TABLE 1. COMPARISON CRITERIA FOR AST TANK FARM CONTAINMENT AREA SOIL EXCAVATION[1]

Chemicals of Interest	EPA Region 6 Soil Screening Criteria[(2)]	$^{Tot}Soil_{Comb}$[(3)]	Comparison Criteria[(4)]
VOCs			
1,1,1,2-Tetrachloroethane	7.6E+00	7.3E+01[(5)]	7.6E+00
1,1,1-Trichloroethane	1.4E+03	5.4E+04[(5)]	1.4E+03
1,1,2,2-Tetrachloroethane	9.7E-01	7.3E+00	9.7E-01
1,1,2-Trichloroethane	2.1E+00	1.9E+01	2.1E+00
1,1-Dichloroethane	2.3E+03	4.3E+03[(5)]	2.3E+03
1,1-Dichloroethene	4.7E+02	3.5E+03[(5)]	4.7E+02
1,1-Dichloropropene	---	6.1E+01	6.1E+01
1,2,3-Trichloropropane	3.4E-03	4.1E+00	3.4E-03
1,2,4-Trichlorobenzene	2.6E+02	4.2E+03[(5)]	2.6E+02
1,2,4-Trimethylbenzene	1.9E+02	1.1E+02[(5)]	1.9E+02
1,2-Dibromo-3-chloropropane	2.2E+00	1.4E-01[(5)]	2.2E+00
1,2-Dibromoethane	7.0E-02	7.9E-01[(5)]	7.0E-02
1,2-Dichlorobenzene	3.7E+02	5.7E+02	3.7E+02
1,2-Dichloroethane	8.4E-01	1.1E+01	8.4E-01
1,2-Dichloropropane	8.5E-01	4.4E+01	8.5E-01
1,3,5-Trimethylbenzene	7.8E+01	8.3E+01	7.8E+01
1,3-Dichlorobenzene	1.5E+02	8.8E+01	8.8E+01
1,3-Dichloropropane	---	6.1E+01	6.1E+01
1,4-Dichlorobenzene	8.1E+00	1.2E+03	8.1E+00
2,2-Dichloropropane	---	4.4E+01	4.4E+01
2-Butanone	3.4E+04	7.3E+04	3.4E+04
2-Chloroethylvinyl ether	---	3.3E+00	3.3E+00
2-Chlorotoluene	5.1E+02	2.5E+03	5.1E+02
2-Hexanone	---	7.9E+01	7.9E+01
4-Chlorotoluene	---	3.5E+00	3.5E+00
4-Isopropyltoluene	---	4.7E+03	4.7E+03
4-Methyl-2-pentanone	1.7E+04	2.8E+04	1.7E+04
Acetone	1.0E+05	8.1E+03	8.1E+03
Acrolein	3.8E-01	8.1E-01	3.8E-01
Acrylonitrile	5.5E-01	4.2E+00	5.5E-01
Benzene	1.6E+00	1.11E+02[(5)]	1.6E+00
Bromobenzene	1.2E+02	1.2E+02[(5)]	1.2E+02
Bromodichloromethane	2.6E+00	4.6E+02	2.6E+00
Bromoform	2.4E+02	6.0E+02	2.4E+02
Bromomethane	1.5E+01	5.3E+01	1.5E+01
Butanol	6.8E+04	3.1E+03	3.1E+03
Carbon disulfide	7.2E+02	7.2E+03	7.2E+02
Carbon tetrachloride	5.8E-01	1.9E+01	5.8E-01
Chlorobenzene	6.0E+02	5.4E+02[(5)]	6.0E+02
Chloroethane	7.2E+00	8.7E+04	7.2E+00
Chloroform	5.8E-01	1.3E+01	5.8E-01
Chloromethane	3.0E+00	1.6E+02	3.0E+00
cis-1,2-Dichloroethene	1.6E+02	4.7E+03	1.6E+02
cis-1,3-Dichloropropene	---	4.3E+01	4.3E+01
Cyclohexane	6.8E+03	4.2E+04	6.8E+03
Dibromochloromethane	2.6E+00	3.4E+02	2.6E+00
Dibromomethane	5.9E+02	1.9E+02	1.9E+02
Dichlorodifluoromethane	3.4E+02	4.3E+04	3.4E+02
Ethylbenzene	2.3E+02	1.0E+04	2.3E+02
Hexachlorobutadiene	2.5E+01	2.3E+01	2.3E+01
Isopropylbenzene (Cumene)	5.8E+02	6.3E+03	5.8E+02

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Chemicals of Interest	EPA Region 6 Soil Screening Criteria[2]	$^{Tot}Soil_{Comb}$[3]	Comparison Criteria[4]
Methyl acetate	1.0E+05	6.6E+03	6.6E+03
Methyl iodide	---	1.2E+02	1.2E+02
Methylcyclohexane	1.4E+02	3.3E+04	1.4E+02
Methylene chloride	2.2E+01	5.6E+02	2.2E+01
Naphthalene	2.1E+02	1.9E+02	1.9E+02
n-Butylbenzene	2.4E+02	4.0E+03	2.4E+02
n-Propylbenzene	2.4E+02	4.1E+03	2.4E+02
o-Xylene	2.8E+02	8.0E+03[5]	2.8E+02
sec-Butylbenzene	2.2E+02	3.7E+03	2.2E+02
Styrene	1.7E+03	7.8E+03[5]	1.7E+03
tert-Butyl methyl ether (MTBE)	4.1E+01	1.1E+03	4.1E+01
tert-Butylbenzene	3.9E+02	3.2E+03	3.9E+02
Tetrachloroethene	1.7E+00	3.3E+02[5]	1.7E+00
Toluene	5.2E+02	2.9E+04[5]	5.2E+02
trans-1,2-Dichloroethene	2.4E+02	6.42E+02[5]	2.4E+02
trans-1,3-Dichloropropene	---	6.1E+01	6.1E+01
trans-1,4-Dichloro-2-butene	---	2.9E-01	2.9E-01
Trichloroethene	1.0E-01	1.1E+02[5]	1.0E-01
Trichlorofluoromethane	1.4E+03	2.8E+04	1.4E+03
Trichlorotrifluoroethane	5.6E+03	3.3E+05	5.6E+03
Vinyl acetate	1.6E+03	2.2E+03	1.6E+03
Vinyl chloride	4.3E-01	1.3E+01[5]	4.3E-01
Xylene (total)	2.1E+02	6.5E+03[5]	2.1E+02
SVOCs			
1,2Diphenylhydrazine/Azobenzen	2.4E+00	1.5E+02[5]	2.4E+00
2,4,5-Trichlorophenol	6.8E+04	1.2E+04	1.2E+04
2,4,6-Trichlorophenol	1.7E+02	6.81E+02[5]	1.7E+02
2,4-Dichlorophenol	2.1E+03	1.7E+03	1.7E+03
2,4-Dimethylphenol	1.4E+04	2.9E+03	2.9E+03
2,4-Dinitrophenol	1.4E+03	1.4E+03	1.4E+03
2,4-Dinitrotoluene	1.4E+03	2.1E+01	2.1E+01
2,6-Dinitrotoluene	6.8E+02	2.8E+01	2.8E+01
2-Chloronaphthalene	2.6E+04	5.0E+04	2.6E+04
2-Chlorophenol	2.6E+02	2.4E+03	2.6E+02
2-Methylnaphthalene	---	2.5E+03	2.5E+03
2-Nitroaniline	2.0E+03	2.9E+01[5]	2.0E+03
2-Nitrophenol	---	4.1E+02	4.1E+02
3,3'-Dichlorobenzidine	4.3E+00	4.2E+01	4.3E+00
3-Nitroaniline	---	1.6E+02	1.6E+02
4,6-Dinitro-2-methylphenol	---	2.26E+01[5]	0.0E+00
4-Bromophenyl phenyl ether	---	1.1E+00	1.1E+00
4-Chloro-3-methylphenol	---	3.0E+03	3.0E+03
4-Chloroaniline	2.7E+03	9.5E+01[5]	2.7E+03
4-Chlorophenyl phenyl ether	---	8.0E-01	8.0E-01
4-Nitroaniline	---	6.6E+02[5]	0.0E+00
4-Nitrophenol	5.5E+03	1.1E+02	1.1E+02
Acenaphthene	3.3E+04	3.7E+04	3.3E+04
Acenaphthylene	---	3.7E+04	3.7E+04
Acetophenone	1.7E+03	3.3E+03	1.7E+03
Aniline	3.4E+02	9.3E+01	9.3E+01
Anthracene	1.0E+05	1.9E+05	1.0E+05
Atrazine (Aatrex)	8.6E+00	8.6E+01	8.6E+00
Benzaldehyde	6.8E+04	3.4E+02	3.4E+02

Chemicals of Interest	EPA Region 6 Soil Screening Criteria[2]	$^{Tot}Soil_{Comb}$[3]	Comparison Criteria[4]
Benzidine	8.3E-03	3.3E-02	8.3E-03
Benzo(a)anthracene	2.3E+00	2.4E+01	2.3E+00
Benzo(a)pyrene	2.3E-01	2.4E+00	2.3E-01
Benzo(b)fluoranthene	2.3E+00	2.4E+01	2.3E+00
Benzo(g,h,i)perylene	---	1.9E+04	1.9E+04
Benzo(k)fluoranthene	2.3E+01	2.4E+02	2.3E+01
Benzoic acid	1.0E+05	5.0E+02	5.0E+02
Benzyl alcohol	1.0E+05	6.2E+03	6.2E+03
Biphenyl	2.6E+04	1.9E+02	1.9E+02
Bis(2-Chloroethoxy)methane	---	6.2E+00	6.2E+00
Bis(2-Chloroethyl)ether	6.2E-01	2.8E+00	6.2E-01
Bis(2-Chloroisopropyl)ether	---	1.1E+02	1.1E+02
Bis(2-Ethylhexyl)phthalate	1.4E+02	5.6E+02	1.4E+02
Butyl benzyl phthalate	2.4E+02	1.0E+04[5]	2.4E+02
Caprolactam	1.0E+05	2.3E+02	2.3E+02
Carbazole	9.6E+01	9.5E+02	9.6E+01
Chrysene	2.3E+02	2.4E+03	2.3E+02
Dibenz(a,h)anthracene	2.3E-01	2.4E+00	2.3E-01
Dibenzofuran	1.7E+03	2.7E+03	1.7E+03
Diethyl phthalate	1.0E+05	2.0E+03	2.0E+03
Dimethyl phthalate	1.0E+05	9.3E+02	9.3E+02
Di-n-butyl phthalate	6.8E+04	1.6E+04	1.6E+04
Di-n-octyl phthalate	2.7E+04	1.3E+04[5]	2.7E+04
Fluoranthene	2.4E+04	2.5E+04	2.4E+04
Fluorene	2.6E+04	2.5E+04	2.5E+04
Hexachlorobenzene	1.2E+00	6.9E+00	1.2E+00
Hexachlorocyclopentadiene	4.1E+03	1.0E+01	1.0E+01
Hexachloroethane	1.4E+02	5.2E+02	1.4E+02
Indeno(1,2,3-cd)pyrene	2.3E+00	2.4E+01	2.3E+00
Isophorone	2.0E+03	1.9E+03	1.9E+03
Nitrobenzene	1.1E+02	5.7E+01[5]	1.1E+02
n-Nitrosodimethylamine	3.8E-02	1.3E-01	3.8E-02
n-Nitrosodi-n-propylamine	2.7E-01	1.4E+00	2.7E-01
n-Nitrosodiphenylamine	3.9E+02	1.9E+03	3.9E+02
o-Cresol	3.4E+04	1.9E+03	1.9E+03
Pentachlorophenol	1.0E+01	1.1E+02	1.0E+01
Phenanthrene	---	1.9E+04	1.9E+04
Phenol	1.0E+05	2.4E+03	2.4E+03
Pyrene	3.2E+04	1.9E+04	1.9E+04
Pyridine	6.8E+02	1.4E+02	1.4E+02

Notes:

1. All values in mg/kg.
2. From EPA's "Region 6 Human Health Medium-Specific Screening Levels 2004-2005". Industrial Outdoor Worker.
3. $^{Tot}Soil_{Comb}$ PCL = TCEQ Protective Concentration Level for 30 acre source area Commercial/Industrial total soil combined pathway (includes inhalation; ingestion; dermal pathways).
4. The lower value of the EPA Region 6 Soil Screening Criteria and the $^{Tot}Soil_{Comb}$ value.
5. Updated from Table 15 of RI/FS Workplan to reflect changes in toxicity data from 2005 to 2009 indicated in TCEQ PCL tables.