Teuten, E.L., Pedler, B.E., Hangsterfer, A.N., and Reddy, C.M., *Identification of highly brominated analogues of Q1 in marine mammals*, Environmental Pollution, published online March 6, 2006 doi:10.1016/j.envpol.2005.10.052

Three novel halogenated organic compounds (HOCs) have been identified in the blubber of marine mammals from coastal New England with the molecular formulae C9H3N2Br6Cl, C9H3N2Br7, and C9H4N2Br5Cl. They were identified using high and low resolution electron ionization (EI) and electron capture negative ionization (ECNI) gas chromatography mass spectrometry (GCMS) and appear to be highly brominated analogues of Q1, a heptachlorinated HOC that has been suspected to be naturally-produced. These new compounds were found in Atlantic white sided dolphin (Lagenorhynchus acutus), bottlenose dolphin (Tursiops truncatus), common dolphin (Delphinus delphis), Risso's dolphin (Grampus griseus), harbor porpoise (Phocoena phocoena), beluga whale (Delphinapterus leucas), fin whale (Balaenoptera physalus), grey seal (Halichoerus grypus), harp seal (Phoca groenlandica) and a potential food source (Loligo pealei) with concentrations as high as 2.7 μg/g (lipid weight). The regiospecificity of C9H3N2Br6Cl is suggestive of a biogenic origin. Debromination of C9H3N2Br6Cl may be significant in the formation of C9H4N2Br5Cl.