NATIONAL STEEL & SHIPBUILDING COMPANY - SAMPLED ON 10/15/98

Station	Total Sample Weight (grams)	Fine Fraction Weight (grams)	Coarse Fraction Weight (grams)	Percent Fine	Percent Coarse
NSS-01	31.26	7.72	23.54	25%	75%
NSS-02	25.28	9.52	15.76	38%	62%
NSS-03	39.72	16.30	23.42	41%	59%
NSS-04	23.24	14.59	8.65	63%	37%
NSS-05	23.56	20.10	3.46	85%	15%
NSS-06	38.10	19.26	18.84	51%	49%
NSS-07	28.52	9.85	18.67	35%	65%
NSS-08	27.04	5.06	21.98	19%	81%
NSS-09	25.78	16.21	9.57	63%	37%
NSS-10	19.38	15.00	4.38	77%	23%
NSS-11	94.02	3.40	90.62	4%	96%
NSS-13	41.54	14.89	26.65	36%	64%
NSS-14	33.93	9.54	24.39	28%	72%
NSS-15	24.56	15.02	9.54	61%	39%
NSS-16	42.19	14.93	27.26	35%	65%
NSS-17	70.15	6.29	63.86	9%	91%
NSS-STD-01	57.32	7.88	49.44	14%	86%
			Average	40%	60%
			Median	36%	64%
			Minimum	4%	15%
			Maximim	85%	96%

Source: NASSCO NPDES Permit - Marine Sediment Monitoring and Reporting, Annual Report, August 1999

Station	Total Sample Weight (grams)	Fine Fraction Weight (grams)	Coarse Fraction Weight (grams)	Percent Fine	Percent Coarse
Ref-01	46.29	17.43	28.86	38%	62%
Ref-02	29.36	12.45	16.91	42%	58%
Ref-03	32.85	21.5	11.35	65%	35%

SOUTHWEST MARINE - SAMPLED ON 6/10/99

Station	Total Sample Weight (grams)	Fine Fraction Weight (grams)	Coarse Fraction Weight (grams)	Percent Fine	Percent Coarse
SWM-01	45.42	5.85	39.57	13%	87%
SWM-02	39.33	13.33	26.00	34%	66%
SWM-03	25.52	14.59	10.93	57%	43%
SWM-04	16.64	11.94	4.70	72%	28%
SWM-05	61.00	3.17	57.83	5%	95%
SWM-06	21.75	14.31	7.44	66%	34%
SWM-07	24.46	13.92	10.54	57%	43%
SWM-08	21.26	18.52	2.74	87%	13%
SWM-09	21.37	18.53	2.84	87%	13%
SWM-10	24.66	13.24	11.42	54%	46%
SWM-11	21.13	16.74	4.39	79%	21%
SWM-12	73.07	4.20	68.87	6%	94%
SWM-13	66.12	4.09	62.03	6%	94%
SWM-14	22.45	8.88	13.57	40%	60%
SWM-15	25.01	14.51	10.50	58%	42%
SWM-STD-01	71.43	1.31	70.12	2%	98%
			Average	45%	55%
			Median	55%	45%
			Minimum	2%	13%
			Maximim	87%	98%

Source: Southwest Marine NPDES Permit - Marine Sediment Monitoring and Reporting, Annual Report, August 1999

Station	Total Sample Weight (grams)	Fine Fraction Weight (grams)	Coarse Fraction Weight (grams)	Percent Fine	Percent Coarse
Ref-01	46.29	17.43	28.86	38%	62%
Ref-02	29.36	12.45	16.91	42%	58%
Ref-03	32.85	21.5	11.35	65%	35%

CAMPBELL SHIPYARDS- SAMPLED ON 10/16/98

Station	Total Sample Weight (grams)	Fine Fraction Weight (grams)	Coarse Fraction Weight (grams)	Percent Fine	Percent Coarse
CMB-01	19.15	14.74	4.41	77%	23%
CMB-02	21.82	15.46	6.36	71%	29%
CMB-03	47.01	7.03	39.98	15%	85%
CMB-04	27.08	8.05	19.03	30%	70%
CMB-05	34.47	6.87	27.60	20%	80%
CMB-06	30.21	12.95	17.26	43%	57%
CMB-07	31.57	10.64	20.93	34%	66%
CMB-08	22.82	17.08	5.74	75%	25%
CMB-09	20.83	12.77	8.06	61%	39%
CMB-10	22.54	15.87	6.67	70%	30%
CMB-11	32.46	9.09	23.37	28%	72%
CMB-STD-01	17.90	4.39	13.51	25%	75%
CMB-STD-02	26.15	12.65	13.50	48%	52%
CMB-STD-03	37.87	10.71	27.16	28%	72%
CMB-STD-04	74.21	7.09	67.12	10%	90%
			Average	42%	58%
			Median	34%	66%
			Minimum	10%	23%
			Maximim	77%	90%

Station	Total Sample Weight (grams)	Fine Fraction Weight (grams)	Coarse Fraction Weight (grams)	Percent Fine	Percent Coarse
Ref-01	46.29	17.43	28.86	38%	62%
Ref-02	29.36	12.45	16.91	42%	58%
Ref-03	32.85	21.5	11.35	65%	35%

Final Report Sediment Characterization Study and Redediation Plan
Southwest Marine Shipyard, San Diego CA. Ogden EES, December 1998
Concentrations in Surface Sediment Samples (mg/kg, dry wt)

Station	Copper	Lead	Mercury	Zinc	Total PCB
SWM71	370	110	1.74	390	
SWM72	370	120	2.08	580	3.49
SWM73	250	200	2.6	400	1.642
SWM74	93	36	0.21	120	0.116
SWM75	250	270	0.87	770	0.404
SWM76	99	53	0.94	200	2.12
SWM77	220	77	0.94	280	
SWM78	330	100	0.95	390	
SWM79	290	94	1.07	360	
SWM80	330	100	1.22	370	
SWMA	360	96	1.65	310	
SWMB	390	150	1.77	490	
SWMC	910	380	1.14	3200	
SWMD	2600	430	5.42	4600	
SWME	400	95	2.7	460	
SWMF	790	190	3.99	710	
SWMG	740	220	2.57	830	
SWMH	280	93	0.89	350	
SWMI	320	100	1.35	350	
SWMJ	400	98	1.09	500	
SWMK	260	100	1.09	370	0.292
SWML	270	97	43.5	400	0.86
SWMM	240	76	0.94	290	
SWMN	100	36	0.31	140	
SWMPCB4	210	65	1.14	250	0.735
SWMPCB5	280	89	1.75	390	11.5
SWM100	415	148	1.84	472	
SWM101	234	85	0.96	308	
SWM102	699	268	1.36	1640	
SWM103	698	308	1.06	1530	
SWM104	333	88	0.8	424	
SWM105	845	221	1.09	794	
SWM106	498	123	1.67	477	
SWM107	722	79	0.58	358	
SWM108			1.13		4.49
SWM109			2.66		1.34
SWM110			2.72		3.83
SWM111			1.27		3.68
SWM112	492	103	1.19	425	
SWM113	292	97	1	352	
SWM114				382	
SWM115				401	
SWM116				366	
SWM117				361	
Mean	**594.51**	**161.56**	**2.23**	**739.81**	**2.20**
St Dev	**515.28**	**126.57**	**4.25**	**761.82**	**2.49**
Minimium	**93.00**	**36.00**	**0.21**	**120.00**	**0.12**
Maximum	**2900.00**	**770.00**	**43.50**	**4600.00**	**11.50**
Median	**405.00**	**110.00**	**1.33**	**435.00**	**1.44**

Non detects (ND) in the chemistry data was not factored into the calculations. No value was entered for NDs.

Final Report Sediment Characterization Study and Redediation Plan
Southwest Marine Shipyard, San Diego CA. Ogden EES, December 1998
Concentrations in Surface Sediment Samples (mg/kg, dry wt)

Station	Copper	Lead	Mercury	Zinc	Total PCB
SWM5	230	100	1.01	320	
SWM6	200	89	1.78	410	
SWM7	220	130	2.57	310	
SWM8	430	150	1.04	830	
SWM9	330	130	2.72	730	
SWM10	1000	230	2.5	790	1.439
SWM11	360	120	2.48	440	
SWM12	270	210	2.45	640	
SWM13	1200	270	2.14	1900	
SWM14	1000	240	4.93	1100	
SWM15	1700	350	6.92	1400	
SWM16	930	340	4.76	840	
SWM17	350	120	1.75	420	
SWM18	400	100	1.38	540	
SWM19	430	160	1.43	920	
SWM20	1300	770	2.46	2500	
SWM21	1200	370	6.71	1500	2.591
SWM22	590	150	1.28	1100	
SWM23	2000	590	2.39	4300	1.78
SWM24	1200	290	3.28	1700	
SWM25	520	140	1.5	560	
SWM26	890	210	2.5	1200	
SWM27	1600	300	2.63	1200	
SWM28	220	71	1.09	270	
SWM29	340	110	1.1	410	
SWM30	660	240	1.68	2000	
SWM31	610	160	3.04	620	0.504
SWM32	670	180	3.11	620	3.42
SWM33	610	180	2.05	560	1.698
SWM34	2700	490	4.15	2100	
SWM35	2900	700	4.7	3100	6.92
SWM36	750	150	1.68	570	
SWM37	480	110	5.11	500	
SWM38	570	130	3.41	540	
SWM39	810	70	0.55	370	
SWM40	470	84	0.79	380	
SWM41	1200	110	1.88	1100	0.396
SWM42	260	44	0.3	280	
SWM43	760	250	2.38	640	5.07
SWM44	1300	110	1.12	810	
SWM45	490	120	1.14	460	
SWM46	1000	110	1.39	1400	0.662
SWM47	630	120	1.31	540	
SWM48	490	120	0.94	430	
SWM49	650	110	1.29	550	
SWM50	550	120	1.04	550	
SWM51	260	59	0.72	340	
SWM52	430	100	1.01	420	0.347
SWM53	410	99	0.85	420	
SWM54	250	79	0.91	350	
SWM55	320	92	0.88	360	
SWM56	330	99	1	380	
SWM57	390	110	1.09	450	0.188
SWM58	330	94	0.96	360	
SWM59	350	94	1.01	390	
SWM60	410	110	1.07	500	
SWM61	360	100	1.23	390	
SWM62	470	110	2.42	430	0.446
SWM63	370	98	1.21	410	
SWM64	420	110	1.36	430	
SWM65	240	82	0.83	300	
SWM66	310	98	1.35	360	

Appendix C
2/27/01

Storm Drain Data
NASSCO Shipyards - Reference Station 01

	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	TBT (ug/kg)	Zinc (mg/kg)	Pyrene (ug/kg)	Benzo(a)pyrene (ug/kg)	Benzo(b)fluoranthene (ug/kg)	Benzo(ghi)perlyene (ug/kg)	Chrysene (ug/kg)
	49.30	25.70	0.18	16.60	99.00	1333.00	857.00	976.00	267.00	1214.00
	36.90	9.30	0.73	2.28	92.20	35.10	35.10	35.10	35.10	35.10
	53.80	22.10	0.14	2.17	112.00	144.00	99.80	106.00	43.40	199.00
	45.50	14.00	0.24	1.82	83.00	213.00	139.00	129.00	36.40	295.00
	52.10	16.70	0.09	98.60	89.70	53.90	94.70	38.90	38.90	196.00
	75.40	22.20	0.04	1.81	91.10	546.00	371.00	273.00	36.20	627.00
	28.00	12.00	0.19	2.20	85.00	387.00	55.00	55.00	55.00	354.00
	8.00	5.70	0.20	1.30	41.00	167.00	27.00	27.00	27.00	106.00
	22.00	14.00	0.12	1.40	45.00	54.00	29.00	31.00	27.00	94.00
	11.00	7.50	0.15	1.30	29.00	75.00	45.00	38.00	26.00	66.00
	12.00	10.00	0.04	1.30	89.00	217.00	53.00	63.00	25.00	150.00
	24.00	12.00		1.80	50.40	260.00	125.00	135.00	58.00	240.00
Mean	34.83	14.27	0.19	11.05	75.53	290.42	160.88	158.92	56.25	298.01
Stdev	20.82	6.28	0.19	27.90	26.71	361.06	238.56	266.80	67.24	329.92
Median	32.45	13.00	0.15	1.82	87.00	190.00	74.85	59.00	36.30	197.50
Minimum	8.00	5.70	0.04	1.30	29.00	35.10	27.00	27.00	25.00	35.10
Maximum	75.40	25.70	0.73	98.60	112.00	1333.00	857.00	976.00	267.00	1214.00

Non detects (ND) in the chemistry data was not factored into the calculations. No value was entered for NDs.

Storm Drain Data
NASSCO Shipyards - Reference Station 02

	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	TBT (ug/kg)	Zinc (mg/kg)	Pyrene (ug/kg)	Benzo(a)pyrene (ug/kg)	Benzo(b)fluoranthene (ug/kg)	Benzo(ghi)perlyene (ug/kg)	Chrysene (ug/kg)
	174.00	43.30	0.30	5.30	199.00	43.50	43.50	43.50	43.50	43.50
	147.00	27.50	0.80	1.90	170.00	38.50	38.50	38.50	38.50	38.50
	216.00	57.50	0.45	37.90	254.00	50.90	50.90	50.90	50.90	50.90
	191.00	38.80	0.57	2.33	210.00	46.50	46.50	46.50	46.50	46.50
	192.00	42.10	0.46	19.20	218.00	43.20	43.20	43.20	43.20	43.20
	194.00	59.90	0.54	2.25	248.00	45.00	45.00	45.00	45.00	45.00
	149.00	51.40	0.60	13.60	176.00	44.00	44.00	44.00	44.00	44.00
	160.00	39.00	0.09	2.72	230.00	43.00	43.00	43.00	43.00	43.00
	190.00	43.00	0.82	2.20	240.00	44.00	44.00	44.00	44.00	44.00
	210.00	52.00	0.68	2.20	240.00	75.00	60.00	44.00	44.00	44.00
	220.00	56.00	0.50	2.20	290.00	44.00	44.00	44.00	44.00	44.00
	161.00	42.80		7.20	231.00	55.00	50.00	57.00	59.00	31.00
Mean	183.67	46.11	0.53	8.25	225.50	47.72	46.05	45.30	45.47	43.13
Stdev	25.30	9.42	0.21	10.83	33.68	9.55	5.47	4.63	5.10	4.74
Median	190.50	43.15	0.54	2.53	230.50	44.00	44.00	44.00	44.00	44.00
Minimum	147.00	27.50	0.09	1.90	170.00	38.50	38.50	38.50	38.50	31.00
Maximum	220.00	59.90	0.82	37.90	290.00	75.00	60.00	57.00	59.00	50.90

Non detects (ND) in the chemistry data was not factored into the calculations. No value was entered for NDs.

Appendix C
2/27/01

Storm Drain Data
NASSCO Shipyards - Reference Station 03

	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	TBT (ug/kg)	Zinc (mg/kg)	Pyrene (ug/kg)	Benzo(a)pyrene (ug/kg)	Benzo(b)fluoranthene (ug/kg)	Benzo(ghi)perlyene (ug/kg)	Chrysene (ug/kg)
	106.00	49.20	0.34	9.77	169.00	4000.00	1979.00	3000.00	667.00	2542.00
	71.50	28.50	0.91	4.50	191.00	659.00	337.00	276.00	36.40	699.00
	66.00	30.40	0.27	4.70	109.00	952.00	264.00	286.00	69.90	745.00
	79.10	26.90	0.43	2.00	120.00	1482.00	592.00	803.00	144.00	1277.00
	58.10	25.00	0.35	149.00	91.80	161.00	99.40	37.40	37.40	186.00
	86.90	44.90	0.35	1.75	141.00	577.00	402.00	374.00	199.00	787.00
	92.40	58.20	0.56	2.00	80.30	150.00	150.00	150.00	150.00	150.00
	76.00	38.00	0.89	2.10	140.00	333.00	254.00	220.00	43.00	440.00
	120.00	45.00	1.19	2.20	190.00	753.00	261.00	296.00	45.00	445.00
	100.00	45.00	0.81	1.90	160.00	2200.00	1130.00	1220.00	437.00	1510.00
	140.00	65.00	0.86	2.20	240.00	898.00	571.00	614.00	233.00	786.00
	95.40	46.10		3.00	144.00	3180.00	1260.00	1710.00	501.00	1740.00
Mean	90.95	41.85	0.63	15.43	148.01	1278.75	608.28	748.87	213.56	942.25
Stdev	23.43	12.56	0.31	42.13	45.56	1233.35	566.27	861.42	210.67	705.54
Median	89.65	44.95	0.56	2.20	142.50	825.50	369.50	335.00	147.00	765.50
Minimum	58.10	25.00	0.27	1.75	80.30	150.00	99.40	37.40	36.40	150.00
Maximum	140.00	65.00	1.19	149.00	240.00	4000.00	1979.00	3000.00	667.00	2542.00

Non detects (ND) in the chemistry data was not factored into the calculations. No value was entered for NDs.

Storm Drain Data
NASSCO Shipyards - NSS STD 01

	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	TBT (ug/kg)	Zinc (mg/kg)	Pyrene (ug/kg)	Benzo(a)pyrene (ug/kg)	Benzo(b)fluoranthene (ug/kg)	Benzo(ghi)perlyene (ug/kg)	Chrysene (ug/kg)
	53.40	56.90	0.09	3.56	154.00	941.00	462.00	632.00	176.00	456.00
	22.60	32.10	0.08	155.00	67.10	656.00	242.00	280.00	86.10	612.00
	62.60	54.90	2.19	2.56	139.00	577.00	217.00	250.00	109.90	364.00
	97.40	45.80	0.09	13.90	132.00	313.00	210.00	224.00	37.30	192.00
	86.10	73.60	0.12		180.00	722.00	177.00	150.00	83.00	252.00
	26.30	47.20	0.79		100.00	838.00	219.00	282.00	223.00	238.00
	47.90	78.40	0.37		77.80	96.00	273.00	340.00	170.00	39.00
	4.20	3.80			25.00	801.00	243.00	268.00		457.00
	66.00	83.00			230.00	750.00				336.00
	11.00	94.00			38.00					
	91.00	130.00			350.00					
	28.10	54.20			108.00					
Mean	49.72	62.83	0.53	43.76	133.41	632.67	255.38	303.25	126.47	327.33
Stdev	31.73	32.17	0.78	74.34	89.94	269.53	88.10	143.56	65.08	169.90
Median	50.65	55.90	0.12	8.73	120.00	722.00	230.50	274.00	109.90	336.00
Minimum	4.20	3.80	0.08	2.56	25.00	96.00	177.00	150.00	37.30	39.00
Maximum	97.40	130.00	2.19	155.00	350.00	941.00	462.00	632.00	223.00	612.00

Non detects (ND) in the chemistry data was not factored into the calculations. No value was entered for NDs.

Southwest Marine Shipyard
Storm Drain - SWMSTD01

Date	Copper (mg/kg)	Lead (mg/kg)	Mercury (mg/kg)	TBT (ug/kg)	Zinc (mg/kg)	Pyrene (ug/kg)	Benzo(a)pyrene (ug/kg)	Benzo(b)fluoranthene (ug/kg)	Benzo(ghi)perlyene (ug/kg)	Chrysene (ug/kg)
12/30/92	88.1	69.7	0.114	268	197	1772	424	506	329	759
6/30/93	109	28.6	0.055	45.3	278	285	83.1	163	66.8	182
12/30/93	119	37.4	0.236	11	197	227	89.2	132	47.4	82
6/30/94	221	91.1	0.06	21.3	404	135	82.6	56.2	76.9	98.1
12/30/94	113	37.7	0.85	3	237	81.4	69.2	682	323	669
6/30/95	141	48.7	6.13	17.8	436	200	84.3	902	150	925
12/30/95	162	83.4	0.09	19.3	339	726	344	433	83	325
6/30/96	190	150	0.13	41.2	360	1970	725	526	326	1250
12/30/96	340	91			510	511	352	392	288	332
6/30/97	230	54			430	2740	527	316	138	362
12/30/97	270	120			610	475	329			
8/30/99	168	124			502	285	564			
Mean	**179.26**	**77.97**	**0.96**	**53.36**	**375.00**	**783.95**	**306.12**	**410.82**	**182.81**	**498.41**
Stdev	**74.87**	**38.91**	**2.11**	**87.88**	**131.60**	**876.26**	**225.79**	**260.74**	**119.56**	**387.87**
Median	**165.00**	**76.55**	**0.12**	**20.30**	**382.00**	**380.00**	**336.50**	**412.50**	**144.00**	**347.00**
Minimum	**88.10**	**28.60**	**0.06**	**3.00**	**197.00**	**81.40**	**69.20**	**56.20**	**47.40**	**82.00**
Maximum	**340.00**	**150.00**	**6.13**	**268.00**	**610.00**	**2740.00**	**725.00**	**902.00**	**329.00**	**1250.00**

Non detects (ND) in the chemistry data was not factored into the calculations. No value was entered for NDs.

Site Characterization and Remedial Action Plan, NASSCO, PTI, 1997
Copper and Zinc Concentrations For Surface Sediment and Core Sediment Samples From
NASSCO Supplemental Sedimetn Sampling Plan

Station	Copper (mg/kg)	Zinc (mg/kg)
1	240	300
2	360	380
3	240	310
4	240	280
5	430	540
6	310	340
7	320	410
8	410	360
9	240	280
10	270	400
11	310	360
12	380	350
13	320	330
14	390	360
15	500	390
16	370	390
17	400	330
18	560	510
19	700	590
20	420	360
21	360	370
22	420	390
23	350	390
24	560	490
25	330	360
26	1500	550
27	250	290
28	240	270
29	260	290
30	350	380
31	350	340
32	300	290
33	550	390
34	460	400
35	330	290
36	380	370
37	410	390
38	260	280
39	360	320
40	460	370
41	340	420
42	230	280
43	250	300
44	350	350
45	360	360
46	320	330
47	460	470
48	270	250
49	330	350
50	360	370
51	360	350
52	340	340
53	340	360

Station	Copper (mg/kg)	Zinc (mg/kg)
54	240	250
55	340	360
56	310	320
57	330	360
58	260	340
59	300	470
60	280	350
61	280	310
62	230	260
63	290	330
64	280	310
65	280	300
66	280	320
67	320	380
68	380	400
69	370	390
70	370	400
71	410	420
72	370	520
73	430	670
74	310	390
75	320	430
76	310	570
77	400	450
78	420	420
79	390	490
80	390	460
81	340	440
82	530	1500
83	750	1500
84	570	1000
85	450	540
86	440	430
87	440	620
88	210	290
89	220	290
90	210	320
91	180	320
92	160	270
93	150	440
94	35	140
95	210	310
96	190	300
97	210	340
98	180	290
99	170	530
100	100	180
101	95	170
102	140	230
Mean	381.13	364.53
Sta Dev	183.17	71.89
Minimum	230.00	250.00
Maximum	1500.00	590.00
Median	350.00	360.00