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

The following compounds are not necessarily considered to be of concern from a human health standpoint. However, under TRRP, aesthetics (§350.74(i)) and ecological (§350.77) criteria would still apply. The COC concentration 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 PCLs. 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 TCEQ website at: http://www.tceq.state.tx.us/remediation/trrp/guidance.html.
Chloride	The TCEQ requires that drinking water not exceed 250 mg/L chloride when criteria related to secondary MCLs, discussed in outlined in TRRP §350.74(f)(3), 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.
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," if necessary, for more information. Memo is available on the TCEQ website at: http://www.tceq.state.tx.us/remediation/trrp/guidance.html. 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 TCEQ requires that drinking water not exceed 0.3 mg/L iron when criteria related to secondary MCLs, outlined in TRRP §350.74(f)(3), 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,

COC	Comments
	Calcium, Magnesium, Potassium, Sodium, and Phosphorus through Soil Ingestion," if necessary, for more information. Memo is available on the TCEQ website at: http://www.tceq.state.tx.us/remediation/trrp/guidance.html.
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 TCEQ website at: http://www.tceq.state.tx.us/remediation/trrp/guidance.html.
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 TCEQ website at: http://www.tceq.state.tx.us/remediation/trrp/guidance.html.
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 TCEQ website at: http://www.tceq.state.tx.us/remediation/trrp/guidance.html.
Sodium carbonate	Sodium carbonate is a chemical for which the calculation of a human health PCL is not required as it is not necessarily of concern from a human health standpoint. However, the soil concentration should not be high enough to cause objectionable characteristics (e.g., odor, taste), make a natural resource unfit for use, cause the soil pH to be increased to the extent that corrosivity occurs (pH = 12.5) or the soil is unable to support vegetation, or cause eye or respiratory tract irritation from airborne sodium carbonate particulate.
Sulfate	The TCEQ requires that drinking water not exceed 300 mg/L sulfate when criteria related to secondary MCLs, discussed in outlined in TRRP §350.74(f)(3), 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.