

APPENDIX 11-C

HOUSTON/GALVESTON - 9% POINT SOURCES 6/12/96

	EI 1990 (TPD)	EI 1999 (TPD)	Permits*	CE-90	CE-99	Non-Permitted		Permitted		Reduction 90-99 (TPD)	New 1999 (TPD)
						RE-90	RE-99	RE-90	RE-99		
HON	0.44	0.53	0.03	0.0%	93.0%	0.0%	95.0%	0.0%	98.0%	0.467	0.000
Pulp & Paper	6.11	9.18	2.72	0.0%	90.0%	0.0%	100.0%	0.0%	100.0%	8.262	0.918
Floating Roof Tanks	24.31	70.96	21.95	95.0%	95.0%	88.0%	95.0%	93.0%	98.0%	28.824	42.139
<b>Total</b>										<b>37.553</b>	<b>43.057</b>

HOUSTON/GALVESTON - 9% AREA SOURCES 6/22/96

	Growth Factor	EI 1990 (TPD)	CE-90	CE-99	RE-90	RE-99	RP-90	RP-99	CR 90-9 (TPD)	New 1999 (TPD)	
											Recreational Marine Vess
UST Remediation	1.1262	1.8200	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	2.050	0.000	
MSW Landfills NSPS & EG	1.0573	7.0020	0.0%	70.0%	0.0%	98.0%	0.0%	80.0%	4.063	3.340	
Commercial Aircraft Engines	1.3506	1.8000	0.0%	40.0%	0.0%	100.0%	0.0%	100.0%	0.972	1.459	
Utility Engine 1999	1.0000	65.6700	0.0%	22.9%	0.0%	100.0%	0.0%	100.0%	15.038	50.632	
Utility Engines 97-99									6.311		
<b>Total</b>										<b>29.146</b>	<b>57.227</b>



ESTIMATES TOWARDS 9% ROP SIP - HOUSTON/GALVESTON

EMISSIONS INVENTORY	1990	Percent	Growth	1999	Percent
Area Sources	200.07	20.5%	-1.7%	196.68	19.1%
Point Sources	481.95	49.4%	7.3%	516.95	50.2%
On-road Mobile Sources	163.39	16.8%	5.7%	172.68	16.8%
Off-road Mobile Sources	129.98	13.3%	9.9%	142.87	13.9%
<b>TOTALS</b>	<b>975.39</b>		<b>5.5%</b>	<b>1029.18</b>	

CREDITABLE REDUCTIONS RELATIVE TO 1999

MANDATED RULES	99 Projected TPD	Reduction
Catchups	47.88	28.63
TSDF	14.99	13.94
Vehicle Refueling (Stage II)	21.02	17.08
General Vent Gas	81.32	14.42
Reform Gas (off road)	150.46	5.30
RFG, VM, Tier I	172.68	40.41
	<b>Subtot</b>	<b>119.77</b>
<b>15% RULES</b>		
*** Auto Refinishing	28.80	11.52
Vessel Cleaning	4.21	3.08
Stage 1	12.36	6.33
SOCMI Reactor/Distillation	4.32	1.57
Marine Vessel Loading	34.77	17.32
Fugitives	75.85	46.92
RE Improvements	187.28	12.70
Gas Utility Engines	73.34	8.73
TCMs	172.68	0.36
Architectural Coatings	26.16	5.23
Consumer/Comm Product	23.42	4.68
Industrial Wastewater	11.51	8.42
Bulk Gasoline Terminals	7.05	3.68
Major Source Bakeries	0.77	0.23
Traffic Markings	2.91	0.58
High Perform. Maintenanc	5.14	1.03
Other Special Purpose	6.46	1.29
Wood Furniture	2.88	0.39
	<b>Subtot</b>	<b>122.52</b>
	<b>Total</b>	<b>242.30</b>

\*\*\* Credits from this category are not counted

	1990	HGA		On-Mobile	Off-Mobile
		Point	Area		
		480.34	229.01	163.39	195.11
Other Product Coatings	0.61-0.91		-0.3		
Other Special Purpose	5.39-5.74		-0.35		
High Performance Maintenance	5.74-4.56		1.18		
Marine Vessel Loading (Area)	15.94-0.00		15.94		
Commercial Vessels	14.81-3.81				11
Military Aircraft	N/A				
Surface Cleaning	16.43-8.44		7.99		
Auto Refinishing	16.50-25.57		-9.07		
Architectural Coatings	31.20-23.23		7.97		
Sheet, Strip, & Coil	5.58-0.00		5.58		
Vessel W/ Outboards	61.39-20.48				40.91
Generators < 50 hp	11.96-9.22				2.74
Lawnmowers	33.43-22.95				10.48
Marine Vessel Loading (point)	15.26-26.84	-10.15			
Acetone	8.54-0.00	8.54			
New 1990		481.95	200.07	163.39	129.98

	1996	HGA		On-Mobile	Off-Mobile
		Point	Area		
		499.9	243.99	192.89	209.99
Other Product Coatings	0.66-1.0		-0.34		
Other Special Purpose	5.83-6.3		-0.47		
High Performance Maintenance	6.22-5.01		1.21		
Marine Vessel Loading (Area)	15.94-0.00		15.94		
Commercial Vessels	14.66-4.29				10.37
Military Aircraft	N/A				
Surface Cleaning	17.80-1.14		16.66		
Auto Refinishing	17.87-10.6		7.27		
Architectural Coatings	33.79-25.96		7.83		
Sheet, Strip, & Coil	6.04-0.00		6.04		
Vessel W/ Outboards	66.51-19.27				47.24
Generators < 50 hp	12.93-10.08				2.85
Lawnmowers	36.29-25.13				11.16
Marine Vessel Loading (Point)	17.95-31.57	-13.62			
Acetone	8.59-0.00	8.59			
New 1996		504.93	189.85	192.89	138.37

	1999	HGA		On-Mobile	Off-Mobile
		Point	Area		
		512.39	252.46	172.68	216.85
Other Product Coatings	0.69-1.04		-0.35		
Other Special Purpose	6.07-6.55		-0.48		
High Performance Maintenance	6.46-5.20		1.26		
Marine Vessel Loading (Area)	16.12-0.00		16.12		
Commercial Vessels	14.79-4.29				10.5
Military Aircraft	N/A				
Surface Cleaning	18.51-1.18		17.33		
Auto Refinishing	18.59-11.06		7.53		
Architectural Coatings	35.14-27.05		8.09		
Sheet, Strip, & Coil	6.28-0.00		6.28		
Vessel W/ Outboards	68.55-19.27				49.28
Generators < 50 hp	13.34-10.44				2.9
Lawnmowers	37.51-26.21				11.3
Marine Vessel Loading (Point)	19.77-34.77	-13.15			
Acetone	8.59-0.00	8.59			
New 1999		516.95	196.68	172.68	142.87

HOUSTON/GALVESTON - POINT SOURCES 2/13/96

	EI 1990 (TPD)	EI 1999 (TPD)	Permits*	CE-90	CE-99	Non-Permitted		Permitted		Reduction 90-99 (TPD)	New 1999 (TPD)
						RE-90	RE-99	RE-90	RE-99		
Fugitive Monitoring	81.67	75.85	25.44	75.0%	93.0%	95.0%	95.0%	98.0%	98.0%	46.917	28.933
Vessel Cleaning	3.39	4.24	0.69	0.0%	90.0%	0.0%	80.0%	0.0%	85.0%	3.084	1.156
SOCMI Reactor	1.44	2.12	1.15	90.0%	98.0%	80.0%	85.0%	85.0%	90.0%	0.729	1.391
SOCMI Distillation	1.57	2.20	0.46	90.0%	98.0%	80.0%	85.0%	85.0%	90.0%	0.837	1.363
TSDf	0.05	0.07	0.07	0.0%	93.0%	0.0%	100.0%	0.0%	100.0%	0.069	0.005
General Vent Gas	0.47	0.83	0.40	0.0%	90.0%	0.0%	85.0%	0.0%	90.0%	0.653	0.177
General Vent Gas	51.46	80.49	26.88	90.0%	90.0%	80.0%	85.0%	85.0%	90.0%	13.763	66.727
Industrial Wastewater	12.55	11.51	2.88	0.0%	90.0%	0.0%	80.0%	0.0%	85.0%	8.417	3.093
Marine Vessel Loading	26.84	34.77	2.24	0.0%	62.0%	0.0%	80.0%	0.0%	85.0%	17.315	17.455
Gasoline Terminals	3.65	3.71	1.00	93.3%	98.0%	90.0%	90.0%	94.0%	94.0%	0.715	2.995
Gasoline Terminals - Fugitive	1.06	3.34	0.36	0.0%	93.0%	0.0%	95.0%	0.0%	98.0%	2.961	0.379
								<b>Total</b>		<b>95.460</b>	<b>123.674</b>

\* Assumes CE-96 for control efficiency for permitted sources in 1990, except fugitives.

	Growth Factor	EI 1990 (TPD)	CE-90	CE-99	RE-90	RE-99	RP-90	RP-99	CR 90-99 (TPD)	New1999 (TPD)	
Architectural Coatings	1.1262	23.2300	0.0%	20.0%	0.0%	100.0%	0.0%	100.0%	5.232	20.929	
Traffic Markings	1.1382	2.5556	0.0%	20.0%	0.0%	100.0%	0.0%	100.0%	0.582	2.327	
Other Special Purpose	1.1262	5.7400	0.0%	20.0%	0.0%	100.0%	0.0%	100.0%	1.293	5.172	
High Perform. Maintenance	1.1262	4.5600	0.0%	20.0%	0.0%	100.0%	0.0%	100.0%	1.027	4.108	
Auto Refinishing	1.1262	25.5700	0.0%	40.0%	0.0%	100.0%	0.0%	100.0%	11.519	17.278	
Utility Engines	1.1168	65.6700	0.0%	11.9%	0.0%	100.0%	0.0%	100.0%	8.727	64.613	
Consumer Products	1.1747	19.9334	0.0%	20.0%	0.0%	100.0%	0.0%	100.0%	4.683	18.733	
Stage I	1.0111	12.2265	95.0%	98.0%	80.0%	90.0%	95.0%	98.0%	6.331	6.032	
Vehicle Refueling (Stage II)	1.0111	20.7928	0.0%	95.0%	0.0%	90.0%	0.0%	95.0%	17.076	3.947	
TSDF	1.1262	13.3075	0.0%	93.0%	0.0%	100.0%	0.0%	100.0%	13.938	1.049	
Wood Furniture	1.1262	2.6813	0.0%	20.0%	0.0%	85.0%	0.0%	75.0%	0.385	2.635	
Major Source Bakeries	1.0736	0.7128	0.0%	30.0%	0.0%	98.0%	0.0%	100.0%	0.225	0.540	
									<b>Total</b>	<b>71.018</b>	<b>147.363</b>
<b>Contingency Rules</b>											
1997 Utility Engine	1.1362	65.6700	0.0%	12.8%	0.0%	100.0%	0.0%	100.0%	9.551		
1996-1997 Utility Engine									0.823		
Municipal Landfills	1.0573	7.0020	0.0%	70.0%	0.0%	98.0%	0.0%	80.0%	4.063	3.340	
Offset Printing	1.2190	4.3652	0.0%	55.0%	0.0%	80.0%	0.0%	100.0%	2.341	2.980	
Non-halogen Dry Cleaners	1.1475	3.3904	0.0%	85.0%	0.0%	85.0%	0.0%	70.0%	1.968	1.923	
									<b>Total</b>	<b>9.195</b>	<b>8.243</b>

## Compliance Assurance Monitoring (CAM) Rule Effectiveness Credits

### Houston/Galveston Area

$$\begin{aligned} 9\% \text{ Credits} &= (3.866 - 0.942) + (29.647 - 9.82) + (137.043 - 95.46) \\ &+ (50.717 - 37.553) \\ &= 77.5 \end{aligned}$$

### Beaumont/Port Arthur Area

$$\begin{aligned} 9\% \text{ Credits} &= (6.58 - 2.006) + (5.966 - 2.665) \\ &+ (97.034 - 57.184) + (8.139 - 7.612) \\ &= 48.252 \end{aligned}$$

$$\begin{aligned} 9\% \text{ Contingency} &= (2.468 - 2.172) \\ &= 0.296 \end{aligned}$$



POINT SOURCES

HOUSTON -Reductions Due to RACT Catch-ups 2/22/96  
10% RE Improvement

Group	Category	EI 1990 (TPD)	EI 1999 (TPD)	Permits	CE-90	CE-99	Non-Permitted		Permitted		Catch-up RE		New1999 (TPD)
							RE-90	RE-99	RE-90	RE-99	1990 (TPD)	90-99 (TPD)	
A	Cans	1.93	2.16	2.16	0.0%	55.2%	96.0%	99.0%	96.0%	99.0%	0.000	0.076	2.083
B	Metal Coils	0.04	0.07	0.07	0.0%	55.9%	70.0%	85.0%	90.0%	99.0%	0.000	0.007	0.063
C	Paper Products	0.00	0.00	0.00	0.0%	55.6%	80.0%	95.0%	85.0%	99.0%	0.000	0.000	0.000
D	Fabrics	0.00	0.00	0.00	0.0%	55.6%	80.0%	95.0%	85.0%	99.0%	0.000	0.000	0.000
E	Auto New-misc. metal	0.00	0.00	0.00	0.0%	55.6%	70.0%	85.0%	90.0%	99.0%	0.000	0.000	0.000
F	Metal Furniture	0.00	0.00	0.00	0.0%	55.6%	70.0%	85.0%	90.0%	99.0%	0.032	0.015	0.119
H	Appliances	0.16	0.17	0.08	0.0%	55.6%	70.0%	85.0%	90.0%	99.0%	0.000	0.000	0.000
I	Gasoline Plants	0.00	0.00	0.00	0.0%	77.0%	80.0%	95.0%	90.0%	99.0%	0.000	0.000	0.000
J	Storage Tanks-Fixed	3.01	3.10	0.18	0.0%	61.9%	80.0%	95.0%	90.0%	99.0%	1.445	0.294	1.362
K	Pet.Ref.:Vacuum Producing Sys.	0.00	0.00	0.00	0.0%	100.0%	80.0%	95.0%	90.0%	99.0%	0.000	0.000	0.000
K	VOC/Water Separators	0.00	0.00	0.00	0.0%	95.0%	60.0%	75.0%	85.0%	99.0%	0.000	0.000	0.000
K	Process Unit Turnarounds	0.00	0.00	0.00	0.0%	98.0%	95.0%	99.0%	98.0%	99.0%	0.000	0.000	0.000
M	Gasoline Terminals-Chambers,Ft.	0.48	0.66	0.57	0.0%	93.3%	87.5%	99.0%	91.5%	99.0%	0.070	0.284	0.306
M	Gasoline Terminals-Gal.,Brazoria	1.65	3.01	0.48	86.6%	93.3%	87.5%	99.0%	91.5%	99.0%	0.613	1.351	1.048
M	Gasoline Terminals-Harris	1.52	6.86	0.05	0.0%	93.3%	87.5%	99.0%	91.5%	99.0%	5.560	0.754	0.545
O	Surface Cleaning	0.15	0.17	0.00	0.0%	55.7%	70.0%	85.0%	90.0%	99.0%	0.067	0.014	0.090
P	Surface Coating Misc.Metals	0.21	0.28	0.00	0.0%	55.6%	70.0%	85.0%	90.0%	99.0%	0.108	0.024	0.151
Q	Factory Fin. Wood	0.00	0.00	0.00	0.0%	55.6%	80.0%	95.0%	85.0%	99.0%	0.000	0.000	0.000
R	Graphic Arts	0.09	0.23	0.23	0.0%	75.0%	70.0%	85.0%	85.0%	99.0%	0.000	0.068	0.167
S	Petroleum Refinery Equip	3.42	3.45	0.55	0.0%	75.0%	95.0%	99.0%	98.0%	99.0%	2.070	0.103	1.281
T	Roof Tanks-Ext.FloatExt.Float	0.13	0.37	0.37	0.0%	61.9%	88.0%	90.0%	93.0%	95.0%	0.001	0.011	0.363
Z	Resins-Polyethylene	0.91	1.97	0.11	0.0%	98.0%	80.0%	95.0%	85.0%	99.0%	1.456	0.365	0.148
Z	Polypropylene	0.00	0.00	0.00	0.0%	98.0%	80.0%	95.0%	85.0%	99.0%	0.000	0.000	0.000
Z	Polystyrene	0.00	0.00	0.00	0.0%	98.0%	80.0%	95.0%	85.0%	99.0%	0.000	0.000	0.000
AA	Natural Gas Processing Plants	14.65	14.64	0.01	0.0%	75.0%	95.0%	99.0%	98.0%	99.0%	10.423	0.439	3.778
AB	SOCMI	1.58	2.05	0.18	0.0%	75.0%	95.0%	99.0%	98.0%	99.0%	1.339	0.061	0.654
AC	Air Oxidation SOCMI	0.00	0.00	0.00	0.0%	98.0%	80.0%	95.0%	85.0%	99.0%	0.000	0.000	0.000
	TOTALS	29.93	39.21								23.183	3.866	12.158

HOUSTON -Reductions Due to RACT Catch-ups 3/9/96

Group Category	EI 1990 (TPD)	EI 1999 (TPD)	Permits	CE-90	CE-99	Non-Permitted		Permitted		Catch-up RE		
						RE-90	RE-99	RE-90	RE-99	Reductio 1990 (TPD)	Reduction 90-99 (TPD)	New1999 (TPD)
A Cans	1.93	2.16	2.16	0.0%	55.2%	96.0%	99.0%	96.0%	99.0%	0.000	0.076	2.083
B Metal Coils	0.04	0.07	0.07	0.0%	55.9%	70.0%	75.0%	90.0%	95.0%	0.000	0.004	0.067
C Paper Products	0.00	0.00	0.00	0.0%	55.6%	80.0%	85.0%	85.0%	90.0%	0.000	0.000	0.000
D Fabrics	0.00	0.00	0.00	0.0%	55.6%	80.0%	85.0%	85.0%	90.0%	0.000	0.000	0.000
E Auto New-misc. metal	0.00	0.00	0.00	0.0%	55.6%	70.0%	75.0%	90.0%	95.0%	0.000	0.000	0.000
F Metal Furniture	0.00	0.00	0.00	0.0%	55.6%	70.0%	75.0%	90.0%	95.0%	0.000	0.000	0.000
H Appliances	0.16	0.17	0.08	0.0%	55.6%	70.0%	75.0%	90.0%	95.0%	0.032	0.007	0.128
I Gasoline Plants	0.00	0.00	0.00	0.0%	77.0%	80.0%	85.0%	90.0%	95.0%	0.000	0.000	0.000
J Storage Tanks-Fixed	3.01	3.10	0.18	0.0%	61.9%	80.0%	85.0%	90.0%	95.0%	1.445	0.103	1.553
K Pet.Ref.:Vacuum Producing Sys.	0.00	0.00	0.00	0.0%	100.0%	80.0%	85.0%	90.0%	95.0%	0.000	0.000	0.000
K VOC/Water Separators	0.00	0.00	0.00	0.0%	95.0%	60.0%	65.0%	85.0%	90.0%	0.000	0.000	0.000
K Process Unit Turnarounds	0.00	0.00	0.00	0.0%	98.0%	95.0%	95.0%	98.0%	98.0%	0.000	0.000	0.000
M Gasoline Terminals-Chambers,Ft.	0.48	0.66	0.57	0.0%	93.3%	87.5%	90.0%	91.5%	94.0%	0.070	0.094	0.497
M Gasoline Terminals-Gal.,Brazoria	1.65	3.01	0.48	86.6%	93.3%	87.5%	90.0%	91.5%	94.0%	0.613	0.320	2.078
M Gasoline Terminals-Harris	1.52	6.86	0.05	0.0%	93.3%	87.5%	90.0%	91.5%	94.0%	5.560	0.167	1.132
O Surface Cleaning	0.15	0.17	0.00	0.0%	55.7%	70.0%	75.0%	90.0%	95.0%	0.067	0.005	0.099
P Surface Coating Misc.Metals	0.21	0.28	0.00	0.0%	55.6%	70.0%	75.0%	90.0%	95.0%	0.108	0.008	0.166
Q Factory Fin. Wood	0.00	0.00	0.00	0.0%	55.6%	80.0%	85.0%	85.0%	90.0%	0.000	0.000	0.000
R Graphic Arts	0.09	0.23	0.23	0.0%	75.0%	70.0%	75.0%	85.0%	90.0%	0.000	0.024	0.211
S Petroleum Refinery Equip	3.42	3.45	0.55	0.0%	75.0%	95.0%	95.0%	98.0%	98.0%	2.070	0.000	1.384
T Roof Tanks-Ext.FloatExt.Float	0.13	0.37	0.37	0.0%	61.9%	88.0%	90.0%	93.0%	95.0%	0.001	0.011	0.363
Z Resins-Polyethylene	0.91	1.97	0.11	0.0%	98.0%	80.0%	85.0%	85.0%	90.0%	1.456	0.124	0.389
Z Polypropylene	0.00	0.00	0.00	0.0%	98.0%	80.0%	85.0%	85.0%	90.0%	0.000	0.000	0.000
Z Polystyrene	0.00	0.00	0.00	0.0%	98.0%	80.0%	85.0%	85.0%	90.0%	0.000	0.000	0.000
AA Natural Gas Processing Plants	14.65	14.64	0.01	0.0%	75.0%	95.0%	95.0%	98.0%	98.0%	10.423	0.000	4.217
AB SOCFI	1.58	2.05	0.18	0.0%	75.0%	95.0%	95.0%	98.0%	98.0%	1.339	0.000	0.716
AC Air Oxidation SOCFI	0.00	0.00	0.00	0.0%	98.0%	80.0%	85.0%	85.0%	90.0%	0.000	0.000	0.000
TOTALS	29.93	39.21								23.183	0.942	15.082

HOUSTON RE Improvement only 2/22/96  
10% RE Improvement

Group Category	EI 1990 (TPD)	EI 1999 (TPD)	Permits	CE-90	CE-99	Non-Permitted		Permitted		Catch-up RE Reductio		New1999 (TPD)
						RE-90	RE-99	RE-90	RE-99	1990 (TPD)	90-99 (TPD)	
A Cans	0.85	0.95	0.20	55.2%	55.2%	96.0%	99.0%	96.0%	99.0%	0.000	0.033	0.914
B Metal Coils	0.30	0.47	0.12	55.9%	55.9%	70.0%	85.0%	90.0%	99.0%	0.000	0.060	0.411
C Paper Products	0.00	0.00	0.00	55.6%	55.6%	80.0%	95.0%	85.0%	99.0%	0.000	0.000	0.000
D Fabrics	0.00	0.00	0.00	55.6%	55.6%	80.0%	95.0%	85.0%	99.0%	0.000	0.000	0.000
E Auto New-misc. metal	0.14	0.14	0.06	55.6%	55.6%	70.0%	85.0%	90.0%	99.0%	0.000	0.016	0.120
F Metal Furniture	0.00	0.00	0.00	55.6%	55.6%	70.0%	85.0%	90.0%	99.0%	0.000	0.000	0.000
H Appliances	0.00	0.00	0.00	55.6%	55.6%	70.0%	85.0%	90.0%	99.0%	0.000	0.000	0.001
I Gasoline Plants	0.00	0.00	0.00	77.0%	77.0%	80.0%	95.0%	90.0%	99.0%	0.000	0.000	0.000
J Storage Tanks-Fixed	19.95	26.11	5.25	61.9%	61.9%	80.0%	95.0%	90.0%	99.0%	0.000	4.496	21.609
K Pet.Ref.:Vacuum Producing Sys.	3.40	3.58	0.10	100.0%	100.0%	80.0%	95.0%	90.0%	99.0%	0.000	2.701	0.880
K VOC/Water Separators	11.90	10.10	1.66	95.0%	95.0%	60.0%	75.0%	85.0%	99.0%	0.000	3.944	6.152
K Process Unit Turnarounds	0.00	0.00	0.00	98.0%	98.0%	95.0%	99.0%	98.0%	99.0%	0.000	0.000	0.000
M Gasoline Terminals	0.00	0.00	0.00	93.3%	93.3%	87.5%	99.0%	91.5%	99.0%	0.000	0.000	0.000
O Surface Cleaning	0.83	0.92	0.13	55.7%	55.7%	70.0%	85.0%	90.0%	99.0%	0.000	0.121	0.796
P Surface Coating Misc.Metals	1.15	1.59	0.50	55.6%	55.6%	70.0%	85.0%	90.0%	99.0%	0.000	0.199	1.394
Q Factory Fin. Wood	0.00	0.00	0.00	55.6%	55.6%	80.0%	95.0%	85.0%	99.0%	0.000	0.000	0.000
R Graphic Arts	0.80	1.02	0.00	60.0%	60.0%	70.0%	85.0%	85.0%	99.0%	0.000	0.158	0.862
S Petroleum Refinery Equip	24.80	25.58	5.54	75.0%	75.0%	95.0%	99.0%	98.0%	99.0%	0.000	2.248	23.328
T Roof Tanks-Ext.Float	24.18	70.59	21.58	61.9%	61.9%	88.0%	90.0%	93.0%	95.0%	0.000	1.962	68.627
Z Resins-Polyethylene	6.18	8.27	5.38	98.0%	98.0%	80.0%	95.0%	85.0%	99.0%	0.000	6.390	1.884
Z Polypropylene	1.49	2.24	1.96	98.0%	98.0%	80.0%	95.0%	85.0%	99.0%	0.000	1.802	0.440
Z Polystyrene	2.06	2.71	1.45	98.0%	98.0%	80.0%	95.0%	85.0%	99.0%	0.000	2.049	0.662
AA Natural Gas Processing Plants	2.90	2.93	0.16	75.0%	75.0%	95.0%	99.0%	98.0%	99.0%	0.000	0.294	2.640
AB SOCMf	34.32	41.03	19.58	75.0%	75.0%	95.0%	99.0%	98.0%	99.0%	0.000	2.792	38.234
AC Air Oxidation SOCMf	0.07	0.56	0.00	98.0%	98.0%	80.0%	95.0%	85.0%	99.0%	0.000	0.379	0.177
TOTALS	135.32	198.78								0.000	29.647	169.130

## HOUSTON RE Improvement only 3/9/96

Group Category	EI 1990 (TPD)	EI 1999 (TPD)	Permits	CE-90	CE-99	Non-Permitted		Permitted		Catch-up RE		
						RE-90	RE-99	RE-90	RE-99	Reductio 1990 (TPD)	Reduction 90-99 (TPD)	New1999 (TPD)
A Cans	0.85	0.95	0.20	55.2%	55.2%	96.0%	99.0%	96.0%	99.0%	0.000	0.033	0.914
B Metal Coils	0.30	0.47	0.12	55.9%	55.9%	70.0%	75.0%	90.0%	95.0%	0.000	0.023	0.448
C Paper Products	0.00	0.00	0.00	55.6%	55.6%	80.0%	85.0%	85.0%	90.0%	0.000	0.000	0.000
D Fabrics	0.00	0.00	0.00	55.6%	55.6%	80.0%	85.0%	85.0%	90.0%	0.000	0.000	0.000
E Auto New-misc. metal	0.14	0.14	0.06	55.6%	55.6%	70.0%	75.0%	90.0%	95.0%	0.000	0.007	0.129
F Metal Furniture	0.00	0.00	0.00	55.6%	55.6%	70.0%	75.0%	90.0%	95.0%	0.000	0.000	0.000
H Appliances	0.00	0.00	0.00	55.6%	55.6%	70.0%	75.0%	90.0%	95.0%	0.000	0.000	0.001
I Gasoline Plants	0.00	0.00	0.00	77.0%	77.0%	80.0%	85.0%	90.0%	95.0%	0.000	0.000	0.000
J Storage Tanks-Fixed	19.95	26.11	5.25	61.9%	61.9%	80.0%	85.0%	90.0%	95.0%	0.000	1.646	24.460
K Pet.Ref.:Vacuum Producing Sys.	3.40	3.58	0.10	100.0%	100.0%	80.0%	85.0%	90.0%	95.0%	0.000	0.921	2.660
K VOC/Water Separators	11.90	10.10	1.66	95.0%	95.0%	60.0%	65.0%	85.0%	90.0%	0.000	1.342	8.754
K Process Unit Turnarounds	0.00	0.00	0.00	98.0%	98.0%	95.0%	95.0%	98.0%	98.0%	0.000	0.000	0.000
M Gasoline Terminals	0.00	0.00	0.00	93.3%	93.3%	87.5%	90.0%	91.5%	94.0%	0.000	0.000	0.000
O Surface Cleaning	0.83	0.92	0.13	55.7%	55.7%	70.0%	75.0%	90.0%	95.0%	0.000	0.043	0.874
P Surface Coating Misc.Metals	1.15	1.59	0.50	55.6%	55.6%	70.0%	75.0%	90.0%	95.0%	0.000	0.078	1.516
Q Factory Fin. Wood	0.00	0.00	0.00	55.6%	55.6%	80.0%	85.0%	85.0%	90.0%	0.000	0.000	0.000
R Graphic Arts	0.80	1.02	0.00	60.0%	60.0%	70.0%	75.0%	85.0%	90.0%	0.000	0.053	0.967
S Petroleum Refinery Equip	24.80	25.58	5.54	75.0%	75.0%	95.0%	95.0%	98.0%	98.0%	0.000	0.000	25.576
T Roof Tanks-Ext.Float	24.18	70.59	21.58	61.9%	61.9%	88.0%	90.0%	93.0%	95.0%	0.000	1.962	68.627
Z Resins-Polyethylene	6.18	8.27	5.38	98.0%	98.0%	80.0%	85.0%	85.0%	90.0%	0.000	2.235	6.039
Z Polypropylene	1.49	2.24	1.96	98.0%	98.0%	80.0%	85.0%	85.0%	90.0%	0.000	0.639	1.603
Z Polystyrene	2.06	2.71	1.45	98.0%	98.0%	80.0%	85.0%	85.0%	90.0%	0.000	0.711	1.999
AA Natural Gas Processing Plants	2.90	2.93	0.16	75.0%	75.0%	95.0%	95.0%	98.0%	98.0%	0.000	0.000	2.934
AB SOCM1	34.32	41.03	19.58	75.0%	75.0%	95.0%	95.0%	98.0%	98.0%	0.000	0.000	41.026
AC Air Oxidation SOCM1	0.07	0.56	0.00	98.0%	98.0%	80.0%	85.0%	85.0%	90.0%	0.000	0.126	0.430
TOTALS	135.32	198.78								0.000	9.820	188.957

**HOUSTON/GALVESTON - POINT SOURCES 2/22/96**  
**10% RE IMPROVEMENT**

	El 1990 (TPD)	El 1999 (TPD)	Permits*	CE-90	CE-99	Non-Permitted RE-90	Non-Permitted RE-99	Permitted RE-90	Permitted RE-99	Reduction 90-99 (TPD)	New 1999 (TPD)
Fugitive Monitoring	81.67	75.85	25.44	75.0%	93.0%	95.0%	99.0%	98.0%	99.0%	54.333	21.517
Vessel Cleaning	3.39	4.24	0.69	0.0%	90.0%	0.0%	90.0%	0.0%	95.0%	3.466	0.774
SOCMI Reactor	1.44	2.12	1.15	90.0%	98.0%	80.0%	95.0%	85.0%	99.0%	1.676	0.444
SOCMI Distillation	1.57	2.20	0.46	90.0%	98.0%	80.0%	95.0%	85.0%	99.0%	1.689	0.511
TSDf	0.05	0.07	0.07	0.0%	93.0%	0.0%	100.0%	0.0%	100.0%	0.069	0.005
General Vent Gas	0.47	0.83	0.40	0.0%	90.0%	0.0%	95.0%	0.0%	99.0%	0.724	0.106
General Vent Gas	51.46	80.49	26.88	90.0%	90.0%	80.0%	95.0%	85.0%	99.0%	40.260	40.230
Industrial Wastewater	12.55	11.51	2.88	0.0%	90.0%	0.0%	90.0%	0.0%	95.0%	9.452	2.058
Marine Vessel Loading	26.84	34.77	2.24	0.0%	62.0%	0.0%	90.0%	0.0%	95.0%	19.471	15.299
Gasoline Terminals	3.65	3.71	1.00	93.3%	98.0%	90.0%	99.0%	94.0%	99.0%	2.828	0.882
Gasoline Terminals - Fugitive	1.06	3.34	0.36	0.0%	93.0%	0.0%	99.0%	0.0%	99.0%	3.075	0.265
									<b>Total</b>	<b>137.043</b>	<b>82.091</b>

\* Assumes CE-96 for control efficiency for permitted sources in 1990, except fugitives.



**HOUSTON/GALVESTON - 9% POINT SOURCES 6/12/96  
10% RE IMPROVEMENT**

	El 1990 (TPD)	El 1999 (TPD)	Permits*	CE-90	CE-99	Non-Permitted		Permitted		Reduction 90-99 (TPD)	New 1999 (TPD)	
						RE-90	RE-99	RE-90	RE-99			
HON	0.44	0.53	0.03	0.0%	93.0%	0.0%	99.0%	0.0%	99.0%	0.486	0.000	
Pulp & Paper	6.11	9.18	2.72	0.0%	90.0%	0.0%	100.0%	0.0%	100.0%	8.262	0.918	
Floating Roof Tanks	24.31	70.96	21.95	95.0%	95.0%	88.0%	99.0%	93.0%	99.0%	41.970	28.993	
										<b>Total</b>	<b>50.717</b>	<b>29.911</b>

**HOUSTON/GALVESTON - 9% AREA SOURCES 6/12/96**

	Growth Factor	El 1990 (TPD)	CE-90	CE-99	RE-90	RE-99	RP-90	RP-99	CR 90-9 (TPD)	New 1999 (TPD)	
Recreational Marine Vess Stage I	1.1168	27.3000	0.0%	2.0%	0.0%	100.0%	0.0%	10.0%	0.061	30.428	
UST Remediation	1.0111	12.2265	95.0%	98.0%	80.0%	99.0%	95.0%	98.0%	10.174	2.188	
MSW Landfills NSPS & EG	1.1262	1.8200	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	2.050	0.000	
Commercial Aircraft Engines	1.0573	7.0020	0.0%	70.0%	0.0%	99.0%	0.0%	80.0%	4.104	3.299	
Utility Engine 1999	1.3506	1.8000	0.0%	40.0%	0.0%	100.0%	0.0%	100.0%	0.972	1.459	
Utility Engines 97-99	1.0000	65.6700	0.0%	22.9%	0.0%	100.0%	0.0%	100.0%	15.038	50.632	
									6.311		
									<b>Total</b>	<b>39.362</b>	<b>59.373</b>

HOUSTON/GALVESTON - 9% POINT SOURCES 6/12/96

	EI 1990 (TPD)	EI 1999 (TPD)	Permits*	CE-90	CE-99	Non-Permitted		Permitted		Reduction 90-99 (TPD)	New 1999 (TPD)
						RE-90	RE-99	RE-90	RE-99		
HON	0.44	0.53	0.03	0.0%	93.0%	0.0%	95.0%	0.0%	98.0%	0.467	0.000
Pulp & Paper	6.11	9.18	2.72	0.0%	90.0%	0.0%	100.0%	0.0%	100.0%	8.262	0.918
Floating Roof Tanks	24.31	70.96	21.95	95.0%	95.0%	88.0%	95.0%	93.0%	98.0%	28.824	42.139
<b>Total</b>										<b>37.553</b>	<b>43.057</b>

HOUSTON/GALVESTON - 9% AREA SOURCES 6/12/96

	Growth Factor	EI 1990 (TPD)	CE-90	CE-99	RE-90	RE-99	RP-90	RP-99	CR 90-9 (TPD)	New 1999 (TPD)	
											Recreational Marine Vess Stage I
UST Remediation	1.0111	12.2265	95.0%	98.0%	80.0%	90.0%	95.0%	98.0%	6.331	6.032	
MSW Landfills NSPS & EG	1.1262	1.8200	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	2.050	0.000	
Commercial Aircraft Engines	1.0573	7.0020	0.0%	70.0%	0.0%	98.0%	0.0%	80.0%	4.063	3.340	
Utility Engine 1999	1.3506	1.8000	0.0%	40.0%	0.0%	100.0%	0.0%	100.0%	0.972	1.459	
Utility Engines 97-99	1.0000	65.6700	0.0%	22.9%	0.0%	100.0%	0.0%	100.0%	15.038	50.632	
<b>Total</b>										<b>35.476</b>	<b>63.258</b>



## Compliance Assurance Monitoring (CAM) Rule Effectiveness Credits

### Houston/Galveston Area

$$\begin{aligned} 9\% \text{ Credits} &= (3.866 - 0.942) + (29.647 - 9.82) + (137.043 - 95.46) \\ &+ (50.717 - 37.553) \\ &= 77.5 \end{aligned}$$

### Beaumont/Port Arthur Area

$$\begin{aligned} 9\% \text{ Credits} &= (6.58 - 2.006) + (5.966 - 2.665) \\ &+ (97.034 - 57.184) + (8.139 - 7.612) \\ &= 48.252 \end{aligned}$$

$$\begin{aligned} 9\% \text{ Contingency} &= (2.468 - 2.172) \\ &= 0.296 \end{aligned}$$

POINT SOURCES

BEAUMON -Reductions Due to RACT Catch-ups 2/6/96  
10% RE IMPROVEMENT

Group Category	EI 1990 (TPD)	EI 1999 (TPD)	Permits	CE-90	CE-99	Non-Permitted		Permitted		Catch-up RE		New1999 (TPD)
						RE-90	RE-99	RE-90	RE-99	1990 (TPD)	90-99 (TPD)	
A Cans	0.00	0.00	0.00	0.0%	55.2%	96.0%	99.0%	96.0%	99.0%	0.000	0.000	0.000
B Metal Coils	0.00	0.00	0.00	0.0%	55.9%	70.0%	85.0%	90.0%	99.0%	0.000	0.000	0.000
C Paper Products	0.00	0.00	0.00	0.0%	55.6%	80.0%	95.0%	85.0%	99.0%	0.000	0.000	0.000
D Fabrics	0.00	0.00	0.00	0.0%	55.6%	80.0%	95.0%	85.0%	99.0%	0.000	0.000	0.000
E Auto New-misc. metal	0.00	0.00	0.00	0.0%	55.6%	70.0%	85.0%	90.0%	99.0%	0.000	0.000	0.000
F Metal Furniture	0.00	0.00	0.00	0.0%	55.6%	70.0%	85.0%	90.0%	99.0%	0.000	0.000	0.000
H Appliances	0.00	0.00	0.00	0.0%	55.6%	70.0%	85.0%	90.0%	99.0%	0.000	0.000	0.000
I Gasoline Plants	0.00	0.00	0.00	0.0%	77.0%	80.0%	95.0%	90.0%	99.0%	0.000	0.000	0.000
J Storage Tanks-Fixed	0.00	0.00	0.00	0.0%	61.9%	80.0%	95.0%	90.0%	99.0%	0.000	0.000	0.000
K Pet.Ref.:Vacuum Producing Sys.	0.00	0.00	0.00	0.0%	100.0%	80.0%	95.0%	90.0%	99.0%	0.000	0.000	0.000
K VOC/Water Separators	0.00	0.00	0.00	0.0%	95.0%	60.0%	75.0%	85.0%	99.0%	0.000	0.000	0.000
K Process Unit Turnarounds	0.00	0.00	0.00	0.0%	98.0%	95.0%	99.0%	98.0%	99.0%	0.000	0.000	0.000
M Gasoline Terminals - Jeff & Orange	1.90	3.14	0.10	86.6%	93.3%	87.5%	99.0%	91.5%	99.0%	0.736	1.394	1.009
M Gasoline Terminals - Hardin	0.00	0.00	0.00	0.0%	93.3%	87.5%	99.0%	0.0%	0.0%	0.000	0.000	0.000
O Surface Cleaning	0.06	0.06	0.00	0.0%	55.7%	70.0%	85.0%	90.0%	99.0%	0.025	0.005	0.034
P Surface Coating Misc.Metals	0.01	0.03	0.00	0.0%	55.6%	70.0%	85.0%	90.0%	99.0%	0.012	0.003	0.016
S Petroleum Refinery Equip	0.34	0.33	0.33	0.0%	75.0%	95.0%	99.0%	98.0%	99.0%	0.000	0.009	0.321
T Roof Tanks-Ext.Float	0.00	0.00	0.00	0.0%	61.9%	88.0%	90.0%	93.0%	95.0%	0.000	0.000	0.000
Z Resins-Polyethylene	6.99	10.14	4.85	0.0%	98.0%	80.0%	95.0%	85.0%	99.0%	4.146	4.761	1.230
Z Polypropylene	0.00	0.00	0.00	0.0%	98.0%	80.0%	95.0%	85.0%	99.0%	0.000	0.000	0.000
Z Polystyrene	0.23	0.27	0.00	0.0%	98.0%	80.0%	95.0%	85.0%	99.0%	0.211	0.040	0.019
AA Natural Gas Processing Plants	0.99	0.97	0.15	0.0%	75.0%	95.0%	99.0%	98.0%	99.0%	0.585	0.029	0.357
AB SOCM1	10.52	11.64	6.12	0.0%	75.0%	95.0%	99.0%	98.0%	99.0%	3.933	0.339	7.366
AC Air Oxidation SOCM1	0.00	0.00	0.00	0.0%	98.0%	80.0%	95.0%	85.0%	99.0%	0.000	0.000	0.000
TOTALS	21.03	26.58								9.646	6.580	10.352

POINT SOURCES

BEAUMON -Reductions Due to RACT Catch-ups 3/9/96

Group Category	EI 1990 (TPD)	EI 1999 (TPD)	Permits	CE-90	CE-99	Non-Permitted		Permitted		Catch-up RE		
						RE-90	RE-99	RE-90	RE-99	Reductio 1990 (TPD)	Reduction 90-99 (TPD)	New1999 (TPD)
A Cans	0.00	0.00	0.00	0.0%	55.2%	96.0%	99.0%	96.0%	99.0%	0.000	0.000	0.000
B Metal Coils	0.00	0.00	0.00	0.0%	55.9%	70.0%	75.0%	90.0%	95.0%	0.000	0.000	0.000
C Paper Products	0.00	0.00	0.00	0.0%	55.6%	80.0%	85.0%	85.0%	90.0%	0.000	0.000	0.000
D Fabrics	0.00	0.00	0.00	0.0%	55.6%	80.0%	85.0%	85.0%	90.0%	0.000	0.000	0.000
E Auto New-misc. metal	0.00	0.00	0.00	0.0%	55.6%	70.0%	75.0%	90.0%	95.0%	0.000	0.000	0.000
F Metal Furniture	0.00	0.00	0.00	0.0%	55.6%	70.0%	75.0%	90.0%	95.0%	0.000	0.000	0.000
H Appliances	0.00	0.00	0.00	0.0%	55.6%	70.0%	75.0%	90.0%	95.0%	0.000	0.000	0.000
I Gasoline Plants	0.00	0.00	0.00	0.0%	77.0%	80.0%	85.0%	90.0%	95.0%	0.000	0.000	0.000
J Storage Tanks-Fixed	0.00	0.00	0.00	0.0%	61.9%	80.0%	85.0%	90.0%	95.0%	0.000	0.000	0.000
K Pet.Ref.:Vacuum Producing Sys.	0.00	0.00	0.00	0.0%	100.0%	80.0%	85.0%	90.0%	95.0%	0.000	0.000	0.000
K VOC/Water Separators	0.00	0.00	0.00	0.0%	95.0%	60.0%	65.0%	85.0%	90.0%	0.000	0.000	0.000
K Process Unit Turnarounds	0.00	0.00	0.00	0.0%	98.0%	95.0%	95.0%	98.0%	98.0%	0.000	0.000	0.000
M Gasoline Terminals - Jeff & Orange	1.90	3.14	0.10	86.6%	93.3%	87.5%	90.0%	91.5%	94.0%	0.736	0.308	2.095
M Gasoline Terminals - Hardin	0.00	0.00	0.00	0.0%	93.3%	87.5%	90.0%	0.0%	0.0%	0.000	0.000	0.000
O Surface Cleaning	0.06	0.06	0.00	0.0%	55.7%	70.0%	75.0%	90.0%	95.0%	0.025	0.002	0.037
P Surface Coating Misc.Metals	0.01	0.03	0.00	0.0%	55.6%	70.0%	75.0%	90.0%	95.0%	0.012	0.001	0.018
S Petroleum Refinery Equip	0.34	0.33	0.33	0.0%	75.0%	95.0%	95.0%	98.0%	98.0%	0.000	0.000	0.330
T Roof Tanks-Ext.Float	0.00	0.00	0.00	0.0%	61.9%	88.0%	90.0%	93.0%	95.0%	0.000	0.000	0.000
Z Resins-Polyethylene	6.99	10.14	4.85	0.0%	98.0%	80.0%	85.0%	85.0%	90.0%	4.146	1.682	4.309
Z Polypropylene	0.00	0.00	0.00	0.0%	98.0%	80.0%	85.0%	85.0%	90.0%	0.000	0.000	0.000
Z Polystyrene	0.23	0.27	0.00	0.0%	98.0%	80.0%	85.0%	85.0%	90.0%	0.211	0.013	0.045
AA Natural Gas Processing Plants	0.99	0.97	0.15	0.0%	75.0%	95.0%	95.0%	98.0%	98.0%	0.585	0.000	0.386
AB SOCMi	10.52	11.64	6.12	0.0%	75.0%	95.0%	95.0%	98.0%	98.0%	3.933	0.000	7.705
AC Air Oxidation SOCMi	0.00	0.00	0.00	0.0%	98.0%	80.0%	85.0%	85.0%	90.0%	0.000	0.000	0.000
TOTALS	21.03	26.58								9.646	2.006	14.925

BEAUMON RE Improvement only 2/22/96

10% RE IMPROVEMENTS

Group Category	EI 1990 (TPD)	EI 1999 (TPD)	Permits	CE-90	CE-99	Non-Permitted		Permitted		Catch-up RE		
						RE-90	RE-99	RE-90	RE-99	Reductio 1990 (TPD)	Reduction 90-99 (TPD)	New1999 (TPD)
A Cans	0.00	0.00	0.00	55.2%	55.2%	96.0%	99.0%	96.0%	99.0%	0.000	0.000	0.000
B Metal Coils	0.00	0.00	0.00	55.9%	55.9%	70.0%	85.0%	90.0%	99.0%	0.000	0.000	0.000
C Paper Products	0.00	0.00	0.00	55.6%	55.6%	80.0%	95.0%	85.0%	99.0%	0.000	0.000	0.000
D Fabrics	0.00	0.00	0.00	55.6%	55.6%	80.0%	95.0%	85.0%	99.0%	0.000	0.000	0.000
E Auto New-misc. metal	0.00	0.00	0.00	55.6%	55.6%	70.0%	85.0%	90.0%	99.0%	0.000	0.000	0.000
F Metal Furniture	0.00	0.00	0.00	55.6%	55.6%	70.0%	85.0%	90.0%	99.0%	0.000	0.000	0.000
H Appliances	0.00	0.00	0.00	55.6%	55.6%	70.0%	85.0%	90.0%	99.0%	0.000	0.000	0.000
I Gasoline Plants	0.00	0.00	0.00	77.0%	77.0%	80.0%	95.0%	90.0%	99.0%	0.000	0.000	0.000
J Storage Tanks-Fixed	4.17	4.54	0.55	61.9%	61.9%	80.0%	95.0%	90.0%	99.0%	0.000	0.804	3.740
K Pet.Ref.:Vacuum Producing Sys.	0.96	0.74	0.00	100.0%	100.0%	80.0%	95.0%	90.0%	99.0%	0.000	0.553	0.183
K VOC/Water Separators	3.93	3.02	0.05	95.0%	95.0%	60.0%	75.0%	85.0%	99.0%	0.000	1.020	2.000
K Process Unit Turnarounds	0.00	0.00	0.00	98.0%	98.0%	95.0%	99.0%	98.0%	99.0%	0.000	0.000	0.000
O Surface Cleaning	0.00	0.00	0.00	55.7%	55.7%	70.0%	85.0%	90.0%	99.0%	0.000	0.000	0.000
P Surface Coating Misc. Metals	0.00	0.00	0.00	55.6%	55.6%	70.0%	85.0%	90.0%	99.0%	0.000	0.000	0.000
S Petroleum Refinery Equip	17.51	19.43	3.87	75.0%	75.0%	95.0%	99.0%	98.0%	99.0%	0.000	1.733	17.697
T Roof Tanks-Ext.Float	21.77	67.28	13.15	61.9%	61.9%	88.0%	90.0%	93.0%	95.0%	0.000	1.856	65.427
TOTALS	48.33	95.01								0.000	5.966	89.046

BEAUMON RE Improvement only 3/9/96

Group Category	EI 1990 (TPD)	EI 1999 (TPD)	Permits	CE-90	CE-99	Non-Permitted		Permitted		Catch-up Reductio 1990 (TPD)	RE Reduction 90-99 (TPD)	New1999 (TPD)
						RE-90	RE-99	RE-90	RE-99			
A Cans	0.00	0.00	0.00	55.2%	55.2%	96.0%	99.0%	96.0%	99.0%	0.000	0.000	0.000
B Metal Coils	0.00	0.00	0.00	55.9%	55.9%	70.0%	75.0%	90.0%	95.0%	0.000	0.000	0.000
C Paper Products	0.00	0.00	0.00	55.6%	55.6%	80.0%	85.0%	85.0%	90.0%	0.000	0.000	0.000
D Fabrics	0.00	0.00	0.00	55.6%	55.6%	80.0%	85.0%	85.0%	90.0%	0.000	0.000	0.000
E Auto New-misc. metal	0.00	0.00	0.00	55.6%	55.6%	70.0%	75.0%	90.0%	95.0%	0.000	0.000	0.000
F Metal Furniture	0.00	0.00	0.00	55.6%	55.6%	70.0%	75.0%	90.0%	95.0%	0.000	0.000	0.000
H Appliances	0.00	0.00	0.00	55.6%	55.6%	70.0%	75.0%	90.0%	95.0%	0.000	0.000	0.000
I Gasoline Plants	0.00	0.00	0.00	77.0%	77.0%	80.0%	85.0%	90.0%	95.0%	0.000	0.000	0.000
J Storage Tanks-Fixed	4.17	4.54	0.55	61.9%	61.9%	80.0%	85.0%	90.0%	95.0%	0.000	0.283	4.261
K Pet.Ref. Vacuum Producing Sys.	0.96	0.74	0.00	100.0%	100.0%	80.0%	85.0%	90.0%	95.0%	0.000	0.185	0.551
K VOC/Water Separators	3.93	3.02	0.05	95.0%	95.0%	60.0%	65.0%	85.0%	90.0%	0.000	0.341	2.679
K Process Unit Turnarounds	0.00	0.00	0.00	98.0%	98.0%	95.0%	95.0%	98.0%	98.0%	0.000	0.000	0.000
O Surface Cleaning	0.00	0.00	0.00	55.7%	55.7%	70.0%	75.0%	90.0%	95.0%	0.000	0.000	0.000
P Surface Coating Misc. Metals	0.00	0.00	0.00	55.6%	55.6%	70.0%	75.0%	90.0%	95.0%	0.000	0.000	0.000
S Petroleum Refinery Equip	17.51	19.43	3.87	75.0%	75.0%	95.0%	95.0%	98.0%	98.0%	0.000	0.000	19.430
T Roof Tanks-Ext.Float	21.77	67.28	13.15	61.9%	61.9%	88.0%	90.0%	93.0%	95.0%	0.000	1.856	65.427
<b>TOTALS</b>	<b>48.33</b>	<b>95.01</b>								<b>0.000</b>	<b>2.665</b>	<b>92.347</b>

**BEAUMONT/PORT ARTHUR - POINT SOURCES    REVISED 2/22/96**  
**10% RE IMPROVEMENT**

	<b>EI 1990 (TPD)</b>	<b>EI 1999 (TPD)</b>	<b>Permits*</b>	<b>CE-90</b>	<b>CE-99</b>	<b>Non-Permitted</b>		<b>Permitted</b>		<b>Reduction 90-99 (TPD)</b>	<b>New 1999 (TPD)</b>
						<b>RE-90</b>	<b>RE-99</b>	<b>RE-90</b>	<b>RE-99</b>		
Fugitive Monitoring	29.36	27.85	10.46	75.0%	93.0%	95.0%	99.0%	98.0%	99.0%	19.923	7.927
RE Floating Roof Tanks	21.77	68.28	13.32	95.0%	95.0%	88.0%	99.0%	93.0%	99.0%	41.537	26.743
Vessel Cleaning	0.02	0.02	0.02	0.0%	90.0%	0.0%	90.0%	0.0%	95.0%	0.020	0.003
General Vent Gas	61.28	71.17	22.94	90.0%	90.0%	80.0%	95.0%	85.0%	99.0%	35.553	35.617
										<b>Total</b>	<b>97.034    70.289</b>

\* Assumes CE-96 for control efficiency for permitted sources in 1990, except fugitives.

**BEAUMONT/PORT ARTHUR - POINT SOURCES REVISED 2/5/96**

	<b>EI 1990 (TPD)</b>	<b>EI 1999 (TPD)</b>	<b>Permits*</b>	<b>CE-90</b>	<b>CE-99</b>	<b>Non-Permitted</b>		<b>Permitted</b>		<b>Reduction 90-99 (TPD)</b>	<b>New 1999 (TPD)</b>
						<b>RE-90</b>	<b>RE-99</b>	<b>RE-90</b>	<b>RE-99</b>		
Fugitive Monitoring	29.36	27.85	10.46	75.0%	93.0%	95.0%	95.0%	98.0%	98.0%	17.306	10.544
RE Floating Roof Tanks	21.77	68.28	13.32	95.0%	95.0%	88.0%	95.0%	93.0%	98.0%	27.717	40.563
Vessel Cleaning	0.02	0.02	0.02	0.0%	90.0%	0.0%	80.0%	0.0%	85.0%	0.018	0.005
General Vent Gas	61.28	71.17	22.94	90.0%	90.0%	80.0%	85.0%	85.0%	90.0%	12.144	59.026
								<b>Total</b>		<b>57.184</b>	<b>110.139</b>

\* Assumes CE-96 for control efficiency for permitted sources in 1990, except fugitives.

**BEAUMONT/PORT ARTHUR - 9% POINT SOURCES 2/22/96**  
**10% RE IMPROVEMENT**

	EI 1990 (TPD)	EI 1999 (TPD)	Permits*	CE-90	CE-99	Non-Permitted		Permitted		Reduction 90-99 (TPD)	New 1999 (TPD)	
						RE-90	RE-99	RE-90	RE-99			
Wastewater MACTs	3.21	5.11	0.00	0.0%	90.0%	0.0%	90.0%	0.0%	95.0%	4.139	0.971	
SOCMI HON	1.66	1.82	0.02	0.0%	93.0%	0.0%	99.0%	0.0%	99.0%	1.677	0.144	
Marine V. Loading MACT	4.31	5.30	1.89	0.0%	4.8%	0.0%	100.0%	0.0%	100.0%	0.254	5.046	
Pulp & Paper	1.69	2.30	1.78	0.0%	90.0%	0.0%	100.0%	0.0%	100.0%	2.068	0.230	
										<b>Subtotal</b>	<b>8.139</b>	<b>6.391</b>

**BEAUMONT/PORT ARTHUR - 9% AREA SOURCES 2/22/96**  
**10% RE IMPROVEMENT**

	Growth Factor	EI 1990 (TPD)	CE-90	CE-99	RE-90	RE-99	RP-90	RP-99	CR 90-9 (TPD)	New 1999 (TPD)	
Recreational Marine Vessel	1.0016	4.3900	0.0%	2.0%	0.0%	100.0%	0.0%	10.0%	0.009	4.388	
UST Remediation	1.1262	0.3360	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.378	0.000	
MSW Landfill NSPS & EG	1.0537	0.658	0.0%	70.0%	0.0%	99.0%	0.0%	80.0%	0.384	0.309	
Commercial Aircraft Engines	1.3378	0.0158	0.0%	40.0%	0.0%	100.0%	0.0%	100.0%	0.008	0.013	
Utility Engine 1999	1.0016	8.6330	0.0%	22.9%	0.0%	100.0%	0.0%	100.0%	1.980	6.667	
Utility Engines 97-99									0.951		
									<b>Subtotal</b>	<b>1.731</b>	<b>11.377</b>



**BEAUMONT/PORT ARTHUR - 9% POINT SOURCES 6/12/96**

	El 1990 (TPD)	El 1999 (TPD)	Permits*	CE-90	CE-99	Non-Permitted		Permitted		Reduction 90-99 (TPD)	New 1999 (TPD)
						RE-90	RE-99	RE-90	RE-99		
Wastewater MACTs	3.21	5.11	0.00	0.0%	90.0%	0.0%	80.0%	0.0%	85.0%	3.679	1.431
SOCMI HON	1.66	1.82	0.02	0.0%	93.0%	0.0%	95.0%	0.0%	98.0%	1.610	0.212
Marine V. Loading MACT	4.31	5.30	1.89	0.0%	4.8%	0.0%	100.0%	0.0%	100.0%	0.254	5.046
Pulp & Paper	1.69	2.30	1.78	0.0%	90.0%	0.0%	100.0%	0.0%	100.0%	2.068	0.230
										<b>Subtotal</b>	<b>7.612 6.918</b>

**BEAUMONT/PORT ARTHUR - 9% AREA SOURCES 6/12/96**

	Growth Factor	El 1990 (TPD)	CE-90	CE-99	RE-90	RE-99	RP-90	RP-99	CR 90-9 (TPD)	New 1999 (TPD)
Recreational Marine Vessel	1.0016	4.3900	0.0%	2.0%	0.0%	100.0%	0.0%	10.0%	0.009	4.388
UST Remediation	1.1262	0.3360	0.0%	100.0%	0.0%	100.0%	0.0%	100.0%	0.378	0.000
MSW Landfill NSPS & EG	1.0537	0.658	0.0%	70.0%	0.0%	98.0%	0.0%	80.0%	0.381	0.313
Commercial Aircraft Engines	1.3378	0.0158	0.0%	40.0%	0.0%	100.0%	0.0%	100.0%	0.008	0.013
Utility Engine 1999	1.0016	8.6330	0.0%	22.9%	0.0%	100.0%	0.0%	100.0%	1.980	6.667
Utility Engines 97-99									0.951	
									<b>Subtotal</b>	<b>1.727 11.380</b>

BEAUMONT/PORT ARTHUR - 9% CONTINGENCY MEASURES 2/22/96  
 10% RE IMPROVEMENT

POINT SOURCES	EI 1990 (TPD)	EI 1999 (TPD)	Permits*	CE-90	CE-99	Non-Permitted		Permitted		Reduction 90-99 (TPD)	New 1999 (TPD)
						RE-90	RE-99	RE-90	RE-99		
Marine Vessel Loading	4.31	5.30	1.89	0.0%	56.0%	0.0%	90.0%	0.0%	95.0%	2.723	2.574
Industrial Wastewater	3.21	5.11	0.00	0.0%	0.0%	0.0%	90.0%	0.0%	95.0%	0.000	5.110
										<b>Subtotal</b>	<b>7.684</b>
										**	<b>2.468</b>

AREA SOURCES

	Growth Factor	EI 1990 (TPD)	CE-90	CE-99	RE-90	RE-99	RP-90	RP-99	CR 90-9 (TPD)	New 1999 (TPD)
Marine Vessel Loading	1.0111	7.4700	0.0%	0.0%	0.0%	90.0%	0.0%	100.0%	0.000	7.553
Rec. Marine Vess (2000)	1.0016	4.3900	0.0%	10.0%	0.0%	100.0%	0.0%	10.0%	0.044	4.353
Utility Engine (2000)	1.0000	8.6330	0.0%	25.2%	0.0%	100.0%	0.0%	100.0%	2.176	6.457
Utility engines 1999-2000									0.196	
							<b>Subtot</b>		<b>0.240</b>	<b>11.906</b>

\*\* MACT marine vessel loading credits are subtracted out

