

Conversation Record



Date: May 5, 2010 **Time:** 11:00 AM

Location: Office Phone

Subject: Natural decay function and rate at which leached concentrations of MTBE from PEX piping diminish over time

Type: Incoming Telephone Visit
 Outgoing Conference Call Other: _____

Name of Person: Jonathan Borak, MD, DABT, Clinical Professor of Epidemiology & Public Health and Associate Clinical Professor of Medicine at Yale University, New Haven, CT

Organization: Jonathan Borak & Company, Inc. **Contact Number:** 203-777-6611

SUMMARY OF CONVERSATION

Dr. Borak returned call to Austin Kerr of Ascent Environmental. Dr. Borak explained that it is reasonable to assume that the concentrations of MTBE that leach from PEX piping would continue to diminish over time beyond the 107-test period of the multiple time point testing that was conducted by NSF. Dr. Borak further explained that, because the amount of MTBE contained in any PEX formulation is limited, it is reasonable to assume that the leached concentrations of MTBE from PEX products would diminish to levels that are equal to the background levels of MTBE that enters the PEX piping.

Dr. Borak explained that the natural decay function can be used to determine the rate at which leached concentrations of MTBE will continue to diminish after time point day 107 of the multiple time point testing conducted by NSF:

$$C_t = C_o * e^{-kt}$$

where,

t = point in time (e.g., a time point or day)

C = Concentration

C_o = concentration at time zero

C_t = concentration at time t

k = slope of the decay function, a positive value

Dr. Borak explained that two of the time points from NSF's multiple time point testing can be used in this equation to solve for k and after k is known, the equation can be used to estimate the day in time when the MTBE concentration would be diminished to a certain concentration. The equation can also be used to interpolate or extrapolate the leached concentration of MTBE that would occur on any particular day.