Compounds for which Calculation of a Human Health MSC is Not Required

The following compounds are not necessarily considered to be of concern from a human health standpoint. However, under the 1993 Risk Reduction Rule (RRR), aesthetics (§335.559(h) and §335.563(j)(2)) and ecological criteria would still apply. The concentration of the compound should not be high enough to cause objectionable characteristics (e.g., taste, odor) or make a natural resource unfit for use.

COC	Comments
Acetic acid	Acetic acid concentration must not be high enough to cause the soil pH to be lowered to the extent that corrosivity occurs or the soil is unable to support vegetation.
Ammonium salts	Ammonium salts (e.g., ammonium nitrate [NH_4NO_3], ammonium perchlorate [NH_4ClO_4], ammonium sulfate [$(NH_4)_2SO_4$]) dissociate in the environment to the ammonium cation (NH_4^+) and the respective anion (e.g., nitrate [NO_3^-], perchlorate [ClO_4^-], sulfate [$SO_{4\&}$]). Some of the anions are considered to be of concern from a human health standpoint. The anion of the ammonium salt COC must be evaluated against their respective MSCs. The ammonium concentration must not be high enough to render a medium unable to support vegetation or animal life and must not raise the soil or water pH to a corrosive level.
Calcium	See October 9, 2001 memorandum entitled "Evaluation of the Potential Health Impacts of Exposure to Iron, Calcium, Magnesium, Potassium, Sodium, and Phosphorus through Soil Ingestion," if necessary, for more information. Memo is available on the TNRCC website at: http://www.tnrcc.state.tx.us/permitting/trrp.htm.
Chloride	The TNRCC requires that drinking water not exceed 300 mg/L chloride when criteria related to secondary MCLs, discussed in RRR §335.559(h) and §335.563(j)(2), are applicable.
Ethylene	None
Hydrogen chloride	Hydrogen chloride concentration must not be high enough to cause the soil pH to be lowered to the extent that corrosivity occurs or the soil is unable to support vegetation.

COC	Comments
Iron	See October 9, 2001 memorandum entitled "Evaluation of the Potential Health Impacts of Exposure to Iron, Calcium, Magnesium, Potassium, Sodium, and Phosphorus through Soil Ingestion" for more information. Memo is available on the TNRCC website at: http://www.tnrcc.state.tx.us/permitting/trrp.htm. Please note that further evaluation may be necessary if iron is present in soil at very high concentrations (>70,000 mg/kg for residential; >292,000 mg/kg for commercial/industrial sites). The TNRCC requires that drinking water not exceed 0.3 mg/L iron when criteria related to secondary MCLs, discussed in RRR §335.559(h) and §335.563(j)(2), are applicable.
Limonene, d-	Limonene, although used as a pesticide, is also employed as a food additive and is nontoxic to humans.
Magnesium	See October 9, 2001 memorandum entitled "Evaluation of the Potential Health Impacts of Exposure to Iron, Calcium, Magnesium, Potassium, Sodium, and Phosphorus through Soil Ingestion," if necessary, for more information. Memo is available on the TNRCC website at: http://www.tnrcc.state.tx.us/permitting/trrp.htm.
Phosphorus, total	See October 9, 2001 memorandum entitled "Evaluation of the Potential Health Impacts of Exposure to Iron, Calcium, Magnesium, Potassium, Sodium, and Phosphorus through Soil Ingestion," if necessary, for more information. Memo is available on the TNRCC website at: http://www.tnrcc.state.tx.us/permitting/trrp.htm.
Potassium	See October 9, 2001 memorandum entitled "Evaluation of the Potential Health Impacts of Exposure to Iron, Calcium, Magnesium, Potassium, Sodium, and Phosphorus through Soil Ingestion," if necessary, for more information. Memo is available on the TNRCC website at: http://www.tnrcc.state.tx.us/permitting/trrp.htm.

COC	Comments
Sodium	See October 9, 2001 memorandum entitled "Evaluation of the Potential Health Impacts of Exposure to Iron, Calcium, Magnesium, Potassium, Sodium, and Phosphorus through Soil Ingestion," if necessary, for more information. Memo is available on the TNRCC website at: http://www.tnrcc.state.tx.us/permitting/trrp.htm.
Sulfate	The TNRCC requires that drinking water not exceed 300 mg/L sulfate when criteria related to secondary MCLs, discussed in RRR §335.559(h) and §335.563(j)(2), are applicable.
Sulfide	The reactive sulfide concentration must not be high enough to generate toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment when exposed to pH conditions between 2 and 12.5.
Sulfur	Sulfur concentration must not be high enough to cause the soil pH to be lowered to the extent that corrosivity occurs or the soil is unable to support vegetation.