

Guidelines/Criteria	
Reference:	Staples RE, Worthy WC, Marks TA. 1979. Influence of drinking water-tap versus purified-on embryo and fetal development in mice. Teratology 19:327-344.
<b>In vivo Study Type</b> Route of Administration Species & age of animals	Mouse reproductive toxicity study Drinking water Virgin CD-1 mice
<b>Study Duration</b>	From at least 1 week before mating until day 18 of gestation (males and females were treated). Further animals were added to the study over 10 months (to evaluate any changes in tap water quality over time).
<b>Type of Mixture</b> Binary >2 components Similar acting or dissimilar What Mode of Action was investigated?	No Yes, whole water was tested Unknown Developmental toxicity in general
<b>Parameters/End points Measured</b> Target organs/Critical effects  Pharmacological changes or adverse effects	Pregnancy rate, dam weight gain, number of implants, live and dead foetuses, foetal mortality, weight, external, visceral and skeletal malformations Depends on endpoint
<b>Individual Components</b> Characterisation of individual compounds Name, exact chemical name, CAS no.  Were dose responses established for individual components? Were no effect levels established? Were doses below the NO(A)ELs investigated?	No Tap water from the municipality of Durham, North Carolina, was compared to a purified water control No No No
<b>Mixtures Investigated</b> Number of dose levels  How does the mixture make-up compare to individual components? (e.g. low dose) equivalents used?) No. of technical replicates per exposure condition ( <i>in vitro</i> ) No. of animals per dose group ( <i>in vivo</i> )	One, i.e. whole tap water as supplied, including its variation in 10 months. Only whole water was tested  217 dams were made pregnant in the treated group, 247 in the control
<b>Observations/Findings</b>	Pooling all 10 months, there was no difference between tap water and control in any parameter. Compared to the purified water, the tap water showed an increased pregnancy rate and number of foetuses per mother in one month, and a higher foetal weight in another month - these findings were ascribed to chance by the authors.
<b>Overall opinion</b> (e.g. sufficient numbers of groups investigated, group sizes adequate, observations reproducible, low dose levels used investigated)	Good study of an environmental mixture.