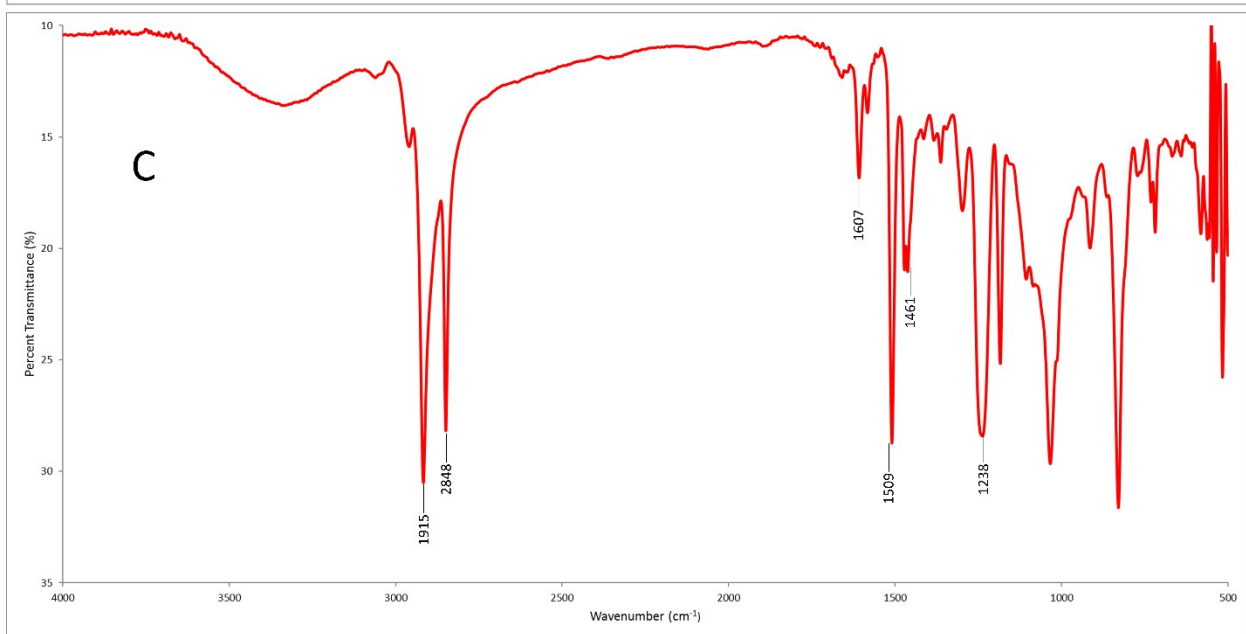
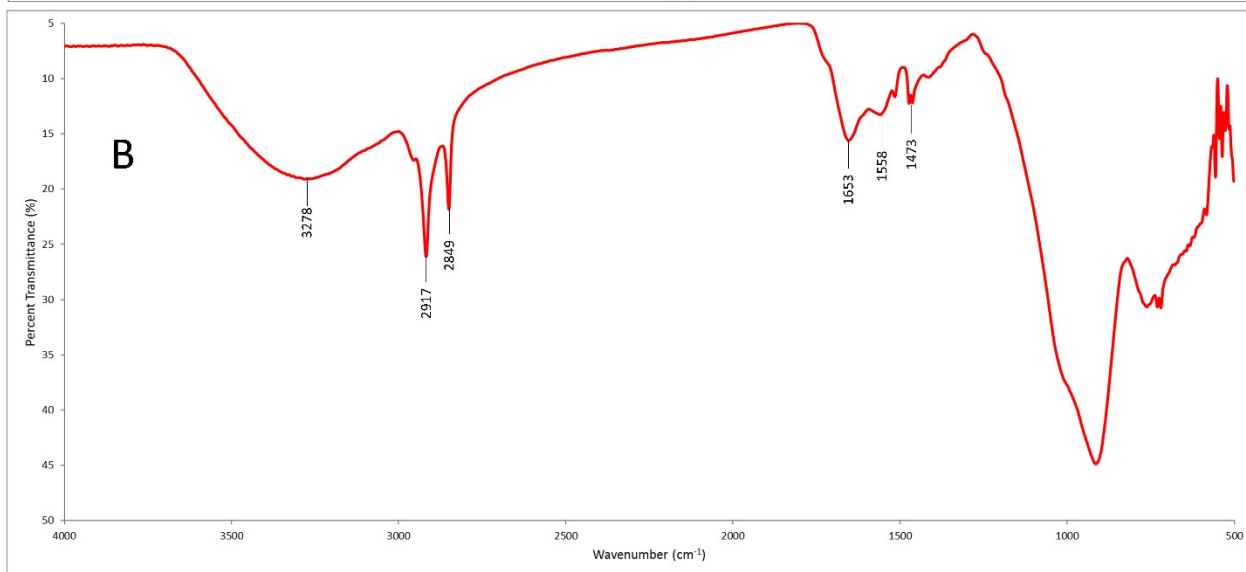
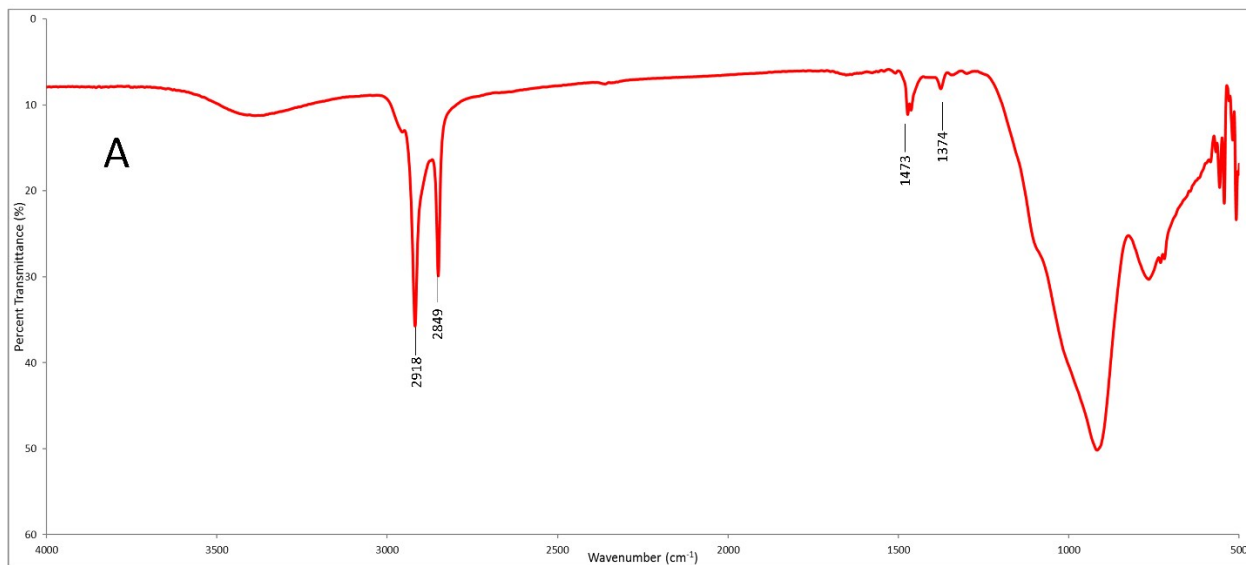


Supplemental Information



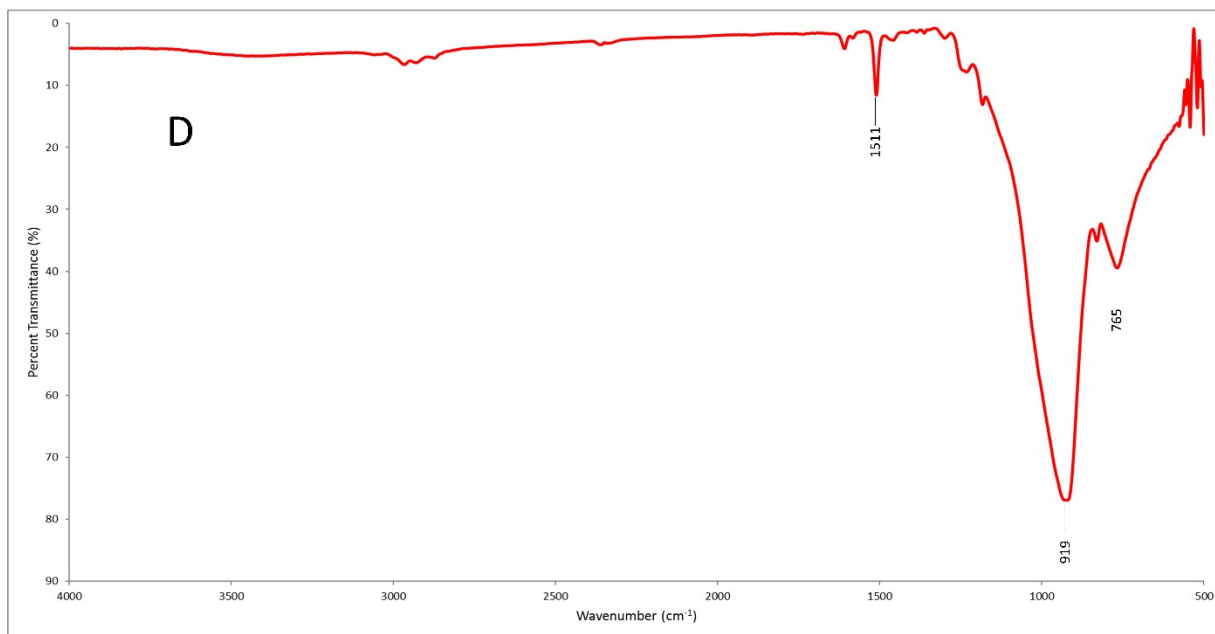


Figure S1: FTIR Microscope Spectra of WWTP Polyethylene Samples (A.) Sphere 01- Polyethylene (B.) Sphere 02- Plastic Polymer with OH group (C.) Sphere 04- Polyethylene (D.) Epoxy Adhesive. The wavenumber scale differs from figure 1 spectra as the samples were analyzed on different instruments.

Particle Identity	Sa (µm)	Sq (µm)	Sz (µm)	Diameter (µm)
Blue Microsphere Standard 1	0.207	0.269	2.970	117.95
Blue Microsphere Standard 2	0.218	0.418	7.297	107.44
Blue Microsphere Standard 3	0.115	0.222	3.449	106.58
Blue Microsphere Standard 4	1.165	1.563	9.904	117.09
Average of Blue Microspheres	0.426	0.618	5.905	112.27
St. Dev. of Blue Microspheres	0.5	0.6	3.3	6.1
Orange Microsphere Standard 1	1.697	2.294	25.641	458.73
Orange Microsphere Standard 2	1.491	2.178	23.918	492.19
Orange Microsphere Standard 3	2.401	3.001	42.055	472.61
Orange Microsphere Standard 4	5.314	6.398	34.300	448.94
Average of Orange Microspheres	2.726	3.468	31.479	468.12
St. Dev. of Orange Microspheres	1.8	2.0	8.4	18.8
Face Wash: Orange MP Bead 1	2.129	3.139	55.068	788.52
Face Wash: Orange MP Bead 2	1.692	2.206	100.970	786.90
Face Wash: Orange MP Bead 3	0.928	1.356	16.279	618.51
Face Wash: Orange MP Bead 4	0.586	0.925	20.645	650.89
Average of Orange Face Wash MPs	1.334	1.906	48.240	711.206
St. Dev. of Orange Face Wash MPs	0.7	1.0	39.2	89.3
Face Wash: Yellow MP Bead 1	2.321	4.954	50.605	327.28
Face Wash: Yellow MP Bead 2	3.058	4.708	37.231	388.53
Face Wash: Yellow MP Bead 3	14.036	17.752	100.405	358.95
Face Wash: Yellow MP Bead 4	2.481	3.685	37.679	426.89
Average of Yellow Face Wash MPs	5.474	7.775	56.480	375.41
St. Dev. of Yellow Face Wash MPs	5.7	6.7	29.9	42.4

Table S1: Complete values for each MP sample tested on the OP.