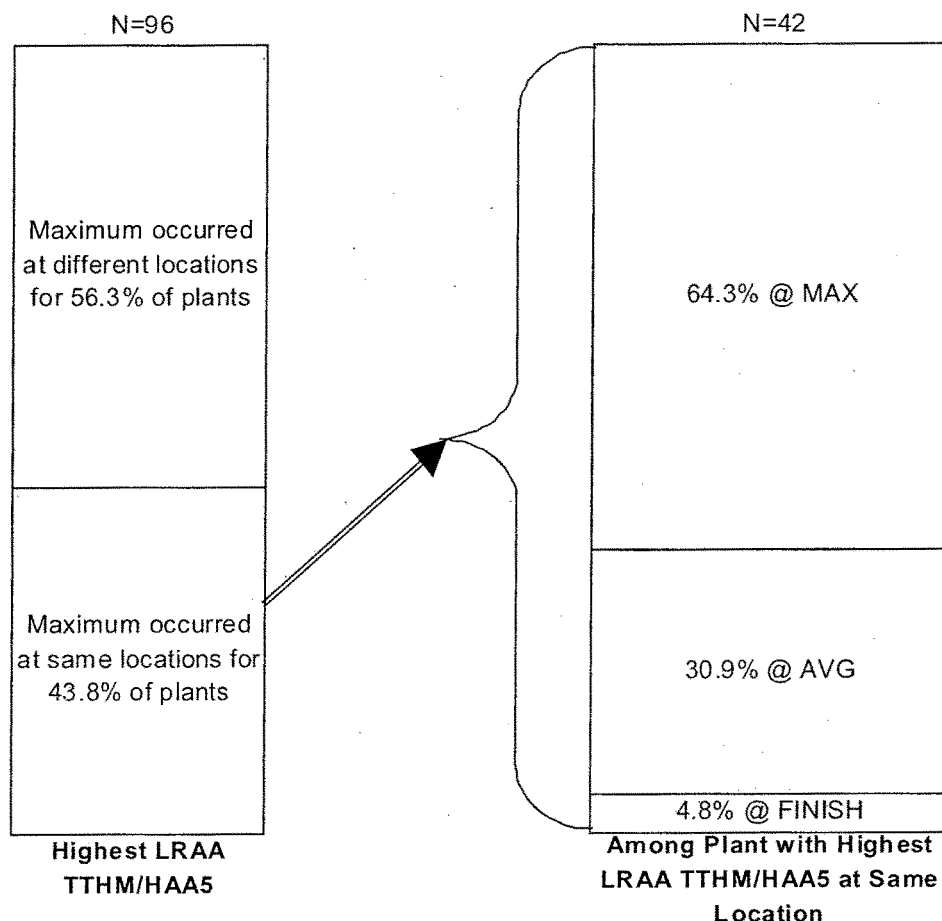


**Figure IV-8. Frequency at Which Highest TTHM/HAA5 LRAAs Occurred at Same Sampling Location (Based on the data from NRW Survey)**



Note: LRAA calculation is based on the results from two sampling events at each of sampling locations in the NRW survey (winter and summer months). Only plants having monitoring results for both winter and summer months are included in the data set.

## V. Discussion of Proposed Stage 2 DBPR Requirements

### A. MCLG for Chloroform

#### 1. What Is EPA Proposing Today?

EPA is proposing an MCLG for chloroform of 0.07 mg/L based on a cancer reference dose (RfD), an assumption that a person drinks 2 liters of water per day (the 90th percentile of intake rate for the U.S. population), and a relative source contribution (RSC) of 20 percent. The MCLG is proposed at a level at which no adverse effects on the health of persons is anticipated with an adequate margin of safety. This conclusion is based on toxicological evidence that the carcinogenic effects of chloroform are an ultimate consequence of sustained tissue toxicity. The MCLG is set at a daily dose for a lifetime at which no adverse effects will occur because the sustained tissue toxicity,

which is a key event in the cancer mode of action of chloroform, will not occur (USEPA 2001b).

EPA believes that the RfD used for chloroform is protective of sensitive groups, including children. This RfD was developed by the EPA current method for developing RfDs based on animal data. The method is designed to be protective by taking human variability into account and assuming that the average human will be as sensitive as the most responsive animal species. EPA's understanding of the mode of action for chloroform does not indicate a uniquely sensitive subgroup or an increased sensitivity in children.

#### 2. How Was This Proposal Developed?

a. *Background.* EPA proposed a zero MCLG for chloroform in the 1994 Stage 1 DBPR proposal (USEPA 1994b). Following the proposal, numerous

toxicological studies on chloroform were published and were discussed in two Notices of Data Availability (NODAs) (USEPA 1997a; USEPA 1998e). The 1998 NODA presented substantial scientific data related to the mode of action as part of the chloroform risk assessment and requested comment on a chloroform MCLG of 0.3 mg/L that reflected a nonlinear mode of action. After considering comments on the NODAs, EPA determined that further deliberations with the Science Advisory Board (SAB) and stakeholders were needed before changing the MCLG for chloroform. Thus, EPA promulgated a chloroform MCLG of zero in the final Stage 1 DBPR (USEPA 1998c) and committed to conducting additional deliberations with the SAB and factoring the SAB's review into the Agency's Stage 2 DBPR rulemaking