APPENDIX C

HUMAN HEALTH STREAMLINED RISK ASSESSMENT

ATTACHMENTS

Attachment C-1

Technical Memorandum

From: Paul F. Goetchius, DVM, DABT

To: FTMC FILL AREAS EE/CA: SRA FILE

Date: 9 February 2001

Subject: **DEVELOPMENT OF SITE-SPECIFIC SCREENING LEVELS FOR A HIGHWAY CONSTRUCTION WORKER EXPOSED TO SOIL**

Site-specific screening levels (SSSL) are medium-specific and receptor-specific, risk-based screening concentrations that are used to quickly and efficiently screen sites for potential cancer risk and noncancer hazards from residual chemicals in environmental media. SSSLs capture all the site-specific exposure assumptions relevant for a given receptor scenario. The process of estimating SSSLs, including development of the receptor scenarios and exposure assumptions, was described in IT (1998). The SSSLs were recently updated with the most current toxicity values and are compiled in IT (2000).

Since the receptor scenarios were first developed, it was learned that a major highway bypass would be built on property within the FTMC facility. Potentially exposed receptors include a highway construction worker and, eventually, a highway maintenance worker. The exposures of these two receptors were compared and it was shown that the construction worker would be the more highly exposed (Goetchius, 1999). Therefore, SSSLs developed for the highway construction worker will be sufficiently protective for all receptors associated with the highway.

IT (1998) provides equations for estimating SSSLs for "general" construction worker exposure to soil. The same equations may be used for estimating SSSLs for a highway construction worker by combining standard exposure variable values with the site-specific values developed for highway construction. The equations and their variable values are as follows:

$$\mathrm{SSSLc} = \frac{(\mathrm{TR})(\mathrm{BW})(\mathrm{ATc})(1/\mathrm{FI})(1/\mathrm{EF})(1/\mathrm{ED})(\mathrm{CF})}{[(\mathrm{IRs})(\mathrm{SFo})] + [(\mathrm{SA})(\mathrm{AF})(\mathrm{ABS})(\mathrm{SFd})] + \left[\frac{(\mathrm{IRa})(\mathrm{SFi})}{\mathrm{PEF}}\right]} \qquad \text{Eq. 1}$$

and

$$\mathrm{SSSLn} = \frac{(\mathrm{THI})(\mathrm{BW})(\mathrm{ATn})(1//\mathrm{FI})(1/\mathrm{EF})(1/\mathrm{ED})(\mathrm{CF})}{\left[\frac{\mathrm{IRs}}{\mathrm{RfDo}}\right] + \left[\frac{(\mathrm{SA})(\mathrm{AF})(\mathrm{ABS})}{\mathrm{RfDd}}\right] + \left[\frac{\mathrm{IRa}}{(\mathrm{RfDi})(\mathrm{PEF})}\right]} \qquad \text{Eq. 2}$$

where (for Equation 1):

SSSLc	=	site-specific screening level for cancer (mg/kg) (calculated)
TR	=	target cancer risk (1E-6, unitless) (IT, 1998)
BW	=	body weight (70 kg) (IT, 1998)
ATc	=	averaging time, cancer risk (25550 days) (IT, 1998)
FI	=	fraction exposed to contaminated medium (1, unitless) (IT, 1998)
EF	=	exposure frequency (15 days/year) (Goetchius, 1999)
ED	=	exposure duration (0.74 years) (Goetchius, 1999)
CF	=	conversion factor (1E+6 mg/kg) (IT, 1998)
IRs	=	soil ingestion rate (100 mg/day) (Goetchius, 1999)
SFo	=	oral cancer slope factor (per mg/kg-day, chemical-specific) (IT, 2000)
SA	=	body surface area exposed to soil (5250 cm^2) (IT, 1998)
AF	=	soil-to-skin adherence factor (0.12 mg/cm^2) (Goetchius, 1999)
ABS	=	dermal absorption factor (unitless, chemical-specific) (IT, 2000)
SFd	=	dermal cancer slope factor (per mg/kg-day, chemical-specific) (IT, 2000)
IRa	=	inhalation rate (20 m^3/day) (IT, 1998)
SFi	=	inhalation cancer slope factor (per mg/kg-day, chemical-specific) (IT, 2000)
PEF	=	particulate emission factor (5 m^3/kg) (IT, 1998)

and where (for Equation 2, variables not defined above):

SSSLn	=	site-specific screening level for noncancer (mg/kg) (calculated)
THI	=	target hazard index (1E-1, unitless) (IT, 1998)
ATn	=	averaging time, noncancer hazard (270 days) (Goetchius, 1999)
RfDo	=	oral reference dose (mg/kg-day, chemical-specific) (IT, 2000)
RfDd	=	dermal reference dose (mg/kg-day, chemical-specific) (IT, 2000)
RfDi	=	inhalation reference dose (mg/kg-day, chemical-specific) (IT, 2000).

SSSLs estimated by these equations are included in the appropriate tables for the site(s) in which highway construction is a plausible exposure scenario.

References:

Goetchius, P.F., 1999, "Development of Lead Cleanup Levels: Preliminary Draft," memorandum to FTMC Shooting Ranges – Lead Contamination File, 28 June.

International Technology (IT), 1998, ***Final Installation-Wide Work Plan, Fort McClellan, Alabama***, Revision 1, Prepared for U.S. Department of the Army, Mobile District, Corps of Engineers, August.

International Technology (IT), 2000, ***Human Health and Ecological Screening Values and PAH Background Summary Report, Fort McClellan, Alabama***, Final, Prepared for U.S. Army Corps of Engineers, Mobile District, August.

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Site Specific Screening Levels
Sediment
Fort McClellan, Calhoun County, Alabama

Chemical	Table A14 Recreational Site User Noncancer SSSL (mg/kg)	Table A14 Recreational Site User Cancer SSSL (mg/kg)	Table A15 Fish Consumption Noncancer SSSL (mg/kg)	Table A15 Fish Consumption Cancer SSSL (mg/kg)
Inorganics				
Aluminum	1.15E+06	NA	NA	NA
Ammonium perchlorate	1.21E+03	NA	NA	NA
Antimony	4.22E+02	NA	NA	NA
Arsenic	3.59E+02	5.58E+01	NA	NA
Barium	8.36E+04	NA	NA	NA
Beryllium	1.50E+02	NA	NA	NA
Boron	1.08E+05	NA	NA	NA
Cadmium	1.71E+02	NA	NA	NA
Cadmium (water)	NA	NA	NA	NA
Calcium[a]	NA	NA	NA	NA
Chromium III	1.40E+06	NA	NA	NA
Chromium VI	2.79E+03	NA	NA	NA
Cobalt	6.72E+04	NA	NA	NA
Copper	4.74E+04	NA	NA	NA
Cyanide	2.43E+04	NA	NA	NA
Iron	3.59E+05	NA	NA	NA
Lead	4.00E+02	NA	NA	NA
Magnesium[a]	NA	NA	NA	NA
Manganese	4.38E+04	NA	NA	NA
Mercury	2.99E+02	NA	NA	NA
Methyl mercury	NA	NA	4.66E-03	NA
Molybdenum	5.95E+03	NA	NA	NA
Nickel	1.76E+04	NA	NA	NA
Perchlorate	1.09E+03	NA	NA	NA
Potassium[a]	NA	NA	NA	NA
Sodium[a]	NA	NA	NA	NA
Selenium	5.96E+03	NA	NA	NA
Silver	6.07E+03	NA	NA	NA
Thallium	7.78E+01	NA	NA	NA
Vanadium	4.83E+03	NA	NA	NA
Zinc	3.44E+05	NA	NA	NA
Volatile Organic Compounds				
Acetone	1.03E+05	NA	NA	NA
Benzene	3.16E+03	2.54E+03	NA	NA
Bis(2-chloroethyl)ether	NA	6.71E+01	NA	NA
bis(2-Chloroisopropyl)ether	4.22E+04	1.05E+03	NA	NA
Bromobenzene	2.08E+04	NA	NA	NA
Bromochloromethane	6.33E+04	NA	NA	NA
Bromodichloromethane	2.08E+04	1.17E+03	NA	NA
Bromoform	2.08E+04	9.21E+03	NA	NA
Bromomethane	1.43E+03	NA	NA	NA
n-Butylbenzene	1.04E+04	NA	NA	NA
sec-Butylbenzene	1.04E+04	NA	NA	NA
tert-Butylbenzene	1.04E+04	NA	NA	NA
Carbon disulfide	1.04E+05	NA	NA	NA
Carbon tetrachloride	7.14E+02	5.50E+02	NA	NA
Chlorobenzene	2.11E+04	NA	NA	NA
Chloroethane	4.22E+05	2.54E+04	NA	NA
Chloroform	1.05E+04	1.21E+04	NA	NA
Chloromethane	4.22E+03	5.68E+03	NA	NA
2-Chloronaphthalene	8.43E+04	NA	NA	NA
m-Chlorotoluene	2.11E+04	NA	NA	NA
o-Chlorotoluene	2.11E+04	NA	NA	NA
p-Chlorotoluene	2.11E+04	NA	NA	NA
Cumene	1.04E+05	NA	NA	NA
Dibenzofuran	3.73E+03	NA	NA	NA
1,2-Dibromoethane	NA	8.28E-01	NA	NA
Dibromomethane	1.05E+04	NA	NA	NA
1,2-Dichlorobenzene	9.35E+04	NA	NA	NA
1,3-Dichlorobenzene	9.35E+02	NA	NA	NA

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Sediment
Fort McClellan, Calhoun County, Alabama

Chemical	Table A14 Recreational Site User Noncancer SSSL (mg/kg)	Table A14 Recreational Site User Cancer SSSL (mg/kg)	Table A15 Fish Consumption Noncancer SSSL (mg/kg)	Table A15 Fish Consumption Cancer SSSL (mg/kg)
1,4-Dichlorobenzene	3.12E+04	3.03E+03	NA	NA
Dichlorodifluoromethane	2.04E+05	NA	NA	NA
1,1-Dichloroethane	1.05E+05	NA	NA	NA
1,2-Dichloroethane	3.16E+04	8.11E+02	NA	NA
1,1-Dichloroethene	9.49E+03	1.23E+02	NA	NA
2-Butanone	6.23E+05	NA	NA	NA
cis-1,2-Dichloroethene	1.05E+04	NA	NA	NA
trans-1,2-Dichloroethene	2.11E+04	NA	NA	NA
1,2-Dichloroethene	9.49E+03	NA	NA	NA
1,1-Dichloropropene	3.12E+02	NA	NA	NA
cis-1,3-Dichloropropene	3.12E+02	4.04E+02	NA	NA
trans-1,3-Dichloropropene	3.12E+02	4.04E+02	NA	NA
1,2-Dichloropropane	NA	1.07E+03	NA	NA
1,3-Dichloropropane	NA	NA	NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
Ethylbenzene	1.04E+05	NA	NA	NA
2-Hexanone	4.16E+04	NA	NA	NA
Isopropylbenzene	1.04E+05	NA	NA	NA
Methyl Chloride	4.22E+03	5.68E+03	NA	NA
Methylene Chloride	6.33E+04	9.84E+03	NA	NA
Methyl Isobutyl Ketone	8.31E+04	NA	NA	NA
4-Methyl-2-Pentanone	8.31E+04	NA	NA	NA
n-Propylbenzene	1.04E+04	NA	NA	NA
Naphthalene	2.11E+04	NA	NA	NA
Nitrobenzene	5.27E+02	NA	NA	NA
4-Nitrophenol	8.17E+03	NA	NA	NA
o-Nitrotoluene	1.04E+04	NA	NA	NA
p-Nitrotoluene	1.04E+04	NA	NA	NA
p-Cymene	2.08E+05	NA	NA	NA
Styrene	2.11E+05	NA	NA	NA
1,1,1,2-Tetrachloroethane	2.99E+04	2.69E+03	NA	NA
1,1,2,2-Tetrachloroethane	5.99E+04	3.49E+02	NA	NA
Tetrachloroethene	1.05E+04	1.42E+03	NA	NA
Toluene	2.11E+05	NA	NA	NA
1,2,3-Trichlorobenzene	1.04E+03	NA	NA	NA
1,2,4-Trichlorobenzene	1.04E+04	NA	NA	NA
1,3,5-Trichlorobenzene	1.04E+03	NA	NA	NA
1,1,1-Trichloroethane	2.11E+05	NA	NA	NA
1,1,2-Trichloroethane	4.22E+03	1.29E+03	NA	NA
Trichloroethene	6.23E+03	6.61E+03	NA	NA
Trichlorofluoromethane	3.06E+05	NA	NA	NA
1,2,3-Trichloropropane	6.12E+03	1.02E+01	NA	NA
1,2,3-Trimethylbenzene	5.10E+04	NA	NA	NA
1,2,4-Trimethylbenzene	5.10E+04	NA	NA	NA
1,3,5-Trimethylbenzene	5.10E+04	NA	NA	NA
Vinyl Chloride	NA	3.88E+01	NA	NA
Xylenes	2.11E+06	NA	NA	NA
m,p-Xylenes	2.11E+06	NA	NA	NA
o-Xylene	2.11E+06	NA	NA	NA
1,2-Dimethylbenzene	2.11E+06	NA	NA	NA
Semi-Volatile Organic Compounds				
Acenaphthene	5.59E+04	NA	NA	NA
Acenaphthylene	5.59E+04	NA	NA	NA
Anthracene	2.99E+05	NA	NA	NA
Benzo(a)anthracene	NA	8.93E+01	NA	NA
Benzo(b)fluoranthene	NA	8.93E+01	NA	NA
Benzo(k)fluoranthene	NA	8.93E+02	NA	NA
Benzo(g,h,I)perylene	2.79E+04	NA	NA	NA
Benzo(a)pyrene	NA	8.93E+00	NA	NA
Benzoic Acid	4.22E+06	NA	NA	NA
Benzyl alcohol	3.16E+05	NA	NA	NA
bis(2-Chloroethoxy)methane	3.06E+03	NA	NA	NA

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Sediment
Fort McClellan, Calhoun County, Alabama

Chemical	Table A14 Recreational Site User Noncancer SSSL (mg/kg)	Table A14 Recreational Site User Cancer SSSL (mg/kg)	Table A15 Fish Consumption Noncancer SSSL (mg/kg)	Table A15 Fish Consumption Cancer SSSL (mg/kg)
bis(2-ethylhexyl)phthalate	2.17E+04	5.41E+03	NA	NA
4-Bromodiphenyl ether	5.40E+04	NA	NA	NA
Butyl benzyl phthalate	2.17E+05	NA	NA	NA
Carbazole	NA	3.26E+03	NA	NA
4-Chloroaniline	4.22E+03	NA	NA	NA
4-Chlorodiphenyl ether	5.40E+04	NA	NA	NA
4-Chloro-3-methylphenol	5.15E+03	NA	NA	NA
2-Chlorophenol	5.27E+03	NA	NA	NA
Chrysene	NA	9.79E+03	NA	NA
Dibenz(a,h)anthracene	NA	9.79E+00	NA	NA
Dibromochloromethane	2.08E+04	8.66E+02	NA	NA
1,2-Dibromo-3-chloropropane				
3,3'-Dichlorobenzidine	NA	1.62E+02	NA	NA
2,4-Dichlorophenol	3.16E+03	NA	NA	NA
2,6-Dichlorophenol	3.16E+03	NA	NA	NA
Diethyl phthalate	8.66E+05	NA	NA	NA
2,4-Dimethylphenol	2.04E+04	NA	NA	NA
Dimethyl phthalate	NA	NA	NA	NA
4,6-Dintro-2-methylphenol	9.31E+01	NA	NA	NA
2,4-Dinitrophenol	1.86E+03	NA	NA	NA
Di-n-butyl phthalate	1.14E+05	NA	NA	NA
Di-n-octyl phthalate	2.17E+04	NA	NA	NA
2,4-Dinitrotoluene	2.11E+03	1.09E+02	NA	NA
2,6-Dinitrotoluene	1.05E+03	1.09E+02	NA	NA
Fluoranthene	3.73E+04	NA	NA	NA
Fluorene	3.73E+04	NA	NA	NA
Hexachlorobenzene	8.31E+02	4.55E+01	NA	NA
Hexachlorobutadiene	2.08E+02	9.33E+02	NA	NA
Hexachlorocyclopentadiene	6.52E+03	NA	NA	NA
Hexachloroethane	1.04E+03	5.20E+03	NA	NA
Indeno(1,2,3-cd)pyrene	NA	8.93E+01	NA	NA
Isophorone	1.86E+05	6.86E+04	NA	NA
2-Methylnaphthalene	2.04E+04	NA	NA	NA
4-Methylnaphthalene	2.04E+04	NA	NA	NA
2-Methylphenol	5.15E+04	NA	NA	NA
4-Methylphenol	5.15E+03	NA	NA	NA
2-Nitroaniline	3.14E+02	NA	NA	NA
3-Nitroaniline	3.14E+02	NA	NA	NA
4-Nitroaniline	3.14E+03	NA	NA	NA
2-Nitrophenol	7.45E+03	NA	NA	NA
N-Nitrosodiphenylamine	NA	1.51E+04	NA	NA
N-Nitrosodi-n-propylamine	NA	1.05E+01	NA	NA
Pentachlorophenol	3.16E+04	6.15E+02	NA	NA
Phenanthrene	2.79E+05	NA	NA	NA
Phenol	6.28E+05	NA	NA	NA
Pyrene	3.06E+04	NA	NA	NA
2,4,5-Trichlorophenol	1.04E+05	NA	NA	NA
2,4,6-Trichlorophenol	NA	6.61E+03	NA	NA
Pesticides/PCBs (using SVOC equations)				
Aldrin	2.79E+01	3.83E+00	NA	NA
PCBs (solid media, food chain)	NA	2.22E+01	NA	6.33E-04
PCBs (water)	NA	NA	NA	NA
Aroclor 1016 (solid media, food chain)	4.22E+01	2.22E+01	2.82E-03	6.33E-04
Aroclor 1016 (water)	NA	NA	NA	NA
Aroclor 1221 (solid media, food chain)	NA	2.22E+01	NA	6.33E-04
Aroclor 1221 (water)	NA	NA	NA	NA
Aroclor 1232 (solid media, food chain)	NA	2.22E+01	NA	6.33E-04
Aroclor 1232 (water)	NA	NA	NA	NA
Aroclor 1242 (solid media, food chain)	NA	2.22E+01	NA	6.33E-04
Aroclor 1242 (water)	NA	NA	NA	NA
Aroclor 1248 (solid media, food chain)	NA	2.22E+01	NA	6.33E-04
Aroclor 1248 (water)	NA	NA	NA	NA

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Site Specific Screening Levels
Sediment
Fort McClellan, Calhoun County, Alabama

Chemical	Table A14 Recreational Site User Noncancer SSSL (mg/kg)	Table A14 Recreational Site User Cancer SSSL (mg/kg)	Table A15 Fish Consumption Noncancer SSSL (mg/kg)	Table A15 Fish Consumption Cancer SSSL (mg/kg)
Aroclor 1254 (solid media, food chain)	1.21E+01	2.22E+01	8.05E-04	6.33E-04
Aroclor 1254 (water)	NA	NA	NA	NA
Aroclor 1260 (solid media, food chain)	NA	2.22E+01	NA	6.33E-04
Aroclor 1260 (water)	NA	NA	NA	NA
Aroclor 1262 (solid media, food chain)	NA	2.22E+01	NA	6.33E-04
Aroclor 1262 (water)	NA	NA	NA	NA
Aroclor 1268 (solid media, food chain)	NA	2.22E+01	NA	6.33E-04
Aroclor 1268 (water)	NA	NA	NA	NA
Azinphos-methyl	9.19E+01	NA	NA	NA
alpha-BHC	NA	1.17E+01	NA	1.52E-04
beta-BHC	NA	4.05E+01	NA	5.31E-04
gamma-BHC (Lindane)	3.16E+02	5.68E+01	3.24E-02	2.61E-03
delta-BHC	3.13E+02	NA	9.12E-03	NA
Bolstar	2.60E+01	NA	NA	NA
Chlordane	3.38E+02	1.35E+02	1.86E-02	3.35E-03
Chlorpyrifos	3.12E+03	NA	NA	NA
Coumaphos	2.60E+01	NA	NA	NA
Dalapon	2.99E+04	NA	NA	NA
DDD	NA	2.35E+02	NA	3.49E-02
4,4'-DDD	NA	2.35E+02	NA	3.49E-02
DDE	NA	1.66E+02	NA	8.95E-04
4,4'-DDE	NA	1.66E+02	NA	8.95E-04
DDT	4.03E+02	1.66E+02	2.23E-02	4.13E-03
4,4'-DDT	4.03E+02	1.66E+02	2.23E-02	4.13E-03
Demeton	4.22E+01	NA	NA	NA
Diazinon	9.19E+02	NA	NA	NA
Dieldrin	4.66E+01	4.07E+00	5.60E-04	2.20E-05
1,2-Dibromo-3-chloropropane (DBCP)	NA	5.20E+01	NA	NA
Dichlorvos	5.27E+02	2.54E+02	NA	NA
Dimethoate	2.11E+02	NA	NA	NA
Dinoseb	1.05E+05	NA	NA	NA
Disulfoton	4.18E+01	NA	NA	NA
Endosulfan	6.12E+03	NA	NA	NA
Endosulfan II	6.12E+03	NA	NA	NA
Endodulfan sulfate	6.12E+03	NA	NA	NA
Endrin	2.79E+02	NA	NA	NA
Endrin aldehyde	2.79E+01	NA	NA	NA
Endrin ketone	2.79E+01	NA	NA	NA
Ethoprop	4.18E+00	NA	NA	NA
Famphur	2.60E+01	NA	NA	NA
Fensulfothion	2.60E+01	NA	NA	NA
Fenthion	2.60E+01	NA	NA	NA
Heptachlor	5.13E+02	1.60E+01	1.86E-02	2.60E-04
Heptchlor Epoxide	1.33E+01	7.90E+00	4.84E-04	1.29E-04
Malathion	2.06E+04	NA	NA	NA
Merphos	3.12E+01	NA	NA	NA
Methoxychlor	5.27E+03	NA	NA	NA
Methyl parathion	2.60E+02	NA	NA	NA
Mevinphos	2.58E+01	NA	NA	NA
Naled	2.08E+03	NA	NA	NA
Parathion	6.23E+03	NA	NA	NA
Phorate	2.11E+02	NA	NA	NA
Ronnel	5.20E+04	NA	NA	NA
Stirophos	3.16E+04	NA	NA	NA
Sulfotep	5.20E+02	NA	NA	NA
Thionazin	9.35E+01	NA	NA	NA
Tokuthion	5.20E+03	NA	NA	NA
Toxaphene	NA	6.61E+01	NA	NA
Trichloronate	5.20E+03	NA	NA	NA
O,O,O-Triethyl phosphorothioate	2.60E+00	NA	NA	NA
Herbicides (using SVOC equations)				
2,4-D	1.05E+04	NA	NA	NA

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Sediment
Fort McClellan, Calhoun County, Alabama

Chemical	Table A14 Recreational Site User Noncancer SSSL (mg/kg)	Table A14 Recreational Site User Cancer SSSL (mg/kg)	Table A15 Fish Consumption Noncancer SSSL (mg/kg)	Table A15 Fish Consumption Cancer SSSL (mg/kg)
2,4-DB	8.43E+03	NA	NA	NA
Dicamba	3.16E+04	NA	NA	NA
Dichloroprop	8.31E+02	NA	NA	NA
MCPA	5.22E+02	NA	NA	NA
MCPP	1043.960437	NA	NA	NA
2,4,5-T	10423.66533	NA	NA	NA
2,4,5-TP	8.31E+03	NA	NA	NA
Polychlorinated Dibenzo-p-Dioxins and Dibenzofurans (using SVOC equations)				
TCDD	NA	NA	NA	NA
2,3,7,8-TCDD	NA	4.85E-04	NA	2.65E-07
TCDF	NA	NA	NA	NA
2,3,7,8-TCDF	NA	4.85E-03	NA	3.32E-06
1,2,3,4,6,7,8-Heptachlorodibenzofuran	NA	4.85E-02	NA	2.40E-03
HpCDD	NA	NA	NA	NA
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	NA	4.85E-02	NA	5.04E-04
HpCDF	NA	NA	NA	NA
1,2,3,4,7,8,9-Heptachlorodibenzofuran	NA	4.85E-02	NA	6.79E-05
1,2,3,4,7,8-Hexachlorodibenzofuran	NA	4.85E-03	NA	3.47E-05
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	NA	4.85E-03	NA	8.68E-06
1,2,3,6,7,8-Hexachlorodibenzofuran	NA	4.85E-03	NA	1.42E-05
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	NA	4.85E-03	NA	2.14E-05
HxCDF	NA	NA	NA	NA
1,2,3,7,8,9-Hexachlorodibenzofuran	NA	4.85E-03	NA	4.22E-06
HxCDD	NA	NA	NA	NA
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	NA	4.85E-03	NA	1.93E-05
2,3,4,6,7,8-Hexachlorodibenzofuran	NA	4.85E-03	NA	3.91E-06
PeCDD	NA	NA	NA	NA
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	NA	9.70E-04	NA	5.79E-07
PeCDF	NA	NA	NA	NA
1,2,3,7,8-Pentachlorodibenzofuran	NA	9.70E-03	NA	2.40E-05
2,3,4,7,8-Pentachlorodibenzofuran	NA	9.70E-04	NA	3.29E-07
Octochlorodibenzofuran	NA	4.85E-01	NA	1.56E-02
Octochlorodibenzo-p-dioxin	NA	4.85E-01	NA	2.11E-02
Chemical Agent Breakdown (using SVOC equations)				
p-Chlorophenylmethylsulfone	5.20E+02	NA	NA	NA
p-Chlorophenylmethylsulfoxide	5.20E+02	NA	NA	NA
1,4-Dithiane	1.04E+04	NA	NA	NA
1,4-Oxathiane	1.04E+03	NA	NA	NA
Thiodiglycol	4.16E+04	NA	NA	NA
Diisopropylmethylphosphonic Acid	8.31E+04	NA	NA	NA
Dimethylmethylphosphonic Acid	8.31E+04	NA	NA	NA
Ethylmethylphosphonic Acid	8.31E+04	NA	NA	NA
Isopropylmethylphosphonic Acid	1.04E+05	NA	NA	NA
Methylphosphonic Acid	8.31E+04	NA	NA	NA
Explosives (using SVOC equations)				
2-Amino-4,6-dinitrotoluene	5.81E+01	NA	NA	NA
4-Amino-2,6-dinitrotoluene	5.81E+01	NA	NA	NA
1,3-Dinitrobenzene	1.02E+02	NA	NA	NA
2,4-Dinitrotoluene	2.11E+03	1.09E+02	NA	NA
2,6-Dinitrotoluene	1.05E+03	1.09E+02	NA	NA
HMX	3.01E+04	NA	NA	NA
Nitroglycerin	NA	6.07E+03	NA	NA
RDX	3.14E+03	7.33E+02	NA	NA
Tetryl	1.04E+04	NA	NA	NA
1,3,5-Trinitrobenzene	2.91E+04	NA	NA	NA
2,4,6-Trinitrotoluene	4.84E+02	2.26E+03	NA	NA

Attachment C-1

Site Specific Screening Levels
Surface Water
Fort McClellan, Calhoun County, Alabama

Chemical	Table A12 Recreational Site User Noncancer SSSL (mg/L)	Table A12 Recreational Site User Cancer SSSL (mg/L)	Table A13 Fish Consumption Noncancer SSSL (mg/L)	Table A13 Fish Consumption Cancer SSSL (mg/L)
Inorganics				
Aluminum	1.53E+01	NA	NA	NA
Ammonium perchlorate	1.58E-02	NA	NA	NA
Antimony	5.85E-03	NA	5.21E-02	NA
Arsenic	4.70E-03	7.31E-04	8.89E-04	6.21E-05
Barium	1.10E+00	NA	NA	NA
Beryllium	1.75E-02	NA	1.37E-02	NA
Boron	1.42E+00	NA	NA	NA
Cadmium	NA	NA	1.61E-03	NA
Cadmium (water)	6.81E-03	NA	NA	NA
Calcium[a]	NA	NA	NA	NA
Chromium III	2.04E+01	NA	1.22E+01	NA
Chromium VI	4.08E-02	NA	2.44E-02	NA
Cobalt	9.31E-01	NA	NA	NA
Copper	6.23E-01	NA	2.61E-02	NA
Cyanide	3.16E-01	NA	NA	NA
Iron	4.70E+00	NA	NA	NA
Lead	1.50E-02	NA	1.50E-02	NA
Magnesium[a]	NA	NA	NA	NA
Manganese	6.40E-01	NA	NA	NA
Mercury	4.25E-03	NA	NA	NA
Methyl mercury	NA	NA	2.37E-06	NA
Molybdenum	7.81E-02	NA	NA	NA
Nickel	3.10E-01	NA	5.55E-02	NA
Perchlorate	1.42E-02	NA	NA	NA
Potassium[a]	NA	NA	NA	NA
Sodium[a]	NA	NA	NA	NA
Selenium	7.82E-02	NA	4.07E-02	NA
Silver	7.90E-02	NA	2.12E-04	NA
Thallium	1.02E-03	NA	NA	NA
Vanadium	7.90E-02	NA	NA	NA
Zinc	4.65E+00	NA	8.32E-01	NA
Volatile Organic Compounds				
Acetone	1.57E+00	NA	NA	NA
Benzene	4.06E-02	3.26E-02	NA	NA
Bis(2-chloroethyl)ether	NA	9.88E-04	NA	NA
bis(2-Chloroisopropyl)ether	5.78E-01	1.44E-02	NA	NA
Bromobenzene	2.53E-01	NA	NA	NA
Bromochloromethane	9.25E-01	NA	NA	NA
Bromodichloromethane	3.00E-01	1.70E-02	NA	NA
Bromoform	3.09E-01	1.37E-01	NA	NA
Bromomethane	2.14E-02	NA	NA	NA
n-Butylbenzene	3.53E-02	NA	NA	NA
sec-Butylbenzene	4.35E-02	NA	NA	NA
tert-Butylbenzene	5.16E-02	NA	NA	NA
Carbon disulfide	1.30E+00	NA	NA	NA
Carbon tetrachloride	9.06E-03	6.97E-03	NA	NA
Chlorobenzene	2.38E-01	NA	NA	NA
Chloroethane	5.94E+00	3.58E-01	NA	NA
Chloroform	1.47E-01	1.69E-01	NA	NA
Chloromethane	6.11E-02	8.23E-02	NA	NA
2-Chloronaphthalene	1.13E+00	NA	NA	NA
m-Chlorotoluene	1.98E-01	NA	NA	NA
o-Chlorotoluene	1.98E-01	NA	NA	NA
p-Chlorotoluene	1.98E-01	NA	NA	NA
Cumene	7.04E-01	NA	NA	NA
Dibenzofuran	1.85E-02	NA	NA	NA

Attachment C-1

Site Specific Screening Levels
Surface Water
Fort McClellan, Calhoun County, Alabama

Chemical	Table A12 Recreational Site User Noncancer SSSL (mg/L)	Table A12 Recreational Site User Cancer SSSL (mg/L)	Table A13 Fish Consumption Noncancer SSSL (mg/L)	Table A13 Fish Consumption Cancer SSSL (mg/L)
1,2-Dibromoethane	NA	1.26E-05	NA	NA
Dibromomethane	1.56E-01	NA	NA	NA
1,2-Dichlorobenzene	9.21E-01	NA	NA	NA
1,3-Dichlorobenzene	8.02E-03	NA	NA	NA
1,4-Dichlorobenzene	3.05E-01	2.97E-02	NA	NA
Dichlorodifluoromethane	2.82E+00	NA	NA	NA
1,1-Dichloroethane	1.47E+00	NA	NA	NA
1,2-Dichloroethane	4.55E-01	1.17E-02	NA	NA
1,1-Dichloroethene	1.26E-01	1.63E-03	NA	NA
2-Butanone	9.38E+00	NA	NA	NA
cis-1,2-Dichloroethene	1.49E-01	NA	NA	NA
trans-1,2-Dichloroethene	2.87E-01	NA	NA	NA
1,2-Dichloroethene	1.34E-01	NA	NA	NA
cis-1,3-Dichloropropene	4.31E-03	NA	NA	NA
trans-1,3-Dichloropropene	4.52E-03	5.86E-03	NA	NA
1,1-Dichloropropene	4.31E-03	NA	NA	NA
1,2-Dichloropropane	NA	1.49E-02	NA	NA
1,3-Dichloropropane	NA	NA	NA	NA
2,2-Dichloropropane	NA	NA	NA	NA
Ethylbenzene	9.61E-01	NA	NA	NA
2-Hexanone	6.08E-01	NA	NA	NA
Isopropylbenzene	7.04E-01	NA	NA	NA
Methyl Chloride	6.11E-02	8.23E-02	NA	NA
Methylene Chloride	9.15E-01	1.42E-01	NA	NA
Methyl Isobutyl Ketone	1.23E+00	NA	NA	NA
4-Methyl-2-Pentanone	1.23E+00	NA	NA	NA
n-Propylbenzene	7.48E-02	NA	NA	NA
Naphthalene	2.04E-01	NA	NA	NA
Nitrobenzene	5.13E-03	NA	NA	NA
4-Nitrophenol	1.19E-01	NA	NA	NA
o-Nitrotoluene	1.43E-01	NA	NA	NA
p-Nitrotoluene	1.41E-01	NA	NA	NA
p-Cymene	1.02E+00	NA	NA	NA
Styrene	2.19E+00	NA	NA	NA
1,1,1,2-Tetrachloroethane	4.08E-01	3.67E-02	NA	NA
1,1,2,2-Tetrachloroethane	8.59E-01	5.01E-03	NA	NA
Tetrachloroethene	1.14E-01	1.54E-02	NA	NA
Toluene	2.32E+00	NA	NA	NA
1,2,3-Trichlorobenzene	7.91E-03	NA	NA	NA
1,2,4-Trichlorobenzene	8.37E-02	NA	NA	NA
1,3,5-Trichlorobenzene	7.01E-03	NA	NA	NA
1,1,1-Trichloroethane	2.78E+00	NA	NA	NA
1,1,2-Trichloroethane	5.92E-02	1.82E-02	NA	NA
Trichloroethene	8.30E-02	8.80E-02	NA	NA
Trichlorofluoromethane	4.05E+00	NA	NA	NA
1,2,3-Trichloropropane	8.63E-02	1.44E-04	NA	NA
1,2,3-Trimethylbenzene	3.45E-01	NA	NA	NA
1,2,4-Trimethylbenzene	3.11E-01	NA	NA	NA
1,3,5-Trimethylbenzene	3.67E-01	NA	NA	NA
Vinyl Chloride	NA	5.50E-04	NA	NA
Xylenes	1.93E+01	NA	NA	NA
m,p-Xylenes	1.93E+01	NA	NA	NA
o-Xylene	1.93E+01	NA	NA	NA
1,2-Dimethylbenzene	1.93E+01	NA	NA	NA
Semi-Volatile Organic Compounds				
Acenaphthene	2.84E-01	NA	NA	NA
Acenaphthylene	2.56E-01	NA	NA	NA

Attachment C-1

Site Specific Screening Levels
Surface Water
Fort McClellan, Calhoun County, Alabama

Chemical	Table A12 Recreational Site User Noncancer SSSL (mg/L)	Table A12 Recreational Site User Cancer SSSL (mg/L)	Table A13 Fish Consumption Noncancer SSSL (mg/L)	Table A13 Fish Consumption Cancer SSSL (mg/L)
Anthracene	1.33E+00	NA	NA	NA
Benzo(a)anthracene	NA	1.08E-04	NA	NA
Benzo(b)fluoranthene	NA	7.50E-05	NA	NA
Benzo(k)fluoranthene	NA	8.07E-04	NA	NA
Benzo(g,h,I)perylene	1.76E-02	NA	NA	NA
Benzo(a)pyrene	NA	7.50E-06	NA	NA
Benzoic Acid	5.97E+01	NA	NA	NA
Benzyl alcohol	4.64E+00	NA	NA	NA
bis(2-Chloroethoxy)methane	4.71E-02	NA	NA	NA
bis(2-ethylhexyl)phthalate	2.07E-01	5.17E-02	NA	NA
4-Bromodiphenyl ether	1.57E-01	NA	NA	NA
Butyl benzyl phthalate	1.73E+00	NA	NA	NA
Carbazole	NA	2.77E-02	NA	NA
4-Chloroaniline	5.99E-02	NA	NA	NA
4-Chlorodiphenyl ether	3.89E-01	NA	NA	NA
4-Chloro-3-methylphenol	5.37E-02	NA	NA	NA
2-Chlorophenol	7.26E-02	NA	NA	NA
Chrysene	NA	1.66E-02	NA	NA
Dibenz(a,h)anthracene	NA	5.41E-06	NA	NA
Dibromochloromethane	3.05E-01	1.27E-02	NA	NA
1,2-Dibromo-3-chloropropane				
3,3'-Dichlorobenzidine	NA	2.13E-03	NA	NA
2,4-Dichlorophenol	4.00E-02	NA	NA	NA
2,6-Dichlorophenol	4.16E-02	NA	NA	NA
Diethyl phthalate	1.17E+01	NA	NA	NA
2,4-Dimethylphenol	2.75E-01	NA	NA	NA
Dimethyl phthalate	NA	NA	NA	NA
4,6-Dintro-2-methylphenol	1.41E-03	NA	NA	NA
2,4-Dinitrophenol	3.07E-02	NA	NA	NA
Di-n-butyl phthalate	1.22E+00	NA	NA	NA
Di-n-octyl phthalate	5.92E-04	NA	NA	NA
2,4-Dinitrotoluene	3.07E-02	1.58E-03	NA	NA
2,6-Dinitrotoluene	1.55E-02	1.59E-03	NA	NA
Fluoranthene	9.35E-02	NA	NA	NA
Fluorene	2.20E-01	NA	NA	NA
Hexachlorobenzene	4.41E-03	2.41E-04	NA	NA
Hexachlorobutadiene	2.85E-03	1.28E-02	NA	NA
Hexachlorocyclopentadiene	3.65E-02	NA	NA	NA
Hexachloroethane	1.15E-02	5.75E-02	NA	NA
Indeno(1,2,3-cd)pyrene	NA	4.82E-05	NA	NA
Isophorone	2.96E+00	1.09E+00	NA	NA
2-Methylnaphthalene	1.31E-01	NA	NA	NA
4-Methylnaphthalene	1.29E-01	NA	NA	NA
2-Methylphenol	7.22E-01	NA	NA	NA
4-Methylphenol	7.22E-02	NA	NA	NA
2-Nitroaniline	4.52E-03	NA	NA	NA
3-Nitroaniline	4.64E-03	NA	NA	NA
4-Nitroaniline	4.63E-02	NA	NA	NA
2-Nitrophenol	1.17E-01	NA	NA	NA
N-Nitrosodiphenylamine	NA	1.95E-01	NA	NA
N-Nitrosodi-n-propylamine	NA	1.28E-04	NA	NA
Pentachlorophenol	7.60E-02	1.48E-03	NA	NA
Phenanthrene	1.01E+00	NA	NA	NA
Phenol	9.06E+00	NA	NA	NA
Pyrene	1.12E-01	NA	NA	NA
2,4,5-Trichlorophenol	9.93E-01	NA	NA	NA
2,4,6-Trichlorophenol	NA	6.96E-02	NA	NA

Attachment C-1

Site Specific Screening Levels
Surface Water
Fort McClellan, Calhoun County, Alabama

Chemical	Table A12 Recreational Site User Noncancer SSSL (mg/L)	Table A12 Recreational Site User Cancer SSSL (mg/L)	Table A13 Fish Consumption Noncancer SSSL (mg/L)	Table A13 Fish Consumption Cancer SSSL (mg/L)
Pesticides/PCBs (using SVOC equations)				
Aldrin	4.62E-04	6.34E-05	4.36E-05	2.69E-06
PCBs (solid media, food chain)	NA	NA	NA	1.96E-07
PCBs (water)	NA	8.27E-05	NA	NA
Aroclor 1016 (solid media, food chain)	NA	NA	7.20E-07	1.62E-07
Aroclor 1016 (water)	1.51E-04	8.27E-05	NA	NA
Aroclor 1221 (solid media, food chain)	NA	NA	NA	7.08E-07
Aroclor 1221 (water)	NA	8.27E-05	NA	NA
Aroclor 1232 (solid media, food chain)	NA	NA	NA	3.37E-07
Aroclor 1232 (water)	NA	8.27E-05	NA	NA
Aroclor 1242 (solid media, food chain)	NA	NA	NA	1.62E-07
Aroclor 1242 (water)	NA	8.27E-05	NA	NA
Aroclor 1248 (solid media, food chain)	NA	NA	NA	1.22E-07
Aroclor 1248 (water)	NA	8.27E-05	NA	NA
Aroclor 1254 (solid media, food chain)	NA	NA	1.89E-07	1.49E-07
Aroclor 1254 (water)	4.32E-05	8.27E-05	NA	NA
Aroclor 1260 (solid media, food chain)	NA	NA	NA	2.22E-07
Aroclor 1260 (water)	NA	8.27E-05	NA	NA
Aroclor 1262 (solid media, food chain)	NA	NA	NA	NA
Aroclor 1262 (water)	NA	8.27E-05	NA	NA
Aroclor 1268 (solid media, food chain)	NA	NA	NA	NA
Aroclor 1268 (water)	NA	8.27E-05	NA	NA
Azinphos-methyl	1.40E-03	NA	2.40E-04	NA
alpha-BHC	NA	1.55E-04	NA	1.40E-06
beta-BHC	NA	5.35E-04	NA	4.60E-06
gamma-BHC (Lindane)	4.26E-03	7.65E-04	9.91E-05	8.00E-06
delta-BHC	3.81E-03	NA	4.16E-05	NA
Bolstar	1.63E-04	NA	2.98E-07	NA
Chlordane	5.41E-03	2.16E-03	5.52E-06	9.92E-07
Chlorpyrifos	3.36E-02	NA	8.26E-05	NA
Coumaphos	3.63E-04	NA	3.54E-06	NA
Dalapon	4.69E-01	NA	4.86E+00	NA
DDD	NA	1.32E-03	NA	1.12E-06
4,4'-DDD	NA	1.32E-03	NA	1.12E-06
DDE	NA	1.04E-03	NA	8.68E-07
4,4'-DDE	NA	1.04E-03	NA	8.68E-07
DDT	1.64E-03	6.74E-04	4.20E-06	7.78E-07
4,4'-DDT	1.64E-03	6.74E-04	4.20E-06	7.78E-07
Demeton	6.32E-04	NA	NA	NA
Diazinon	1.33E-02	NA	5.56E-04	NA
Dieldrin	6.29E-04	5.50E-05	2.96E-06	1.16E-07
1,2-Dibromo-3-chloropropane (DBCP)	NA	7.33E-04	NA	3.63E-05
Dichlorvos	7.84E-03	3.78E-03	1.83E-02	3.97E-03
Dimethoate	3.15E-03	NA	3.11E-02	NA
Dinoseb	1.53E+00	NA	6.57E-01	NA
Disulfoton	5.06E-04	NA	7.10E-06	NA
Endosulfan	9.30E-02	NA	3.27E-03	NA
Endosulfan II	9.30E-02	NA	3.27E-03	NA
Endodulfan sulfate	9.30E-02	NA	3.27E-03	NA
Endrin	3.76E-03	NA	1.78E-05	NA
Endrin aldehyde	2.00E-04	NA	3.09E-07	NA
Endrin ketone	4.74E-04	NA	NA	NA
Ethoprop	5.30E-05	NA	1.73E-06	NA
Famphur	3.92E-04	NA	1.68E-04	NA
Fensulfothion	3.91E-04	NA	1.86E-04	NA
Fenthion	3.10E-04	NA	3.84E-06	NA
Heptachlor	7.14E-03	2.22E-04	5.31E-05	7.43E-07
Heptachlor Epoxide	1.34E-04	7.95E-05	1.73E-07	4.60E-08

Site Specific Screening Levels
Surface Water
Fort McClellan, Calhoun County, Alabama

Chemical	Table A12 Recreational Site User Noncancer SSSL (mg/L)	Table A12 Recreational Site User Cancer SSSL (mg/L)	Table A13 Fish Consumption Noncancer SSSL (mg/L)	Table A13 Fish Consumption Cancer SSSL (mg/L)
Malathion	3.13E-01	NA	1.13E-01	NA
Merphos	6.55E-06	NA	2.52E-06	NA
Methoxychlor	6.61E-02	NA	3.14E-04	NA
Methyl parathion	3.78E-03	NA	4.98E-04	NA
Mevinphos	3.95E-04	NA	NA	NA
Naled	3.16E-02	NA	8.84E-02	NA
Parathion	8.25E-02	NA	1.58E-03	NA
Phorate	2.55E-03	NA	4.36E-05	NA
Ronnel	4.83E-01	NA	1.33E-03	NA
Stirophos	4.61E-01	NA	1.47E-02	NA
Sulfotep	7.02E-03	NA	9.44E-05	NA
Thionazin	1.42E-03	NA	NA	NA
Tokuthion	7.90E-02	NA	NA	NA
Toxaphene	NA	8.87E-04	NA	1.02E-06
Trichloronate	4.37E-02	NA	8.62E-05	NA
O,O,O-Triethyl phosphorothioate	3.95E-05	NA	NA	NA
Herbicides (using SVOC equations)				
2,4-D	1.48E-01	NA	NA	NA
2,4-DB	1.22E-01	NA	NA	NA
Dicamba	4.62E-01	NA	NA	NA
Dichloroprop	1.18E-02	NA	NA	NA
MCPA	7.67E-03	NA	NA	NA
MCPP	1.39E-02	NA	NA	NA
2,4,5-T	1.42E-01	NA	NA	NA
2,4,5-TP	1.06E-01	NA	NA	NA
Polychlorinated Dibenzo-p-Dioxins and Dibenzofurans (using SVOC equations)				
TCDD	NA	NA	NA	NA
2,3,7,8-TCDD	NA	5.48E-10	NA	4.35E-12
TCDF	NA	NA	NA	NA
2,3,7,8-TCDF	NA	5.48E-09	NA	1.99E-11
1,2,3,4,6,7,8-Heptachlorodibenzofuran	NA	5.48E-08	NA	3.83E-09
HpCDD	NA	NA	NA	NA
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	NA	5.48E-08	NA	6.19E-09
HpCDF	NA	NA	NA	NA
1,2,3,4,7,8,9-Heptachlorodibenzofuran	NA	5.48E-08	NA	3.83E-09
1,2,3,4,7,8-Hexachlorodibenzofuran	NA	5.48E-09	NA	1.19E-10
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	NA	5.48E-09	NA	2.38E-10
1,2,3,6,7,8-Hexachlorodibenzofuran	NA	5.48E-09	NA	1.19E-10
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	NA	5.48E-09	NA	2.38E-10
HxCDF	NA	NA	NA	NA
1,2,3,7,8,9-Hexachlorodibenzofuran	NA	5.48E-09	NA	1.19E-10
HxCDD	NA	NA	NA	NA
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	NA	5.48E-09	NA	2.38E-10
2,3,4,6,7,8-Hexachlorodibenzofuran	NA	5.48E-09	NA	1.19E-10
PeCDD	NA	NA	NA	NA
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	NA	1.10E-09	NA	2.39E-11
PeCDF	NA	NA	NA	NA
1,2,3,7,8-Pentachlorodibenzofuran	NA	1.10E-08	NA	8.38E-11
2,3,4,7,8-Pentachlorodibenzofuran	NA	1.10E-09	NA	8.38E-12
Octochlorodibenzofuran	NA	5.48E-07	NA	2.66E-07
Octochlorodibenzo-p-dioxin	NA	5.48E-07	NA	1.63E-07
Chemical Agent Breakdown (using SVOC equations)				
p-Chlorophenylmethylsulfone	7.90E-03	NA	NA	NA
p-Chlorophenylmethylsulfoxide	7.90E-03	NA	NA	NA

Attachment C-1

Site Specific Screening Levels
Surface Water
Fort McClellan, Calhoun County, Alabama

Chemical	Table A12 Recreational Site User Noncancer SSSL (mg/L)	Table A12 Recreational Site User Cancer SSSL (mg/L)	Table A13 Fish Consumption Noncancer SSSL (mg/L)	Table A13 Fish Consumption Cancer SSSL (mg/L)
1,4-Dithiane	1.57E-01	NA	NA	NA
1,4-Oxathiane	1.57E-02	NA	NA	NA
Thiodiglycol	6.31E-01	NA	NA	NA
Diisopropylmethylphosphonic Acid	1.25E+00	NA	NA	NA
Dimethylmethylphosphonic Acid	1.24E+00	NA	NA	NA
Ethylmethylphosphonic Acid	1.24E+00	NA	NA	NA
Isopropylmethylphosphonic Acid	1.56E+00	NA	NA	NA
Methylphosphonic Acid	1.23E+00	NA	NA	NA
Explosives (using SVOC equations)				
2-Amino-4,6-dinitrotoluene	9.34E-04	NA	NA	NA
4-Amino-2,6-dinitrotoluene	9.34E-04	NA	NA	NA
1,3-Dinitrobenzene	1.55E-03	NA	NA	NA
2,4-Dinitrotoluene	3.07E-02	1.58E-03	NA	NA
2,6-Dinitrotoluene	1.55E-02	1.59E-03	NA	NA
HMX	7.88E-01	NA	NA	NA
Nitroglycerin	NA	7.90E-02	NA	NA
RDX	4.72E-02	1.10E-02	NA	NA
Tetryl	1.57E-01	NA	NA	NA
1,3,5-Trinitrobenzene	4.70E-01	NA	NA	NA
2,4,6-Trinitrotoluene	7.79E-03	3.63E-02	NA	NA

Attachment C-1

Site Specific Screening Levels
Groundwater
Fort McClellan, Calhoun County, Alabama

Chemical	Table A9 Resident Noncancer SSSL (mg/L)	Table A9 Resident Cancer SSSL (mg/L)	Table A10 Groundskeeper Noncancer SSSL (mg/L)	Table A10 Groundskeeper Cancer SSSL (mg/L)	Table A11 Construction Worker Noncancer SSSL (mg/L)	Table A11 Construction Worker Cancer SSSL (mg/L)	National Guardsperson Noncancer SSSL (mg/L)	National Guardsperson Cancer SSSL (mg/L)
Inorganics								
Aluminum	1.56E+00	NA	1.01E+01	NA	1.01E+01	NA	1.90E+01	NA
Ammonium perchlorate	1.56E-03	NA	1.02E-02	NA	1.02E-02	NA	1.90E-02	NA
Antimony	6.26E-04	NA	3.93E-03	NA	3.93E-03	NA	7.60E-03	NA
Arsenic	4.69E-04	4.46E-05	3.05E-03	1.90E-04	3.05E-03	4.75E-03	5.70E-03	3.29E-04
Barium	1.10E-01	NA	7.12E-01	NA	7.12E-01	NA	1.33E+00	NA
Beryllium	3.13E-03	NA	1.45E-02	NA	1.45E-02	NA	3.80E-02	NA
Boron	1.41E-01	NA	9.20E-01	NA	9.20E-01	NA	1.71E+00	NA
Cadmium	NA	NA	NA	NA	NA	NA	1.90E-02	NA
Cadmium (water)	7.82E-04	NA	4.72E-03	NA	4.72E-03	NA	9.51E-03	NA
Calcium	NA	NA	NA	NA	NA	NA	NA	NA
Chromium III	2.35E+00	NA	1.42E+01	NA	1.42E+01	NA	2.85E+01	NA
Chromium VI	4.69E-03	NA	2.83E-02	NA	2.83E-02	NA	5.70E-02	NA
Cobalt	9.39E-02	NA	6.08E-01	NA	6.08E-01	NA	1.14E+00	NA
Copper	6.26E-02	NA	4.06E-01	NA	4.06E-01	NA	7.60E-01	NA
Cyanide	3.13E-02	NA	2.04E-01	NA	2.04E-01	NA	3.80E-01	NA
Iron	4.69E-01	NA	3.05E+00	NA	3.05E+00	NA	5.70E+00	NA
Lead	1.50E-02	NA	1.50E-02	NA	1.50E-02	NA	NA	NA
Magnesium	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	7.35E-02	NA	4.44E-01	NA	4.44E-01	NA	8.93E-01	NA
Mercury	4.69E-04	NA	2.90E-03	NA	2.90E-03	NA	5.70E-03	NA
Methyl mercury	NA	NA	NA	NA	NA	NA	1.90E-03	NA
Molybdenum	7.82E-03	NA	5.08E-02	NA	5.08E-02	NA	9.51E-02	NA
Nickel	3.13E-02	NA	2.02E-01	NA	2.02E-01	NA	3.80E-01	NA
Perchlorate	1.41E-03	NA	9.20E-03	NA	9.20E-03	NA	1.71E-02	NA
Potassium	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	7.82E-03	NA	5.08E-02	NA	5.08E-02	NA	9.51E-02	NA
Silver	7.82E-03	NA	5.11E-02	NA	5.11E-02	NA	9.51E-02	NA
Thallium	1.02E-04	NA	6.62E-04	NA	6.62E-04	NA	1.24E-03	NA
Vanadium	1.10E-02	NA	5.94E-02	NA	5.94E-02	NA	1.33E-01	NA
Zinc	4.69E-01	NA	3.04E+00	NA	3.04E+00	NA	5.70E+00	NA
Volatile Organic Compounds								
Acetone	1.56E-01	NA	1.02E+00	NA	1.02E+00	NA	1.90E+00	NA
Benzene	3.96E-03	1.41E-03	2.82E-02	9.09E-03	2.82E-02	2.27E-01	2.52E-02	9.91E-03
Bis(2-chloroethyl)ether	NA	3.71E-05	NA	2.58E-04	NA	6.45E-03	NA	2.61E-04
bis(2-Chloroisopropyl)ether	6.15E-02	7.24E-04	3.90E-01	3.90E-03	3.90E-01	9.75E-02	7.60E-01	5.19E-03
Bromobenzene	9.13E-03	NA	1.81E-01	NA	1.81E-01	NA	6.34E-02	NA
Bromochloromethane	9.34E-02	NA	6.06E-01	NA	6.06E-01	NA	1.09E+00	NA
Bromodichloromethane	3.10E-02	1.08E-03	1.99E-01	4.50E-03	1.99E-01	1.12E-01	3.80E-01	7.95E-03
Bromoform	3.12E-02	6.44E-03	2.02E-01	3.58E-02	2.02E-01	8.95E-01	3.80E-01	4.61E-02
Bromomethane	2.18E-03	NA	1.41E-02	NA	1.41E-02	NA	1.55E-02	NA
n-Butylbenzene	9.57E-03	NA	3.67E-02	NA	3.67E-02	NA	1.90E-01	NA
sec-Butylbenzene	1.06E-02	NA	4.35E-02	NA	4.35E-02	NA	1.90E-01	NA
tert-Butylbenzene	1.14E-02	NA	4.97E-02	NA	4.97E-02	NA	1.90E-01	NA
Carbon disulfide	1.51E-01	NA	9.21E-01	NA	9.21E-01	NA	1.40E+00	NA
Carbon tetrachloride	1.05E-03	4.08E-04	6.43E-03	1.98E-03	6.43E-03	4.95E-02	7.09E-03	2.94E-03
Chlorobenzene	1.62E-02	NA	1.75E-01	NA	1.75E-01	NA	1.08E-01	NA
Chloroethane	6.18E-01	1.41E-02	3.96E+00	9.55E-02	3.96E+00	2.39E+00	6.92E+00	9.91E-02
Chloroform	3.11E-04	1.15E-03	9.86E-02	4.53E-02	9.86E-02	1.13E+00	2.26E-03	7.71E-03
Chloromethane	6.22E-03	3.93E-03	4.02E-02	2.16E-02	4.02E-02	5.41E-01	7.36E-02	2.82E-02
2-Chloronaphthalene	1.22E-01	NA	7.70E-01	NA	7.70E-01	NA	1.52E+00	NA
m-Chlorotoluene	2.82E-02	NA	1.57E-01	NA	1.57E-01	NA	3.80E-01	NA
o-Chlorotoluene	2.82E-02	NA	1.57E-01	NA	1.57E-01	NA	3.80E-01	NA
p-Chlorotoluene	2.82E-02	NA	1.57E-01	NA	1.57E-01	NA	3.80E-01	NA
Cumene	1.27E-01	NA	6.24E-01	NA	6.24E-01	NA	1.15E+00	NA
Dibenzofuran	4.34E-03	NA	1.83E-02	NA	1.83E-02	NA	7.60E-02	NA
1,2-Dibromoethane	2.08E-04	7.83E-07	NA	3.31E-06	NA	8.26E-05	1.52E-03	5.76E-06
Dibromomethane	1.56E-02	NA	1.02E-01	NA	1.02E-01	NA	1.90E-01	NA

Attachment C-1

Site Specific Screening Levels
Groundwater
Fort McClellan, Calhoun County, Alabama

Chemical	Table A9 Resident Noncancer SSSL (mg/L)	Table A9 Resident Cancer SSSL (mg/L)	Table A10 Groundskeeper Noncancer SSSL (mg/L)	Table A10 Groundskeeper Cancer SSSL (mg/L)	Table A11 Construction Worker Noncancer SSSL (mg/L)	Table A11 Construction Worker Cancer SSSL (mg/L)	National Guardsperson Noncancer SSSL (mg/L)	National Guardsperson Cancer SSSL (mg/L)
1,2-Dichlorobenzene	2.87E-02	NA	7.19E-01	NA	7.19E-01	NA	2.02E-01	NA
1,3-Dichlorobenzene	1.23E-03	NA	6.59E-03	NA	6.59E-03	NA	1.71E-02	NA
1,4-Dichlorobenzene	4.26E-02	1.76E-03	2.39E-01	9.30E-03	2.39E-01	2.32E-01	5.22E-01	1.24E-02
Dichlorodifluoromethane	1.62E-01	NA	1.93E+00	NA	1.93E+00	NA	1.08E+00	NA
1,1-Dichloroethane	1.54E-01	NA	9.86E-01	NA	9.86E-01	NA	1.26E+00	NA
1,2-Dichloroethane	4.88E-03	4.48E-04	3.00E-01	3.08E-03	3.00E-01	7.69E-02	3.50E-02	3.16E-03
1,1-Dichloroethene	1.38E-02	9.36E-05	8.63E-02	4.48E-04	8.63E-02	1.12E-02	1.71E-01	6.76E-04
2-Butanone	7.14E-01	NA	6.10E+00	NA	6.10E+00	NA	4.60E+00	NA
cis-1,2-Dichloroethene	1.55E-02	NA	9.91E-02	NA	9.91E-02	NA	1.90E-01	NA
trans-1,2-Dichloroethene	3.07E-02	NA	1.95E-01	NA	1.95E-01	NA	3.80E-01	NA
1,2-Dichloroethene	1.39E-02	NA	8.92E-02	NA	8.92E-02	NA	1.71E-01	NA
1,1-Dichloropropene	4.61E-04	NA	2.92E-03	NA	2.92E-03	NA	5.50E-03	NA
cis-1,3-Dichloropropene	4.65E-04	2.54E-04	2.99E-03	1.55E-03	2.99E-03	3.88E-02	5.50E-03	1.81E-03
trans-1,3-Dichloropropene	4.65E-04	2.54E-04	2.99E-03	1.55E-03	2.99E-03	3.88E-02	5.50E-03	1.81E-03
1,2-Dichloropropane	4.02E-03	9.85E-04	NA	4.02E-03	NA	1.01E-01	2.93E-02	7.25E-03
1,3-Dichloropropane	4.02E-03	NA	NA	NA	NA	NA	2.93E-02	NA
2,2-Dichloropropane	4.02E-03	NA	NA	NA	NA	NA	2.93E-02	NA
Ethylbenzene	1.40E-01	NA	7.69E-01	NA	7.69E-01	NA	1.53E+00	NA
2-Hexanone	4.94E-03	NA	4.01E-01	NA	4.01E-01	NA	3.55E-02	NA
Isopropylbenzene	1.27E-01	NA	6.24E-01	NA	6.24E-01	NA	1.15E+00	NA
Methyl Chloride	6.22E-03	3.93E-03	4.02E-02	2.16E-02	4.02E-02	5.41E-01	7.36E-02	2.82E-02
Methylene Chloride	9.32E-02	7.85E-03	6.02E-01	3.75E-02	6.02E-01	9.37E-01	1.09E+00	5.70E-02
Methyl Isobutyl Ketone	5.84E-02	NA	8.05E-01	NA	8.05E-01	NA	3.94E-01	NA
4-Methyl-2-Pentanone	5.84E-02	NA	8.05E-01	NA	8.05E-01	NA	3.94E-01	NA
n-Propylbenzene	1.30E-02	NA	6.51E-02	NA	6.51E-02	NA	1.90E-01	NA
Naphthalene	3.01E-03	NA	1.59E-01	NA	1.59E-01	NA	2.16E-02	NA
Nitrobenzene	7.12E-04	NA	4.00E-03	NA	4.00E-03	NA	5.96E-03	NA
4-Nitrophenol	1.24E-02	NA	7.93E-02	NA	7.93E-02	NA	1.52E-01	NA
o-Nitrotoluene	1.53E-02	NA	9.69E-02	NA	9.69E-02	NA	1.90E-01	NA
p-Nitrotoluene	1.53E-02	NA	9.63E-02	NA	9.63E-02	NA	1.90E-01	NA
p-Cymene	2.26E-01	NA	9.85E-01	NA	9.85E-01	NA	3.80E+00	NA
Styrene	2.90E-01	NA	1.67E+00	NA	1.67E+00	NA	2.55E+00	NA
1,1,1,2-Tetrachloroethane	4.56E-02	1.57E-03	2.83E-01	1.02E-02	2.83E-01	2.54E-01	5.70E-01	1.11E-02
1,1,2,2-Tetrachloroethane	9.21E-02	2.04E-04	5.82E-01	1.36E-03	5.82E-01	3.40E-02	1.14E+00	1.44E-03
Tetrachloroethene	1.46E-02	1.26E-03	8.54E-02	4.60E-03	8.54E-02	1.15E-01	1.82E-01	9.22E-03
Toluene	2.59E-01	NA	1.73E+00	NA	1.73E+00	NA	1.65E+00	NA
1,2,3-Trichlorobenzene	1.32E-03	NA	6.77E-03	NA	6.77E-03	NA	1.90E-02	NA
1,2,4-Trichlorobenzene	1.35E-02	NA	7.03E-02	NA	7.03E-02	NA	1.69E-01	NA
1,3,5-Trichlorobenzene	1.27E-03	NA	6.22E-03	NA	6.22E-03	NA	1.90E-02	NA
1,1,1-Trichloroethane	3.05E-01	NA	1.91E+00	NA	1.91E+00	NA	2.55E+00	NA
1,1,2-Trichloroethane	6.18E-03	7.15E-04	3.95E-02	4.85E-03	3.95E-02	1.21E-01	7.60E-02	5.04E-03
Trichloroethene	9.15E-03	4.51E-03	5.72E-02	2.42E-02	5.72E-02	6.06E-01	1.14E-01	3.22E-02
Trichlorofluoromethane	4.38E-01	NA	2.82E+00	NA	2.82E+00	NA	2.75E+00	NA
1,2,3-Trichloropropane	9.22E-03	9.57E-06	5.84E-02	3.89E-05	5.84E-02	9.73E-04	1.14E-01	7.04E-05
1,2,3-Trimethylbenzene	6.00E-03	NA	3.08E-01	NA	3.08E-01	NA	4.32E-02	NA
1,2,4-Trimethylbenzene	6.00E-03	NA	2.86E-01	NA	2.86E-01	NA	4.32E-02	NA
1,3,5-Trimethylbenzene	6.00E-03	NA	3.22E-01	NA	3.22E-01	NA	4.32E-02	NA
Vinyl Chloride	NA	3.20E-05	NA	1.46E-04	NA	3.66E-03	NA	2.33E-04
Xylenes	2.80E+00	NA	1.54E+01	NA	1.54E+01	NA	3.80E+01	NA
m,p-Xylenes	2.80E+00	NA	1.54E+01	NA	1.54E+01	NA	3.80E+01	NA
o-Xylene	2.80E+00	NA	1.54E+01	NA	1.54E+01	NA	3.80E+01	NA
1,2-Dimethylbenzene	2.80E+00	NA	1.54E+01	NA	1.54E+01	NA	3.80E+01	NA
Semi-Volatile Organic Compounds								
Acenaphthene	6.58E-02	NA	2.79E-01	NA	2.79E-01	NA	8.27E-01	NA
Acenaphthylene	6.28E-02	NA	2.57E-01	NA	2.57E-01	NA	7.93E-01	NA
Anthracene	3.19E-01	NA	1.32E+00	NA	1.32E+00	NA	4.03E+00	NA
Benzo(a)anthracene	NA	2.47E-05	NA	5.13E-05	NA	1.28E-03	NA	2.18E-04
Benzo(b)fluoranthene	NA	1.83E-05	NA	3.62E-05	NA	9.04E-04	NA	1.64E-04
Benzo(k)fluoranthene	NA	1.94E-04	NA	3.88E-04	NA	9.70E-03	NA	1.74E-03

Attachment C-1

Site Specific Screening Levels
Groundwater
Fort McClellan, Calhoun County, Alabama

Chemical	Table A9 Resident Noncancer SSSL (mg/L)	Table A9 Resident Cancer SSSL (mg/L)	Table A10 Groundskeeper Noncancer SSSL (mg/L)	Table A10 Groundskeeper Cancer SSSL (mg/L)	Table A11 Construction Worker Noncancer SSSL (mg/L)	Table A11 Construction Worker Cancer SSSL (mg/L)	National Guardsperson Noncancer SSSL (mg/L)	National Guardsperson Cancer SSSL (mg/L)
Benzo(g,h,l)perylene	8.19E-03	NA	2.15E-02	NA	2.15E-02	NA	1.10E-01	NA
Benzo(a)pyrene	NA	1.83E-06	NA	3.62E-06	NA	9.04E-05	NA	1.64E-05
Benzoic Acid	6.19E+00	NA	3.97E+01	NA	3.97E+01	NA	7.53E+01	NA
Benzyl alcohol	4.68E-01	NA	3.03E+00	NA	3.03E+00	NA	5.68E+00	NA
bis(2-Chloroethoxy)methane	4.69E-03	NA	3.06E-02	NA	3.06E-02	NA	5.70E-02	NA
bis(2-Ethylhexyl)phthalate	2.85E-02	4.31E-03	1.61E-01	1.61E-02	1.61E-01	4.02E-01	3.50E-01	3.24E-02
4-Bromodiphenyl ether	4.81E-02	NA	1.70E-01	NA	1.70E-01	NA	6.17E-01	NA
Butyl benzyl phthalate	2.72E-01	NA	1.44E+00	NA	1.44E+00	NA	3.35E+00	NA
Carbazole	NA	2.77E-03	NA	9.47E-03	NA	2.37E-01	NA	2.12E-02
4-Chloroaniline	6.20E-03	NA	3.98E-02	NA	3.98E-02	NA	7.54E-02	NA
4-Chlorodiphenyl ether	7.27E-02	NA	3.50E-01	NA	3.50E-01	NA	9.04E-01	NA
4-Chloro-3-methylphenol	7.20E-03	NA	4.12E-02	NA	4.12E-02	NA	8.83E-02	NA
2-Chlorophenol	7.70E-03	NA	4.89E-02	NA	4.89E-02	NA	9.37E-02	NA
Chrysene	NA	3.40E-03	NA	7.61E-03	NA	1.90E-01	NA	2.92E-02
Dibenz(a,h)anthracene	NA	1.38E-06	NA	2.64E-06	NA	6.60E-05	NA	1.26E-05
Dibromochloromethane	3.11E-02	7.92E-04	2.01E-01	3.35E-03	2.01E-01	8.37E-02	3.78E-01	5.83E-03
1,2-Dibromo-3-chloropropane	NA	4.71E-05	NA	1.97E-04	NA	4.91E-03	NA	3.48E-04
3,3'-Dichlorobenzidine	NA	1.44E-04	NA	5.90E-04	NA	1.48E-02	NA	1.07E-03
2,4-Dichlorophenol	4.54E-03	NA	2.80E-02	NA	2.80E-02	NA	5.54E-02	NA
2,6-Dichlorophenol	4.58E-03	NA	2.86E-02	NA	2.86E-02	NA	5.58E-02	NA
Diethyl phthalate	1.23E+00	NA	7.87E+00	NA	7.87E+00	NA	1.50E+01	NA
2,4-Dimethylphenol	3.05E-02	NA	1.90E-01	NA	1.90E-01	NA	3.71E-01	NA
Dimethyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dintro-2-methylphenol	1.53E-04	NA	9.61E-04	NA	9.61E-04	NA	1.86E-03	NA
2,4-Dinitrophenol	3.11E-03	NA	2.01E-02	NA	2.01E-02	NA	3.78E-02	NA
Di-n-butyl phthalate	1.48E-01	NA	8.88E-01	NA	8.88E-01	NA	1.81E+00	NA
Di-n-octyl phthalate	3.18E-04	NA	7.46E-04	NA	7.46E-04	NA	4.35E-03	NA
2,4-Dinitrotoluene	3.11E-03	9.79E-05	2.01E-02	4.14E-04	2.01E-02	1.04E-02	3.78E-02	7.21E-04
2,6-Dinitrotoluene	1.56E-03	9.81E-05	1.01E-02	4.17E-04	1.01E-02	1.04E-02	1.89E-02	7.22E-04
Fluoranthene	3.05E-02	NA	1.03E-01	NA	1.03E-01	NA	3.93E-01	NA
Fluorene	4.66E-02	NA	2.09E-01	NA	2.09E-01	NA	5.83E-01	NA
Hexachlorobenzene	9.33E-04	3.01E-05	4.18E-03	9.14E-05	4.18E-03	2.29E-03	1.17E-02	2.36E-04
Hexachlorobutadiene	3.07E-04	8.40E-04	1.94E-03	3.48E-03	1.94E-03	8.70E-02	3.74E-03	6.21E-03
Hexachlorocyclopentadiene	7.99E-03	NA	3.50E-02	NA	3.50E-02	NA	1.00E-01	NA
Hexachloroethane	1.46E-03	4.44E-03	8.58E-03	1.72E-02	8.58E-03	4.29E-01	1.79E-02	3.32E-02
Indeno(1,2,3-cd)pyrene	NA	1.24E-05	NA	2.36E-05	NA	5.91E-04	NA	1.14E-04
Isophorone	3.09E-01	6.95E-02	1.98E+00	2.91E-01	1.98E+00	7.28E+00	3.76E+00	5.13E-01
2-Methylnaphthalene	2.48E-02	NA	1.18E-01	NA	1.18E-01	NA	3.09E-01	NA
4-Methylnaphthalene	2.47E-02	NA	1.17E-01	NA	1.17E-01	NA	3.08E-01	NA
2-Methylphenol	7.69E-02	NA	4.87E-01	NA	4.87E-01	NA	9.36E-01	NA
4-Methylphenol	7.69E-03	NA	4.87E-02	NA	4.87E-02	NA	9.36E-02	NA
2-Nitroaniline	4.65E-04	NA	2.99E-03	NA	2.99E-03	NA	5.66E-03	NA
3-Nitroaniline	4.67E-04	NA	3.03E-03	NA	3.03E-03	NA	5.68E-03	NA
4-Nitroaniline	4.67E-03	NA	3.03E-02	NA	3.03E-02	NA	5.68E-02	NA
2-Nitrophenol	1.23E-02	NA	7.85E-02	NA	7.85E-02	NA	1.50E-01	NA
N-Nitrosodiphenylamine	NA	1.32E-02	NA	5.41E-02	NA	1.35E+00	NA	9.81E-02
N-Nitrosodi-n-propylamine	NA	9.12E-06	NA	3.65E-05	NA	9.13E-04	NA	6.78E-05
Pentachlorophenol	2.40E-02	2.66E-04	8.33E-02	6.48E-04	8.33E-02	1.62E-02	3.09E-01	2.22E-03
Phenanthrene	2.81E-01	NA	1.06E+00	NA	1.06E+00	NA	3.57E+00	NA
Phenol	9.31E-01	NA	5.99E+00	NA	5.99E+00	NA	1.13E+01	NA
Pyrene	2.95E-02	NA	1.15E-01	NA	1.15E-01	NA	3.74E-01	NA
2,4,5-Trichlorophenol	1.41E-01	NA	7.84E-01	NA	7.84E-01	NA	1.73E+00	NA
2,4,6-Trichlorophenol	NA	5.57E-03	NA	2.12E-02	NA	5.30E-01	NA	4.18E-02
Pesticides/PCBs (using SVOC equations)								
Aldrin	4.67E-05	3.92E-06	3.03E-04	1.66E-05	3.03E-04	4.15E-04	5.68E-04	2.89E-05
PCBs (solid media, food chain)	NA	NA	NA	NA	NA	NA	NA	NA
PCBs (water)	NA	1.53E-03	NA	3.66E-05	NA	9.15E-04	NA	1.28E-04
Aroclor 1016 (solid media, food chain)	NA	NA	NA	NA	NA	NA	6.58E-04	NA
Aroclor 1016 (water)	5.09E-05	1.53E-05	1.69E-04	3.66E-05	1.69E-04	9.15E-04	6.58E-04	1.28E-04

Attachment C-1

Site Specific Screening Levels
Groundwater
Fort McClellan, Calhoun County, Alabama

Chemical	Table A9 Resident Noncancer SSSL (mg/L)	Table A9 Resident Cancer SSSL (mg/L)	Table A10 Groundskeeper Noncancer SSSL (mg/L)	Table A10 Groundskeeper Cancer SSSL (mg/L)	Table A11 Construction Worker Noncancer SSSL (mg/L)	Table A11 Construction Worker Cancer SSSL (mg/L)	National Guardsperson Noncancer SSSL (mg/L)	National Guardsperson Cancer SSSL (mg/L)
Aroclor 1221 (solid media, food chain)	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1221 (water)	NA	1.53E-05	NA	3.66E-05	NA	9.15E-04	NA	1.28E-04
Aroclor 1232 (solid media, food chain)	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1232 (water)	NA	1.53E-05	NA	3.66E-05	NA	9.15E-04	NA	1.28E-04
Aroclor 1242 (solid media, food chain)	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242 (water)	NA	1.53E-05	NA	3.66E-05	NA	9.15E-04	NA	1.28E-04
Aroclor 1248 (solid media, food chain)	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1248 (water)	NA	1.53E-05	NA	3.66E-05	NA	9.15E-04	NA	1.28E-04
Aroclor 1254 (solid media, food chain)	NA	NA	NA	NA	NA	NA	1.88E-04	NA
Aroclor 1254 (water)	1.45E-05	1.53E-05	4.83E-05	3.66E-05	4.83E-05	9.15E-04	1.88E-04	1.28E-04
Aroclor 1260 (solid media, food chain)	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1260 (water)	NA	1.53E-05	NA	3.66E-05	NA	9.15E-04	NA	1.28E-04
Aroclor 1262 (solid media, food chain)	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1262 (water)	NA	1.53E-05	NA	3.66E-05	NA	9.15E-04	NA	1.28E-04
Aroclor 1268 (solid media, food chain)	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1268 (water)	NA	1.53E-05	NA	3.66E-05	NA	9.15E-04	NA	1.28E-04
Azinphos-methyl	1.40E-04	NA	9.11E-04	NA	9.11E-04	NA	1.71E-03	NA
alpha-BHC	NA	1.03E-05	NA	4.25E-05	NA	1.06E-03	NA	7.66E-05
beta-BHC	NA	3.61E-05	NA	1.48E-04	NA	3.69E-03	NA	2.67E-04
gamma-BHC (Lindane)	4.60E-04	5.03E-05	2.90E-03	2.08E-04	2.90E-03	5.20E-03	5.60E-03	3.72E-04
delta-BHC	4.49E-04	NA	2.73E-03	NA	2.73E-03	NA	5.49E-03	NA
Bolstar	3.10E-05	NA	1.48E-04	NA	1.48E-04	NA	3.86E-04	NA
Chlordane	7.22E-04	1.75E-04	4.14E-03	6.62E-04	4.14E-03	1.65E-02	8.85E-03	1.31E-03
Chlorpyrifos	4.37E-03	NA	2.53E-02	NA	2.53E-02	NA	5.35E-02	NA
Coumaphos	3.85E-05	NA	2.44E-04	NA	2.44E-04	NA	4.69E-04	NA
Dalapon	4.68E-02	NA	3.05E-01	NA	3.05E-01	NA	5.69E-01	NA
DDD	NA	1.83E-04	NA	5.24E-04	NA	1.31E-02	NA	1.46E-03
4,4'-DDD	NA	1.83E-04	NA	5.24E-04	NA	1.31E-02	NA	1.46E-03
DDE	NA	1.36E-04	NA	4.02E-04	NA	1.01E-02	NA	1.08E-03
4,4'-DDE	NA	1.36E-04	NA	4.02E-04	NA	1.01E-02	NA	1.08E-03
DDT	4.61E-04	1.09E-04	1.73E-03	2.84E-04	1.73E-03	7.11E-03	5.87E-03	8.95E-04
4,4'-DDT	4.61E-04	1.09E-04	1.73E-03	2.84E-04	1.73E-03	7.11E-03	5.87E-03	8.95E-04
Demeton	6.26E-05	NA	4.09E-04	NA	4.09E-04	NA	7.60E-04	NA
Diazinon	1.39E-03	NA	8.87E-03	NA	8.87E-03	NA	1.69E-02	NA
Dieldrin	7.47E-05	3.97E-06	4.52E-04	1.58E-05	4.52E-04	3.95E-04	9.13E-04	2.96E-05
1,2-Dibromo-3-chloropropane (DBCP)	NA	4.71E-05	NA	1.97E-04	NA	4.91E-03	NA	3.48E-04
Dichlorvos	7.81E-04	2.31E-04	5.09E-03	9.83E-04	5.09E-03	2.46E-02	9.49E-03	1.70E-03
Dimethoate	3.13E-04	NA	2.04E-03	NA	2.04E-03	NA	3.80E-03	NA
Dinoseb	1.56E-01	NA	1.01E+00	NA	1.01E+00	NA	1.89E+00	NA
Disulfoton	5.99E-05	NA	3.63E-04	NA	3.63E-04	NA	7.31E-04	NA
Endosulfan	9.35E-03	NA	6.07E-02	NA	6.07E-02	NA	1.14E-01	NA
Endosulfan II	9.35E-03	NA	6.07E-02	NA	6.07E-02	NA	1.14E-01	NA
Endodulfan sulfate	9.35E-03	NA	6.07E-02	NA	6.07E-02	NA	1.14E-01	NA
Endrin	4.48E-04	NA	2.71E-03	NA	2.71E-03	NA	5.47E-03	NA
Endrin aldehyde	3.75E-05	NA	1.80E-04	NA	1.80E-04	NA	4.67E-04	NA
Endrin ketone	4.69E-05	NA	3.07E-04	NA	3.07E-04	NA	5.70E-04	NA
Ethoprop	6.04E-06	NA	3.72E-05	NA	3.72E-05	NA	7.37E-05	NA
Famphur	3.91E-05	NA	2.55E-04	NA	2.55E-04	NA	4.75E-04	NA
Fensulfothion	3.90E-05	NA	2.54E-04	NA	2.54E-04	NA	4.75E-04	NA
Fenthion	3.73E-05	NA	2.24E-04	NA	2.24E-04	NA	4.55E-04	NA
Heptachlor	7.67E-04	1.46E-05	4.85E-03	6.03E-05	4.85E-03	1.51E-03	9.34E-03	1.08E-04
Heptachlor Epoxide	1.85E-05	6.63E-06	1.05E-04	2.47E-05	1.05E-04	6.19E-04	2.28E-04	4.99E-05
Malathion	3.12E-02	NA	2.04E-01	NA	2.04E-01	NA	3.80E-01	NA
Merphos	3.35E-06	NA	8.16E-06	NA	8.16E-06	NA	4.54E-05	NA
Methoxychlor	7.55E-03	NA	4.65E-02	NA	4.65E-02	NA	9.21E-02	NA
Methyl parathion	3.88E-04	NA	2.50E-03	NA	2.50E-03	NA	4.72E-03	NA
Mevinphos	3.91E-05	NA	2.56E-04	NA	2.56E-04	NA	4.75E-04	NA
Naled	3.13E-03	NA	2.04E-02	NA	2.04E-02	NA	3.80E-02	NA
Parathion	9.14E-03	NA	5.70E-02	NA	5.70E-02	NA	1.11E-01	NA
Phorate	3.00E-04	NA	1.82E-03	NA	1.82E-03	NA	3.66E-03	NA

Attachment C-1

Site Specific Screening Levels
Groundwater
Fort McClellan, Calhoun County, Alabama

Chemical	Table A9 Resident Noncancer SSSL (mg/L)	Table A9 Resident Cancer SSSL (mg/L)	Table A10 Groundskeeper Noncancer SSSL (mg/L)	Table A10 Groundskeeper Cancer SSSL (mg/L)	Table A11 Construction Worker Noncancer SSSL (mg/L)	Table A11 Construction Worker Cancer SSSL (mg/L)	National Guardsperson Noncancer SSSL (mg/L)	National Guardsperson Cancer SSSL (mg/L)
Ronnel	7.01E-02	NA	3.85E-01	NA	3.85E-01	NA	8.62E-01	NA
Stirophos	4.67E-02	NA	3.02E-01	NA	3.02E-01	NA	5.68E-01	NA
Sulfotep	7.65E-04	NA	4.80E-03	NA	4.80E-03	NA	9.32E-03	NA
Thionazin	1.41E-04	NA	9.20E-04	NA	9.20E-04	NA	1.71E-03	NA
Tokuthion	7.82E-03	NA	5.11E-02	NA	5.11E-02	NA	9.51E-02	NA
Toxaphene	NA	5.92E-05	NA	2.44E-04	NA	6.09E-03	NA	4.39E-04
Trichloronate	6.82E-03	NA	3.61E-02	NA	3.61E-02	NA	8.40E-02	NA
O,O,O-Triethyl phosphorothioate	3.91E-06	NA	2.56E-05	NA	2.56E-05	NA	4.75E-05	NA
Herbicides (using SVOC equations)								
2,4-D	1.55E-02	NA	9.88E-02	NA	9.88E-02	NA	1.88E-01	NA
2,4-DB	1.24E-02	NA	8.03E-02	NA	8.03E-02	NA	1.51E-01	NA
Dicamba	4.67E-02	NA	3.03E-01	NA	3.03E-01	NA	5.68E-01	NA
Dichloroprop	1.23E-03	NA	7.87E-03	NA	7.87E-03	NA	1.50E-02	NA
MCPA	7.78E-04	NA	5.04E-03	NA	5.04E-03	NA	9.46E-03	NA
MCPP	1.53E-03	NA	9.56E-03	NA	9.56E-03	NA	1.86E-02	NA
2,4,5-T	1.53E-02	NA	9.67E-02	NA	9.67E-02	NA	1.87E-01	NA
2,4,5-TP	1.21E-02	NA	7.44E-02	NA	7.44E-02	NA	1.47E-01	NA
Polychlorinated Dibenzo-p-Dioxins and Dibenzofurans (using SVOC equations)								
TCDD	NA	NA	NA	NA	NA	NA	NA	NA
2,3,7,8-TCDD	NA	1.24E-10	NA	2.59E-10	NA	6.46E-09	NA	1.09E-09
TCDF	NA	NA	NA	NA	NA	NA	NA	NA
2,3,7,8-TCDF	NA	1.24E-09	NA	2.59E-09	NA	6.46E-08	NA	1.09E-08
1,2,3,4,6,7,8-Heptachlorodibenzofuran	NA	1.24E-08	NA	2.59E-08	NA	6.46E-07	NA	1.09E-07
HpCDD	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	NA	1.24E-08	NA	2.59E-08	NA	6.46E-07	NA	1.09E-07
HpCDF	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8,9-Heptachlorodibenzofuran	NA	1.24E-08	NA	2.59E-08	NA	6.46E-07	NA	1.09E-07
1,2,3,4,7,8-Hexachlorodibenzofuran	NA	1.24E-09	NA	2.59E-09	NA	6.46E-08	NA	1.09E-08
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	NA	1.24E-09	NA	2.59E-09	NA	6.46E-08	NA	1.09E-08
1,2,3,6,7,8-Hexachlorodibenzofuran	NA	1.24E-09	NA	2.59E-09	NA	6.46E-08	NA	1.09E-08
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	NA	1.24E-09	NA	2.59E-09	NA	6.46E-08	NA	1.09E-08
HxCDF	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-Hexachlorodibenzofuran	NA	1.24E-09	NA	2.59E-09	NA	6.46E-08	NA	1.09E-08
HxCDD	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	NA	1.24E-09	NA	2.59E-09	NA	6.46E-08	NA	1.09E-08
2,3,4,6,7,8-Hexachlorodibenzofuran	NA	1.24E-09	NA	2.59E-09	NA	6.46E-08	NA	1.09E-08
PeCDD	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	NA	2.47E-10	NA	5.17E-10	NA	1.29E-08	NA	2.18E-09
PeCDF	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8-Pentachlorodibenzofuran	NA	2.47E-09	NA	5.17E-09	NA	1.29E-07	NA	2.18E-08
2,3,4,7,8-Pentachlorodibenzofuran	NA	2.47E-10	NA	5.17E-10	NA	1.29E-08	NA	2.18E-09
Octochlorodibenzofuran	NA	1.24E-07	NA	2.59E-07	NA	6.46E-06	NA	1.09E-06
Octochlorodibenzo-p-dioxin	NA	1.24E-07	NA	2.59E-07	NA	6.46E-06	NA	1.09E-06
Chemical Agent Breakdown (using SVOC equations)								
p-Chlorophenylmethylsulfone	7.82E-04	NA	5.11E-03	NA	5.11E-03	NA	9.51E-03	NA
p-Chlorophenylmethylsulfoxide	7.82E-04	NA	5.11E-03	NA	5.11E-03	NA	9.51E-03	NA
1,4-Dithiane	1.56E-02	NA	1.02E-01	NA	1.02E-01	NA	1.90E-01	NA
1,4-Oxathiane	1.56E-03	NA	1.02E-02	NA	1.02E-02	NA	1.90E-02	NA
Thiodiglycol	6.26E-02	NA	4.09E-01	NA	4.09E-01	NA	7.60E-01	NA
Diisopropylmethylphosphonic Acid	1.25E-01	NA	8.15E-01	NA	8.15E-01	NA	1.52E+00	NA
Dimethylmethylphosphonic Acid	1.25E-01	NA	8.11E-01	NA	8.11E-01	NA	1.52E+00	NA
Ethylmethylphosphonic Acid	1.25E-01	NA	8.11E-01	NA	8.11E-01	NA	1.52E+00	NA
Isopropylmethylphosphonic Acid	1.56E-01	NA	1.02E+00	NA	1.02E+00	NA	1.90E+00	NA
Methylphosphonic Acid	1.25E-01	NA	8.08E-01	NA	8.08E 01	NA	1.52E+00	NA

Attachment C-1

Site Specific Screening Levels
Groundwater
Fort McClellan, Calhoun County, Alabama

Chemical	Table A9 Resident Noncancer SSSL (mg/L)	Table A9 Resident Cancer SSSL (mg/L)	Table A10 Groundskeeper Noncancer SSSL (mg/L)	Table A10 Groundskeeper Cancer SSSL (mg/L)	Table A11 Construction Worker Noncancer SSSL (mg/L)	Table A11 Construction Worker Cancer SSSL (mg/L)	National Guardsperson Noncancer SSSL (mg/L)	National Guardsperson Cancer SSSL (mg/L)
Explosives (using SVOC equations)								
2-Amino-4,6-dinitrotoluene	9.36E-05	NA	6.09E-04	NA	6.09E-04	NA	1.14E-03	NA
4-Amino-2,6-dinitrotoluene	9.36E-05	NA	6.09E-04	NA	6.09E-04	NA	1.14E-03	NA
1,3-Dinitrobenzene	1.56E-04	NA	1.01E-03	NA	1.01E-03	NA	1.89E-03	NA
2,4-Dinitrotoluene	3.11E-03	9.79E-05	2.01E-02	4.14E-04	2.01E-02	1.04E-02	3.78E-02	7.21E-04
2,6-Dinitrotoluene	1.56E-03	9.81E-05	1.01E-02	4.17E-04	1.01E-02	1.04E-02	1.89E-02	7.22E-04
HMX	7.82E-02	NA	5.10E-01	NA	5.10E-01	NA	9.50E-01	NA
Nitroglycerin	NA	4.78E-03	NA	2.04E-02	NA	2.04E-02	NA	3.52E-02
RDX	4.69E-03	6.69E-04	3.06E-02	2.86E-03	3.06E-02	7.14E-02	5.70E-02	4.93E-03
Tetryl	1.56E-02	NA	1.02E-01	NA	1.02E-01	NA	1.90E-01	NA
1,3,5-Trinitrobenzene	4.69E-02	NA	3.05E-01	NA	3.05E-01	NA	5.70E-01	NA
2,4,6-Trinitrotoluene	7.80E-04	2.23E-03	5.07E-03	9.47E-03	5.07E-03	2.37E-01	9.48E-03	1.64E-02

Attachment C-1

Site Specific Screening Levels
Soil
Fort McClellan, Calhoun County, Alabama

Chemical	Table A4 Resident Noncancer SSSL (mg/kg)	Table A4 Resident Cancer SSSL (mg/kg)	Table A5 Groundskeeper Noncancer SSSL (mg/kg)	Table A5 Groundskeeper Cancer SSSL (mg/kg)	Table A6 Recreational Site User Noncancer SSSL (mg/kg)	Table A6 Recreational Site User Cancer SSSL (mg/kg)	Table A7 Construction Worker Noncancer SSSL (mg/kg)	Table A7 Construction Worker Cancer SSSL (mg/kg)	Table A8 Venison Noncancer SSSL (mg/kg)	Table A8 Venison Cancer SSSL (mg/kg)	Table A9 Highway Worker Noncancer SSSL (mg/kg)	Table A9 Highway Worker Cancer SSSL (mg/kg)	National Guardsperson Noncancer SSSL (mg/kg)	National Guardsperson Cancer SSSL (mg/kg)
Inorganics														
Aluminum	7.80E+03	NA	6.69E+03	NA	6.27E+05	NA	3.34E+03	NA	4.99E+08	NA	5.76E+04	NA	1.47E+04	NA
Ammonium perchlorate	7.82E+00	NA	1.02E+02	NA	6.32E+02	NA	5.11E+01	NA	NA	NA	1.70E+03	NA	2.66E+02	NA
Antimony	3.11E+00	NA	4.07E+01	NA	2.47E+02	NA	1.99E+01	NA	5.99E+03	NA	6.41E+02	NA	1.04E+02	NA
Arsenic	2.34E+00	4.26E-01	3.06E+01	1.59E+00	1.89E+02	2.94E+01	1.53E+01	1.98E+01	1.12E+04	1.75E+03	5.08E+02	7.64E+02	7.96E+01	3.70E+00
Barium	5.47E+02	NA	6.50E+02	NA	4.41E+04	NA	3.25E+02	NA	9.32E+06	NA	5.68E+03	NA	1.43E+03	NA
Beryllium	9.60E+00	NA	2.39E+01	1.70E+01	4.08E+02	NA	9.60E+00	2.13E+02	5.99E+05	NA	1.60E+02	4.80E+03	4.42E+01	3.42E+01
Boron	7.03E+02	NA	6.99E+03	NA	5.67E+04	NA	3.49E+03	NA	NA	NA	9.36E+04	NA	1.73E+04	NA
Cadmium	6.25E+00	NA	6.55E+01	2.27E+01	3.43E+02	NA	2.13E+01	2.84E+02	9.91E+03	NA	4.03E+02	6.39E+03	1.08E+02	4.56E+01
Cadmium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium III	1.16E+04	NA	1.52E+05	NA	9.09E+05	NA	7.28E+04	NA	1.09E+08	NA	2.27E+06	NA	3.79E+05	NA
Chromium VI	2.32E+01	NA	9.96E+01	3.41E+00	1.82E+03	NA	4.91E+01	4.26E+01	2.18E+05	NA	9.71E+02	9.59E+02	2.26E+02	6.85E+00
Cobalt	4.68E+02	NA	2.90E+01	NA	3.75E+04	NA	1.45E+01	NA	4.50E+05	NA	2.42E+02	NA	6.30E+01	NA
Copper	3.13E+02	NA	4.08E+03	NA	2.52E+04	NA	2.04E+03	NA	3.00E+04	NA	6.74E+04	NA	1.06E+04	NA
Cyanide	1.56E+02	NA	2.04E+03	NA	1.26E+04	NA	1.02E+03	NA	NA	NA	3.41E+04	NA	5.32E+03	NA
Iron	2.34E+03	NA	3.06E+04	NA	1.89E+05	NA	1.53E+04	NA	1.12E+07	NA	5.08E+05	NA	7.96E+04	NA
Lead	4.00E+02	NA	8.80E+02	NA	4.00E+02	NA	8.80E+02	NA	4.00E+02	NA	8.80E+02	NA	8.80E+02	NA
Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	3.63E+02	NA	7.05E+01	NA	2.85E+04	NA	3.52E+01	NA	1.41E+06	NA	5.91E+02	NA	1.53E+02	NA
Mercury	2.33E+00	NA	2.85E+01	NA	1.84E+02	NA	1.38E+01	NA	4.00E+00	NA	4.16E+02	NA	7.12E+01	NA
Methyl mercury	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Molybdenum	3.91E+01	NA	5.11E+02	NA	3.15E+03	NA	2.55E+02	NA	9.99E+03	NA	8.44E+03	NA	1.33E+03	NA
Nickel	1.54E+02	NA	2.02E+03	1.70E+02	1.20E+04	NA	9.59E+02	2.13E+03	1.66E+05	NA	2.94E+04	4.80E+04	5.00E+03	3.42E+02
Perchlorate	7.04E+00	NA	9.20E+01	NA	5.69E+02	NA	4.60E+01	NA	NA	NA	1.53E+03	NA	2.40E+02	NA
Potassium[a]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium[a]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	3.91E+01	NA	5.11E+02	NA	3.15E+03	NA	2.55E+02	NA	4.00E+04	NA	8.45E+03	NA	1.33E+03	NA
Silver	3.91E+01	NA	5.11E+02	NA	3.16E+03	NA	2.56E+02	NA	1.25E+04	NA	8.52E+03	NA	1.33E+03	NA
Thallium	5.08E-01	NA	6.64E+00	NA	4.10E+01	NA	3.31E+00	NA	1.22E+03	NA	1.10E+02	NA	1.73E+01	NA
Vanadium	5.31E+01	NA	6.97E+02	NA	4.00E+03	NA	3.16E+02	NA	1.53E+06	NA	9.07E+03	NA	1.65E+03	NA
Zinc	2.34E+03	NA	3.06E+04	NA	1.88E+05	NA	1.52E+04	NA	5.99E+03	NA	4.98E+05	NA	7.90E+04	NA
Volatile Organic Compounds														
Acetone	7.76E+02	NA	1.02E+04	NA	6.16E+04	NA	4.95E+03	NA	NA	NA	1.58E+05	NA	2.58E+04	NA
Benzene	2.33E+01	2.17E+01	2.95E+02	9.62E+01	1.86E+03	1.49E+03	1.44E+02	1.18E+03	NA	NA	4.51E+03	5.04E+04	7.47E+02	2.27E+02
Bis(2-chloroethyl)ether	NA	5.73E-01	NA	2.54E+00	NA	3.94E+01	NA	3.11E+01	NA	NA	NA	1.33E+03	NA	5.97E+00
bis(2-Chloroisopropyl)ether	3.11E+02	9.01E+00	4.07E+03	4.03E+01	2.47E+04	6.19E+02	1.99E+03	4.93E+02	NA	NA	6.41E+04	2.13E+04	1.04E+04	9.49E+01
Bromobenzene	1.55E+02	NA	1.78E+03	NA	1.23E+04	NA	8.74E+02	NA	NA	NA	2.52E+04	NA	4.45E+03	NA
Bromochloromethane	4.66E+02	NA	6.09E+03	NA	3.71E+04	NA	2.98E+03	NA	NA	NA	9.59E+04	NA	1.55E+04	NA
Bromodichloromethane	1.55E+02	1.02E+01	2.03E+03	4.59E+01	1.23E+04	6.97E+02	9.93E+02	5.61E+02	NA	NA	3.18E+04	2.43E+04	5.17E+03	1.08E+02
Bromoform	1.55E+02	7.97E+01	2.03E+03	3.57E+02	1.23E+04	5.47E+03	9.93E+02	4.36E+03	NA	NA	3.18E+04	1.87E+05	5.17E+03	8.39E+02
Bromomethane	1.09E+01	NA	1.39E+02	NA	8.62E+02	NA	6.80E+01	NA	NA	NA	2.13E+03	NA	3.53E+02	NA
n-Butylbenzene	7.77E+01	NA	1.02E+03	NA	6.17E+03	NA	4.97E+02	NA	NA	NA	1.59E+04	NA	2.59E+03	NA
sec-Butylbenzene	7.77E+01	NA	1.02E+03	NA	6.17E+03	NA	4.97E+02	NA	NA	NA	1.59E+04	NA	2.59E+03	NA
tert-Butylbenzene	7.77E+01	NA	1.02E+03	NA	6.17E+03	NA	4.97E+02	NA	NA	NA	1.59E+04	NA	2.59E+03	NA
Carbon disulfide	7.77E+02	NA	1.01E+04	NA	6.17E+04	NA	4.92E+03	NA	NA	NA	1.56E+05	NA	2.56E+04	NA
Carbon tetrachloride	5.43E+00	4.83E+00	6.94E+01	2.17E+01	4.31E+02	3.31E+02	3.38E+01	2.64E+02	NA	NA	1.06E+03	1.13E+04	1.75E+02	5.09E+01
Chlorobenzene	1.55E+02	NA	1.90E+03	NA	1.24E+04	NA	9.32E+02	NA	NA	NA	2.83E+04	NA	4.79E+03	NA
Chloroethane	3.11E+03	2.17E+02	4.06E+04	9.62E+02	2.47E+05	1.49E+04	1.99E+04	1.18E+04	NA	NA	6.38E+05	5.04E+05	1.03E+05	2.27E+03
Chloroform	7.77E+01	1.03E+02	3.07E+02	3.69E+02	6.19E+03	7.10E+03	1.52E+02	4.54E+03	NA	NA	2.98E+03	1.66E+05	6.97E+02	8.41E+02
Chloromethane	3.11E+01	4.85E+01	4.06E+02	2.17E+02	2.47E+03	3.33E+03	1.99E+02	2.66E+03	NA	NA	6.40E+03	1.15E+05	1.04E+03	5.11E+02
2-Chloronaphthalene	6.22E+02	NA	8.13E+03	NA	4.95E+04	NA	3.98E+03	NA	NA	NA	1.28E+05	NA	2.07E+04	NA

Site Specific Screening Levels
Soil
Fort McClellan, Calhoun County, Alabama

Chemical	Table A4 Resident Noncancer SSSL (mg/kg)	Table A4 Resident Cancer SSSL (mg/kg)	Table A5 Groundskeeper Noncancer SSSL (mg/kg)	Table A5 Groundskeeper Cancer SSSL (mg/kg)	Table A6 Recreational Site User Noncancer SSSL (mg/kg)	Table A6 Recreational Site User Cancer SSSL (mg/kg)	Table A7 Construction Worker Noncancer SSSL (mg/kg)	Table A7 Construction Worker Cancer SSSL (mg/kg)	Table A8 Venison Noncancer SSSL (mg/kg)	Table A8 Venison Cancer SSSL (mg/kg)	Table A9 Highway Worker Noncancer SSSL (mg/kg)	Table A9 Highway Worker Cancer SSSL (mg/kg)	National Guardsperson Noncancer SSSL (mg/kg)	National Guardsperson Cancer SSSL (mg/kg)
m-Chlorotoluene	1.55E+02	NA	2.03E+03	NA	1.24E+04	NA	9.96E+02	NA	NA	NA	3.20E+04	NA	5.19E+03	NA
o-Chlorotoluene	1.55E+02	NA	2.03E+03	NA	1.24E+04	NA	9.96E+02	NA	NA	NA	3.20E+04	NA	5.19E+03	NA
p-Chlorotoluene	1.55E+02	NA	2.03E+03	NA	1.24E+04	NA	9.96E+02	NA	NA	NA	3.20E+04	NA	5.19E+03	NA
Cumene	7.77E+02	NA	9.98E+03	NA	6.17E+04	NA	4.05E+03	NA	NA	NA	1.11E+05	NA	2.53E+04	NA
Dibenzofuran	3.09E+01	NA	4.05E+02	NA	2.43E+03	NA	1.94E+02	NA	NA	NA	6.05E+03	NA	1.01E+03	NA
1,2-Dibromoethane	NA	7.38E-03	2.91E+02	3.34E-02	NA	5.06E-01	NA	4.06E-01	NA	NA	NA	1.74E+01	6.32E+02	7.83E-02
Dibromomethane	7.77E+01	NA	1.02E+03	NA	6.19E+03	NA	4.98E+02	NA	NA	NA	1.60E+04	NA	2.59E+03	NA
1,2-Dichlorobenzene	6.99E+02	NA	7.57E+03	NA	5.56E+04	NA	3.71E+03	NA	NA	NA	1.03E+05	NA	1.87E+04	NA
1,3-Dichlorobenzene	6.99E+00	NA	9.14E+01	NA	5.56E+02	NA	4.47E+01	NA	NA	NA	1.43E+03	NA	2.33E+02	NA
1,4-Dichlorobenzene	2.33E+02	2.62E+01	3.04E+03	1.16E+02	1.85E+04	1.80E+03	1.49E+03	1.42E+03	NA	NA	4.75E+04	6.07E+04	7.73E+03	2.74E+02
Dichlorodifluoromethane	1.55E+03	NA	1.90E+04	NA	1.23E+05	NA	9.27E+03	NA	NA	NA	2.79E+05	NA	4.77E+04	NA
1,1-Dichloroethane	7.77E+02	NA	1.00E+04	NA	6.19E+04	NA	4.91E+03	NA	NA	NA	1.56E+05	NA	2.55E+04	NA
1,2-Dichloroethane	2.33E+02	6.93E+00	2.14E+03	3.07E+01	1.86E+04	4.76E+02	1.05E+03	3.76E+02	NA	NA	2.66E+04	1.61E+04	5.18E+03	7.22E+01
1,1-Dichloroethene	7.00E+01	1.05E+00	9.15E+02	4.72E+00	5.57E+03	7.22E+01	4.48E+02	5.78E+01	NA	NA	1.44E+04	2.50E+03	2.33E+03	1.11E+01
2-Butanone	4.66E+03	NA	5.86E+04	NA	3.70E+05	NA	2.86E+04	NA	NA	NA	8.87E+05	NA	1.48E+05	NA
cis-1,2-Dichloroethene	7.77E+01	NA	1.02E+03	NA	6.19E+03	NA	4.98E+02	NA	NA	NA	1.60E+04	NA	2.59E+03	NA
trans-1,2-Dichloroethene	1.55E+02	NA	2.03E+03	NA	1.24E+04	NA	9.96E+02	NA	NA	NA	3.20E+04	NA	5.19E+03	NA
1,2-Dichloroethene	7.00E+01	NA	9.15E+02	NA	5.57E+03	NA	4.48E+02	NA	NA	NA	1.44E+04	NA	2.33E+03	NA
1,1-Dichloropropene	2.33E+00	NA	3.05E+01	NA	1.85E+02	NA	1.49E+01	NA	NA	NA	4.77E+02	NA	7.75E+01	NA
cis-1,3-Dichloropropene	2.33E+00	3.50E+00	3.05E+01	1.56E+01	1.85E+02	2.40E+02	1.49E+01	1.90E+02	NA	NA	4.77E+02	8.15E+03	7.75E+01	3.66E+01
trans-1,3-Dichloropropene	2.33E+00	3.50E+00	3.05E+01	1.56E+01	1.85E+02	2.40E+02	1.49E+01	1.90E+02	NA	NA	4.77E+02	8.15E+03	7.75E+01	3.66E+01
1,2-Dichloropropane	NA	9.26E+00	5.62E+03	4.18E+01	NA	6.35E+02	2.81E+03	5.11E+02	NA	NA	4.68E+04	2.21E+04	1.22E+04	9.86E+01
1,3-Dichloropropane	NA	NA	5.62E+03	NA	NA	NA	2.81E+03	NA	NA	NA	4.68E+04	NA	1.22E+04	NA
2,2-Dichloropropane	NA	NA	5.62E+03	NA	NA	NA	2.81E+03	NA	NA	NA	4.68E+04	NA	1.22E+04	NA
Ethylbenzene	7.77E+02	NA	1.01E+04	NA	6.18E+04	NA	4.94E+03	NA	NA	NA	1.57E+05	NA	2.57E+04	NA
2-Hexanone	3.11E+02	NA	2.59E+03	NA	2.47E+04	NA	1.28E+03	NA	NA	NA	3.08E+04	NA	6.21E+03	NA
Isopropylbenzene	7.77E+02	NA	9.98E+03	NA	6.17E+04	NA	4.88E+03	NA	NA	NA	1.54E+05	NA	2.53E+04	NA
Methyl Chloride	3.11E+01	4.85E+01	4.06E+02	2.17E+02	2.47E+03	3.33E+03	1.99E+02	2.66E+03	NA	NA	6.40E+03	1.15E+05	1.04E+03	5.11E+02
Methylene Chloride	4.66E+02	8.41E+01	6.09E+03	3.78E+02	3.71E+04	5.77E+03	2.98E+03	4.63E+03	NA	NA	9.59E+04	2.00E+05	1.55E+04	8.92E+02
Methyl Isobutyl Ketone	6.21E+02	NA	7.53E+03	NA	4.94E+04	NA	3.69E+03	NA	NA	NA	1.11E+05	NA	1.89E+04	NA
4-Methyl-2-Pentanone	6.21E+02	NA	7.53E+03	NA	4.94E+04	NA	3.69E+03	NA	NA	NA	1.11E+05	NA	1.89E+04	NA
n-Propylbenzene	7.77E+01	NA	1.02E+03	NA	6.17E+03	NA	4.97E+02	NA	NA	NA	1.59E+04	NA	2.59E+03	NA
Naphthalene	1.55E+02	NA	1.39E+03	NA	1.24E+04	NA	6.85E+02	NA	NA	NA	1.71E+04	NA	3.36E+03	NA
Nitrobenzene	3.89E+00	NA	5.00E+01	NA	3.09E+02	NA	2.45E+01	NA	NA	NA	7.77E+02	NA	1.27E+02	NA
4-Nitrophenol	6.21E+01	NA	8.12E+02	NA	4.92E+03	NA	3.96E+02	NA	NA	NA	1.26E+04	NA	2.06E+03	NA
o-Nitrotoluene	7.77E+01	NA	1.02E+03	NA	6.17E+03	NA	4.97E+02	NA	NA	NA	1.59E+04	NA	2.59E+03	NA
p-Nitrotoluene	7.77E+01	NA	1.02E+03	NA	6.17E+03	NA	4.97E+02	NA	NA	NA	1.59E+04	NA	2.59E+03	NA
p-Cymene	1.55E+03	NA	2.03E+04	NA	1.23E+05	NA	9.93E+03	NA	NA	NA	3.18E+05	NA	5.17E+04	NA
Styrene	1.55E+03	NA	2.01E+04	NA	1.24E+05	NA	9.83E+03	NA	NA	NA	3.12E+05	NA	5.10E+04	NA
1,1,1,2-Tetrachloroethane	2.33E+02	2.41E+01	3.04E+03	1.07E+02	1.84E+04	1.65E+03	1.48E+03	1.30E+03	NA	NA	4.69E+04	5.48E+04	7.70E+03	2.50E+02
1,1,2,2-Tetrachloroethane	4.65E+02	3.13E+00	6.09E+03	1.39E+01	3.68E+04	2.15E+02	2.96E+03	1.69E+02	NA	NA	9.38E+04	7.13E+03	1.54E+04	3.25E+01
Tetrachloroethene	7.77E+01	1.21E+01	1.02E+03	5.47E+01	6.19E+03	8.33E+02	4.97E+02	6.70E+02	NA	NA	1.60E+04	2.91E+04	2.59E+03	1.29E+02
Toluene	1.55E+03	NA	1.96E+04	NA	1.24E+05	NA	9.62E+03	NA	NA	NA	3.00E+05	NA	4.98E+04	NA
1,2,3-Trichlorobenzene	7.77E+00	NA	1.02E+02	NA	6.17E+02	NA	4.97E+01	NA	NA	NA	1.59E+03	NA	2.59E+02	NA
1,2,4-Trichlorobenzene	7.77E+01	NA	1.01E+03	NA	6.17E+03	NA	4.95E+02	NA	NA	NA	1.58E+04	NA	2.58E+03	NA
1,3,5-Trichlorobenzene	7.77E+00	NA	1.02E+02	NA	6.17E+02	NA	4.97E+01	NA	NA	NA	1.59E+03	NA	2.59E+02	NA
1,1,1-Trichloroethane	1.55E+03	NA	2.01E+04	NA	1.24E+05	NA	9.83E+03	NA	NA	NA	3.12E+05	NA	5.10E+04	NA
1,1,2-Trichloroethane	3.11E+01	1.11E+01	4.07E+02	4.90E+01	2.47E+03	7.60E+02	1.99E+02	6.00E+02	NA	NA	6.41E+03	2.56E+04	1.04E+03	1.15E+02
Trichloroethene	4.66E+01	5.72E+01	6.10E+02	2.56E+02	3.70E+03	3.93E+03	2.98E+02	3.13E+03	NA	NA	9.55E+03	1.34E+05	1.55E+03	6.02E+02
Trichlorofluoromethane	2.33E+03	NA	2.96E+04	NA	1.85E+05	NA	1.44E+04	NA	NA	NA	4.49E+05	NA	7.47E+04	NA
1,2,3-Trichloropropane	4.66E+01	8.97E-02	6.09E+02	4.06E-01	3.69E+03	6.16E+00	2.97E+02	4.95E+00	NA	NA	9.47E+03	2.13E+02	1.55E+03	9.54E-01
1,2,3-Trimethylbenzene	3.88E+02	NA	3.20E+03	NA	3.08E+04	NA	1.58E+03	NA	NA	NA	3.78E+04	NA	7.65E+03	NA
1,2,4-Trimethylbenzene	3.88E+02	NA	3.20E+03	NA	3.08E+04	NA	1.58E+03	NA	NA	NA	3.78E+04	NA	7.65E+03	NA

Attachment C-1

Site Specific Screening Levels
Soil
Fort McClellan, Calhoun County, Alabama

Chemical	Table A4 Resident Noncancer SSSL (mg/kg)	Table A4 Resident Cancer SSSL (mg/kg)	Table A5 Groundskeeper Noncancer SSSL (mg/kg)	Table A5 Groundskeeper Cancer SSSL (mg/kg)	Table A6 Recreational Site User Noncancer SSSL (mg/kg)	Table A6 Recreational Site User Cancer SSSL (mg/kg)	Table A7 Construction Worker Noncancer SSSL (mg/kg)	Table A7 Construction Worker Cancer SSSL (mg/kg)	Table A8 Venison Noncancer SSSL (mg/kg)	Table A8 Venison Cancer SSSL (mg/kg)	Table A9 Highway Worker Noncancer SSSL (mg/kg)	Table A9 Highway Worker Cancer SSSL (mg/kg)	National Guardsperson Noncancer SSSL (mg/kg)	National Guardsperson Cancer SSSL (mg/kg)
1,3,5-Trimethylbenzene	3.88E+02	NA	3.20E+03	NA	3.08E+04	NA	1.58E+03	NA	NA	NA	3.78E+04	NA	7.65E+03	NA
Vinyl Chloride	NA	3.32E-01	NA	1.49E+00	NA	2.28E+01	NA	1.83E+01	NA	NA	NA	7.93E+02	NA	3.53E+00
Xylene, Total	1.55E+04	NA	2.03E+05	NA	1.24E+06	NA	9.96E+04	NA	NA	NA	3.20E+06	NA	5.19E+05	NA
m,p-Xylenes	1.55E+04	NA	2.03E+05	NA	1.24E+06	NA	9.96E+04	NA	NA	NA	3.20E+06	NA	5.19E+05	NA
o-Xylene	1.55E+04	NA	2.03E+05	NA	1.24E+06	NA	9.96E+04	NA	NA	NA	3.20E+06	NA	5.19E+05	NA
1,2-Dimethylbenzene	1.55E+04	NA	2.03E+05	NA	1.24E+06	NA	9.96E+04	NA	NA	NA	3.20E+06	NA	5.19E+05	NA
Semi-Volatile Organic Compounds														
Acenaphthene	4.63E+02	NA	6.07E+03	NA	3.64E+04	NA	2.91E+03	NA	NA	NA	9.08E+04	NA	1.52E+04	NA
Acenaphthylene	4.63E+02	NA	6.07E+03	NA	3.64E+04	NA	2.91E+03	NA	NA	NA	9.08E+04	NA	1.52E+04	NA
Anthracene	2.33E+03	NA	3.04E+04	NA	1.84E+05	NA	1.48E+04	NA	NA	NA	4.69E+05	NA	7.70E+04	NA
Benzo(a)anthracene	NA	8.51E-01	NA	3.85E+00	NA	5.81E+01	NA	4.62E+01	NA	NA	NA	1.93E+03	NA	8.89E+00
Benzo(b)fluoranthene	NA	8.51E-01	NA	3.85E+00	NA	5.81E+01	NA	4.62E+01	NA	NA	NA	1.93E+03	NA	8.89E+00
Benzo(k)fluoranthene	NA	8.51E+00	NA	3.85E+01	NA	5.81E+02	NA	4.62E+02	NA	NA	NA	1.93E+04	NA	8.89E+01
Benzo(ghi)perylene	2.32E+02	NA	3.03E+03	NA	1.82E+04	NA	1.46E+03	NA	NA	NA	4.54E+04	NA	7.59E+03	NA
Benzo(a)pyrene	NA	8.51E-02	NA	3.85E-01	NA	5.81E+00	NA	4.62E+00	NA	NA	NA	1.93E+02	NA	8.89E-01
Benzoic Acid	3.11E+04	NA	4.07E+05	NA	2.47E+06	NA	1.99E+05	NA	NA	NA	6.41E+06	NA	1.04E+06	NA
Benzyl alcohol	2.33E+03	NA	3.05E+04	NA	1.86E+05	NA	1.49E+04	NA	NA	NA	4.81E+05	NA	7.78E+04	NA
bis(2-Chloroethoxy)methane	2.33E+01	NA	3.05E+02	NA	1.85E+03	NA	1.48E+02	NA	NA	NA	4.74E+03	NA	7.73E+02	NA
bis(2-Ethylhexyl)phthalate	1.56E+02	4.52E+01	2.04E+03	2.00E+02	1.24E+04	3.11E+03	1.00E+03	2.45E+03	NA	NA	3.24E+04	1.06E+05	5.21E+03	4.72E+02
4-Bromodiphenyl ether	4.48E+02	NA	5.87E+03	NA	3.52E+04	NA	2.82E+03	NA	NA	NA	8.77E+04	NA	1.47E+04	NA
Butyl benzyl phthalate	1.56E+03	NA	2.04E+04	NA	1.24E+05	NA	1.00E+04	NA	NA	NA	3.24E+05	NA	5.21E+04	NA
Carbazole	NA	3.11E+01	NA	1.42E+02	NA	2.12E+03	NA	1.70E+03	NA	NA	NA	7.15E+04	NA	3.28E+02
4-Chloroaniline	3.11E+01	NA	4.07E+02	NA	2.47E+03	NA	1.99E+02	NA	NA	NA	6.41E+03	NA	1.04E+03	NA
4-Chlorodiphenyl ether	4.48E+02	NA	5.87E+03	NA	3.52E+04	NA	2.82E+03	NA	NA	NA	8.77E+04	NA	1.47E+04	NA
4-Chloro-3-methylphenol	3.88E+01	NA	5.08E+02	NA	3.08E+03	NA	2.48E+02	NA	NA	NA	7.93E+03	NA	1.29E+03	NA
2-Chlorophenol	3.89E+01	NA	5.08E+02	NA	3.09E+03	NA	2.49E+02	NA	NA	NA	8.01E+03	NA	1.30E+03	NA
Chrysene	NA	8.61E+01	NA	3.86E+02	NA	5.90E+03	NA	4.71E+03	NA	NA	NA	2.01E+05	NA	9.06E+02
Dibenz(a,h)anthracene	NA	8.61E-02	NA	3.86E-01	NA	5.90E+00	NA	4.71E+00	NA	NA	NA	2.01E+02	NA	9.06E-01
Dibromochloromethane	1.55E+02	7.49E+00	2.03E+03	3.39E+01	1.23E+04	5.14E+02	9.93E+02	4.14E+02	NA	NA	3.18E+04	1.79E+04	5.17E+03	7.98E+01
1,2-Dibromo-3-chloropropane	NA	4.50E-01	2.91E+02	2.03E+00	NA	3.09E+01	1.46E+02	2.48E+01	NA	NA	2.43E+03	1.08E+03	6.32E+02	4.79E+00
3,3'-Dichlorobenzidine	NA	1.40E+00	NA	6.32E+00	NA	9.60E+01	NA	7.72E+01	NA	NA	NA	3.35E+03	NA	1.49E+01
2,4-Dichlorophenol	2.33E+01	NA	3.05E+02	NA	1.86E+03	NA	1.49E+02	NA	NA	NA	4.81E+03	NA	7.78E+02	NA
2,6-Dichlorophenol	2.33E+01	NA	3.05E+02	NA	1.86E+03	NA	1.49E+02	NA	NA	NA	4.81E+03	NA	7.78E+02	NA
Diethyl phthalate	6.23E+03	NA	8.14E+04	NA	4.97E+05	NA	4.00E+04	NA	NA	NA	1.30E+06	NA	2.09E+05	NA
2,4-Dimethylphenol	1.55E+02	NA	2.03E+03	NA	1.23E+04	NA	9.90E+02	NA	NA	NA	3.16E+04	NA	5.15E+03	NA
Dimethyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dintro-2-methylphenol	7.72E-01	NA	1.01E+01	NA	6.06E+01	NA	4.86E+00	NA	NA	NA	1.51E+02	NA	2.53E+01	NA
2,4-Dinitrophenol	1.54E+01	NA	2.02E+02	NA	1.21E+03	NA	9.71E+01	NA	NA	NA	3.03E+03	NA	5.06E+02	NA
Di-n-butyl phthalate	7.80E+02	NA	1.02E+04	NA	6.26E+04	NA	5.05E+03	NA	NA	NA	1.66E+05	NA	2.63E+04	NA
Di-n-octyl phthalate	1.56E+02	NA	2.04E+03	NA	1.24E+04	NA	1.00E+03	NA	NA	NA	3.24E+04	NA	5.21E+03	NA
2,4-Dinitrotoluene	1.55E+01	9.27E-01	2.03E+02	4.19E+00	1.24E+03	6.37E+01	9.96E+01	5.13E+01	NA	NA	3.20E+03	2.23E+03	5.19E+02	9.89E+00
2,6-Dinitrotoluene	7.77E+00	9.27E-01	1.02E+02	4.19E+00	6.19E+02	6.37E+01	4.98E+01	5.13E+01	NA	NA	1.60E+03	2.23E+03	2.59E+02	9.89E+00
Fluoranthene	3.09E+02	NA	4.05E+03	NA	2.43E+04	NA	1.94E+03	NA	NA	NA	6.05E+04	NA	1.01E+04	NA
Fluorene	3.09E+02	NA	4.05E+03	NA	2.43E+04	NA	1.94E+03	NA	NA	NA	6.05E+04	NA	1.01E+04	NA
Hexachlorobenzene	6.21E+00	3.93E-01	8.13E+01	1.74E+00	4.94E+02	2.70E+01	3.97E+01	2.13E+01	NA	NA	1.27E+03	9.07E+02	2.07E+02	4.09E+00
Hexachlorobutadiene	1.55E+00	8.07E+00	2.03E+01	3.58E+01	1.23E+02	5.54E+02	9.93E+00	4.37E+02	NA	NA	3.18E+02	1.86E+04	5.17E+01	8.40E+01
Hexachlorocyclopentadiene	5.41E+01	NA	8.93E+01	NA	4.24E+03	NA	4.44E+01	NA	NA	NA	7.88E+02	NA	1.97E+02	NA
Hexachloroethane	7.77E+00	4.50E+01	1.02E+02	1.99E+02	6.17E+02	3.09E+03	4.97E+01	2.44E+03	NA	NA	1.59E+03	1.04E+05	2.59E+02	4.68E+02
Indeno(1,2,3-cd)pyrene	NA	8.51E-01	NA	3.85E+00	NA	5.81E+01	NA	4.62E+01	NA	NA	NA	1.93E+03	NA	8.89E+00
Isophorone	1.54E+03	6.54E+02	2.02E+04	2.98E+03	1.21E+05	4.47E+04	9.71E+03	3.58E+04	NA	NA	3.03E+05	1.51E+06	5.06E+04	6.90E+03
2-Methylnaphthalene	1.55E+02	NA	1.39E+03	NA	1.23E+04	NA	6.82E+02	NA	NA	NA	1.70E+04	NA	3.35E+03	NA
4-Methylnaphthalene	1.55E+02	NA	1.39E+03	NA	1.23E+04	NA	6.82E+02	NA	NA	NA	1.70E+04	NA	3.35E+03	NA

Attachment C-1

Site Specific Screening Levels
Soil
Fort McClellan, Calhoun County, Alabama

Chemical	Table A4 Resident Noncancer SSSL (mg/kg)	Table A4 Resident Cancer SSSL (mg/kg)	Table A5 Groundskeeper Noncancer SSSL (mg/kg)	Table A5 Groundskeeper Cancer SSSL (mg/kg)	Table A6 Recreational Site User Noncancer SSSL (mg/kg)	Table A6 Recreational Site User Cancer SSSL (mg/kg)	Table A7 Construction Worker Noncancer SSSL (mg/kg)	Table A7 Construction Worker Cancer SSSL (mg/kg)	Table A8 Venison Noncancer SSSL (mg/kg)	Table A8 Venison Cancer SSSL (mg/kg)	Table A9 Highway Worker Noncancer SSSL (mg/kg)	Table A9 Highway Worker Cancer SSSL (mg/kg)	National Guardsperson Noncancer SSSL (mg/kg)	National Guardsperson Cancer SSSL (mg/kg)
2-Methylphenol	3.88E+02	NA	5.08E+03	NA	3.08E+04	NA	2.48E+03	NA	NA	NA	7.93E+04	NA	1.29E+04	NA
4-Methylphenol	3.88E+01	NA	5.08E+02	NA	3.08E+03	NA	2.48E+02	NA	NA	NA	7.93E+03	NA	1.29E+03	NA
2-Nitroaniline	2.33E+00	NA	2.76E+01	NA	1.85E+02	NA	1.35E+01	NA	NA	NA	4.00E+02	NA	6.92E+01	NA
3-Nitroaniline	2.33E+00	NA	3.05E+01	NA	1.85E+02	NA	1.49E+01	NA	NA	NA	4.79E+02	NA	7.77E+01	NA
4-Nitroaniline	2.33E+01	NA	3.05E+02	NA	1.85E+03	NA	1.49E+02	NA	NA	NA	4.79E+03	NA	7.77E+02	NA
2-Nitrophenol	6.21E+01	NA	8.09E+02	NA	4.85E+03	NA	3.88E+02	NA	NA	NA	1.21E+04	NA	2.02E+03	NA
N-Nitrosodiphenylamine	NA	1.29E+02	NA	5.81E+02	NA	8.84E+03	NA	7.11E+03	NA	NA	NA	3.09E+05	NA	1.37E+03
N-Nitrosodi-n-propylamine	NA	9.01E-02	NA	4.07E-01	NA	6.19E+00	NA	4.98E+00	NA	NA	NA	2.17E+02	NA	9.61E-01
Pentachlorophenol	2.33E+02	5.25E+00	3.05E+03	2.37E+01	1.86E+04	3.61E+02	1.49E+03	2.90E+02	NA	NA	4.81E+04	1.26E+04	7.78E+03	5.60E+01
Phenanthrene	2.32E+03	NA	3.03E+04	NA	1.82E+05	NA	1.46E+04	NA	NA	NA	4.54E+05	NA	7.59E+04	NA
Phenol	4.66E+03	NA	6.10E+04	NA	3.71E+05	NA	2.98E+04	NA	NA	NA	9.58E+05	NA	1.55E+05	NA
Pyrene	2.33E+02	NA	3.05E+03	NA	1.85E+04	NA	1.48E+03	NA	NA	NA	4.74E+04	NA	7.73E+03	NA
2,4,5-Trichlorophenol	7.77E+02	NA	1.02E+04	NA	6.17E+04	NA	4.97E+03	NA	NA	NA	1.59E+05	NA	2.59E+04	NA
2,4,6-Trichlorophenol	NA	5.72E+01	NA	2.54E+02	NA	3.93E+03	NA	3.10E+03	NA	NA	NA	1.32E+05	NA	5.96E+02
Pesticides/PCBs (using SVOC equations)														
Aldrin	2.32E-01	3.65E-02	3.03E+00	1.63E-01	1.82E+01	2.50E+00	1.46E+00	1.96E+00	4.96E+03	6.81E+02	4.54E+01	8.13E+01	7.59E+00	3.77E-01
PCBs (solid media, food chain)	NA	2.93E-01	NA	1.36E+00	NA	1.96E+01	NA	1.52E+01	NA	1.57E+02	NA	5.68E+02	NA	2.92E+00
PCBs (water)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1016 (solid media, food chain)	5.25E-01	2.93E-01	6.91E+00	1.36E+00	3.88E+01	1.96E+01	3.04E+00	1.52E+01	9.34E+02	4.67E+02	8.40E+01	5.68E+02	1.59E+01	2.92E+00
Aroclor 1016 (water)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1221 (solid media, food chain)	NA	2.93E-01	NA	1.36E+00	NA	1.96E+01	NA	1.52E+01	NA	1.12E+03	NA	5.68E+02	NA	2.92E+00
Aroclor 1221 (water)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1232 (solid media, food chain)	NA	2.93E-01	NA	1.36E+00	NA	1.96E+01	NA	1.52E+01	NA	7.59E+02	NA	5.68E+02	NA	2.92E+00
Aroclor 1232 (water)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242 (solid media, food chain)	NA	2.93E-01	NA	1.36E+00	NA	1.96E+01	NA	1.52E+01	NA	4.67E+02	NA	5.68E+02	NA	2.92E+00
Aroclor 1242 (water)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1248 (solid media, food chain)	NA	2.93E-01	NA	1.36E+00	NA	1.96E+01	NA	1.52E+01	NA	2.61E+02	NA	5.68E+02	NA	2.92E+00
Aroclor 1248 (water)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1254 (solid media, food chain)	1.50E-01	2.93E-01	1.97E+00	1.36E+00	1.11E+01	1.96E+01	8.70E-01	1.52E+01	1.11E+02	1.95E+02	2.40E+01	5.68E+02	4.53E+00	2.92E+00
Aroclor 1254 (water)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1260 (solid media, food chain)	NA	2.93E-01	NA	1.36E+00	NA	1.96E+01	NA	1.52E+01	NA	1.46E+02	NA	5.68E+02	NA	2.92E+00
Aroclor 1260 (water)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1262 (solid media, food chain)	NA	2.93E-01	NA	1.36E+00	NA	1.96E+01	NA	1.52E+01	NA	NA	NA	5.68E+02	NA	2.92E+00
Aroclor 1262 (water)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1268 (solid media, food chain)	NA	2.93E-01	NA	1.36E+00	NA	1.96E+01	NA	1.52E+01	NA	NA	NA	5.68E+02	NA	2.92E+00
Aroclor 1268 (water)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Azinphos-methyl	6.98E-01	NA	9.14E+00	NA	5.54E+01	NA	4.45E+00	NA	1.97E+04	NA	1.42E+02	NA	2.32E+01	NA
alpha-BHC	NA	1.00E-01	NA	4.43E-01	NA	6.87E+00	NA	5.42E+00	NA	8.53E+02	NA	2.31E+02	NA	1.04E+00
beta-BHC	NA	3.50E-01	NA	1.55E+00	NA	2.40E+01	NA	1.89E+01	NA	2.90E+03	NA	8.07E+02	NA	3.64E+00
gamma-BHC (Lindane)	2.33E+00	4.85E-01	3.05E+01	2.19E+00	1.86E+02	3.33E+01	1.49E+01	2.68E+01	2.49E+04	4.47E+03	4.81E+02	1.17E+03	7.78E+01	5.17E+00
delta-BHC	2.33E+00	NA	3.05E+01	NA	1.85E+02	NA	1.49E+01	NA	1.65E+04	NA	4.78E+02	NA	7.76E+01	NA
Bolstar	1.94E-01	NA	2.54E+00	NA	1.54E+01	NA	1.24E+00	NA	3.75E+02	NA	3.98E+01	NA	6.47E+00	NA
Chlordane	3.79E+00	1.69E+00	4.74E+01	7.80E+00	2.84E+02	1.14E+02	2.15E+01	8.83E+01	7.08E+03	2.83E+03	5.95E+02	3.36E+03	1.11E+02	1.70E+01
Chlorpyrifos	2.33E+01	NA	3.05E+02	NA	1.85E+03	NA	1.49E+02	NA	7.46E+04	NA	4.78E+03	NA	7.76E+02	NA
Coumaphos	1.94E-01	NA	2.54E+00	NA	1.54E+01	NA	1.24E+00	NA	1.39E+03	NA	3.98E+01	NA	6.47E+00	NA
Dalapon	2.33E+02	NA	3.04E+03	NA	1.84E+04	NA	1.48E+03	NA	4.42E+07	NA	4.69E+04	NA	7.70E+03	NA
DDD	NA	2.54E+00	NA	1.17E+01	NA	1.72E+02	NA	1.37E+02	NA	3.21E+03	NA	5.55E+03	NA	2.64E+01
4,4'-DDD	NA	2.54E+00	NA	1.17E+01	NA	1.72E+02	NA	1.37E+02	NA	3.21E+03	NA	5.55E+03	NA	2.64E+01
DDE	NA	1.79E+00	NA	8.27E+00	NA	1.22E+02	NA	9.67E+01	NA	2.52E+03	NA	3.92E+03	NA	1.87E+01
4,4'-DDE	NA	1.79E+00	NA	8.27E+00	NA	1.22E+02	NA	9.67E+01	NA	2.52E+03	NA	3.92E+03	NA	1.87E+01
DDT	3.83E+00	1.79E+00	5.02E+01	8.11E+00	2.95E+02	1.22E+02	2.35E+01	9.50E+01	3.19E+03	1.31E+03	7.04E+02	3.79E+03	1.22E+02	1.83E+01
4,4'-DDT	3.83E+00	1.79E+00	5.02E+01	8.11E+00	2.95E+02	1.22E+02	2.35E+01	9.50E+01	3.19E+03	1.31E+03	7.04E+02	3.79E+03	1.22E+02	1.83E+01

Attachment C-1

Site Specific Screening Levels
Soil
Fort McClellan, Calhoun County, Alabama

Chemical	Table A4 Resident Noncancer SSSL (mg/kg)	Table A4 Resident Cancer SSSL (mg/kg)	Table A5 Groundskeeper Noncancer SSSL (mg/kg)	Table A5 Groundskeeper Cancer SSSL (mg/kg)	Table A6 Recreational Site User Noncancer SSSL (mg/kg)	Table A6 Recreational Site User Cancer SSSL (mg/kg)	Table A7 Construction Worker Noncancer SSSL (mg/kg)	Table A7 Construction Worker Cancer SSSL (mg/kg)	Table A8 Venison Noncancer SSSL (mg/kg)	Table A8 Venison Cancer SSSL (mg/kg)	Table A9 Highway Worker Noncancer SSSL (mg/kg)	Table A9 Highway Worker Cancer SSSL (mg/kg)	National Guardsperson Noncancer SSSL (mg/kg)	National Guardsperson Cancer SSSL (mg/kg)
Demeton	3.11E-01	NA	4.07E+00	NA	2.47E+01	NA	1.99E+00	NA	NA	NA	6.41E+01	NA	1.04E+01	NA
Diazinon	6.98E+00	NA	9.14E+01	NA	5.54E+02	NA	4.45E+01	NA	9.99E+04	NA	1.42E+03	NA	2.32E+02	NA
Dieldrin	3.86E-01	3.88E-02	5.06E+00	1.74E-01	3.03E+01	2.65E+00	2.43E+00	2.08E+00	1.83E+03	1.60E+02	7.56E+01	8.64E+01	1.26E+01	4.01E-01
1,2-Dibromo-3-chloropropane (DBCP)	NA	4.50E-01	2.91E+02	2.03E+00	NA	3.09E+01	1.46E+02	2.48E+01	NA	8.68E+03	2.43E+03	1.08E+03	6.32E+02	4.79E+00
Dichlorvos	3.89E+00	2.17E+00	4.75E+01	9.82E+00	3.09E+02	1.49E+02	2.33E+01	1.20E+02	3.69E+05	1.78E+05	7.06E+02	5.23E+03	1.20E+02	2.32E+01
Dimethoate	1.55E+00	NA	2.03E+01	NA	1.24E+02	NA	9.96E+00	NA	2.89E+05	NA	3.20E+02	NA	5.19E+01	NA
Dinoseb	7.77E+02	NA	1.02E+04	NA	6.19E+04	NA	4.98E+03	NA	3.33E+07	NA	1.60E+05	NA	2.59E+04	NA
Disulfoton	3.11E-01	NA	4.07E+00	NA	2.47E+01	NA	1.99E+00	NA	2.48E+03	NA	6.38E+01	NA	1.04E+01	NA
Endosulfan	4.66E+01	NA	6.09E+02	NA	3.69E+03	NA	2.97E+02	NA	6.28E+05	NA	9.47E+03	NA	1.55E+03	NA
Endosulfan II	4.66E+01	NA	6.09E+02	NA	3.69E+03	NA	2.97E+02	NA	6.28E+05	NA	9.47E+03	NA	1.55E+03	NA
Endodulfan sulfate	4.66E+01	NA	6.09E+02	NA	3.69E+03	NA	2.97E+02	NA	6.28E+05	NA	9.47E+03	NA	1.55E+03	NA
Endrin	2.32E+00	NA	3.03E+01	NA	1.82E+02	NA	1.46E+01	NA	1.10E+04	NA	4.54E+02	NA	7.59E+01	NA
Endrin aldehyde	2.32E-01	NA	3.03E+00	NA	1.82E+01	NA	1.46E+00	NA	4.00E+02	NA	4.54E+01	NA	7.59E+00	NA
Endrin Ketone	2.32E-01	NA	3.03E+00	NA	1.82E+01	NA	1.46E+00	NA	NA	NA	4.54E+01	NA	7.59E+00	NA
Ethoprop	3.11E-02	NA	4.07E-01	NA	2.47E+00	NA	1.99E-01	NA	3.76E+02	NA	6.38E+00	NA	1.04E+00	NA
Famphur	1.94E-01	NA	2.54E+00	NA	1.54E+01	NA	1.24E+00	NA	8.40E+03	NA	3.98E+01	NA	6.47E+00	NA
Fensulfothion	1.94E-01	NA	2.54E+00	NA	1.54E+01	NA	1.24E+00	NA	8.82E+03	NA	3.98E+01	NA	6.47E+00	NA
Fenthion	1.94E-01	NA	2.54E+00	NA	1.54E+01	NA	1.24E+00	NA	1.45E+03	NA	3.98E+01	NA	6.47E+00	NA
Heptachlor	3.88E+00	1.40E-01	5.08E+01	6.20E-01	3.08E+02	9.58E+00	2.48E+01	7.56E+00	2.43E+04	7.56E+02	7.92E+02	3.21E+02	1.29E+02	1.45E+00
Heptachlor Epoxide	1.01E-01	6.91E-02	1.32E+00	3.06E-01	8.01E+00	4.74E+00	6.44E-01	3.74E+00	2.11E+02	1.25E+02	2.06E+01	1.59E+02	3.35E+00	7.18E-01
Malathion	1.55E+02	NA	2.03E+03	NA	1.23E+04	NA	9.92E+02	NA	6.22E+06	NA	3.17E+04	NA	5.17E+03	NA
Merphos	2.33E-01	NA	3.05E+00	NA	1.85E+01	NA	1.49E+00	NA	5.36E+01	NA	4.78E+01	NA	7.76E+00	NA
Methoxychlor	3.89E+01	NA	5.08E+02	NA	3.09E+03	NA	2.49E+02	NA	1.89E+05	NA	8.01E+03	NA	1.30E+03	NA
Methyl parathion	1.94E+00	NA	2.54E+01	NA	1.54E+02	NA	1.24E+01	NA	4.78E+04	NA	3.98E+02	NA	6.47E+01	NA
Mevinphos	1.94E-01	NA	2.54E+00	NA	1.54E+01	NA	1.24E+00	NA	NA	NA	3.96E+01	NA	6.45E+00	NA
Naled	1.55E+01	NA	2.03E+02	NA	1.23E+03	NA	9.93E+01	NA	1.61E+06	NA	3.18E+03	NA	5.17E+02	NA
Parathion	4.66E+01	NA	6.10E+02	NA	3.70E+03	NA	2.98E+02	NA	4.47E+05	NA	9.55E+03	NA	1.55E+03	NA
Phorate	1.55E+00	NA	2.03E+01	NA	1.24E+02	NA	9.96E+00	NA	1.37E+04	NA	3.20E+02	NA	5.19E+01	NA
Ronnel	3.88E+02	NA	5.08E+03	NA	3.09E+04	NA	2.48E+03	NA	1.22E+06	NA	7.96E+04	NA	1.29E+04	NA
Stirophos	2.33E+02	NA	3.05E+03	NA	1.86E+04	NA	1.49E+03	NA	2.99E+06	NA	4.81E+04	NA	7.78E+03	NA
Sulfotep	3.88E+00	NA	5.08E+01	NA	3.09E+02	NA	2.48E+01	NA	3.19E+04	NA	7.96E+02	NA	1.29E+02	NA
Thionazin	6.99E-01	NA	9.14E+00	NA	5.56E+01	NA	4.47E+00	NA	NA	NA	1.43E+02	NA	2.33E+01	NA
Tokuthion	3.88E+01	NA	5.08E+02	NA	3.09E+03	NA	2.48E+02	NA	NA	NA	7.96E+03	NA	1.29E+03	NA
Toxaphene	NA	5.72E-01	NA	2.54E+00	NA	3.93E+01	NA	3.10E+01	NA	1.81E+03	NA	1.32E+03	NA	5.96E+00
Trichloronate	3.88E+01	NA	5.08E+02	NA	3.09E+03	NA	2.48E+02	NA	9.56E+04	NA	7.96E+03	NA	1.29E+03	NA
O,O,O-Triethyl phosphorothioate	1.94E-02	NA	2.54E-01	NA	1.54E+00	NA	1.24E-01	NA	NA	NA	3.98E+00	NA	6.47E-01	NA
Herbicides (using SVOC equations)														
2,4-D	7.77E+01	NA	1.02E+03	NA	6.19E+03	NA	4.98E+02	NA	NA	NA	1.60E+04	NA	2.59E+03	NA
2,4-DB	6.22E+01	NA	8.13E+02	NA	4.95E+03	NA	3.98E+02	NA	NA	NA	1.28E+04	NA	2.07E+03	NA
Dicamba	2.33E+02	NA	3.05E+03	NA	1.86E+04	NA	1.49E+03	NA	NA	NA	4.81E+04	NA	7.78E+03	NA
Dichloroprop	6.21E+00	NA	8.13E+01	NA	4.94E+02	NA	3.97E+01	NA	NA	NA	1.27E+03	NA	2.07E+02	NA
MCPA	3.88E+00	NA	5.08E+01	NA	3.09E+02	NA	2.48E+01	NA	NA	NA	7.98E+02	NA	1.29E+02	NA
MCPP	7.77E+00	NA	1.02E+02	NA	6.18E+02	NA	4.97E+01	NA	NA	NA	1.60E+03	NA	2.59E+02	NA
2,4,5-T	7.77E+01	NA	1.02E+03	NA	6.18E+03	NA	4.97E+02	NA	NA	NA	1.59E+04	NA	2.59E+03	NA
2,4,5-TP	6.21E+01	NA	8.13E+02	NA	4.94E+03	NA	3.97E+02	NA	NA	NA	1.27E+04	NA	2.07E+03	NA
Polychlorinated Dibenzo-p-Dioxins and Dibenzofurans (using SVOC equations)														
TCDD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,3,7,8-TCDD	NA	4.20E-06	NA	1.87E-05	NA	2.88E-04	NA	2.28E-04	NA	1.57E-03	NA	9.77E-03	NA	4.39E-05
TCDF	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,3,7,8-TCDF	NA	4.20E-05	NA	1.87E-04	NA	2.88E-03	NA	2.28E-03	NA	2.60E-02	NA	9.77E-02	NA	4.39E-04

Attachment C-1

Site Specific Screening Levels
Soil
Fort McClellan, Calhoun County, Alabama

Chemical	Table A4 Resident Noncancer SSSL (mg/kg)	Table A4 Resident Cancer SSSL (mg/kg)	Table A5 Groundskeeper Noncancer SSSL (mg/kg)	Table A5 Groundskeeper Cancer SSSL (mg/kg)	Table A6 Recreational Site User Noncancer SSSL (mg/kg)	Table A6 Recreational Site User Cancer SSSL (mg/kg)	Table A7 Construction Worker Noncancer SSSL (mg/kg)	Table A7 Construction Worker Cancer SSSL (mg/kg)	Table A8 Venison Noncancer SSSL (mg/kg)	Table A8 Venison Cancer SSSL (mg/kg)	Table A9 Highway Worker Noncancer SSSL (mg/kg)	Table A9 Highway Worker Cancer SSSL (mg/kg)	National Guardsperson Noncancer SSSL (mg/kg)	National Guardsperson Cancer SSSL (mg/kg)
1,2,3,4,6,7,8-Heptachlorodibenzofuran	NA	4.20E-04	NA	1.87E-03	NA	2.88E-02	NA	2.28E-02	NA	6.05E-02	NA	9.77E-01	NA	4.39E-03
HpCDD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	NA	4.20E-04	NA	1.87E-03	NA	2.88E-02	NA	2.28E-02	NA	4.98E-02	NA	9.77E-01	NA	4.39E-03
HpCDF	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8,9-Heptachlorodibenzofuran	NA	4.20E-04	NA	1.87E-03	NA	2.88E-02	NA	2.28E-02	NA	6.05E-02	NA	9.77E-01	NA	4.39E-03
1,2,3,4,7,8-Hexachlorodibenzofuran	NA	4.20E-05	NA	1.87E-04	NA	2.88E-03	NA	2.28E-03	NA	9.83E-03	NA	9.77E-02	NA	4.39E-04
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	NA	4.20E-05	NA	1.87E-04	NA	2.88E-03	NA	2.28E-03	NA	7.35E-03	NA	9.77E-02	NA	4.39E-04
1,2,3,6,7,8-Hexachlorodibenzofuran	NA	4.20E-05	NA	1.87E-04	NA	2.88E-03	NA	2.28E-03	NA	9.83E-03	NA	9.77E-02	NA	4.39E-04
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	NA	4.20E-05	NA	1.87E-04	NA	2.88E-03	NA	2.28E-03	NA	7.35E-03	NA	9.77E-02	NA	4.39E-04
HxCDF	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-Hexachlorodibenzofuran	NA	4.20E-05	NA	1.87E-04	NA	2.88E-03	NA	2.28E-03	NA	9.83E-03	NA	9.77E-02	NA	4.39E-04
HxCDD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	NA	4.20E-05	NA	1.87E-04	NA	2.88E-03	NA	2.28E-03	NA	7.35E-03	NA	9.77E-02	NA	4.39E-04
2,3,4,6,7,8-Hexachlorodibenzofuran	NA	4.20E-05	NA	1.87E-04	NA	2.88E-03	NA	2.28E-03	NA	9.83E-03	NA	9.77E-02	NA	4.39E-04
PeCDD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	NA	8.39E-06	NA	3.74E-05	NA	5.76E-04	NA	4.57E-04	NA	1.97E-03	NA	1.95E-02	NA	8.79E-05
PeCDF	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8-Pentachlorodibenzofuran	NA	8.39E-05	NA	3.74E-04	NA	5.76E-03	NA	4.57E-03	NA	3.20E-02	NA	1.95E-01	NA	8.79E-04
2,3,4,7,8-Pentachlorodibenzofuran	NA	8.39E-06	NA	3.74E-05	NA	5.76E-04	NA	4.57E-04	NA	3.20E-03	NA	1.95E-02	NA	8.79E-05
Octochlorodibenzofuran	NA	4.20E-03	NA	1.87E-02	NA	2.88E-01	NA	2.28E-01	NA	2.78E-01	NA	9.77E+00	NA	4.39E-02
Octochlorodibenzo-p-dioxin	NA	4.20E-03	NA	1.87E-02	NA	2.88E-01	NA	2.28E-01	NA	3.38E-01	NA	9.77E+00	NA	4.39E-02
Chemical Agent Breakdown (using SVOC equations)														
p-Chlorophenylmethylsulfone	3.88E+00	NA	5.08E+01	NA	3.09E+02	NA	2.48E+01	NA	NA	NA	7.96E+02	NA	1.29E+02	NA
p-Chlorophenylmethylsulfoxide	3.88E+00	NA	5.08E+01	NA	3.09E+02	NA	2.48E+01	NA	NA	NA	7.96E+02	NA	1.29E+02	NA
1,4-Dithiane	7.77E+01	NA	1.02E+03	NA	6.17E+03	NA	4.97E+02	NA	NA	NA	1.59E+04	NA	2.59E+03	NA
1,4-Oxathiane	7.77E+00	NA	1.02E+02	NA	6.17E+02	NA	4.97E+01	NA	NA	NA	1.59E+03	NA	2.59E+02	NA
Thiodiglycol	3.11E+02	NA	3.57E+03	NA	2.47E+04	NA	1.75E+03	NA	NA	NA	5.04E+04	NA	8.89E+03	NA
Diisopropylmethylphosphonic Acid	6.21E+02	NA	8.13E+03	NA	4.94E+04	NA	3.97E+03	NA	NA	NA	1.27E+05	NA	2.07E+04	NA
Dimethylmethylphosphonic Acid	6.21E+02	NA	8.13E+03	NA	4.94E+04	NA	3.97E+03	NA	NA	NA	1.27E+05	NA	2.07E+04	NA
Ethylmethylphosphonic Acid	6.21E+02	NA	8.13E+03	NA	4.94E+04	NA	3.97E+03	NA	NA	NA	1.27E+05	NA	2.07E+04	NA
Isopropylmethylphosphonic Acid	7.77E+02	NA	1.02E+04	NA	6.17E+04	NA	4.97E+03	NA	NA	NA	1.59E+05	NA	2.59E+04	NA
Methylphosphonic Acid	6.21E+02	NA	8.13E+03	NA	4.94E+04	NA	3.97E+03	NA	NA	NA	1.27E+05	NA	2.07E+04	NA
Explosives (using SVOC equations)														
2-Amino-4,6-dinitrotoluene	4.64E-01	NA	6.08E+00	NA	3.66E+01	NA	2.94E+00	NA	NA	NA	9.25E+01	NA	1.53E+01	NA
4-Amino-2,6-dinitrotoluene	4.64E-01	NA	6.08E+00	NA	3.66E+01	NA	2.94E+00	NA	NA	NA	9.25E+01	NA	1.53E+01	NA
1,3-Dinitrobenzene	7.76E-01	NA	1.02E+01	NA	6.16E+01	NA	4.95E+00	NA	NA	NA	1.58E+02	NA	2.58E+01	NA
2,4-Dinitrotoluene	1.55E+01	9.27E-01	2.03E+02	4.19E+00	1.24E+03	6.37E+01	9.96E+01	5.13E+01	NA	NA	3.20E+03	2.23E+03	5.19E+02	9.84E+00
2,6-Dinitrotoluene	7.77E+00	9.27E-01	1.02E+02	4.19E+00	6.19E+02	6.37E+01	4.98E+01	5.13E+01	NA	NA	1.60E+03	2.23E+03	2.59E+02	9.84E+00
HMX	3.75E+02	NA	4.94E+03	NA	2.77E+04	NA	2.17E+03	NA	NA	NA	6.00E+04	NA	1.13E+04	NA
Nitroglycerin	NA	4.57E+01	NA	2.04E+02	NA	3.16E+03	NA	2.56E+03	NA	NA	NA	1.15E+05	NA	4.93E+02
RDX	2.33E+01	6.30E+00	3.05E+02	2.85E+01	1.85E+03	4.33E+02	1.49E+02	3.48E+02	NA	NA	4.79E+03	1.51E+04	7.77E+02	6.68E+01
Tetryl	7.77E+01	NA	1.02E+03	NA	6.17E+03	NA	4.97E+02	NA	NA	NA	1.59E+04	NA	2.59E+03	NA
1,3,5-Trinitrobenzene	2.32E+02	NA	3.04E+03	NA	1.83E+04	NA	1.47E+03	NA	NA	NA	4.62E+04	NA	7.65E+03	NA
2,4,6-Trinitrotoluene	3.87E+00	2.08E+01	5.07E+01	9.46E+01	3.05E+02	1.42E+03	2.45E+01	1.14E+03	NA	NA	7.71E+02	4.86E+04	1.27E+02	2.19E+02

Attachment C-2

STEPS FOR ESTIMATING UPPER TOLERANCE LIMITS

The raw data tables within the SAIC (1998) **Background Metals Survey Report** were utilized to calculate the 95% Upper Tolerance Limits (UTLs). All "X" qualified data were rejected and all field duplicates were averaged with the original data point.

(1) If greater than 50% non-detects, assume non-parametric distribution.
(2) Otherwise, determine distribution of data (normal, lognormal, or non-parametric using the Shapiro-Wilk or Shapiro-Francia Test)
(3) Based on best-fit distribution the UTL is determined

Upper Tolerance Limit for a Normally Distributed Data Set

The upper 95 percent tolerance limit (UTL-$N_{0.95,0.95}$) is actually the upper 95 percent confidence limit for the 95th quantile for a data set fitting a normal distribution. Its purpose is to define that concentration of a constituent below which, with 95 percent certainty, all values in a population will fall. The UTL-$N_{0.95,0.95}$ was calculated using the following equation:

$$UTL\text{-}N_{0.95,0.95} = \bar{x} + s\,K_{0.95,0.95}$$

where:

$\underline{x}$ = arithmetic mean
s = sample standard deviation
$K_{0.95,0.95}$ = factor for estimating the 95 percent confidence limit for the 95th quantile (Lieberman, 1958; Table 5)

Upper Tolerance Limit for a Lognormally Distributed Data Set

The upper 95 percent tolerance limit (UTL-$L_{0.95,0.95}$) is actually the upper 95 percent confidence limit for the 95th quantile for a data set fitting a lognormal distribution. Its purpose is to define that concentration of a constituent below which, with 95 percent certainty, all values in a population will fall. The UTL-$L_{0.95,0.95}$ was calculated using the following equation:

$$UTL\text{-}L_{0.95,0.95} = \exp\left(\bar{y} + s_y\,K_{0.95,0.95}\right)$$

where:

$\underline{y}$ = arithmetic mean of the log transformed data, y = ln (x)
s_y = sample standard deviation of the log-transformed data
$K_{0.95,0.95}$ = factor for estimating the 95 percent confidence limit for the 95th quantile (Gilbert, 1987; Table A-3)

Upper Tolerance Limit for a Non-Parametric Data Set

The upper confidence limit for a non-parametric data set equation is used for data sets with greater than 50 percent non-detects or the data are neither normally, nor lognormally, distributed. The data set is first sorted in ascending order. Then the statistical order for the UTL-NP is computed by:

$$O = p(n+1)$$

where:

O = statistical order

p = proportion (95 percent)

n = number of data points

and UTL-NP would then be the Oth largest data point in the ordered data set. If O is an integer with a fraction, it is rounded up to its nearest integer.

Attachment C-3
Parcel 79 IEUBK Lead Model Input Parameters

LEAD MODEL Version 0.99d

AIR CONCENTRATION: 0.100 µg Pb/m3 DEFAULT
Indoor AIR Pb Conc: 30.0 percent of outdoor.
Other AIR Parameters:

Age	Time Outdoors (hr)	Vent. Rate (m3/day)	Lung Abs. (%)
0-1	1.0	2.0	32.0
1-2	2.0	3.0	32.0
2-3	3.0	5.0	32.0
3-4	4.0	5.0	32.0
4-5	4.0	5.0	32.0
5-6	4.0	7.0	32.0
6-7	4.0	7.0	32.0

DIET: DEFAULT

DRINKING WATER Conc: 24.50 µg Pb/L
WATER Consumption: DEFAULT

SOIL & DUST:
Soil: constant conc.
Dust: constant conc.

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
0-1	2210.0	200.0
1-2	2210.0	200.0
2-3	2210.0	200.0
3-4	2210.0	200.0
4-5	2210.0	200.0
5-6	2210.0	200.0
6-7	2210.0	200.0

Additional Dust Sources: None DEFAULT

PAINT Intake: 0.00 µg Pb/day DEFAULT

MATERNAL CONTRIBUTION: Infant Model
Maternal Blood Conc: 2.50 µg Pb/dL

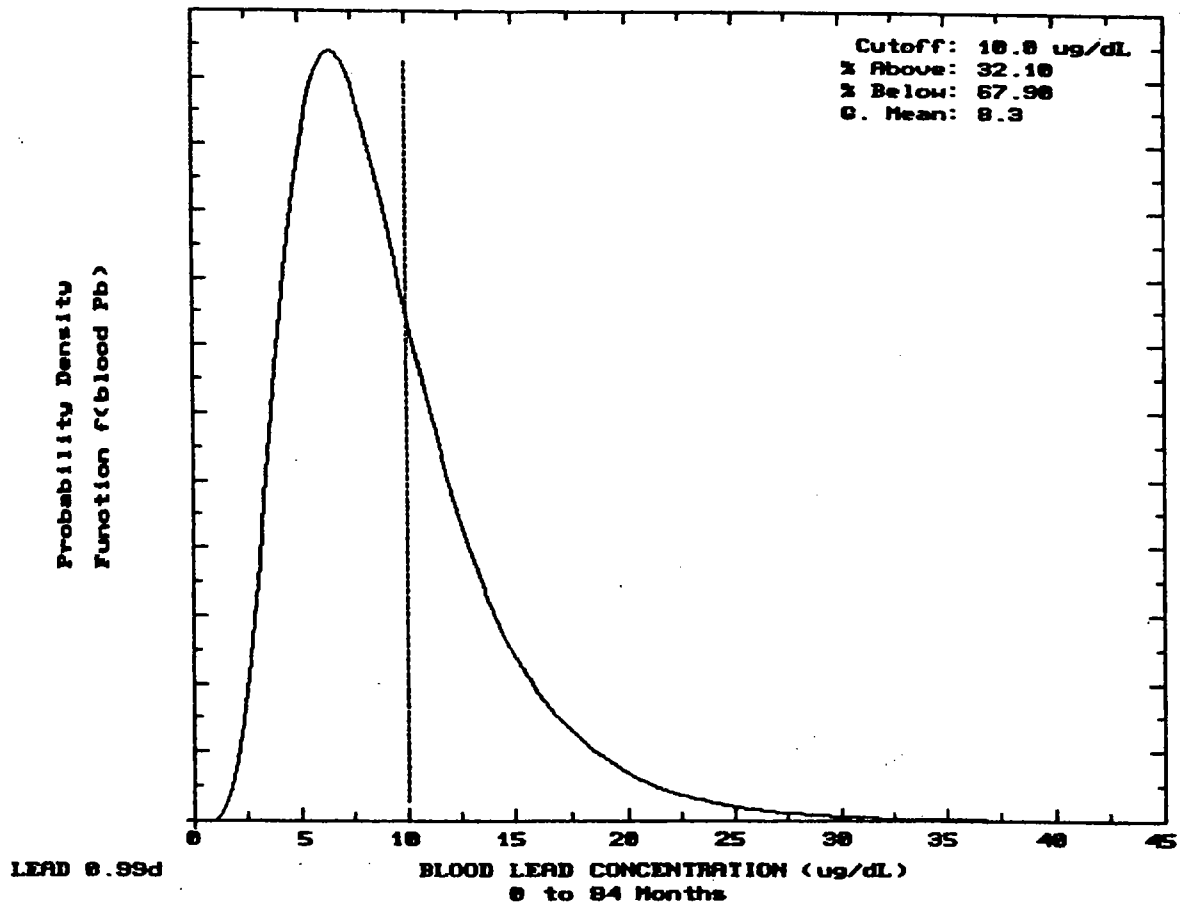
CALCULATED BLOOD Pb and Pb UPTAKES:

YEAR	Blood Level (µg/dL)	Total Uptake (µg/day)	Soil+Dust Uptake (µg/day)
0.5-1:	12.9	24.90	20.99
1-2:	15.2	38.00	31.60
2-3:	14.5	39.95	32.83
3-4:	14.1	41.42	34.04
4-5:	12.1	35.23	27.17
5-6:	10.6	33.96	25.19
6-7:	9.5	33.49	24.19

YEAR	Diet Uptake (µg/day)	Water Uptake (µg/day)	Paint Uptake (µg/day)	Air Uptake (µg/day)
0.5-1:	2.06	1.83	0.00	0.02
1-2:	2.04	4.33	0.00	0.03
2-3:	2.38	4.67	0.00	0.06
3-4:	2.37	4.94	0.00	0.07
4-5:	2.46	5.52	0.00	0.07
5-6:	2.68	6.00	0.00	0.09
6-7:	3.01	6.21	0.00	0.09

Attachment C-4

Blood Lead Concentration vs. Probability Density
IEUBK Lead Blood Model for Children
Parcel 79, Fort McClellan, Alabama



Attachment C-5

Mann-Whitney U Test Result Summary
Site Data vs Background Data
Parcel 80
Fort McClellan, Alabama

Chemical	Rank Sum Site	Rank Sum Bkg	U	Z	p-Level	Z Adjusted	p-Level	Valid N Site	Valid N Bkg	2*1sided exact p
Lead - Surface Water	237.5	1778.5	67.5	1.970622	0.048776	2.005137	0.044957	5	58	0.046456

Attachment C-6a

Parcel 80, Landfill 3
Future Groundwater Model Equations
for beta-BHC

$$K_d = f_{oc} \bullet K_{oc}$$

where:

K_d	=	soil-water distribution coefficient (L/kg, calculated)
f_{oc}	=	organic carbon content of soil (0.001, site-specific, unitless)
K_{oc}	=	soil organic carbon-water partition coefficient (1,259 L/kg, chemical-specific).

$$PF = \frac{P_{soil}}{(H' \bullet \theta_a) + \theta_w + (P_{soil} \bullet K_d)}$$

where:

PF	=	soil-water partition factor (kg/L, calculated)
P_{soil}	=	soil bulk density (0.65 g/cm^3, default)
H'	=	Henry's law constant (3.1 x 10^{-5}, unitless, chemical-specific)
θ_a	=	air-filled soil porosity (0.28, unitless, default)
θ_w	=	water-filled soil porosity (0.16, unitless, default)
K_d	=	soil-water distribution coefficient (L/kg, calculated).

$$SSSSL = \frac{SSSL_{GW-RES} \bullet DAF}{PF}$$

where:

SSSSL	=	site-specific soil screening level (mg/kg, calculated)
$SSSL_{GW-RES}$	=	site-specific screening level, groundwater, resident (mg/L)
DAF	=	dilution-attenuation factor (1, unitless, default)
PF	=	soil-water partition factor (kg/L, calculated).

$$ILCR = \frac{MDC \bullet TR}{SSSSL}$$

where:

ILCR	=	incremental lifetime cancer risk from future groundwater conditions (unitless, calculated)
MDC	=	maximum detected concentration (3.7E-03, mg/kg – for beta BHC in total soil)
TR	=	target risk (unitless, 1E-06)
SSSSL	=	site-specific soil screening level (calculated).

Attachment C-6b

Future Groundwater Model for Beta BHC
Parcel 80, Fort McClellan, Alabama

Variables:

Fraction of organic carbon, foc (unitless)
site-specific 0.001

Organic carbon-water partition coefficient, Koc (beta-BHC) (L/kg)
chemical specific 1259

Soil Bulk Density, Psoil (g/cm3)
very conservative default 0.65

Henry's law constant, H' (unitless)
chemical specific 3.10E-05

Air-filled soil porosity, Theta a (unitless)
default 0.28

Water-filled soil porosity, Theta w (unitless)
default 0.16

Site-specific screening level for groundwater-resident, SSSLgw-res, (mg/L)
(IT, 2000) 3.61E-05

Dilution attenuation Factor, DAF (unitless)
very conservative default 1

Maximum detected concentration in total soil, MDC (beta-BHC) (mg/kg)
site-specific 3.70E-03

Target cancer risk, TR (unitless)
default 1.00E-06

CHEMICAL NAME	MDC mg/kg	Soil-Water Distribution Coefficient (Kd) L/kg	Soil-Water Partition Factor (PF) kg/L	Site-Specific Soil Screening Level (SSSSL) mg/kg	Incremental Lifetime Cancer Risk (ILCR) unitless
Beta-BHC	3.70E-03	1.26E+00	6.64E-01	5.43E-05	6.81E-05

Attachment C-7

Mann-Whitney U Test Result Summary
Site Data vs Background Data
Parcel 81
Fort McClellan, Alabama

Chemical	Rank Sum Site	Rank Sum Bkg	U	Z	p-level	Z adjusted	p-level	Valid N Site	Valid N Bkg	2*1sided exact p
Antimony - Groundwater	182	1529	98	0.955786	0.339187	1.001838	0.31643	5	53	0.35709

Attachment C-8

Mann-Whitney U Test Result Summary
Site Data vs Background Data
Parcels 126 and 227,
Fort McClellan, Alabama

Chemical	Rank Sum Site	Rank Sum Bkg	U	Z	p-level	Z adjusted	p-level	Valid N Site	Valid N Bkg	2*1sided exact p
Arsenic - Sediment	333.5	1496.5	118.5	1.946265	0.051632	1.94632	0.051625	8	52	0.050349
Iron - Surface Water	236	1909	139	0.861193	0.389138	0.861231	0.389117	6	59	0.404869
Manganese - Groundwater	729	2197	367	1.439753	0.149947	1.441143	0.149554	16	60	0.153076
Lead - Groundwater	664	2339	448	0.502202	0.615529	0.506745	0.612337	16	61	0.623158

Attachment C-9
Parcel 231 IEUBK Lead Model Input Parameters

LEAD MODEL Version 0.99d

AIR CONCENTRATION: 0.100 µg Pb/m3 DEFAULT
Indoor AIR Pb Conc: 30.0 percent of outdoor.
Other AIR Parameters:

Age	Time Outdoors (hr)	Vent. Rate (m3/day)	Lung Abs. (%)
0-1	1.0	2.0	32.0
1-2	2.0	3.0	32.0
2-3	3.0	5.0	32.0
3-4	4.0	5.0	32.0
4-5	4.0	5.0	32.0
5-6	4.0	7.0	32.0
6-7	4.0	7.0	32.0

DIET: DEFAULT

DRINKING WATER Conc: 126.00 µg Pb/L
WATER Consumption: DEFAULT

SOIL & DUST:
Soil: constant conc.
Dust: constant conc.

Age	Soil (µg Pb/g)	House Dust (µg Pb/g)
0-1	93.0	200.0
1-2	93.0	200.0
2-3	93.0	200.0
3-4	93.0	200.0
4-5	93.0	200.0
5-6	93.0	200.0
6-7	93.0	200.0

Additional Dust Sources: None DEFAULT

PAINT Intake: 0.00 µg Pb/day DEFAULT

MATERNAL CONTRIBUTION: Infant Model
Maternal Blood Conc: 2.50 µg Pb/dL

CALCULATED BLOOD Pb and Pb UPTAKES:

YEAR	Blood Level (µg/dL)	Total Uptake (µg/day)	Soil+Dust Uptake (µg/day)
0.5-1:	8.5	15.99	3.21
1-2:	12.0	30.71	4.65
2-3:	11.9	32.81	4.78
3-4:	11.7	34.17	4.92
4-5:	11.3	34.77	3.75
5-6:	10.9	36.60	3.42
6-7:	10.4	37.61	3.26

YEAR	Diet Uptake (µg/day)	Water Uptake (µg/day)	Paint Uptake (µg/day)	Air Uptake (µg/day)
0.5-1:	2.30	10.46	0.00	0.02
1-2:	2.19	23.83	0.00	0.03
2-3:	2.52	25.45	0.00	0.06
3-4:	2.49	26.70	0.00	0.07
4-5:	2.47	28.49	0.00	0.07
5-6:	2.64	30.45	0.00	0.09
6-7:	2.95	31.31	0.00	0.09