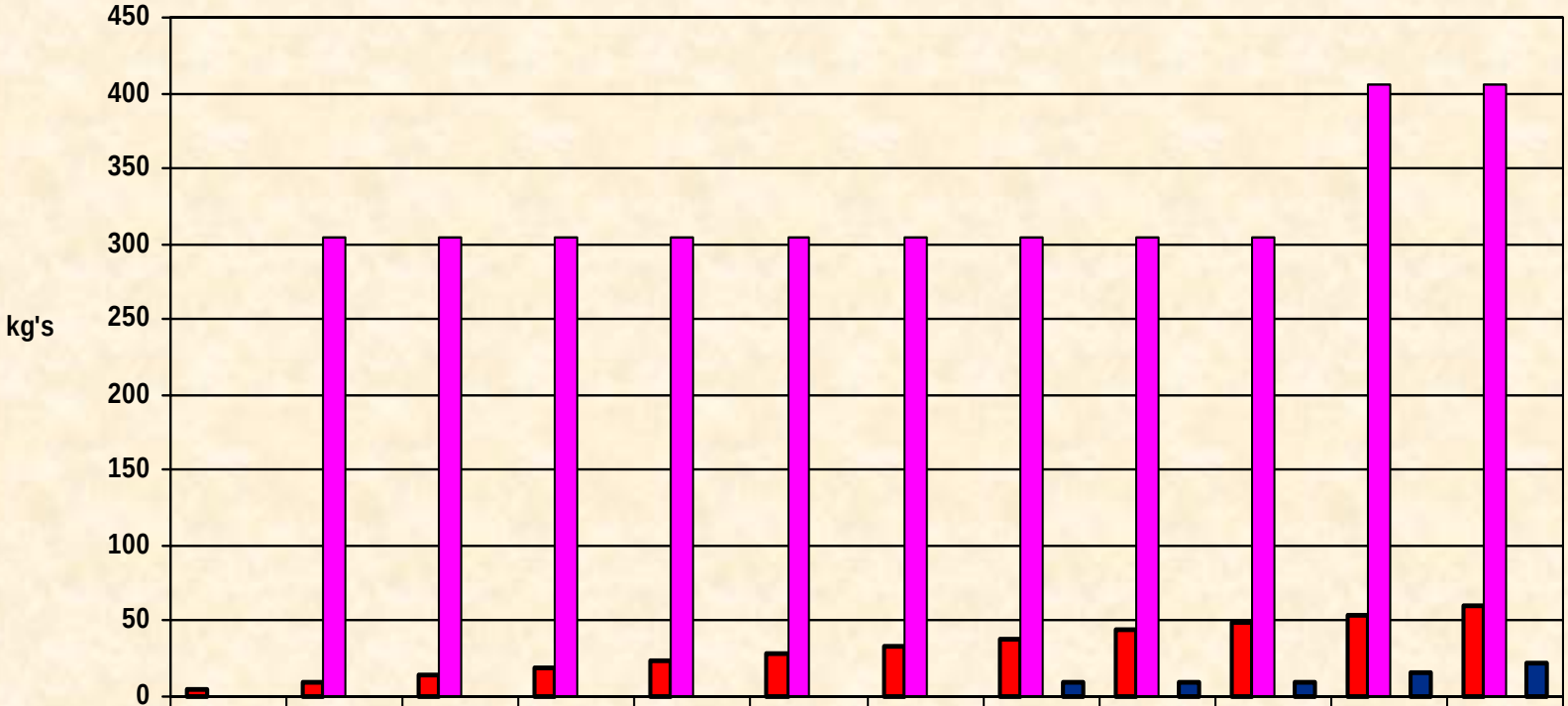
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FY04	3	4	4	7	11	13	14	14	14	14	22	29
FY03	1	4	5	5	5	17	21	24	26	27	28	30
FY02	14	14	16	19	26	26	26	26	26	30	33	36

Items Packed in Containers



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FY04	15	17	17	29	58	67	77	77	77	77	103	122
FY03	6	13	26	26	26	61	68	87	95	97	98	101
FY02	42	42	52	62	76	76	76	76	76	82	86	95

ORNL Laboratory Waste Services
Mixed Waste Generated
X042 - Environmental Sciences Division (ESD)



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FY04 Forecast	4.3	9.1	14.1	18.4	23.2	29.2	33.7	38.5	44.2	48.5	53.3	60.0
FY04 Actuals	0.0	304.0	304.0	304.0	304.0	304.0	304.0	304.0	304.0	304.0	406.0	406.0
FY03 Actuals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FY02 Actuals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	10.0	10.0	16.5	22.6

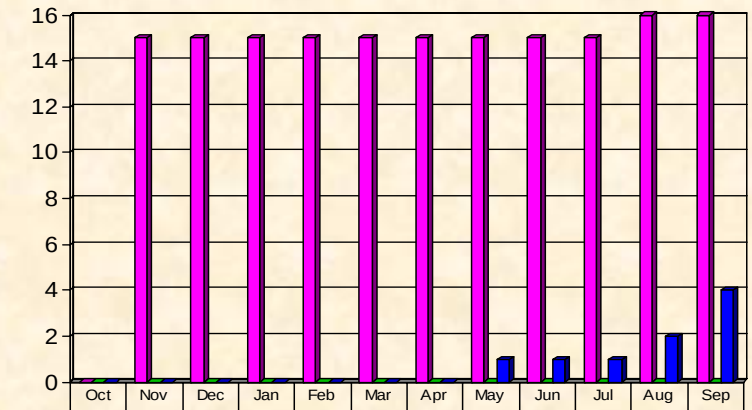
NOTE: Actual Waste Generated includes Routine and Non-Routine. FY02, FY03 and FY04 Waste Generated is reported by Division assigning Charge Number (as referenced on 2109). FY02, FY03 and FY04. This change in reporting was made during July and August 2004.

ORNL Laboratory Waste Services
Mixed Waste Generated
X042 – Environmental Sciences Division (ESD)

Containers Processed

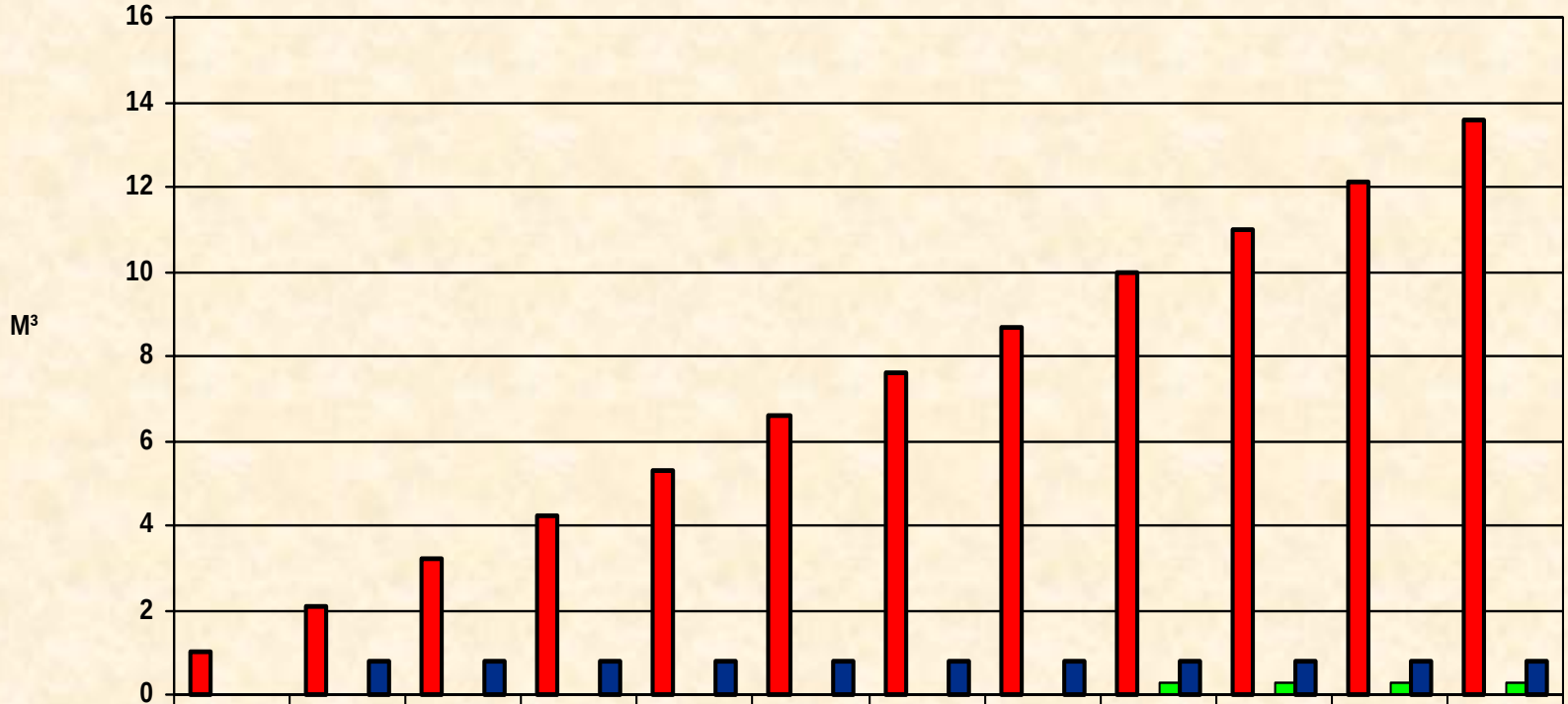
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FY04	0	4	4	4	4	4	4	4	4	4	5	5
FY03	0	0	0	0	0	0	0	0	0	0	0	0
FY02	0	0	0	0	0	0	0	1	1	1	2	3

Items Packed in Containers



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FY04	0	15	15	15	15	15	15	15	15	15	16	16
FY03	0	0	0	0	0	0	0	0	0	0	0	0
FY02	0	0	0	0	0	0	0	1	1	1	2	4

ORNL Laboratory Waste Services
Low-Level Waste Generated
X042 - Environmental Sciences Division (ESD)

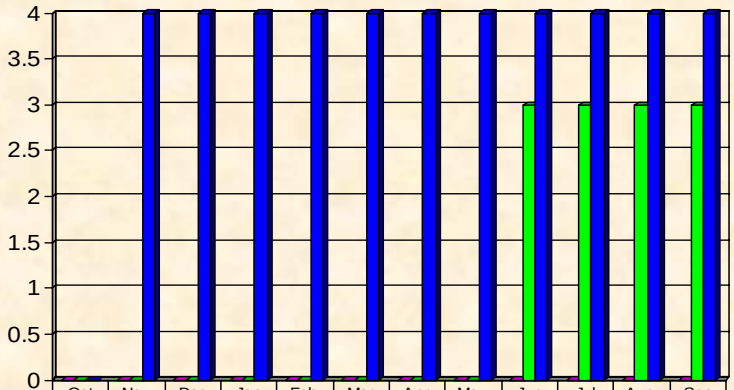


	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FY04 Forecast	1	2.1	3.2	4.2	5.3	6.6	7.6	8.7	10	11	12.1	13.6
FY04 Actuals	0	0	0	0	0	0	0	0	0	0	0	0
FY03 Actuals	0	0	0	0	0	0	0	0	0.3	0.3	0.3	0.3
FY02 Actuals	0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8

NOTE: Actual Waste Generated includes Routine and Non-Routine. FY02, FY03 and FY04 Waste Generated is reported by Division assigning Charge Number (as referenced on 2109). FY02, FY03 and FY04. This change in reporting was made during July and August 2004.

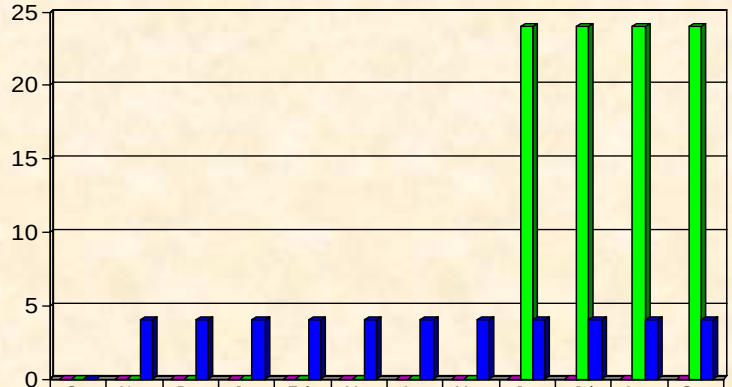
ORNL Laboratory Waste Services
Low-Level Waste Generated
X042 – Environmental Sciences Division (ESD)

Containers Processed



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FY04	0	0	0	0	0	0	0	0	0	0	0	0
FY03	0	0	0	0	0	0	0	0	3	3	3	3
FY02	0	4	4	4	4	4	4	4	4	4	4	4

Items Packed in Containers



	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FY04	0	0	0	0	0	0	0	0	0	0	0	0
FY03	0	0	0	0	0	0	0	0	24	24	24	24
FY02	0	4	4	4	4	4	4	4	4	4	4	4

Waste Generated Detail Report

Wednesday, October 13, 2004

Records Selected: Division = Division assigned Charge Number on 2109 Form (not Division recorded on 2109 Form)

Container	MWP	Origin Location	Generator	Category	Routine / Non-Routine	Description	Quantity	Received	Picked Up	2109 Div.	ChargeNumbe
X042											
HAZ											
X10C0300141	HW-01-SC	1505/154	S.E. Childs	EXC	NR	Lab Pack Containing Dry Corrosives	6.000 kg	9/28/2004		X042	33800007
X10C0300132	HW-01-SC	1505/154	Z. Yang	EXC	NR	Chromomycin. Packed in a 5-Gallon Steel Drum	7.000 kg	10/24/2003	12/11/2003	X042	33800007
X10C0300133	HW-01-SC	1505/154	S.E. Childs	EXC	NR	Non-Regulated Solid Chemicals Packed in 5-Gallon Plastic Bucket	5.000 kg	10/24/2003	12/11/2003	X042	33800007
X10C0014047	HW-01-SC	1505/NA	S.E. Childs	RND	R	Spent Phenol/Chloroform Mixture	19.000 kg	11/18/2003	1/15/2004	X042	33800007
X10C0300135	HW-01-SC	1505/NA	Z. Yang	EXC	NR	Lab Pack Oxidizers	6.000 kg	1/27/2004	3/11/2004	X042	33800007
X10C0300137	HW-01-SC	1505/NA	Z. Yang	EXC	NR	Lab Pack Flammable Liquids	5.000 kg	1/27/2004	3/11/2004	X042	33800007
X10C0300136	HW-01-SC	1505/NA	Z. Yang	EXC	NR	Lab Pack Naphthalene	6.000 kg	1/27/2004	3/11/2004	X042	33800007
X10C0011803	HW-01-SC	1505/154	Z. Yang	EXC	NR	Lab Pack Non-Regulaed Solids	14.000 kg	2/3/2004	3/11/2004	X042	33800007
X10C0300134	HW-01-SC	1505/NA	Z. Yang	EXC	NR	Lab Pack Flammable Liquids	7.000 kg	2/3/2004	3/11/2004	X042	33800007
X10C0300138	HW-01-SC	1505/NA	Z. Yang	EXC	NR	Lab Pack Mercury Compounds	5.000 kg	2/3/2004	3/11/2004	X042	33800007
X10C0300139	HW-01-SC	1505/NA	Z. Yang	EXC	NR	Lab Pack Acidic Solution Containing Mercuric Thiocyanate	9.000 kg	2/3/2004	3/11/2004	X042	33800007
X10C0300131	HW-01-SC	1505/154	Z. Yang	EXC	NR	Mithramycin Packed in 5-Gallon Steel Drum	8.000 kg	10/24/2003	12/11/2003	X042	33800007
X10C0300142	HW-01-SC	1505/154	S.E. Childs	EXC	NR	Lab Pack Nitric Acid	5.000 kg	3/2/2004	4/15/2004	X042	33800007
X10C0402249	HW-01-SC	1505/NA	M.T. Ross	EXC	NR	Lab Packed Item; OUABAIN, See Attached Log Sheet	8.000 kg	9/9/2004		X042	33800001
X10C0300144	HW-01-SC	1505/154	T.L. Mehlhorn	EXC	NR	Waste Meets No Rad Added Requirements. Water Containing .02% Spent Sodium Azide, and .5% Sodium Chloride in Water	52.000 kg	8/17/2004		X042	33800007
X10C0402094	HW-01-SC	1505/287	M.T. Ross	EXC	NR	Lab Packed Items; Hazardous Waste Liquids; See Attached Log Sheet, pH Value is an Actual Field Test; No Rad Added, Physical Form Code - W001	21.000 kg	8/6/2004	9/16/2004	X042	33800001
X10C0402248	HW-01-SC	1505/NA	M.T. Ross	EXC	NR	Lab Packed Items; Non-DOT Regulated; See Attached Log Sheet	3.000 kg	9/9/2004		X042	33800001
X10C0402247	HW-01-SC	1505/NA	M.T. Ross	EXC	NR	Lab Packed Items; See Attached Log Sheet	2.000 kg	9/9/2004		X042	33800001
X10C0402246	HW-01-SC	1505/NA	M.T. Ross	EXC	NR	Lab Packed Items; Non-DOT Regulated; See Attached Log Sheet	2.000 kg	9/9/2004		X042	33800001
X10C0300140	HW-01-SC	1505/154	S.E. Childs	EXC	NR	Lab Pack Corrosive Solids	11.000 kg	3/2/2004	4/15/2004	X042	33800007
X10C0402244	HW-01-SC	1505/NA	M.T. Ross	EXC	NR	Lab Packed Items; Mercury Thermometers; See Attached Log Sheet	10.000 kg	9/9/2004		X042	33800001
X10C0300149	HW-01-SC	1505/154	T.L. Mehlhorn	EXC	NR	Waste Meets No Rad Added Requirements, Used Soda Lime, Indicating	5.000 kg	8/17/2004		X042	33800007

Waste Generated Detail Report

Records Selected: Division = Division assigned Charge Number on 2109 Form (not Division recorded on 2109 Form)

Container	MWP	Origin Location	Generator	Category	Routine / Non-Routine	Description	Quantity	Received	Picked Up	2109 Div.	ChargeNumbe
X10C0402093	HW-01-SC	1505/287	M.T. Ross	EXC	NR	Lab Packed Items; Flammable Liquids; See Attached Log Sheet, Corrosivity to Steel Value is an Estimate Based on Chemical Constituents; No Rad Added, Physical Form Code - W001	20.000 kg	8/6/2004	9/16/2004	X042	33800001
X10C0402092	HW-01-SC	1505/NA	M.T. Ross	EXC	NR	Lab Packed Item; DL-Isocitric Acid; See Attached Log Sheet, No Rad Added	2.000 kg	8/6/2004	9/16/2004	X042	33800001
X10C0402091	HW-01-SC	1505/NA	M.T. Ross	EXC	NR	Lab Packed Items; Nuclear Track Emulsion; See Attached Log Sheet, pH Value is an Estimate Based on Chemical Constituents; No Rad Added, Physical Form Code - W001	3.000 kg	8/6/2004	9/16/2004	X042	33800001
X10C0402090	HW-01-SC	1505/NA	M.T. Ross	EXC	NR	Lab Packed Items; Flammable Liquids; See Attached Log Sheet, pH Value is an Estimate Based on Chemical Constituents; No Rad Added, Physical Form Code - W001	5.000 kg	8/6/2004	9/16/2004	X042	33800001
X10C0300143	HW-01-SC	1505/154	S.E. Childs	EXC	NR	Fiber Drum Containing NonRegulated Dry Chemicals	50.000 kg	4/12/2004	6/17/2004	X042	33800007
X10C0300148	HW-01-SC	1505/154	T.L. Mehlhorn	EXC	NR	Waste Meets No Rad Added Requirements. Water Containing .02% Spent Sodium Azide, and .5% Sodium Chloride in Water	51.000 kg	8/17/2004		X042	33800007
X10C0402245	HW-01-SC	1505/NA	M.T. Ross	EXC	NR	Lab Packed Item; Trifluoro Acetic Acid; See Attached Log Sheet	2.000 kg	9/9/2004		X042	33800001
					Total	HAZ	349.000 kg				

MIXED

X10C0014040	MW-014	1505/154	T.L. Mehlhorn	EXC	NR	Mixed Waste Drum Containing Bags of Vials. Rad Contaminated Groundwater Spiked with Cadmium and Cobalt EDTA	71.000 kg	11/5/2003	1/23/2004	X042	33800007
X10C0014039	MW-014	1505/154	T.L. Mehlhorn	EXC	NR	Mixed Waste Drum Containing Bags of Vials. Rad Contaminated Groundwater Spiked with Cadmium and Cobalt EDTA	79.000 kg	11/5/2003	1/23/2004	X042	33800007
X10C0014046	MW-017	1505/Lab 287	K.A. Lowe	EXC	NR	Mixed Waste, Groundwater Contaminated with U-238, TC-99, Barrium and Cadmium. Acidified to PH of 1 wth Nitric Acid.	74.000 kg	11/18/2003	2/11/2004	X042	33800007
X10C0014045	MW-017	1505/Lab 287	K.A. Lowe	EXC	NR	Mixed Waste, Groundwater Contaminated with U-238, TC-99, Barrium and Cadmium. Acidified to PH of 1 wth Nitric Acid.	80.000 kg	11/18/2003	2/11/2004	X042	33800007
X10C0300150	MW-017	1505/Lab 287	K.A. Lowe	EXC	NR	Mixed Waste, Groundwater Contaminated with U-238, TC-99, Barium, and Cadmium. Acidified to PH of 1 with Phosphoric Acid	102.000 kg	8/30/2004		X042	33800007
					Total	MIXED	406.000 kg				

Waste Generated Detail Report

Records Selected: Division = Division assigned Charge Number on 2109 Form (not Division recorded on 2109 Form)

Container	MWP	Origin Location	Generator	Category	Routine / Non-Routine	Description	Quantity	Received	Picked Up	2109 Div.	ChargeNumbe