

# FACILITY INFORMATION

## COST ESTIMATE FOR CLOSURE AND POST-CLOSURE CARE OF RCRA HAZARDOUS WASTE UNITS

FLD984171165

1	Facility Name	SAFETY-KLEEN SANFORD
2	Facility Identification Number	0022198
3	Date Report Generated	08/27/98
4	Facility Address	600 Central Park Drive  SANFORD FL 32771
5	Mailing Address	
6	Contact Person	Rich Morris
7	Telephone	
8	Sequence Number for this Cost Estimate	1
9	Source(s) of Information Used to Prepare this Cost Estimate	

# FACILITY SUMMARY

Facility Name: SAFETY-KLEEN SANFORD

Facility Sequence: 1

Facility EPA ID: 0022198

## UNIT COST ESTIMATES

Unit Name		Number of Units	Cost To Close
1.	Container Storage Areas	1	\$52,964
2.	Tank Systems	1	\$227,239
3.	Surface Impoundments		\$0
4.	Waste Piles		\$0
5.	Land Treatment		\$0
6.	Landfills		\$0
7.	Incinerators and BIFs		\$0
8.	Drip Pads		\$0
9.	Containment Buildings		\$0
10.	Total Closure Costs		\$280,203
11.	Post-Closure Care		\$0
12.	User Defined Additional Costs		\$0
TOTAL COST OF CLOSURE AND POST CLOSURE (Rounded to \$280,000)			\$280,203

# TREATMENT AND DISPOSAL

TD-1

Facility Name: SAFETY-KLEEN SANFORD

Facility Sequence: 1

Unit Name: WASTE SOLVENT TANKS

Unit Sequence: 1

## SUMMARY WORKSHEET

Activity		Worksheet Number	Cost
1.	Treatment and Disposal of Waste	TD-2	\$154,001
2.	Transportation and Disposal of Decontamination Fluids	TD-3	\$7,234
TOTAL COST OF TREATMENT AND DISPOSAL			\$161,235

# TREATMENT AND DISPOSAL

**TD-2***TREATMENT AND DISPOSAL- Page 1 of 2*

Facility Name: SAFETY-KLEEN SANFORD

Facility Sequence: 1

Unit Name: WASTE SOLVENT TANKS

Unit Sequence: 1

Form Sequence: 1

1 TREATMENT AND DISPOSAL OF WASTE 1 Tank solvents			
1.A	Volume in yd <sup>3</sup> of waste to be treated and disposed of	94.0 yd <sup>3</sup>	
1.B	Density of waste	1,685.8 lb/yd <sup>3</sup>	
1.C	Amount in tons of waste to be treated and disposed of	79.2 tons	
1.D	Treatment and disposal cost per ton	\$1,140.00 /ton	
1.E	Cost to Treat and Dispose of Waste 1		\$90,288
2 TREATMENT AND DISPOSAL OF WASTE 2 Concrete Contai			
2.A	Volume in yd <sup>3</sup> of waste to be treated and disposed of	242.0 yd <sup>3</sup>	
2.B	Density of waste	4,050.0 lb/yd <sup>3</sup>	
2.C	Amount in tons of waste to be treated and disposed of	490.1 tons	
2.D	Treatment and disposal cost per ton	\$130.00 /ton	
2.E	Cost to Treat and Dispose of Waste 2		\$63,713

Facility Name: SAFETY-KLEEN SANFORD

Facility Sequence: 1

Unit Name: WASTE SOLVENT TANKS

Unit Sequence: 1 Form Sequence: 1

3 TREATMENT AND DISPOSAL OF WASTE 3			
3.A	Volume in yd <sup>3</sup> of waste to be treated and disposed of	0.0 yd <sup>3</sup>	
3.B	Density of waste	1,685.8 lb/yd <sup>3</sup>	
3.C	Amount in tons of waste to be treated and disposed of	0.0 tons	
3.D	Treatment and disposal cost per ton	\$0.00 /ton	
3.E	Cost to Treat and Dispose of Waste 3		\$0
4 TREATMENT AND DISPOSAL OF WASTE 4			
4.A	Volume in yd <sup>3</sup> of waste to be treated and disposed of	0.0 yd <sup>3</sup>	
4.B	Density of waste	1,685.8 lb/yd <sup>3</sup>	
4.C	Amount in tons of waste to be treated and disposed of	0.0 tons	
4.D	Treatment and disposal cost per ton	\$0.00 /ton	
4.E	Cost to Treat and Dispose of Waste 4		\$0
TOTAL COST OF TREATMENT AND DISPOSAL			\$154,001

F001-005 does not meet LDR

# TREATMENT AND DISPOSAL

**TD-3****TRANSPORTATION AND DISPOSAL OF DECONTAMINATION FLUIDS- Page 1 of 1****Facility Name: SAFETY-KLEEN SANFORD****Facility Sequence: 1****Unit Name: WASTE SOLVENT TANKS****Unit Sequence: 1 Form Sequence: 1**

1	Volume of decontamination fluid generated from closure activities	7,591 total gal	
2	Labor and equipment cost per work hour Appropriate level of PPE	\$36.66 /work hr Protection Level D	
3	Work rate to pump decontamination fluid to a holding tank	0.00007 work hrs/ gallon	
4	Number of hours required to pump decontamination fluid to a holding tank	1 work hrs	
5	Subtotal of labor and equipment costs to pump decontamination fluid to a holding tank		\$37
6	Number of days required to rent holding tank	1 days	
7	Holding tank rental fee (10,000 gal tank per day)	\$365 /day	
8	Number of tanks required	1 tanks	
9	Subtotal of tank rental costs		\$365
10	Transportation and disposal costs for bulk liquid \$0.90 /gal		\$6,832
TOTAL COST TO TRANSPORT AND DISPOSE OF DECONTAMINATION FLUID AS A BULK LIQUID			\$7,234

Facility Name: SAFETY-KLEEN SANFORD

Facility Sequence: 1

Unit Name: WASTE SOLVENT TANKS

Unit Sequence: 1

Form Sequence: 1

<b>1 TRANSPORTATION OF WASTE IN DRUMS</b>			
1.A	Number of drums of waste	0 drums	
1.B	Cost to transport one truckload of 55-gallon drums 250 miles	\$1,087.50 /truckload	
1.C	Number of truckloads needed to transport waste in drums (80 drums per truckload)	0 truckloads	
1.D	<b>Cost to Transport Waste in Drums</b>		<b>\$0</b>
<b>2 TRANSPORTATION OF BULK LIQUIDS</b>			
2.A	Gallons of liquid waste	19,000 gal	
2.B	Cost to transport one truckload of bulk liquids 250 miles	\$1,087.50 /truckload	
2.C	Number of truckloads needed to transport bulk free liquid waste (6,900 gallons per truckload)	3 truckloads	
2.D	<b>Cost to Transport Bulk Liquid Waste</b>		<b>\$3,263</b>
<b>3 TRANSPORTATION OF BULK WASTE</b>			
3.A	Number of waste debris boxes	1 debris boxes	
3.B	Cost to transport one truckload of bulk waste 250 miles	\$1,087.50 /truckload	
3.C	Number of truckloads needed to transport bulk waste (one debris box per truckload)	1 truckloads	
3.D	<b>Cost to Transport Bulk Waste</b>		<b>\$1,088</b>
<b>TOTAL COST OF TRANSPORTATION OF WASTE</b>			<b>\$4,351</b>

Facility Name: SAFETY-KLEEN SANFORD

Facility Sequence: 1

Unit Name: WASTE SOLVENT TANKS

Unit Sequence: 1 Form Sequence: 1

1 UNIT DESCRIPTION AND MAXIMUM PERMITTED CAPACITY			
1.A	Type of tank system	aboveground	
1.B	Maximum permitted capacity of the tank	19,000 gal	
1.C	Total length of ancillary piping	100.0 ft	
1.D	Nominal size of ancillary piping	3.00 in	
1.E	Maximum capacity of ancillary piping	77 gal	
1.F	Maximum capacity of tank and ancillary piping	19,077 gal	
1.G	Type of secondary containment system	lined containment system	
2 SURFACE AREA OF TANK SYSTEM			
2.A	Tank	884.0 ft <sup>2</sup>	
2.B	Ancillary Piping	160.4 ft <sup>2</sup>	
2.C	Surface Area of Tank System		1,044.4 ft <sup>2</sup>
2.D	Surface Area of Tank System in yd <sup>2</sup>		116.0 yd <sup>2</sup>



Facility Name: SAFETY-KLEEN SANFORD

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Unit Name: WASTE SOLVENT TANKS

Unit Sequence: 1

<b>3 VOLUME OF TANK SYSTEM TO BE REMOVED</b>			
<b>3.A</b>	<b>Volume of Tank System to be Removed</b>		<b>2,540.1 ft<sup>3</sup></b>
<b>3.B</b>	<b>Volume of Tank System to be Removed in yd<sup>3</sup></b>		<b>94.1 yd<sup>3</sup></b>
<b>4 SURFACE AREA OF SECONDARY CONTAINMENT SYSTEM</b>			
<b>4.A</b>	<b>Length</b>	<b>56.5 ft</b>	
<b>4.B</b>	<b>Width</b>	<b>38.6 ft</b>	
<b>4.C</b>	<b>Surface Area of Secondary Containment System Pad</b>		<b>2,180.9 ft<sup>2</sup></b>
<b>4.D</b>	<b>Surface Area of Secondary Containment System Pad in yd<sup>2</sup></b>		<b>242.3 yd<sup>2</sup></b>
<b>5 VOLUME OF SECONDARY CONTAINMENT SYSTEM</b>			
<b>5.A</b>	<b>Thickness</b>	<b>1.00 ft</b>	
<b>5.B</b>	<b>Volume of Secondary Containment Pad</b>		<b>80.8 yd<sup>3</sup></b>
<b>6 SURFACE AREA OF SECONDARY CONTAINMENT SYSTEM BERM</b>			
<b>6.A</b>	<b>Total Length</b>	<b>190.0 ft</b>	
<b>6.B</b>	<b>Height</b>	<b>3.00 ft</b>	
<b>6.C</b>	<b>Surface Area of Secondary Containment System Berm</b>		<b>570.0 ft<sup>2</sup></b>
<b>6.D</b>	<b>Surface Area of Secondary Containment System Berm in yd<sup>2</sup></b>		<b>63.3 yd<sup>2</sup></b>

Facility Name: SAFETY-KLEEN SANFORD

Facility Sequence: 1

Unit Name: WASTE SOLVENT TANKS

Unit Sequence: 1

<b>7 VOLUME OF SECONDARY CONTAINMENT SYSTEM BERM</b>			
7.A	Thickness	3.00 ft	
7.B	Volume of Secondary Containment System Berm		63.3 yd <sup>3</sup>
<b>8 SURFACE AREA OF OTHER STRUCTURES IN SECONDARY CONTAINMENT SYSTEM</b>			
8.A	Surface Area of Other Structures		0.0 ft <sup>2</sup>
8.B	Surface Area of Other Structures in yd <sup>2</sup>		0.0 yd <sup>2</sup>
<b>9 VOLUME OF OTHER STRUCTURES IN SECONDARY CONTAINMENT SYSTEM</b>			
9	Volume of Other Structures		0.0 yd <sup>3</sup>
<b>10 VOLUME OF CONTAMINATED SOIL TO BE REMOVED</b>			
10.A	Length	0.0 ft	
10.B	Width	0.0 ft	
10.C	Depth	0.00 ft	
10.D	Volume of Contaminated Soil to be Removed		0.0 ft <sup>3</sup>
10.E	Volume of Contaminated Soil to be Removed in yd <sup>3</sup>		0.0 yd <sup>3</sup>

Facility Name: SAFETY-KLEEN SANFORD

Facility Sequence: 1

Unit Name: WASTE SOLVENT TANKS

Unit Sequence: 1

## SUMMARY WORKSHEET

Activity		Worksheet Number	Cost
1.	Removal of Waste	TS-3	\$322
2.	Tank System Purging (ignitable wastes only)	TS-4	\$0
3.	Flushing the Tank and Piping	TS-5	\$0
4.	Excavation, Disassembly, and Loading	TS-6	\$1,305
5.	Demolition and Removal of Containment System	TS-7	\$8,508
6.	Removal of Soil	TS-8	\$0
7.	Backfill	TS-9	\$0
8.	Decontamination	DC-1	\$5,720
9.	Sampling and Analysis	SA-2	\$3,860
10.	Monitoring Well Installation	MW-1	\$0
11.	Transportation	TR-1	\$4,351
12.	Treatment and Disposal	TD-1	\$161,235
13.	<b>Subtotal of Closure Costs</b>		<b>\$185,301</b>
14.	Engineering Expenses      Percent Applied      10.00 %		\$18,530
15.	Certification of Closure	TS-10	\$2,750
16.	<b>Subtotal</b>		<b>\$206,581</b>
17.	Contingency Allowance      Percent Applied      10.00 %		\$20,658
18.	Landfill Closure (Cover Installation)	CI-2	\$0
<b>TOTAL COST OF CLOSURE      (Rounded to      \$230,000 )</b>			<b>\$227,239</b>

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apple 94,000

Facility Name: SAFETY-KLEEN SANFORD

Facility Sequence: 1

Unit Name: WASTE SOLVENT TANKS

Unit Sequence: 1 Form Sequence: 1

1	Maximum volume of waste to be removed from the tank and ancillary piping	19,077 gal	
2	Labor and equipment cost per work hour Appropriate level of PPE	\$92.10 /work hr Protection Level D	
3	Work rate required to remove waste from tank and ancillary piping	0.00017 work hr/ gal capacity	
4	Number of hours required to remove waste from tank and ancillary piping	3.5 work hrs	
TOTAL COST OF REMOVAL OF WASTE FROM TANK AND ANCILLARY PIPING			\$322

Facility Name: SAFETY-KLEEN SANFORD

Facility Sequence: 1

Unit Name: WASTE SOLVENT TANKS

Unit Sequence: 1 Form Sequence: 1

**1 EXCAVATION AND LOADING (FOR IN-GROUND AND UNDERGROUND TANKS ONLY)**

1.A	Capacity of tank	0 gal	
1.B	Labor and equipment cost per work hour Appropriate level of PPE	\$33.31 /work hr Protection Level D	
1.C	Work rate required to excavate and load tank per gallon capacity	0.00200 work hr/ gal capacity	
1.D	Number of hours required to excavate and load tank	0.0 work hrs	
1.E	Cost to Excavate and Load Tank		\$0

**2 DISASSEMBLY OF ANCILLARY PIPING**

2.A	Length of ancillary piping to be disassembled	100.0 ft	
2.B	Labor and equipment cost per work hour Appropriate level of PPE	\$38.12 /work hr Protection Level D	
2.C	Work rate required to disassemble one ft of pipe	0.15000 work hr/ft	
2.D	Number of hours required to disassemble ancillary piping	15.0 work hrs	
2.E	Cost of Disassembly of Ancillary Piping		\$572

## EXCAVATION, DISASSEMBLY, AND LOADING - Page 2 of 2

Facility Name: SAFETY-KLEEN SANFORD

Facility Sequence: 1

Unit Name: WASTE SOLVENT TANKS

Unit Sequence: 1

3 LOADING (FOR ON-GROUND AND ABOVEGROUND TANKS ONLY)			
3.A	Capacity of tank	19,000 gal	
3.B	Labor and equipment cost per work hour Appropriate level of PPE	\$38.56 /work hr Protection Level D	
3.C	Work rate required to load tank per gallon capacity	0.00100 work hr/ gal capacity	
3.D	Number of hours required to load tank	19.0 work hrs	
3.E	Cost to Load Tank		\$733
TOTAL COST OF EXCAVATION, DISASSEMBLY, AND LOADING			\$1,305

## DEMOLITION AND REMOVAL OF CONTAINMENT SYSTEM - Page 1 of 1

Facility Name: SAFETY-KLEEN SANFORD

Facility Sequence: 1

Unit Name: WASTE SOLVENT TANKS

Unit Sequence: 1 Form Sequence: 1

<b>1 DEMOLITION OF CONTAINMENT SYSTEM</b>			
1.A	Area of containment system	2,750.9 ft <sup>2</sup>	
1.B	Labor and equipment cost per work hour Appropriate level of PPE	\$32.28 /work hr Protection Level D	
1.C	Work rate required to demolish one ft <sup>2</sup> of containment system	0.04000 work hr/ ft <sup>2</sup>	
1.D	Number of hours required to demolish the containment system	110.5 work hrs	
1.E	<b>Cost to Demolish the Containment System</b>		<b>\$3,567</b>
<b>2 REMOVAL AND LOADING OF CONTAINMENT SYSTEM</b>			
2.A	Volume of the containment system	144.1 yd <sup>3</sup>	
2.B	Labor and equipment cost per work hour Appropriate level of PPE	\$38.12 /work hr Protection Level D	
2.C	Work rate required to remove and load one yd <sup>3</sup>	0.30000 work hr/ yd <sup>3</sup>	
2.D	Number of hours required to remove and load the containment system	43.5 work hrs	
2.E	Subtotal of labor and equipment cost to remove and load the containment system		<b>\$1,658</b>
2.F	Number of debris box containers needed to hold the containment system	8 containers	
2.G	Cost of one 20-yd <sup>3</sup> -capacity debris box container (rent per week)	\$380 /container	
2.H	Cost of debris box containers		<b>\$3,040</b>
2.I	Cost of mobilization and demobilization (flat rate)		<b>\$243</b>
2.J	<b>Cost to Remove and Load Containment System</b>		<b>\$4,941</b>
<b>TOTAL COST OF DEMOLITION AND REMOVAL OF CONTAINMENT SYSTEM</b>			<b>\$8,508</b>

Facility Name: SAFETY-KLEEN SANFORD

Facility Sequence: 1

Unit Name: WASTE SOLVENT TANKS

Unit Sequence: 1 Form Sequence: 1

1	Number of units requiring certification of closure	1	
2	Cost of certification of closure per unit	\$2,750	
TOTAL COST OF CERTIFICATION OF CLOSURE			\$2,750