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Record of Decision:

WHITMOYER LABORATORIES
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WATER-IMMISCIBLE LIQUIDS, WATER-MISCIBLE LIQUIDS WITH HIGH ARSENIC CONTENT, AND WATER-MISCIBLE LIQUIDS WITH LOW ARSENIC CONTENT.

SEVENTY-TWO GALLONS OF MISCELLANEOUS LIQUIDS ARE CURRENTLY UNCLASSIFIABLE. IT IS EXPECTED THAT THESE WASTES WILL FALL INTO ONE OF THESE THREE CATEGORIES WHEN ADDITIONAL INFORMATION ON THESE WASTES IS COLLECTED DURING THE REMEDIAL DESIGN PHASE.

TABLE 1 PRESENTS THE CLASSIFICATION OF THESE CONCENTRATED LIQUIDS ADDRESSED BY THIS DOCUMENT. ALTOGETHER, THERE ARE APPROXIMATELY 69,000 GALLONS OF CONCENTRATED LIQUIDS. OF THIS AMOUNT, 39,000 GALLONS (57 PERCENT) ARE CLASSIFIED AS WATER-MISCIBLE LIQUIDS WITH LOW ARSENIC CONTENT; 25,000 GALLONS (36 PERCENT) ARE CLASSIFIED AS WATER-MISCIBLE LIQUIDS WITH HIGH ARSENIC CONTENT; AND 5,000 GALLONS (7 PERCENT) ARE CLASSIFIED AS WATER-IMMISCIBLE LIQUIDS.

#SSR
SUMMARY OF SITE RISKS

PROPER MAINTENANCE AND CONTROLS ARE NEEDED AT THE SITE TO PREVENT RELEASES OF THE CONCENTRATED LIQUIDS WHICH MAY PRESENT AN IMMINENT AND SUBSTANTIAL ENDANGERMENT TO PUBLIC HEALTH AND THE ENVIRONMENT. THE GREATEST RISKS TO HUMAN HEALTH FROM THE FACILITY ARE ASSOCIATED WITH DIRECT CONTACT WITH THE CONCENTRATED LIQUIDS BY UNAUTHORIZED PERSONNEL ON-SITE (E.G., TRESPASSERS, VANDALS, ETC.). SOME OF THE LIQUIDS, INCLUDING RAW ARSENIC ACID (TA0006) AND SEVERAL MISCELLANEOUS PRODUCT LIQUIDS, ARE CORROSIVE. MOST OF THE WATER-IMMISCIBLE LIQUIDS PRESENT IN TANKS AND PIPING CONTAIN SUSPECTED VOLATILE TOXIC ORGANICS, AND, AS A RESULT, THEIR ASSOCIATED VAPORS ARE TOXIC. SOME OF THE WATER-IMMISCIBLE LIQUID IS PREDOMINANTLY ANILINE. CONCENTRATED ANILINE IS ACUTELY TOXIC TO HUMANS. ANILINE PENETRATES THE SKIN RAPIDLY AND INDUCES METHEMOGLOBINEMIA IN THOSE PERSONS SUFFICIENTLY EXPOSED. DEATH CAN RESULT FROM A SIGNIFICANT EXPOSURE. NEARLY ALL OF THE TANKS AND PIPING CONTAIN SIGNIFICANT LEVELS OF ARSENIC. ONE-THIRD OF THE TANKS AND PIPING CONTAIN VERY HIGH ARSENIC CONCENTRATIONS (AVERAGE 3 PERCENT ARSENIC). ACCIDENTAL INGESTION OF ARSENIC CAN CAUSE SICKNESS OR DEATH. ARSENIC IS ALSO A KNOWN HUMAN CARCINOGEN. ACCIDENTAL INGESTION OF ANY OF THE CONCENTRATED LIQUIDS ADDRESSED HERE WILL LIKELY RESULT IN TOXIC EFFECTS.

A THREAT TO HUMAN HEALTH AND THE ENVIRONMENT IS ALSO POSED BY TANK/PIPING FAILURE. TANKS AND PIPING (VESSELS) CAN FAIL PRIMARILY UNDER THREE SCENARIOS. TANKS, VESSELS, AND THEIR ATTENDANT PIPING AND VALVES CAN FAIL DUE TO FREEZING WEATHER. TO DATE, THE TANKS DO NOT APPEAR TO BE SIGNIFICANTLY AFFECTED BY FREEZING WEATHER. HOWEVER, CONTINUED LACK OF MAINTENANCE, COUPLED WITH AN EXTENDED PERIOD OF FREEZING WEATHER, AS OCCURS PERIODICALLY, COULD RESULT IN THE RUPTURE OF MANY OF THE UNWINTERIZED TANKS AND PIPING. THEY CAN ALSO FAIL DUE TO DETERIORATION OVER TIME FROM STRESS, FATIGUE, OR THE EFFECTS OF THE CONCENTRATED LIQUIDS. STRUCTURAL INTEGRITY TESTING OF THE TANKS AND VESSELS WAS OUTSIDE THE SCOPE OF THE RI AND WAS NOT CONDUCTED. THE POTENTIAL FOR TANK/PIPING FAILURE FROM ACTS OF VANDALISM IS ALSO PRESENT.

THERE IS THE POSSIBILITY OF DIRECT CONTACT WITH THE CONCENTRATED LIQUIDS DURING TANK FAILURE. THE POTENTIAL EFFECTS OF DIRECT CONTACT ARE DISCUSSED ABOVE.

ALL OF THE TANKS AND PIPING ARE WITHIN 400 FEET OF TULPEHOCKEN CREEK; 27 OF THE 32 TANKS AND PIPING (AND ATTACHED VESSELS) ARE WITHIN 150 FEET. THE SITE SLOPES TOWARD THE CREEK. THUS, ANY RELEASES FROM TANK/VESSEL FAILURE ARE LIKELY TO REACH AND CONTAMINATE TULPEHOCKEN CREEK. ALL BUT TWO OF THE TANKS ARE DIKED. THIS DIKING COULD PREVENT A SIGNIFICANT PORTION OF THE TANK CONTENTS FROM CONTAMINATING THE ENVIRONMENT DURING A TANK FAILURE. HOWEVER, WITHOUT MAINTENANCE OF THE DIKING INTEGRITY AND PERIODIC REMOVAL OF ACCUMULATED PRECIPITATION, THE DIKES WILL BE INEFFECTIVE AT CONTAINING LEAKS. RELEASES FROM THE TANKS AND VESSELS COULD ALSO CAUSE MIGRATION OF CONTAMINANTS TO GROUNDWATER AND/OR THE SEWER LINE SERVING THE SITE; SUCH MIGRATION COULD ADDITIONALLY CONTAMINATE THIS POTABLE WATER SUPPLY AND/OR CAUSE AN UPSET AT THE SEWAGE PLANT.

MANY OF THE CONCENTRATED LIQUIDS HAVE LOW FLASH POINTS AND/OR ARE COMBUSTIBLE. A FIRE COULD CAUSE THE RELEASE OF HAZARDOUS SUBSTANCES TO THE ATMOSPHERE. A TANK/PIPING EXPLOSION WOULD CAUSE THE RELEASE OF HAZARDOUS SUBSTANCES TO THE ENVIRONMENT. THE WEST MYERSTOWN ELEMENTARY SCHOOL, A POTENTIAL RECEPTOR, IS LOCATED APPROXIMATELY 1,800 FEET NORTHWEST OF THE TANKS AND PIPING.

THE MAP OF FLOOD-PRONE AREAS, PUBLISHED BY THE UNITED STATES GEOLOGIC SURVEY, AND THE FLOOD INSURANCE RATE MAP, PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, BOTH SHOW THE TANKS ASSOCIATED WITH SAMPLES TA0001-TA0008 TO BE IN THE 100-YEAR FLOOD PLAIN (ELEVATION 559 ABOVE MSL, SEE FIGURE 3). SEVERE FLOODING COULD CAUSE THE FAILURE OF THESE TANKS, WITH CATASTROPHIC RELEASE OF CONTAMINANTS TO THE CREEK WATERS.

DESCRIPTION OF ALTERNATIVES

USING INFORMATION COLLECTED BY EPA'S REM III CONTRACTOR AND THE FINDINGS OF PAST AND PRESENT INVESTIGATIONS AND DATA ANALYSIS, EPA DEVELOPED FIVE ALTERNATIVES FOR AN EARLY ACTION RECORD OF DECISION FOR THE CONCENTRATED LIQUIDS OPERABLE UNIT AT THE WHITMOYER LABORATORIES SITE. EPA'S APPROACH TO THIS EARLY ACTION ROD HAS BEEN TO EVALUATE A LIMITED NUMBER OF ALTERNATIVES. THE WASTES TO BE REMEDIATED ARE LIQUID WASTES ONLY AND THIS LEADS TOWARDTREATMENT OF THE WASTE RATHER THAN CONTAINMENT. ALSO TREATMENT OF LIQUID WASTES IS GENERALLY REQUIRED TO MEET THE LAND DISPOSAL REGULATIONS (LDR) TREATMENT STANDARDS. THE FIVE ALTERNATIVES ARE NO ACTION; OFF-SITE DISPOSAL (WITHOUT TREATMENT); OFF-SITE TREATMENT AND DISPOSAL; ON-SITE TREATMENT AND DISPOSAL; AND ON-SITE CONTAINMENT.

THREE OF THESE ALTERNATIVES WERE ELIMINATED FROM FURTHER CONSIDERATION BASED ON CRITICAL FLAWS. OFF-SITE DISPOSAL (WITHOUT TREATMENT) WAS ELIMINATED SINCE THE WASTES, AS LIQUIDS, ARE NOT READILY LANDFILLABLE; DISPOSAL WITHOUT TREATMENT OF THE F-WASTES, P-WASTE, AND "CALIFORNIA LIST" WASTES IS GENERALLY PROHIBITED UNDER THE 40 CFR 268 LAND BAN REQUIREMENTS, AND THE WASTES CONTAIN LEVELS OF PRIORITY POLLUTANTS AND CONVENTIONAL PARAMETERS THAT ARE SIGNIFICANTLY HIGHER THAN TYPICAL CONCENTRATION STANDARDS REQUIRED FOR DIRECT DISCHARGE TO SURFACE WATERS. ON-SITE TREATMENT AND DISPOSAL WAS ELIMINATED, SINCE THE RELATIVELY LOW VOLUME OF WASTES PRESENT, COUPLED WITH RELATIVELY HIGH MOBILIZATION, ENGINEERING, AND CAPITAL COSTS, WOULD RESULT IN VERY HIGH TREATMENT COSTS. THIS ALTERNATIVE OFFERS THE SAME DEGREE OF PROTECTION AS OFF-SITE TREATMENT BUT AT A MUCH HIGHER COST. ON-SITE CONTAINMENT WAS ELIMINATED FROM FURTHER CONSIDERATION, SINCE THIS ALTERNATIVE OFFERS ONLY A TEMPORARY SOLUTION AND WOULD NOT BE EFFECTIVE IN THE LONG TERM. BASED ON THIS ANALYSIS, EPA RETAINED TWO ALTERNATIVES FOR FURTHER CONSIDERATION. THE TWO ALTERNATIVES ARE;

- NO ACTION
- OFF-SITE TREATMENT AND DISPOSAL

ALTERNATIVE 1 - NO ACTION

ALTERNATIVE 1 CONSISTS OF NO ACTION FOR THE CONCENTRATED LIQUID WASTES. THIS ALTERNATIVE IS CONSIDERED AS A BASELINE FOR COMPARISON WITH OTHER ALTERNATIVES. THE NO-ACTION ALTERNATIVE WOULD NOT INVOLVE ANY ACTIONS OTHER THAN THOSE CURRENTLY PROVIDED AT THE SITE. THESE INCLUDE EXISTING DIKING OF ALL OF THE TANKS (EXCEPT THE TWO TANKERS), SITE FENCING, AND A SECURITY GUARD SERVICE.

UNDER THE NO-ACTION ALTERNATIVE, EXISTING CHEMICALS WOULD BE ALLOWED TO REMAIN ON- SITE. THIS ALTERNATIVE WOULD NOT MINIMIZE OR ELIMINATE ANY POSSIBLE CATASTROPHIC THREAT TO HUMAN HEALTH AND THE ENVIRONMENT THAT CURRENTLY EXISTS. IN ADDITION, THIS ALTERNATIVE WOULD NOT PROVIDE A PERMANENT SOLUTION, NOR WOULD IT COMPLY WITH OTHER STATUTORY OR REGULATORY REQUIREMENTS (IN PARTICULAR, RCRA STORAGE, DISPOSAL, AND CLOSURE REQUIREMENTS).

ALTERNATIVE 2 - OFF-SITE TREATMENT AND DISPOSAL

ALTERNATIVE 2 CONSISTS OF CONSOLIDATING THE WASTE LIQUIDS INTO THREE GENERAL CATEGORIES, TRANSPORTING THE WASTES OFF-SITE FOR TREATMENT, AND EVENTUALLY DISPOSING OF THE TREATED WATER IN AN OFF-SITE SURFACE WATER AND DISPOSING OF SOLID RESIDUALS IN AN OFF-SITE LANDFILL. THE ORGANIC COMPOUNDS WOULD BE DESTROYED, EITHER DIRECTLY OR INDIRECTLY, THROUGH THERMAL TREATMENT OR BIODEGRADATION, OR RECYCLED. THE TANKS AND VESSELS (AND ASSOCIATED PIPING) WOULD THEN BE CLEANED, USING, AS APPROPRIATE, STEAM, EMULSIFIERS, WATER, ETC., TO REMOVE THE BULK CONTAMINATION FROM THESE ITEMS AND MEET RCRA SUBTITLE C CLOSURE STANDARDS. THE DECONTAMINATED TANKS, VESSELS, AND PIPING WOULD THEN BE LEFT ON SITE FOR FUTURE REUSE, SCRAP, OR DISPOSAL. NO DEMOLITION OF THE TANKS AND VESSELS WOULD BE INCLUDED UNDER THIS ALTERNATIVE. THE CLEANING AGENT RESIDUALS WOULD LIKEWISE BE TREATED AND DISPOSED OFF SITE. THE OFF-SITE TREATMENT FACILITIES MUST BE RCRA PERMITTED FACILITIES AND BE IN COMPLIANCE WITH THEIR PERMIT.

THE THREE MAJOR CATEGORIES OF CONCENTRATED LIQUIDS ARE;

- WATER-IMMISCIBLE
- WATER-MISCIBLE HIGH ARSENIC
- WATER-MISCIBLE LOW ARSENIC

THE CONSOLIDATION ACTIVITIES UNDER THIS ALTERNATIVE ARE NOT PLANNED TO OCCUR UNTIL ACTUAL ON-SITE REMEDIAL ACTION OCCURS. THE WASTE CATEGORIES PRESENTED HERE ARE PRELIMINARY, TO ALLOW FOR OPTIMIZATION UNDER REMEDIAL DESIGN. IN PARTICULAR, DISCRETE TANK, PIPING OR MISCELLANEOUS WASTES MAY BE MOVED TO OTHER CATEGORIES IN ORDER TO FACILITATE TREATMENT. ALSO, ADDITIONAL CATEGORIES MAY BE DEVELOPED OR CATEGORIES ELIMINATED, BASED ON OPTIMIZATION DURING REMEDIAL DESIGN.

THE POTENTIAL TASKS UNDER THIS ALTERNATIVE ARE SUMMARIZED AS FOLLOWS;

- INTERIM TANK INSPECTION.
- COMPATIBILITY TESTING AND CONSOLIDATION OF APPROXIMATELY 69,000 GALLONS OF CONCENTRATED LIQUID WASTES INTO APPROXIMATELY THREE CATEGORIES.
- TRANSPORTATION OF THESE WASTES OFF-SITE, IN ACCORDANCE WITH RCRA, US DEPARTMENT OF TRANSPORTATION (DOT), AND STATE REGULATIONS.
- TREATMENT OF THE WASTES AT PERMITTED FACILITY(IES) (AS YET UNIDENTIFIED), IN ACCORDANCE WITH RCRA AND STATE REGULATIONS.
- DISPOSAL/DISCHARGE OF SOLID AND LIQUID TREATMENT RESIDUALS, IN ACCORDANCE WITH RCRA, CLEAN WATER ACT AND STATE REGULATIONS.
- DECONTAMINATION OF 32 TANKS (AND PIPING VESSELS) AND ABOUT 2,000 LINEAR FEET OF PIPING, IN ACCORDANCE WITH RCRA CLOSURE STANDARDS AND DESIGN SPECIFICATIONS.
- COLLECTION, TRANSPORTATION, TREATMENT, AND DISPOSAL OF ABOUT 8,000 GALLONS OF DECONTAMINATION FLUIDS, IN ACCORDANCE WITH RCRA, DOT, AND STATE REGULATIONS.
- INSPECTION OF TANKS AND PIPING FOR COMPLIANCE WITH DESIGN SPECIFICATIONS.

POTENTIAL TREATMENT TECHNOLOGIES FOR THE THREE CATEGORIES OF CONCENTRATED LIQUIDS ARE PRESENTED IN TABLE 2. THIS TABLE IS DEVELOPED BASED ON APPLICABLE EPA GUIDANCE, COUPLED WITH A REVIEW OF THE VOLUMES, MATRICES, AND CONTAMINANTS PRESENT IN THE CONCENTRATED LIQUIDS.

THIS ALTERNATIVE INVOLVES THE TREATMENT AND DISPOSAL OF RCRA HAZARDOUS LISTED AND CHARACTERISTIC WASTES OFF-SITE. SOME OF THESE WASTES ARE CLASSIFIED AS RCRA F-WASTES, P-WASTES (40 C.F.R. 261.31 AND .32) AND/OR "CALIFORNIA LIST" WASTES (RCRA SECTION 3004(D)(2)). EPA HAS PROMULGATED LAND DISPOSAL RESTRICTIONS (LDR) FOR THESE WASTES; THUS THE LAND DISPOSAL RESTRICTIONS ARE APPLICABLE REQUIREMENTS FOR THESE WASTES. THE OFF-SITE TREATMENT FACILITIES MUST BE ABLE TO ACHIEVE THE LDR TREATMENT STANDARDS FOR THESE WASTES.

UNDER THIS ALTERNATIVE, SPECIFIC TREATMENT TECHNOLOGIES ARE NOT IDENTIFIED AT THIS POINT SO AS NOT TO LIMIT POTENTIAL VIABLE TECHNOLOGIES UNDER REMEDIAL ACTION. FINAL SELECTION OF TECHNOLOGIES WILL BE MADE BASED ON VENDOR RESPONSES TO PERFORMANCE SPECIFICATIONS. CRITERIA TO BE USED IN THIS SELECTION INCLUDE;

- COMPLIANCE OF VENDORS WITH THEIR PERMITS (RCRA, NPDES, AND PRETREATMENT STANDARDS).
- COMPLIANCE WITH CERCLA AND ARARS.
- PERMANENCE.
- ULTIMATE FATE OF CONTAMINANTS.
- REDUCTION IN VOLUME, MOBILITY, AND TOXICITY.
- COSTS.

FOR PURPOSES OF COSTING THIS ALTERNATIVE, THE FOLLOWING TREATMENT TECHNOLOGIES WERE SELECTED;

- WATER-IMMISCIBLE: INCINERATION, FOLLOWED BY NPDES POTW OR SURFACE WATER DISCHARGE OF WATERS AND RCRA HAZARDOUS WASTE DISPOSAL OF INORGANIC RESIDUES.
- WATER-MISCIBLE HIGH ARSENIC: PHYSICAL/CHEMICAL TREATMENT, FOLLOWED BY NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PUBLICLY OWNED TREATMENT WORKS (POTW) OR SURFACE WATER DISCHARGE OF WATERS AND RCRA HAZARDOUS WASTE DISPOSAL OF INORGANIC RESIDUES.
- WATER-MISCIBLE LOW ARSENIC: PHYSICAL/CHEMICAL TREATMENT, FOLLOWED BY NPDES POTW OR SURFACE-WATER DISCHARGE OF WATER AND HAZARDOUS OR NONHAZARDOUS DISPOSAL OF INORGANIC RESIDUES.

AT THE COMPLETION OF THIS REMEDIAL ALTERNATIVE, HUMAN HEALTH AND ENVIRONMENTAL RISKS POSED BY THE LIQUIDS WILL EITHER BE SUBSTANTIALLY REDUCED OR ELIMINATED. THE ESTIMATED CAPITAL COST OF THIS ALTERNATIVE IS APPROXIMATELY $475,000. THERE ARE NO ANNUAL OPERATION AND MAINTENANCE (O&M) COSTS. THE ESTIMATED TIME TO IMPLEMENT THIS ALTERNATIVE AND TO MEET THE CLEANUP GOALS IS 18 MONTHS OR LESS.

SUMMARY OF THE COMPARATIVE ANALYSIS OF ALTERNATIVES OVERALL PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT

ALTERNATIVE 1 - NO ACTION WOULD NOT PROTECT HUMAN HEALTH AND THE ENVIRONMENT. THE RISKS PRESENTLY POSED BY THE LIQUIDS ARE DISCUSSED ABOVE. RISKS ASSOCIATED WITH DIRECT HUMAN CONTACT ARE SOMEWHAT REDUCED DUE TO THE PRESENCE OF A SECURITY GUARD SERVICE; HOWEVER, ACCIDENTAL CONTACT WITH THE WASTE IS STILL CONCEIVABLE. SINCE SOME OF THE WASTES ARE IGNITABLE AND HAVE HIGH BTU VALUES, THERE IS A RISK OF FIRE OCCURRING AT THE SITE. BECAUSE SEVEN TANKS LIE WITHIN THE FLOOD PLAIN, THERE IS A RISK OF RELEASE DURING FLOODING.

IF NO ACTION IS TAKEN, IT IS LIKELY THAT ONE OR MORE OF THE TANKS WILL EVENTUALLY LEAK OR FAIL. AT THE SAME TIME, THE CONTAINMENT DIKES WILL EVENTUALLY FILL WITH RAIN WATER, SINCE THERE IS NET PRECIPITATION AT THE SITE. WITH THE DIKES FULL OF RAIN WATER, THEY WILL NOT OFFER SECONDARY CONTAINMENT PROTECTION. ALSO SOME TANKS HAVE NO SECONDARY CONTAINMENT STRUCTURES. THEREFORE, THE NO-ACTION ALTERNATIVE WOULD NOT PROTECT THE ENVIRONMENT FROM LEAKS AND POTENTIAL CATASTROPHIC FAILURE OF THE TANKS. ENVIRONMENTAL MEDIA LIKELY TO BE AFFECTED BY LEAKS AND CATASTROPHIC FAILURE INCLUDE SOILS, GROUNDWATER, AND SURFACE WATER (TULPEHOCKEN CREEK).

ALTERNATIVE 2 - OFF-SITE TREATMENT AND DISPOSAL OF THE WASTES WOULD INVOLVE REMOVING THE WASTES FROM THE SITE AND THEREBY MINIMIZING LONG-TERM RISKS AT THE SITE ASSOCIATED WITH THESE WASTES. THIS ALTERNATIVE WOULD ELIMINATE THE DIRECT CONTACT THREAT POSED BY THE WASTES AND WOULD REMOVE THE THREAT TO HUMAN HEALTH AND THE ENVIRONMENT FROM THE STORED LIQUIDS. THE WASTES WOULD THEN BE TREATED TO DESTROY OR RECYCLE THE ORGANIC CONTAMINANTS, USING THE TECHNOLOGIES IDENTIFIED IN THE DESCRIPTION OF ALTERNATIVES. THE METAL CONTAMINANTS WOULD BE TREATED USING THE TECHNOLOGIES DESCRIBED IN THE DESCRIPTION OF ALTERNATIVES, AND THEN DISPOSED IN AN APPROPRIATE LANDFILL DESIGNED TO PROTECT HUMAN HEALTH AND THE ENVIRONMENT.

ALTERNATIVE 2 WOULD ALSO INCLUDE INTERIM PERIODIC INSPECTION OF THE TANKS PRIOR TO REMEDIATION. THESE INSPECTIONS COULD PROVIDE SOME ADDITIONAL PROTECTION BY IDENTIFYING LEAKS AND POTENTIALLY IDENTIFYING OTHER MEANS OF FAILURE.

<u>COMPLIANCE WITH ARARS</u>

ALTERNATIVE 1 - NO ACTION WOULD NOT COMPLY WITH THE ARARS PRESENTED IN APPENDIX A.

ALTERNATIVE 2 - OFF-SITE TREATMENT AND DISPOSAL WOULD COMPLY WITH EACH OF THE ARARS PRESENTED IN APPENDIX A. SINCE SOME OF THE CONCENTRATED LIQUIDS ARE RCRA-LISTED WASTES AND/OR "CALIFORNIA LIST" WASTES, THE "LAND BAN" REGULATIONS OF 40 C.F.R. PART 268 ARE APPLICABLE TO THESE WASTES, AND MUST BE COMPLIED WITH BY THE OFF-SITE TREATMENT FACILITY. ALTERNATIVE 2 WOULD ALSO MEET EACH OF THE RESPONSE OBJECTIVES.

<u>COST</u>

ALTERNATIVE 1 - NO ACTION HAS A ZERO COST ASSOCIATED WITH IT. ITEMS SUCH AS SITE MAINTENANCE, SECURITY SERVICE, AND 5-YEAR SITE REVIEW ARE ALL ASSUMED TO BE COVERED UNDER OTHER OPERABLE UNITS AT THE SITE.

THE ESTIMATED COSTS ASSOCIATED WITH ALTERNATIVE 2--OFF-SITE TREATMENT AND DISPOSAL--TOTAL ABOUT $475,000, INCLUDING $50,000 FOR REMEDIAL DESIGN AND CONSTRUCTION MANAGEMENT. SINCE THE ACTIONS ASSOCIATED WITH THIS ALTERNATIVE WOULD REQUIRE LESS THAN 1 YEAR TO REMEDIATE, THERE ARE NO LONG-TERM OPERATION AND MAINTENANCE COSTS. INCLUDED IN THE CAPITAL COST UNDER DISPOSAL ARE SECONDARY COSTS FOR THE VENDORS, INCLUDING SOLID RESIDUE DISPOSAL IN A HAZARDOUS WASTE LANDFILL AND TREATED WATER DISCHARGE. ENGINEERING COSTS, WHICH INCLUDE CONSOLIDATION COMPATIBILITY TESTING, SPECIFICATION PREPARATION, BID REVIEW, CONSTRUCTION MONITORING, AND COMPLIANCE INSPECTION, ARE ALSO A PART OF THE COST ESTIMATE.

<u>LONG-TERM EFFECTIVENESS AND PERMANENCE</u>

ALTERNATIVE 1 - NO ACTION WOULD NOT BE EFFECTIVE IN THE LONG TERM. WITH TIME, THE INTEGRITY OF TANKS, VESSELS, AND PIPING WILL DETERIORATE. DETERIORATION MECHANISMS INCLUDE CORROSION, WEATHERING, FREEZING, AND METAL FATIGUE. ADDITIONALLY, WITH TIME, THE SECONDARY CONTAINMENT SYSTEMS WILL LIKELY DETERIORATE. TWO OF THE TANKS AT THE SITE (TA-0009 AND 0012) CONTAIN ABOUT 10,000 GALLONS OF WASTE AND HAVE NO SECONDARY CONTAINMENT. AN ADDITIONAL CONCERN IS THAT TANKS TA0001-0008 ARE IN THE 100-YEAR FLOOD PLAIN AND ARE SUBJECT TO CATASTROPHIC WASHOUT. THE POSSIBILITY OF A FIRE AT THE SITE IS ALSO INCREASED OVER THE LONG TERM.

WITH THE HAZARDOUS MATERIALS REMOVED FROM THE SITE, AND THE TANKS, VESSELS, AND PIPING DECONTAMINATED, ALTERNATIVE 2--OFF-SITE TREATMENT AND DISPOSAL WOULD BE EFFECTIVE IN THE LONG TERM. DESTRUCTION OR RECYCLING OF THE ORGANIC CONTAMINANTS WOULD ELIMINATE FUTURE RISKS ASSOCIATED WITH THEM. METALS RESIDUALS MAY REQUIRE ADDITIONAL REMEDIAL MEASURES FOLLOWING TREATMENT PRIOR TO DISPOSAL. IF NECESSARY

THESE METALS MAY BE TREATED PRIOR TO DISPOSAL TO REDUCE MOBILITY AND WILL BE PLACED INTO AN OFF-SITE DISPOSAL FACILITY FOR PROPER LONG-TERM MANAGEMENT. THESE ITEMS WOULD BE COVERED UNDER THE OFF-SITE TREATMENT VENDOR'S OPERATION. THIS ALTERNATIVE OFFERS A HIGH DEGREE OF PERMANENCE AND IS CONSISTENT WITH FUTURE REMEDIAL EFFORTS FOR THE REMAINING OPERABLE UNITS AT THE SITE.

REDUCTION OF TOXICITY, MOBILITY, OR VOLUME

ALTERNATIVE 1 - NO ACTION WOULD NOT RESULT IN THE REDUCTION OF THE TOXICITY OF THE EXISTING WASTES. MOBILITY AND VOLUME MAY INCREASE WITH TIME AS A RESULT OF LEAKS OR TANK FAILURE. THIS FAILURE WOULD RESULT IN CONTAMINATION OF OTHER MEDIA AT THE SITE, INCLUDING GROUNDWATER, SOILS, AND POTENTIALLY SURFACE WATER (TULPEHOCKEN CREEK).

ALTERNATIVE 2 - THIS ALTERNATIVE SATISFIES THE STATUTORY PREFERENCE FOR REDUCTION IN TOXICITY, MOBILITY, AND VOLUME OF HAZARDOUS SUBSTANCES. OFF-SITE TREATMENT AND DISPOSAL WOULD RESULT IN A SIGNIFICANT REDUCTION IN TOXICITY OF THE ORGANICS--BY DESTRUCTION; REDUCTION IN VOLUME OF CONTAMINATED MATERIALS BY SEPARATION OF WATER FROM THE CONTAMINANTS; AND MOBILITY OF THE RESIDUAL METALS BY CONCENTRATING, DETERRING, AND PLACING THEM IN A PROPERLY MANAGED LANDFILL. THE METALS MAY ALSO BE STABILIZED BY THE VENDOR PRIOR TO LANDFILLING.

SHORT-TERM EFFECTIVENESS

IN THE SHORT TERM, ALTERNATIVE 1 - NO ACTION MAY BE MODERATELY EFFECTIVE. HOWEVER, THE POTENTIAL FOR ACCIDENTAL HUMAN CONTACT AND CATASTROPHIC TANK FAILURE REMAIN MAJOR RISKS. ADDITIONALLY, IT SHOULD BE NOTED THAT CURRENTLY AT LEAST ONE TANK (TA0002/0008) HAS BEEN OBSERVED TO BE LEAKING; THIS LEAK IS CURRENTLY CONTROLLED BY A SECONDARY CONTAINMENT STRUCTURE. THE NO-ACTION ALTERNATIVE CAN BE IN EFFECT ALMOST IMMEDIATELY FOLLOWING COMPLETION OF THE RECORD OF DECISION.

ALTERNATIVE 2 - OFF-SITE TREATMENT AND DISPOSAL WOULD LIKEWISE HAVE SOME SHORT-TERM RISKS. THERE ARE RISKS ASSOCIATED WITH TANK FAILURE DURING THE PERIOD FROM THE PRESENT TIME UNTIL COMPLETION OF OFF-SITE TRANSPORT. HOWEVER, THESE RISKS WILL BE DECREASED BY PERIODIC INSPECTION. THE RISK OF ACCIDENTAL HUMAN CONTACT AND CATASTROPHIC TANK FAILURE CANNOT BE ELIMINATED, HOWEVER. THE OFF-SITE TREATMENT AND DISPOSAL ALTERNATIVE ALSO CARRIES SOME ADDITIONAL SHORT-TERM RISK ASSOCIATED WITH TRANSPORTING THE CONTAMINATED WASTES OFF-SITE. THESE RISKS ARE PRIMARILY ASSOCIATED WITH POTENTIAL TRANSPORT TRUCK ACCIDENTS. RISK REDUCTION TECHNIQUES, INCLUDING PERSONAL PROTECTION EQUIPMENT, MONITORING, EMERGENCY SPILL RESPONSE MEASURES, ETC., WILL BE INCORPORATED INTO THE REMEDIAL DESIGN TO MINIMIZE THESE RISKS.

ALL OF THE TASKS UNDER THIS ALTERNATIVE CAN BE IMPLEMENTED WITHIN 2 TO 18 MONTHS, WITH ACTUAL ON-SITE ACTIVITIES REQUIRING ABOUT 1 MONTH OR LESS. THE INTERIM INSPECTION TASK UNDER THIS ALTERNATIVE CAN BE IMPLEMENTED IMMEDIATELY.

IMPLEMENTABILITY

ALTERNATIVE 1 - NO ACTION IS READILY IMPLEMENTED, SINCE NO PERMITS OR ACTION-RELATED ACTIVITIES ARE INVOLVED.

ALTERNATIVE 2 - OFF-SITE TREATMENT AND DISPOSAL WOULD INVOLVE A REMEDIAL DESIGN PHASE TO DEVELOP ACTION PLANS AND SPECIFICATIONS AND SELECTION OF A CONTRACTOR TO PERFORM THE REMEDIAL WORK. SINCE ABOUT ONE-HALF TO ALL OF THE WASTE IS RCRA HAZARDOUS, MANIFESTING WOULD BE REQUIRED FOR TRANSPORTATION AND OFF-SITE DISPOSAL OF THE WASTES. THE AVAILABILITY OF VENDORS CAPABLE OF PERFORMING THE TREATMENT AND DISPOSAL WORK IS SOMEWHAT LIMITED, ALTHOUGH THERE ARE SEVERAL VENDORS AVAILABLE FOR EACH OF THE THREE CATEGORIES OF WASTE.

AT THE COMPLETION OF TANK, VESSEL, AND PIPING DECONTAMINATION, THESE ITEMS WOULD BE INSPECTED TO ENSURE COMPLIANCE WITH DECONTAMINATION REQUIREMENTS.

STATE ACCEPTANCE

THE COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF ENVIRONMENTAL RESOURCES (PADER) HAS REVIEWED THE INFORMATION AVAILABLE FOR THE SITE. ALTERNATIVE 1 - NO ACTION IS NOT ACCEPTABLE TO PADER. PADER CONCURS WITH THE SELECTION OF ALTERNATIVE 2 - OFF-SITE TREATMENT AND DISPOSAL AS THE REMEDY FOR THE CONCENTRATED LIQUIDS OPERABLE UNIT. SEE ATTACHED CONCURRENCE LETTER.

COMMUNITY ACCEPTANCE

THE PROPOSED PLAN FOR THE CONCENTRATED LIQUIDS OPERABLE UNIT WAS ISSUED IN APRIL 1989. A PUBLIC COMMENT PERIOD ON EPA'S PLANS WAS PROVIDED FROM APRIL 17, 1989 UNTIL MAY 17, 1989. COMMUNITY SUPPORT FOR THE PROPOSED ACTION IS HIGH (SEE THE ATTACHED RESPONSIVENESS SUMMARY).

EXPLANATION OF SIGNIFICANT CHANGES

THE PROPOSED PLAN FOR THE WHITMOYER LABORATORIES SITE CONCENTRATED LIQUIDS OPERABLE UNIT WAS RELEASED FOR COMMENT IN APRIL 1989. THE PROPOSED PLAN IDENTIFIED ALTERNATIVE 2 - OFF-SITE TREATMENT AND DISPOSAL AS THE PREFERRED ALTERNATIVE. EPA REVIEWED ALL OF THE COMMENTS SUBMITTED DURING THE PUBLIC COMMENT PERIOD. UPON REVIEW OF THESE COMMENTS, IT WAS DETERMINED THAT NO SIGNIFICANT CHANGES TO THE REMEDY, AS IT WAS ORIGINALLY IDENTIFIED IN THE PROPOSED PLAN, WERE NECESSARY.

#SR
THE SELECTED REMEDY

BASED UPON CONSIDERATION OF INFORMATION AVAILABLE FOR THE WHITMOYER LABORATORIES SITE CONCENTRATED LIQUIDS OPERABLE UNIT, WHICH ARE SET FORTH IN THE ADMINISTRATIVE RECORD, AN EVALUATION OF THE RISKS CURRENTLY POSED BY THE SITE, THE REQUIREMENTS OF CERCLA, THE DETAILED EVALUATION OF ALTERNATIVES, AND COMMUNITY INPUT, BOTH EPA AND THE COMMONWEALTH OF PENNSYLVANIA HAVE SELECTED ALTERNATIVE 2 (OFF-SITE TREATMENT AND DISPOSAL) AS THE REMEDY TO BE IMPLEMENTED FOR THE OPERABLE UNIT. THIS ALTERNATIVE WILL SIGNIFICANTLY REDUCE OR ELIMINATE THE ACTUAL AND POTENTIAL THREATS TO HUMAN HEALTH AND THE ENVIRONMENT POSED BY THE LIQUIDS, IS CONSISTENT WITH EPA'S STRATEGY FOR REMEDIATION OF THE SITE AND MEETS THE CRITERIA SPECIFIED IN CERCLA SECTION 121(B)(1).

APPROXIMATELY 69,000 GALLONS OF CONCENTRATED LIQUIDS WILL BE TREATED IN THIS OPERABLE UNIT. A SUMMARY OF THE CONCENTRATED LIQUIDS IS PROVIDED IN TABLE 3. (MORE INFORMATION PERMITTING CLASSIFICATION OF THE 70 GALLONS OF CURRENTLY UNCLASSIFIABLE LIQUIDS WILL BE COLLECTED DURING THE REMEDIAL DESIGN.) THESE LIQUIDS WILL BE CONSOLIDATED AND TRANSPORTED OFF-SITE FOR TREATMENT/DISPOSAL. RCRA HAZARDOUS WASTES THAT ARE RESTRICTED FROM LAND DISPOSAL (40 CFR 268) MUST BE TREATED TO THE APPROPRIATE TREATMENT STANDARDS BY THE OFF-SITE TREATMENT FACILITY PRIOR TO DISPOSAL. ORGANIC COMPOUNDS WILL BE DESTROYED OR RECYCLED. RESIDUAL METALS IN THE CONCENTRATED LIQUIDS MAY BE TREATED PRIOR TO DISPOSAL TO REDUCE MOBILITY AND WILL BE PLACED INTO AN OFF-SITE DISPOSAL FACILITY FOR PROPER LONG-TERM MANAGEMENT. THE TANKS, VESSELS AND ASSOCIATED PIPING WILL BE CLEANED USING APPROPRIATE DECONTAMINATION FLUIDS, AND LEFT ON-SITE FOR FUTURE REUSE, SCRAP, OR DISPOSAL. THE CLEANING AGENTS WILL ALSO BE TREATED AND DISPOSED OFF-SITE.

RESPONSE OBJECTIVES

THE RESPONSE OBJECTIVES FOR THIS OPERABLE UNIT ARE TO;

- REDUCE OR ELIMINATE POTENTIAL EXPOSURE PATHWAYS BY WHICH CONTAMINANTS MAY REACH POTENTIAL RECEPTORS.
- PROTECT THE ENVIRONMENT FROM POTENTIAL LEAKS AND/OR CATASTROPHIC TANK FAILURE.
- BE COST-EFFECTIVE.
- BE IN COMPLIANCE WITH THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA), AS AMENDED BY THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA).
- BE CONDUCTED IN ACCORDANCE WITH THE NATIONAL CONTINGENCY PLAN (NCP SECTION 300.68).
- BE IN COMPLIANCE WITH APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS).
- PROVIDE PERMANENT SOLUTIONS TO CONTAMINATION PROBLEMS TO THE MAXIMUM EXTENT PRACTICABLE.
- BE EFFECTIVE OVER BOTH THE SHORT - AND LONG-TERM.
- BE ACCEPTABLE TO STATE AUTHORITIES AND THE LOCAL COMMUNITY.
- LEAVE THE FACILITY IN A STATE CONDUCIVE TO REMEDIATION OF OTHER AREAS OF THE SITE.

#SD
STATUTORY DETERMINATIONS

UNDER ITS LEGAL AUTHORITIES, EPA'S PRIMARY RESPONSIBILITY AT SUPERFUND SITES IS TO UNDERTAKE REMEDIAL ACTIONS THAT ARE PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT. IN ADDITION, SECTION 121 OF CERCLA ESTABLISHES SEVERAL OTHER STATUTORY REQUIREMENTS AND PREFERENCES. THESE SPECIFY THAT WHEN COMPLETE, THE SELECTED REMEDIAL ACTION FOR THIS SITE MUST COMPLY WITH APPLICABLE OR RELEVANT AND APPROPRIATE ENVIRONMENTAL REQUIREMENTS ESTABLISHED UNDER FEDERAL AND STATE ENVIRONMENTAL LAWS UNLESS A STATUTORY WAIVER IS JUSTIFIED. THE SELECTED REMEDY ALSO MUST BE COST-EFFECTIVE AND UTILIZE TREATMENT TECHNOLOGIES

OR RESOURCE RECOVERY TECHNOLOGIES TO THE MAXIMUM EXTENT PRACTICABLE. FINALLY, THE STATUTE INCLUDES A PREFERENCE FOR REMEDIES THAT PERMANENTLY AND SIGNIFICANTLY REDUCE THE VOLUME, TOXICITY OR MOBILITY OF HAZARDOUS WASTES. THE FOLLOWING SECTIONS DISCUSS HOW THE SELECTED REMEDY FOR THIS SITE MEETS THESE STATUTORY REQUIREMENTS.

PROTECTION OF HUMAN HEALTH AND THE ENVIRONMENT

THE SELECTED REMEDY PROTECTS HUMAN HEALTH AND THE ENVIRONMENT THROUGH OFF-SITE LIQUIDS TREATMENT TO DESTROY OR RECYCLE ORGANIC CONTAMINANTS AND TO COLLECT METAL CONTAMINANTS FOR DISPOSAL IN AN APPROPRIATE LANDFILL. THE SELECTED REMEDY ELIMINATES A DIRECT CONTACT THREAT AND ALLOWS OTHER AREAS OF THE SITE WHICH MAY POSE POTENTIAL HEALTH THREATS TO BE REMEDIATED. TANKS, VESSELS, AND ASSOCIATED PIPING WILL BE CLEANED, WITH CLEANING AGENTS ALSO BEING TREATED AND DISPOSED OFF-SITE. PRIOR TO REMEDIATION, TANKS AND VESSELS WILL BE PERIODICALLY INSPECTED. DESTRUCTION (OR RECYCLING) OF ORGANIC COMPOUNDS WILL ELIMINATE THE THREATS POSED BY THESE CHEMICALS. SINCE METALS CANNOT BE DESTROYED, THERE WILL BE SOME LONG-TERM RISKS; HOWEVER, THESE METALS MAY BE TREATED PRIOR TO DISPOSAL TO REDUCE MOBILITY AND WILL BE PLACED INTO AN OFF-SITE LANDFILL FOR PROPER LONG-TERM MANAGEMENT. ANY SHORT-TERM RISKS FROM IMPLEMENTATION OF THE SELECTED REMEDY WILL BE MITIGATED BY INCORPORATING INTO THE DESIGN PERSONAL PROTECTION EQUIPMENT, MONITORING, AND EMERGENCY SPILL PROCEDURES.

ATTAINMENT OF APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS

THE SELECTED REMEDY OF OFF-SITE TREATMENT AND DISPOSAL WILL ATTAIN ALL APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS. THE ARARS ARE SPECIFIED IN APPENDIX A.

COST-EFFECTIVENESS

EPA AND THE COMMONWEALTH OF PENNSYLVANIA BELIEVE THE SELECTED REMEDY IS COST-EFFECTIVE IN MITIGATING THE RISKS POSED BY THE CONCENTRATED LIQUIDS IN A REASONABLE PERIOD OF TIME (LESS THAN 18 MONTHS). BECAUSE ORGANIC CHEMICALS PRESENT IN THE LIQUIDS WILL BE DESTROYED (OR RECYCLED) AND METALS WILL BE DISPOSED IN AN APPROPRIATE LANDFILL, SELECTION OF THE OFF-SITE TREATMENT AND DISPOSAL REMEDY AFFORDS A HIGH DEGREE OF LONG-TERM EFFECTIVENESS AND PERMANENCE. THE CAPITAL COST OF THE CONCENTRATED LIQUIDS REMEDY IS ESTIMATED TO BE $475,000, INCLUDING $50,000 FOR REMEDIAL DESIGN AND CONSTRUCTION MANAGEMENT, WITH NO ANNUAL O&M COSTS. WHILE THESE COSTS ARE SIGNIFICANTLY GREATER THAN FOR THE NO-ACTION ALTERNATIVE, THE SELECTED REMEDY IS PROTECTIVE OF PUBLIC HEALTH AND THE ENVIRONMENT AND COMPLIES WITH ALL ARARS; THE NO-ACTION ALTERNATIVE DOES NOT ACHIEVE THESE CRITERIA. THEREFORE, EPA AND THE COMMONWEALTH OF PENNSYLVANIA BELIEVE THAT THE SELECTED REMEDY IS COST-EFFECTIVE.

UTILIZATION OF PERMANENT SOLUTIONS AND ALTERNATIVE TREATMENT (OR RESOURCE RECOVERY TECHNOLOGIES) TO THE MAXIMUM EXTENT PRACTICABLE.

THE CONCENTRATED LIQUIDS FOUND AT THE SITE REPRESENT A PRINCIPAL THREAT TO HUMAN HEALTH AND THE ENVIRONMENT. BY TREATING ALL OF THE CONCENTRATED LIQUIDS AND DECONTAMINATION FLUIDS AT AN OFF-SITE TREATMENT FACILITY, THE SELECTED REMEDY USES PERMANENT TREATMENT TECHNOLOGIES TO THE MAXIMUM EXTENT PRACTICABLE.

PREFERENCE FOR TREATMENT AS A PRINCIPAL ELEMENT

BY TREATING ALL OF THE CONCENTRATED LIQUIDS AND DECONTAMINATION FLUIDS AT AN OFF-SITE TREATMENT FACILITY, THE SELECTED REMEDY ADDRESSES THE PRINCIPAL THREATS POSED BY THE CONCENTRATED LIQUIDS THROUGH THE USE OF TREATMENT TECHNOLOGIES. THEREFORE, THE STATUTORY PREFERENCE FOR REMEDIES THAT EMPLOY TREATMENT AS A PRINCIPAL ELEMENT IS SATISFIED.

#TAB

TABLE 3

ESTIMATED COSTS OF SELECTED REMEDY

SITE WORK (MOBILIZATION/DEMOBILIZATION, LIQUID REMOVAL, TANK DECON, SAFETY MONITORING)	$199,462
OFF-SITE TRANSPORTATION OF LIQUIDS	15,200
OFF-SITE TREATMENT OF LIQUIDS AND DECON WATER	123,000
CONTINGENCY (20%)	67,533
	405,195
DESIGN	50,000
INTERIM INSPECTION MONITORING (10 MONTHS)	20,000
TOTAL PROJECT COSTS	$475,195

APPENDIX A

APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS)

ACTION	ARARS	
	ALT. 1 NO ACTION	ALT. 2 - OFF-SITE TREATMENT AND DISPOSAL
1. CONSOLIDATION OF 69,000 GALLONS OF CONCENTRATED HAZARDOUS WASTES INTO TANKS AND CONTAINERS, OFF-SITE TRANSPORT, TREATMENT & DISPOSAL OF TOXIC WASTE.	N/A	A) ANY AIR EMISSION GENERATED DURING THE REMEDIAL ACTION MUST NOT EXCEED NATIONAL AMBIENT AIR QUALITY STANDARDS ESTABLISHED UNDER THE CLEAN AIR ACT, SECTION 109, AND 40 C.F.R. PARTS 50 AND 51. B) FEDERAL FLOOD PLAIN EXECUTIVE ORDER 11988 PROVIDES FOR CONSIDERATION OF FLOOD PLAINS DURING REMEDIAL ACTIONS. LIQUIDS LOCATED IN THE 100 YEAR FLOOD PLAIN WILL BE CONSOLIDATED IN AN AREA OUTSIDE THE FLOOD PLAIN. C) ANY NEW ON-SITE TANKS AND CONTAINERS MUST BE CONSTRUCTED, OPERATED, AND CLOSED IN ACCORDANCE WITH 40 C.F.R. PART 264, SUBPARTS I AND J, RESPECTIVELY AND 25 PA CODE CHAPTER 75.264 SUBPARTS (Q) AND (R).
2. TRANSPORT OF CONCENTRATED WASTES IN TANKS AND CONTAINERS.	N/A	A) TRANSPORT OF HAZARDOUS WASTE FOR TREATMENT AND DISPOSAL MUST SATISFY PENNSYLVANIA SOLID WASTE DISPOSAL REGULATION, 25 PA. CODE CHAPTERS 262 AND 263 (40 C.F.R. PARTS 262 AND 263). B) TRANSPORT OF HAZARDOUS MATERIALS FOR TREATMENT AND DISPOSAL MUST SATISFY DEPARTMENT OF TRANSPORTATION REGULATIONS SET FORTH IN 49 C.F.R. PART 107, 171.1-171.500. THE DOT REGULATIONS GOVERN THE TRANSPORT OF HAZARDOUS WASTE MATERIALS, INCLUDING PACKAGING, SHIPPING, EQUIPMENT AND PLACARDING.
3. CONSOLIDATION OF 69,000 GALLONS OF CONCENTRATED HAZARDOUS WASTES INTO TANKS AND CONTAINER.	N/A	REGULATIONS OF THE OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION ("OSHA"), 29 C.F.R. PARTS 1904, 1919 AND 1926, PROVIDE OCCUPATIONAL SAFETY AND HEALTH REQUIREMENTS APPLICABLE TO WORKERS ENGAGED IN ON-SITE HAZARDOUS WASTE FIELD ACTIVITIES.

APPENDIX A (CONTINUED)

ACTION	ALT. 1 NO ACTION	ALT. 2 - OFF-SITE TREATMENT AND DISPOSAL
4. DECONTAMINATION OF 32 TANKS AND 2,000 LINEAR FEET OF PIPING ON SITE.	N/A	A) THE HANDLING AND CLOSURE OF THE EXISTING RCRA-REGULATED TANKS AND PIPING MUST SATISFY 40 C.F.R. PART 264, SUBPARTS I ("USE AND MANAGEMENT OF CONTAINERS") AND J ("TANK SYSTEMS"), RESPECTIVELY AND 25 PA CODE 75.264. B) CLOSURE OF THE UNITS MUST ALSO SATISFY 40 C.F.R. PART 264, SUBPART G ("CLOSURE AND POST-CLOSURE") AND 25 PA CODE CHAPTER 75.264(O).
5. OFF-SITE DISPOSAL OF 69,000 GALLONS OF CONCENTRATED HAZARDOUS WASTES OFF-SITE.	N/A	A) ANY HAZARDOUS WASTE DELIVERED OFF-SITE MUST BE DELIVERED TO A TREATMENT/STORAGE/DISPOSAL ("TSD") FACILITY WHICH HAS QUALIFIED FOR INTERIM STATUS OR HAS OBTAINED A RCRA PERMIT. SUCH TREATMENT, STORAGE, OR DISPOSAL MUST BE PERFORMED IN ACCORDANCE WITH 40 C.F.R. PART 265, OR THE ANALOGOUS STATE REGULATIONS, OR THE TSD'S PERMIT, AS MAY BE APPROPRIATE. B) SECTION 121(D)(3) OF CERCLA MANDATES THAT HAZARDOUS WASTES DISPOSED OFF-SITE BE DISPOSED OF AT A FACILITY THAT IS OPERATING IN COMPLIANCE WITH INTERIM STATUS REQUIREMENTS OR A PERMIT AND IF THE WASTES ARE TO BE LAND-DISPOSED, THE RECEIVING FACILITY MUST NOT BE RELEASING ANY HAZARDOUS WASTES OR CONSTITUENTS INTO GROUND WATER, SURFACE WATER OR SOIL AND ANY RELEASES FROM OTHER UNITS AT THE FACILITY MUST BE CONTROLLED BY RCRA CORRECTIVE ACTION. C) ANY OFF-SITE DISPOSAL MUST COMPLY WITH THE EPA OFF-SITE DISPOSAL POLICY, OSWER DIRECTIVE NO. 9834.11 (11/13/87).
6. OFF-SITE DISPOSAL OF 8,000 GALLONS OF WATER USED, USED TO DECONTAMINATE ON-SITE TANKS AND PIPING.	N/A	ID. (SEE 5 ABOVE)

WHITMOYER LABORATORIES SITE
LEBANON COUNTY, PENNSYLVANIA

FINAL
RESPONSIVENESS SUMMARY
JUNE 23, 1989

THIS RESPONSIVENESS SUMMARY IS INTENDED TO DOCUMENT PUBLIC CONCERNS AND COMMENTS EXPRESSED DURING THE PUBLIC COMMENT PERIOD. THE SUMMARY IS ALSO INTENDED TO DOCUMENT THE EPA'S RESPONSES TO THE COMMENTS AND CONCERNS THAT WERE RECEIVED. INFORMATION IS ORGANIZED AS FOLLOWS;

1.0 OVERVIEW
2.0 SUMMARY OF COMMENTS AND RESPONSES
3.0 REMAINING CONCERNS

ATTACHMENT;
LIST OF COMMUNITY RELATIONS ACTIVITIES
CONDUCTED AT THE WHITMOYER LABORATORIES SITE

1.0 OVERVIEW

THE PUBLIC COMMENT PERIOD FOR THE WHITMOYER LABORATORIES SITE BEGAN ON APRIL 17, 1989, AND EXTENDED UNTIL MAY 17, 1989. IN A PUBLIC ANNOUNCEMENT THAT APPEARED IN THE LEBANON COUNTY DAILY NEWS ON APRIL 17, 1989. EPA SUMMARIZED THE AGENCY'S PROPOSED PLAN FOR DISPOSING OF CONCENTRATED LIQUIDS FROM THE SITE AND OFFERED THE LOCAL COMMUNITY AN OPPORTUNITY TO REQUEST A PUBLIC MEETING TO DISCUSS THE PLAN. THE ANNOUNCEMENT ALSO INFORMED COMMUNITY MEMBERS THAT COPIES OF THE PROPOSED PLAN AND THE CONCENTRATED LIQUIDS ASSESSMENT, UPON WHICH THE PLAN WAS BASED, WERE AVAILABLE LOCALLY AT THE MYERSTOWN PUBLIC LIBRARY IN MYERSTOWN, PENNSYLVANIA. NO PUBLIC MEETING REQUESTS WERE RECEIVED. CONSEQUENTLY, NO MEETING WAS HELD.

2.0 SUMMARY OF COMMENTS AND RESPONSES

DURING THE COMMENT PERIOD, ONLY ONE COMMENT WAS RECEIVED REGARDING THE PROPOSED PLAN TO DISPOSE CONCENTRATED LIQUIDS. THE COMMENT WAS PRESENTED IN A LETTER FROM A LOCAL OFFICIAL ASSOCIATED WITH THE LEBANON COUNTY EMERGENCY PLANNING AGENCY, AND IT WAS DATED APRIL 25, 1989.

COMMENT: THIS OFFICIAL STATED THAT HE NEEDED SPECIFIC INFORMATION FROM EPA IN ORDER TO ENHANCE THE ORIGINAL SITE EMERGENCY CONTINGENCY PLAN AND PROVIDE FOR A PUBLIC SAFETY SERVICES RESPONSE IN THE EVENT AN UNPLANNED INCIDENT OCCURRED DURING THE REMEDIAL ACTION. THE INFORMATION REQUESTED INCLUDED THE FOLLOWING;

- THE NAME AND NUMBER OF AN EPA CONTACT PERSON WHO WILL BE ABLE TO PROVIDE PERTINENT INFORMATION IN THE EVENT OF A RELEASE.
- THE WORK SCHEDULE, AS WELL AS THE SHIPPING SCHEDULE AND TRAVEL ROUTES FOR ALL VEHICLES TRANSPORTING HAZARDOUS WASTES FROM THE SITE THROUGH LEBANON COUNTY.
- CONTINGENCY PLAN COORDINATION AMONG EPA, COUNTY EMA (EMERGENCY MANAGEMENT AGENCY), LOCAL PUBLIC SAFETY UNITS, PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES (PADER), AND THE STATE FISH COMMISSION.
- INFORMATION REGARDING THE TYPE OF PROTECTIVE EQUIPMENT NEEDED BY PUBLIC SAFETY PERSONNEL WHO WOULD BE CALLED ON TO RESPOND TO AN EMERGENCY.
- STATUS REPORTS REGARDING CLEANUP ACTIVITIES.
- INFORMATION, IN THE EVENT OF A RELEASE, REGARDING LEVEL OF CONCERN AND AREA OR RADIUS OF CONTAMINANT PLUME MIGRATION.

EPA RESPONSE: THE NAME, ADDRESS, AND PHONE NUMBER OF THE EPA REMEDIAL PROJECT MANAGER (RPM) FOR THE PROPOSED CONCENTRATED LIQUIDS REMEDIAL

ACTION WAS PROVIDED IN AL LETTER, DATED JUNE 1, 1989. IN ADDITION, THE RPM STATED THAT THE REQUESTED INFORMATION REGARDING SCHEDULES, TRAVEL ROUTES, AND PROTECTIVE EQUIPMENT WILL BE DEFINED DURING THE REMEDIAL DESIGN AND WILL, SUBSEQUENTLY, BE PROVIDED TO THE APPROPRIATE OFFICIALS, AS IT IS DEVELOPED. THE RPM ALSO SAID THAT EPA WILL COORDINATE CONTINGENCY PLANNING WITH THE NECESSARY EMERGENCY RESPONSE UNITS AND ESTABLISH AN ACCEPTABLE PROJECT STATUS REPORTING FORMAT FOR USE DURING THE REMEDIAL ACTION.

3.0 REMAINING CONCERNS

THERE DO NOT APPEAR TO BE ANY SIGNIFICANT REMAINING CONCERNS REGARDING THE PROPOSED REMEDIAL ACTION. BOTH STATE AND LOCAL OFFICIALS SEEM TO BE IN AGREEMENT WITH EPA'S PREFERRED ALTERNATIVE.