2005 Water Quality Data for Shandon

Tables 1,2,3,4, 5, 6, and 7 list all of the drinking water contaminants that were detected from January 2005 through December 2005, unless otherwise noted. The presence of these contaminants in water does not necessarily indicate that the water poses a health risk. The DHS requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data may be more than one year old, but is still representative of the water quality.

Table 1 – Microbiological Contaminants					
Contaminant (reporting units)	**MCL**	**PHG (MCLG)**	**Range**	**Average**	**Potential Source of Contamination**
Total Coliform Bacteria (MPN/100mL) (Distribution System)	More than 1 sample in a month with a detection	(0)	ND	ND	Naturally present in the environment
Heterotrophic Plate Count (CFU/mL) (Distribution System)	TT		ND—19	2	Naturally present in the environment

Table 2—Detection of Contaminants with a PRIMARY Drinking Water Standard					
Barium (ppb)	1000	2000	120—130	128 (2004)	Erosion of natural deposits
Fluoride (ppb)	2000	1000	150—190	170 (2004)	Erosion of natural deposits
Nitrate as NO3 (ppm)	45	45	11—15	13	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

Table 3—Detection of Radioactive Contaminants					
Gross Alpha Particle Activity (pCi/L)	15	-----	ND—3.92	ND (2003/2004)	Erosion of natural deposits
Radium 228	5		ND—1.22	ND (2004)	Erosion of natural deposits

Table 4 – Detection of Contaminants with a SECONDARY Drinking Water Standard					
Chloride (ppm)	500	-----	52-100	76	Runoff/leaching from natural deposits
Color (CU) *(Distribution & Wells)*	15	-----	ND—1	ND	Naturally occurring organic materials
Corrosivity (LI)	Noncorrosive	-----	-0.09—0.02	0.0 Stable	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
Iron (ppb)	300		ND—14	7	Leaching from natural deposits; industrial wastes
Odor – Threshold (TON) *(Distribution & Wells)*	3	-----	ND—2.5	1.2	Naturally occurring organic materials
Specific Conductance (micromhos/cm)	1600	-----	530—760	645	Runoff/leaching from natural deposits
Turbidity (NTU) (Distribution System & Wells)	5	-----	0.05—0.25	0.10	Soil runoff
Total Dissolved Solids (mg/L)	1000	-----	360—520	440	Runoff/leaching from natural deposits
Sulfate	500	-----	63—110	87	Runoff/leaching from natural deposits

Table 5 — Detection of Copper in Shandon Homes							
Contaminant (reporting units)	MCL	MCLG	Number of Samples Collected	Date Collected	90th Percentile Level Detected	Number of Sites found above the AL	Potential Source of Contamination
Copper (ppb)	AL=1300	170	10	8/2005	110	0	Internal corrosion of household water plumbing systems

Table 6 – Detection of Disinfection Byproducts, Disinfectant Residuals, and Disinfection Byproduct Precursors—Distribution System					
Contaminant (reporting units)	**MCL**	**PHG (MCLG) [MRDLG]**	**Range**	**Average**	**Potential Source of Contamination**
Chlorine (ppm) *(Distribution)*	MRDL = 4.0 (as Cl2)	MRDLG = 4 (as Cl2)	1.14—1.72	1.40	Drinking water disinfectant added for treatment.

Table 7 – Detection of Unregulated Contaminants or Contaminants without a Drinking Water Standard					
Total Alkalinity as $CaCO_3$ (ppm)	NS	-----	110—120	115	Runoff/leaching from natural deposits; seawater influence
Boron (ppb)	AL = 1000	-----	ND—120	ND (2002)	Runoff/leaching from natural deposits. (State regulations required us to monitor this contaminant while the State considered setting a limit on it.)
Calcium (ppm)	NS	-----	60—89	75	Runoff/leaching from natural deposits; seawater influence
Chromium VI (ppb) (Hexavalent chromium)	NS	-----	1.0—1.1	1.1 (2002)	Erosion of natural sources; discharge from steel and pulp mills and chrome plating. (State regulations required us to monitor this contaminant while the State considered setting a limit on it.)
Total Hardness (ppm)	NS	-----	160—250	205	Generally found in ground and surface water
Magnesium (ppm)	NS	-----	3.9—6.7	5.3	Runoff/leaching from natural deposits; seawater influence
pH	NS	-----	7.55	7.55	Runoff/leaching from natural deposits; seawater influence
Sodium (ppm)	NS	-----	45—55	50	Runoff/leaching from natural deposits; seawater influence
Vanadium (ppb)	AL = 50	-----	5.0—6.2	5.7 (2002)	Runoff/leaching from natural deposits. (State regulations required us to monitor this contaminant while the State considered setting a limit on it.)