

Attachment A

Normans Dry Cleaners and Laundry

Groundwater Constituents of Concern (COCs), Practical Quantitation Limits (PQLs) and Numeric Water Quality Objectives

Constituents of Concern (COCs) Composed of PCE-regulated CVOCs, ¹ Other-Regulated VOCs ² , NCTPH ³ -Regulated Compounds, and Other Regulated Groundwater COCs ⁴	Practical Quantitation Limits ⁵ micrograms per liter (ug/l)	Water Quality Objectives ⁶ micrograms per liter (ug/l)
PCE-Regulated CVOCs	na	na
Trichloroethene (TCE)	<0.5	0.8 ^a
Tetrachloroethene (PCE)	<0.5	0.06 ^a
Cis-1,2-Dichloroethene (c-DCE)	<0.5	6 ^b
Trans-1,2-Dichloroethene (t-DCE)	<0.5	10 ^b
Other-Regulated VOCs	na	na
1,1-Dichloroethylene (1,1-DCE)	<0.5	0.06 ^j
Trichlorotrifluoroethane (Freon 113)	<0.5	1200 ^b
1,1,1-Trichloroethane (TCA)	<0.5	17 ^g
Trichloromethane (TCM dba chloroform)	<0.5	0.26 ^g
Bromodichloromethane	<0.5	0.27 ^h
Acetone	<0.5	6300 ^f
NCTPH-Regulated Compounds	na	na
TPH as gasoline (TPHg)	<50.0	5.0 ^c
Benzene (B)	<0.5	0.15 ^a
Toluene (T)	<0.5	40 ^d
Ethylbenzene (E)	<0.5	29 ^d
Xylenes (X)	<0.5	17 ^d
Methyl t-Butyl Ether (MtBE)	<0.5	5 ^d
1,2,4-Trimethylbenzene	<0.5	330 ^e
1,3,5-Trimethylbenzene	<0.5	15 ^d
sec-Butylbenzene	<0.5	260 ^e
tert-Butylbenzene	<0.5	260 ^e
n-Propylbenzene	<0.5	260 ^e
n-Butylbenzene	<0.5	260 ^e
Isopropylbenzene (Cumene)	<0.5	0.8 ^d

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PCE-Regulated CVOCs	na	na
Naphthalene	<1.0	14 ^f
4-isopropyl toluene	<1.0	not identified
Other Regulated Groundwater COCs	Order-specific	Order-specific

Notes: na means not applicable.

(1) PCE-Regulated CVOCs means Chlorinated Volatile Organic Compounds

(2) Other Regulated VOCs means Volatile Organic Compounds

(3) NCTPH-Regulated Compounds means Non-Chlorinated Total Petroleum Hydrocarbon (TPH) Compounds

(4) Other Regulated Groundwater COCs are those additional constituents of concern that have required monitoring under specific General Waste Discharge Requirements needed for in-situ treatments. These COCs will be specified on specific applications for pilot-scale and full-scale treatment alternatives.

(5) Practical Quantitation Limits (PQLs) are based on current State-certified laboratory technology. For example applying US EPA test method 8260B and assume no dilutions are necessary. If dilutions are necessary then PQLs will likely rise. For instances where technology cannot achieve specified water quality objectives, then the PQLs will be used.

(6) Water Quality Objectives are selected from numerical water quality standards found in *A Compilation of Water Goals* (Marshack, August, 2007) and/or from the CRWQCB, North Coast Region Water Quality Control Plan (Basin Plan).

(a) Toxicity criterion for health-based limits from California Public Health Goal (PHG).

(b) California Department of Health Services Primary Maximum Contaminant Level (MCL) for *Domestic Water Quality and Monitoring, California Code of Regulations*, Title 22, Division 4, Chapter 15, Article 5.5, Section 64444, Table 64444-A.

(c) USEPA Drinking Water Health Advisory or Suggested No-Adverse-Response Levels for toxicity other than cancer risk.

(d) USEPA, Secondary Maximum Contaminant Level, Taste and Odor or welfare-based criterion.

(e) California Department of Health Services, Drinking Water Notification Level.

(f) USEPA IRIS Reference Dose (RfD) as a drinking water level.

(g) National Academy of Science Health Advisory for one-in-a-million Incremental Cancer Risk estimates for drinking water.

(h) CalEPA Cancer Potency Factor as a drinking water level for one-in-a-million Incremental Cancer Risk estimates for drinking water (assumes 70 kg body weight and 2 liters/day water consumption).

(j) One-in-a-Million Incremental Cancer Risk Estimates for Drinking Water, USEPA Health Advisory.