

Toledo Harbor
OLD

	mg/kg	mg	tons
Aluminum	19700	3.69E+13	40675.28
Arsenic	7.4	1.39E+10	15.32
Barium	120.54	2.26E+11	249.12
Beryllium	0.93	7.74E+09	8.53
Cadmium	1.21	2.27E+09	2.5
Calcium	35770.59	6.70E+13	73854.86
Chromium	30.59	5.74E+10	63.27
Cobalt	10	1.88E+10	20.72
Copper	37.01	6.94E+10	76.5
Iron	27647.06	5.18E+13	57099.73
Lead	23.24	4.36E+10	48.06
Magnesium	11330.59	2.12E+13	23369
Manganese	483.71	9.07E+11	999.8
Mercury	0.15	2.81E+08	0.31
Nickel	31.67	5.94E+10	65.48
Potassium	3684.71	6.91E+12	7616.97
Selenium	0.6	1.13E+09	1.25
Silver	0.3	5.63E+08	0.62
Sodium	159.1	2.98E+11	328.49
Thallium	0.46	8.63E+08	0.95
Vanadium	37.83	7.09E+10	78.15
Zinc	121.29	2.27E+11	250.22
TOC	35817.65	6.72E+13	74075.32
Cyanide	0.38	7.13E+08	0.79
Ammonia	150.76	2.83E+11	311.95
Phosphorus	584.76	1.10E+12	1212.54 *
Nitrogen	1844.12	3.46E+12	3814
Oil & Grease	679.27	1.28E+12	1410.96

All results are approximate with the following assumptions:

1.25 million cubic yards is the amount of solid material proposed for open lake disposal; not the amount of solid material plus associated liquid. Therefore, the results in tons indicates that amount of any particular parameter in a solid form where 1 cy = 1,500 kg.

Data regarding RM 2 was removed from the calculation since material from this location does not meet open lake disposal standards, and will be placed in a CDF.

Animony was not calculated since the majority of results were below open-lake reference and/or placement area detection amounts.

>>> "Smith, Tod D LRB" <Tod.D.Smith@usace.army.mil> 12/17/2007 1:29 pm >>>

Not sure of the context of your question. Probably a more complicated question than you think. The volume and associated water content and weight of dredged material can vary greatly depending upon harbor and the dredging/placement phase you are in.

For slurry material you could think roughly 25% solid to 75% water.

Prior to weir discharge from a CDF (if necessary) the particulates (and essentially contaminants) are settled from the water to 100 ppm or better. If you are asking rough weight of say dredged material excavated from the surface of a CDF, a rough calculation could be:

1 CY of sediment = ~ 1.5 ton
(1 ton = ~ 2,000 pounds & 1 pound = ~ 0.5 Kg)
1CY = ~ 3,000 pounds = 1,500 Kg