MASSACHUSETTS WATER QUALITY STANDARDS FOR DISCHARGE TO SURFACE WATERS ARE APPLICABLE TO DISCHARGES TO THE UNNAMED STREAM. THE UNNAMED STREAM IS CLASSIFIED AS CLASS B, FOR THE USES AND PROTECTION OF PROPAGATION OF FISH, AQUATIC LIFE AND WILDLIFE, AND FOR PRIMARY AND SECONDARY CONTACT RECREATION. MASSACHUSETTS STANDARDS STATE THAT WATER SHALL BE FREE FROM POLLUTANTS THAT EXCEED THE RECOMMENDED LIMITS, THAT ARE IN CONCENTRATIONS INJURIOUS OR TOXIC TO HUMANS, OR THAT EXCEED SITE-SPECIFIC SAFE EXPOSURE LEVELS DETERMINED BY BIOASSAY USING SENSITIVE SPECIES. AT SULLIVAN'S LEDGE, THESE STANDARDS WILL BE ATTAINED BY USING EITHER AMBIENT WATER QUALITY STANDARDS OR WHOLE EFFLUENT TOXICITY LIMITS. BIOASSAY TESTS MAY ALSO BE PERFORMED TO DETERMINE SITE-SPECIFIC SAFE EXPOSURE LEVELS. BECAUSE THE EFFLUENT FROM THE TREATMENT FACILITIES AND DEWATERING ACTIVITIES WILL BE DISCHARGED DIRECTLY INTO THE UNNAMED STREAM AT A POINT CONSIDERED PART OF THE SITE, NO PERMIT IS REQUIRED.

ATR

STANDARDS FOR PARTICULATE MATTER UNDER THE CLEAN AIR ACT AND DEP AIR POLLUTION REGULATIONS ARE APPLICABLE AND WILL BE ATTAINED DURING CONSTRUCTION PHASES.

OTHER LAWS

THE SELECTED REMEDY AND THE CONTINGENCY REMEDY WILL COMPLY WITH CERTAIN OTHER LAWS AND REGULATIONS, ALTHOUGH STRICTLY SPEAKING, THEY ARE NOT ARARS BECAUSE THEY ARE NOT ENVIRONMENTAL LAWS OR RELATE ONLY TO OFF-SITE ACTIVITIES. THESE LAWS INCLUDE, BUT ARE NOT LIMITED TO: THE OCCUPATIONAL HEALTH AND SAFETY ACT, 29 USC 651 ET SEC.; DEPARTMENT OF TRANSPORTATION HAZARDOUS MATERIAL TRANSPORTATION ACT REGULATIONS, 49 CFR 171-179, 387; MASSACHUSETTS REQUIREMENTS FOR TRANSPORTERS OF HAZARDOUS WASTE, 30 CMR 30.400; AND MASSACHUSETTS RIGHT TO KNOW REQUIREMENTS, 105 CMR 670.00, 310 CMR 33.00, AND 454 CMR 21.00.

C. THE SELECTED AND CONTINGENCY REMEDIES ARE COST-EFFECTIVE

IN THE AGENCY'S JUDGMENT, THE SELECTED AND CONTINGENCY REMEDIES ARE COST EFFECTIVE, I.E., THE REMEDIES AFFORD OVERALL EFFECTIVENESS PROPORTIONAL TO THEIR COSTS. IN SELECTING THESE REMEDIES, ONCE EPA IDENTIFIED ALTERNATIVES THAT ARE PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT AND THAT ATTAIN, OR, AS APPROPRIATE, WAIVE ARARS, EPA EVALUATED THE OVERALL EFFECTIVENESS OF EACH ALTERNATIVE BY ASSESSING THE RELEVANT THREE CRITERIA- LONG TERM EFFECTIVENESS AND PERMANENCE; REDUCTION IN TOXICITY, MOBILITY, AND VOLUME THROUGH TREATMENT; AND SHORT TERM EFFECTIVENESS, IN COMBINATION. THE RELATIONSHIP OF THE OVERALL EFFECTIVENESS OF THE SELECTED AND CONTINGENCY REMEDIAL ALTERNATIVES WAS DETERMINED TO BE PROPORTIONAL TO THEIR COSTS.

1. SELECTED REMEDY

THE COSTS ASSOCIATED WITH THE SELECTED REMEDY ARE:

ESTIMATED CAPITAL COSTS: \$2,640,000

ESTIMATED OPERATION AND MAINTENANCE

COST (NET PRESENT WORTH): \$164,000

ESTIMATED TOTAL COST (NET PRESENT WORTH): \$2,800,000

OF THE SOURCE CONTROL ALTERNATIVES DISCUSSED IN SECTION VIII., EPA HAS DETERMINED THAT THE SELECTED REMEDY (EXCAVATION, DEWATERING, DISPOSAL UNDER AN IMPERMEABLE CAP) MAY BE ONLY SLIGHTLY LESS EFFECTIVE IN THE LONG-TERM AS ALTERNATIVE 6(A) (SOLIDIFICATION/STABILIZATION, DISPOSAL AT THE DISPOSAL AREA) AND ALTERNATIVE 6(B) (SOLIDIFICATION/STABILIZATION, DISPOSAL AT GOLF COURSE LANDFILL) BECAUSE UNDER THE SELECTED REMEDY, THE CONTAMINANTS WOULD BE PLACED IN A RCRA LANDFILL THAT WOULD INCLUDE GROUNDWATER TREATMENT AND MONITORING TO ENSURE THE EFFECTIVENESS OF THE LANDFILL. ALTHOUGH THIS SELECTED REMEDY DOES NOT PROVIDE PERMANENCE THROUGH TREATMENT, UNLESS REQUIRED BY THE LAND DISPOSAL RESTRICTIONS, IT MAY NOT BE NECESSARY TO SOLIDIFY OR OTHERWISE TREAT EXCAVATED MIDDLE MARSH AND ADJACENT WETLAND SEDIMENT/SOILS BECAUSE THE LEVELS OF PCBS ARE RELATIVELY LOW, LESS THAN 50 PPM, AND WOULD BE PROPERLY CONTAINED UNDER A RCRA ENGINEERED CAP TO BE CONSTRUCTED AS PART OF THE FIRST OPERABLE UNIT. WHILE THE SELECTED REMEDY DOES NOT PROVIDE THE SAME DEGREE OF PERMANENCE AS ALTERNATIVES REQUIRING SOLVENT EXTRACTION AND/OR INCINERATION, FOR THE MIDDLE MARSH OPERABLE UNIT UNCERTAINTY ASSOCIATED WITH THE LONG-TERM EFFECTIVENESS OF THE SELECTED REMEDY IN CONTAINING RELATIVELY LOW LEVELS OF PCBS SHALL BE MINIMIZED BY ENGINEERING AND INSTITUTIONAL CONTROLS.

IN COMPARISON TO ALL OTHER CONTAINMENT/TREATMENT ALTERNATIVES, THE SELECTED REMEDY IS THE LEAST COSTLY, WITH A PRESENT WORTH COST OF \$2,800,000. IN CONTRAST, PRESENT WORTH COSTS OF OTHER ALTERNATIVES REQUIRING TREATMENT INCLUDE: SOLIDIFICATION/DISPOSAL FROM \$5.0 TO \$6.0 MILLION; SOLVENT EXTRACTION AT \$7.8 MILLION; AND ON-SITE INCINERATION FROM \$9.8 TO \$10.0 MILLION.

2. CONTINGENCY REMEDY

THE COSTS ASSOCIATED WITH THE CONTINGENCY REMEDY ARE:

EPA Superfund Record of Decision:

SULLIVAN'S LEDGE EPA ID: MAD980731343 OU 02 NEW BEDFORD, MA 09/27/1991