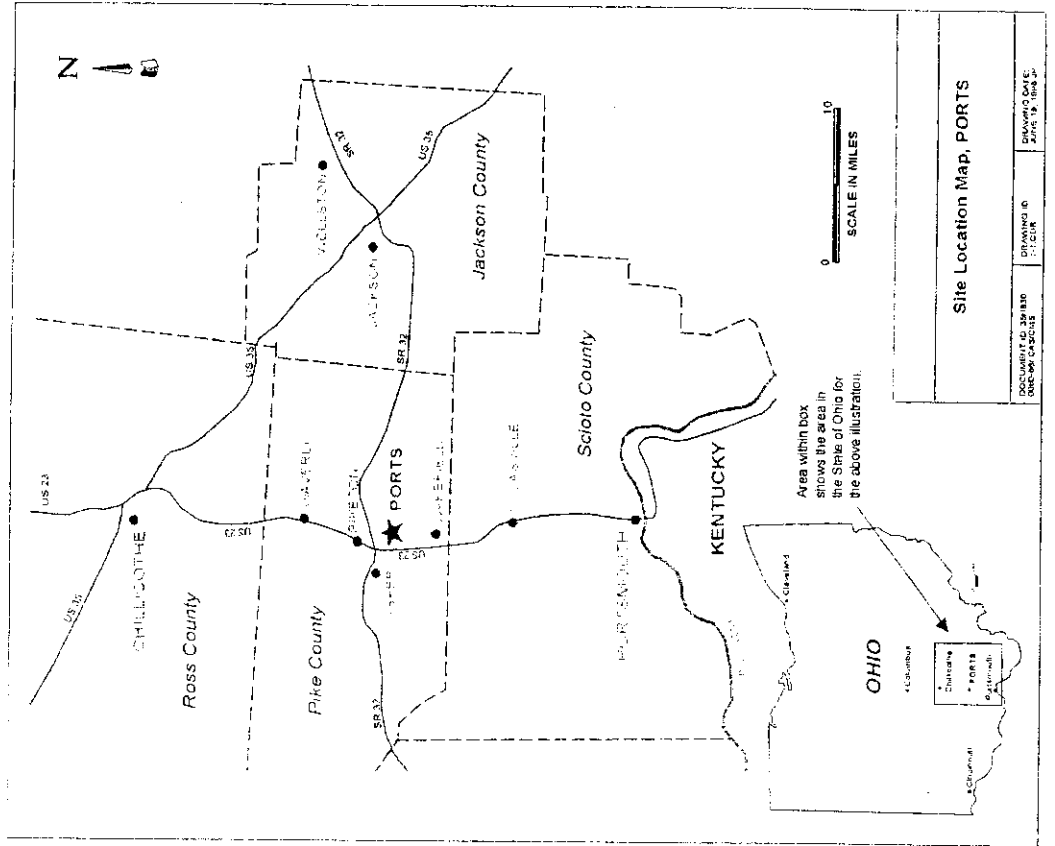
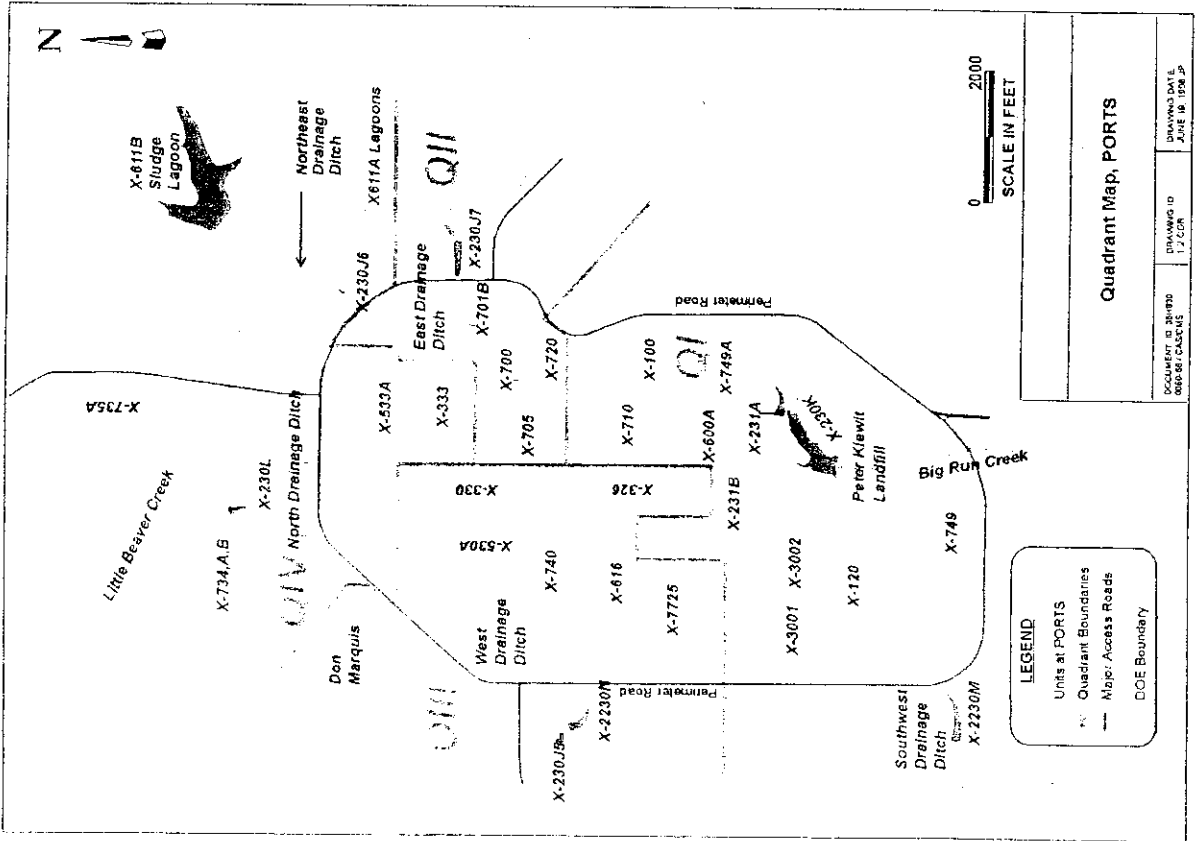


**APPENDIX I**  
**FIGURES**

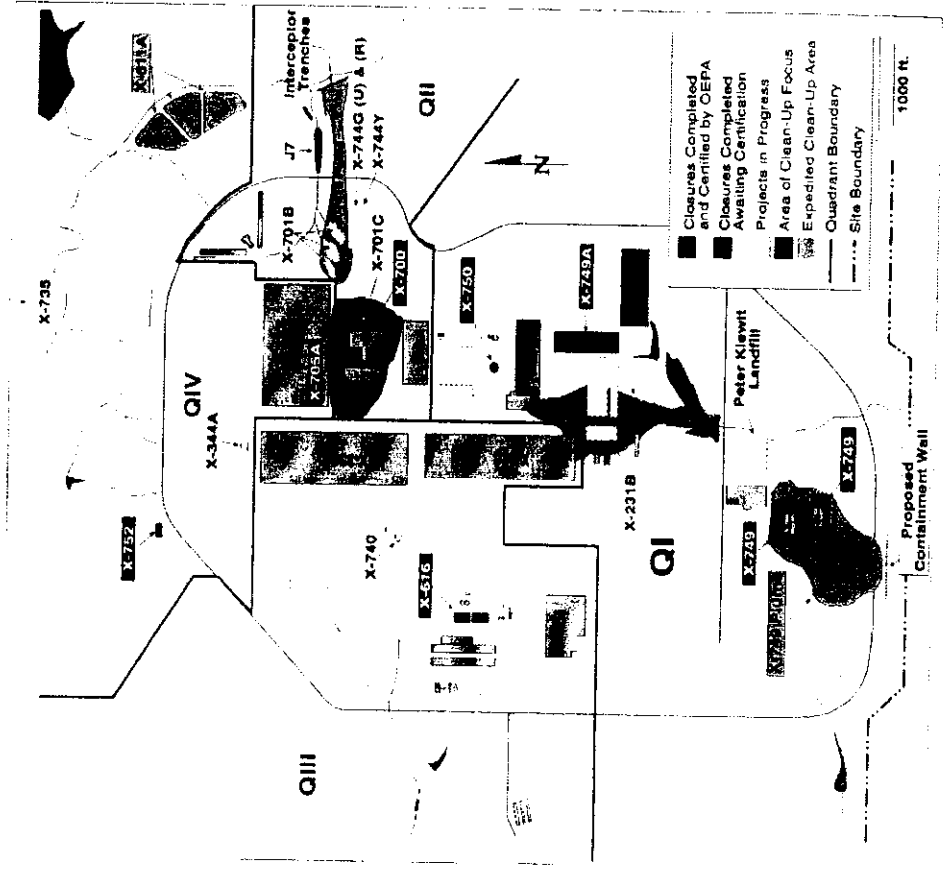
# Figure 1



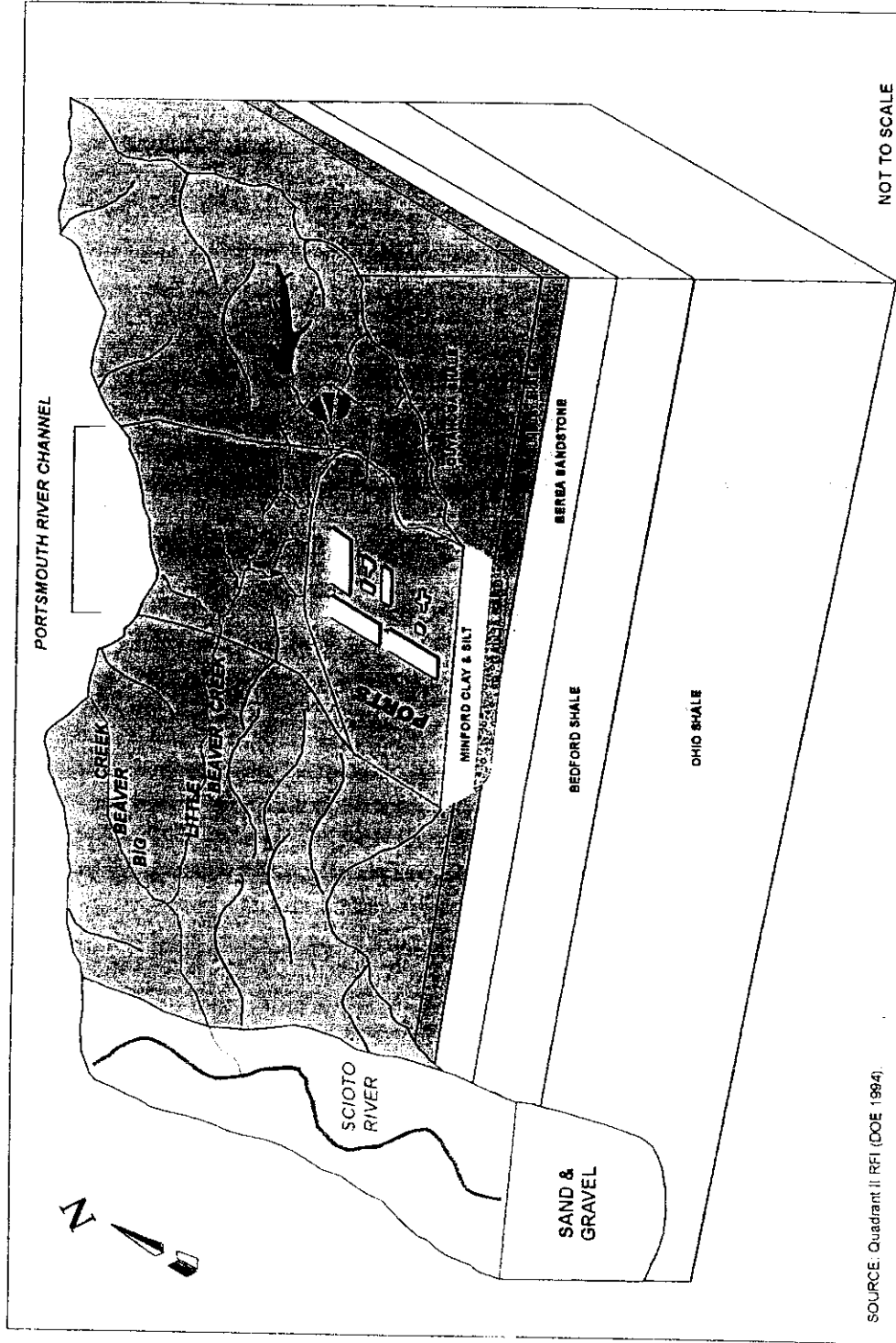
# Figure 2



# Figure 3



# Figure 4



SOURCE: Quadrant II RFI (DOE 1984).

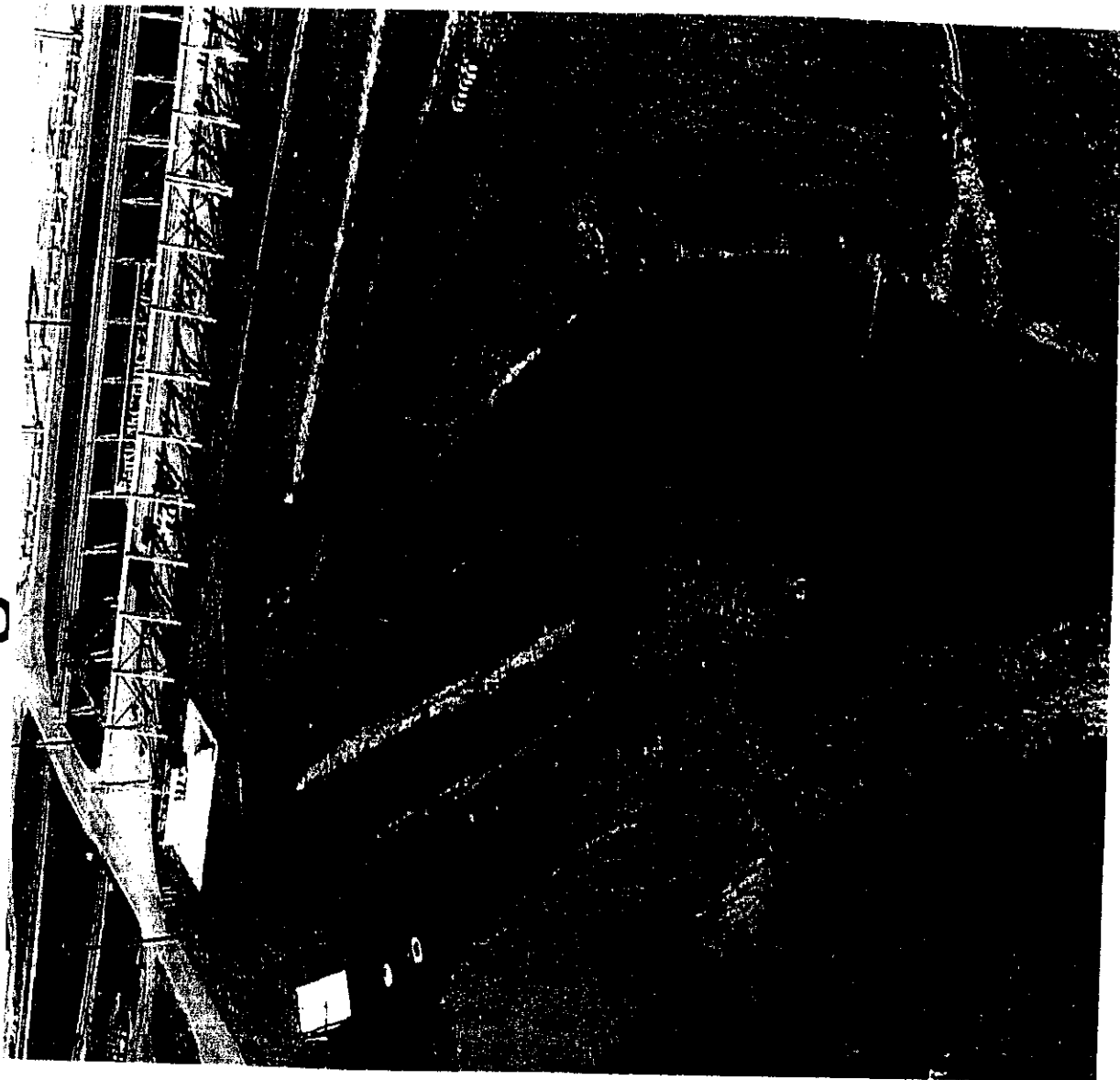
Schematic Block Diagram Showing Geology at Ports

DOCUMENT ID: 348R20  
0000-01 / CAS/MS

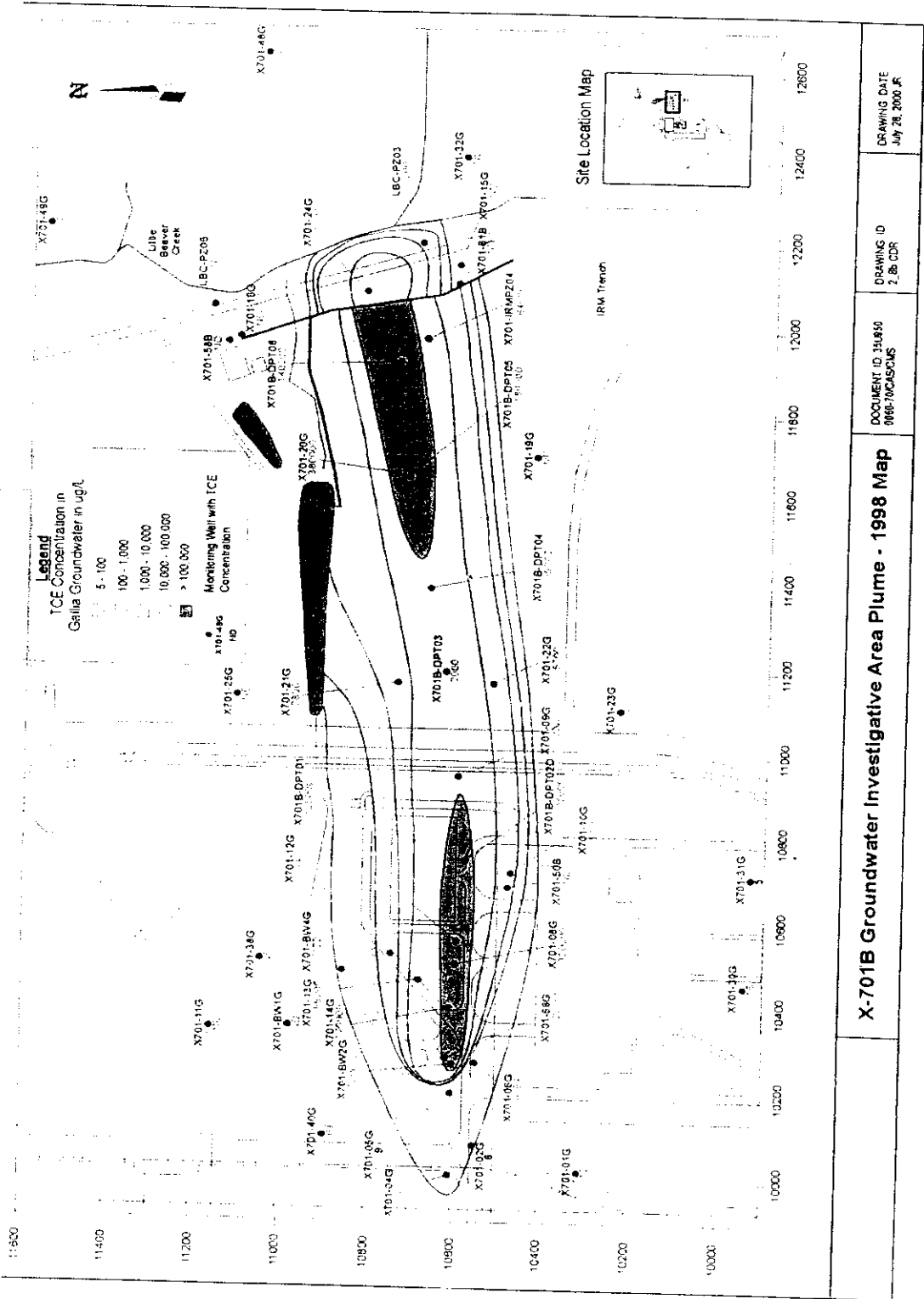
DRAWING ID:  
1-S-CDR

DRAWING DATE:  
JUNE 19, 1988 JP

Figure 5



# Figure 6



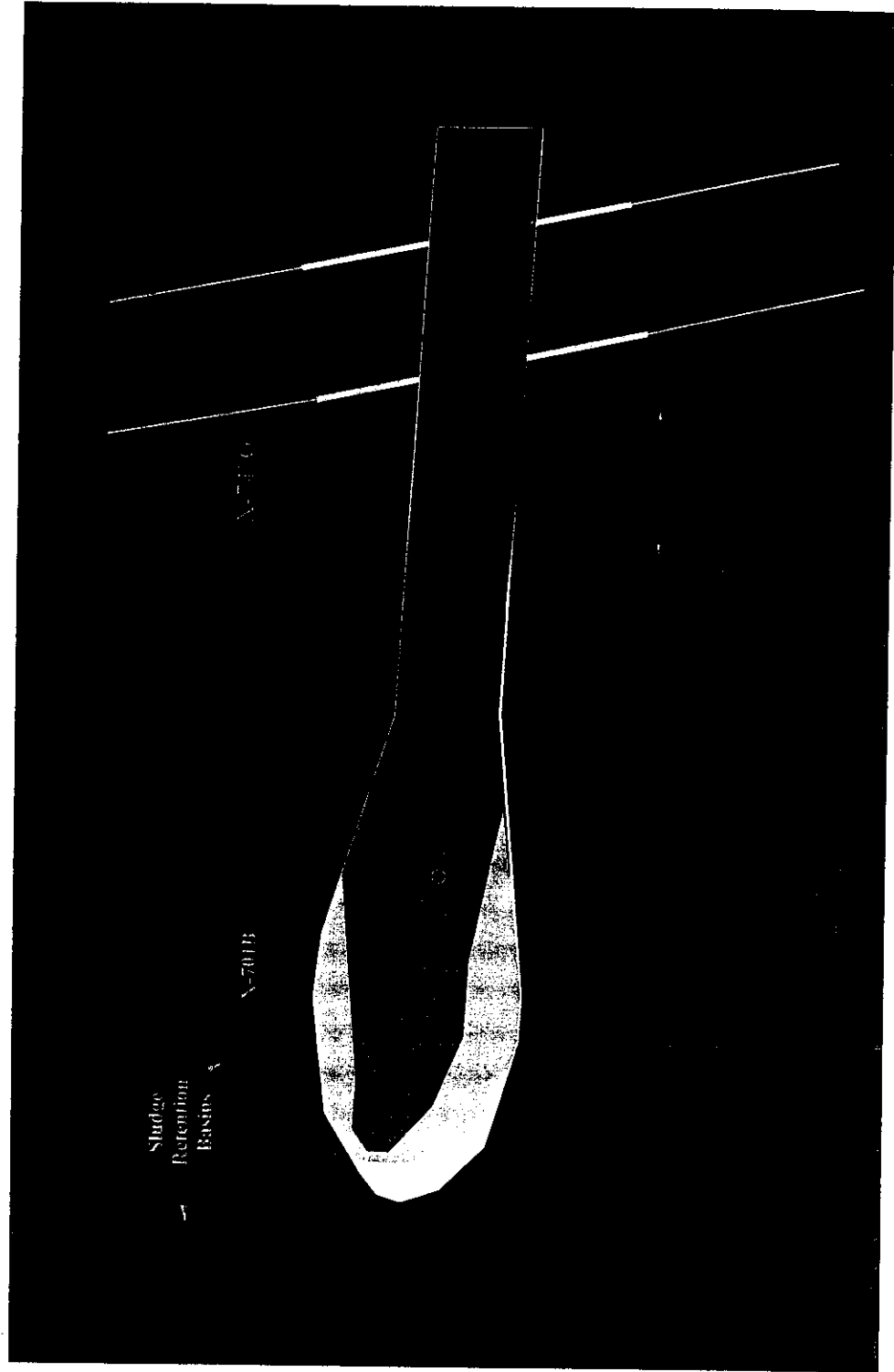
X-701B Groundwater Investigative Area Plume - 1998 Map

DOCUMENT ID: 151559  
9867-70CASC045

DRAWING ID:  
2.26 CDR

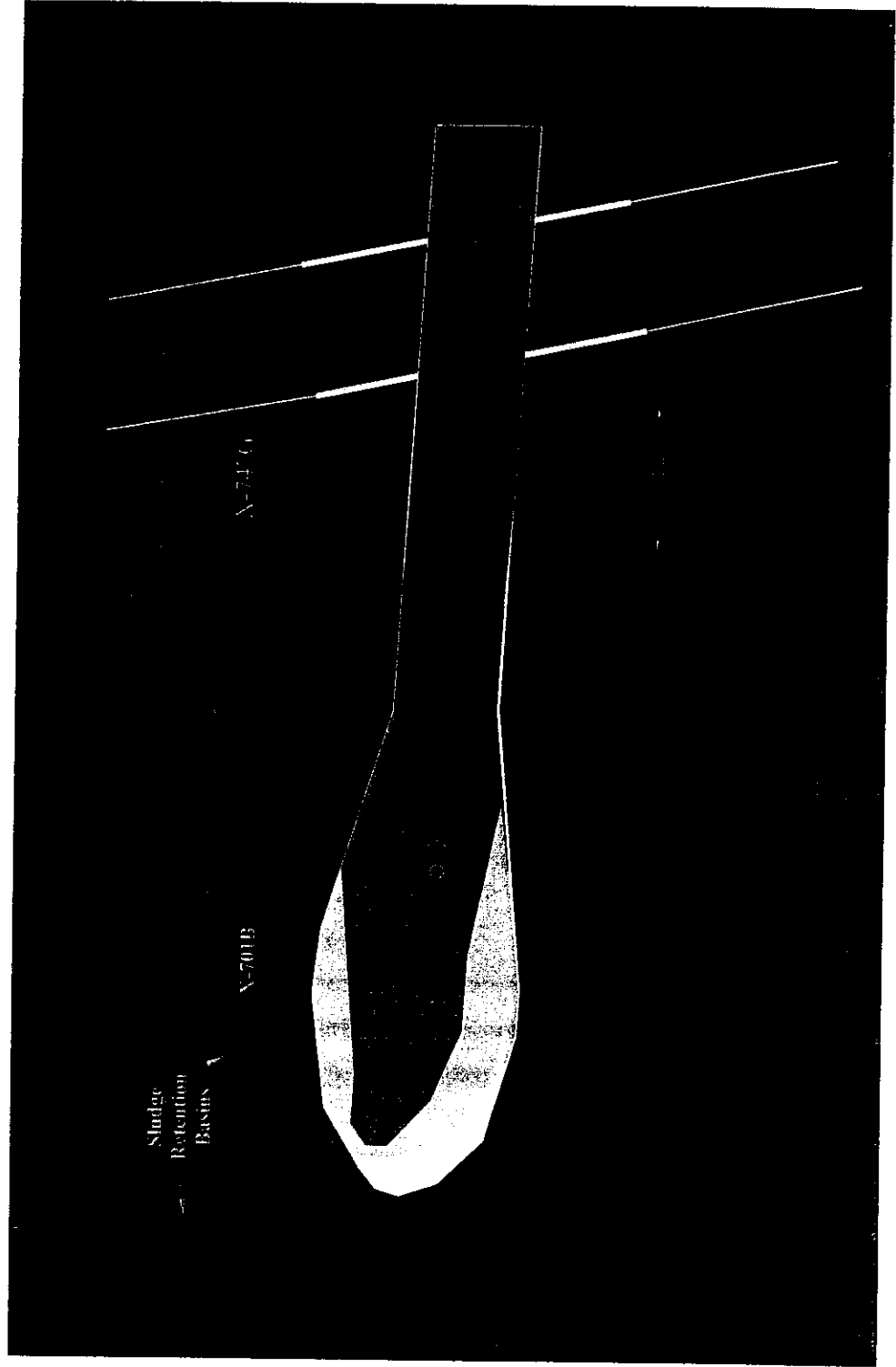
DRAWING DATE:  
July 28, 2000 JF

Figure 8





# Figure 8



**APPENDIX II**  
**ARARs**

CAT.	ORC.	OAC.	PARA.	STATUS.	CAPTION.	TEXT.	CAPTION.
ODNR	1518.02			APP	ENDANGERED PLANT SPECIES	PROHIBITS REMOVAL OR DESTRUCTION OF ENDANGERED PLANT SPECIES (SOME PRIVATE PROPERTY EXCEPTIONS).	APPLIES TO REMEDIATION SITES WHERE CHEMICALS MAY HARM ENDANGERED SPECIES. CLEARLY ESTABLISHES THAT RECEPTOR PLANT SPECIES MUST BE CONSIDERED IN RISK ASSESSMENTS. THIS ACT MAY REQUIRE CONSIDERATION OF ENDANGERED SPECIES IN REMEDIATIONS.
APC	3704.05		A-1	APP	PROHIBITS VIOLATION OF AIR POLLUTION CONTROL RULES	PROHIBITS EMISSION OF AN AIR CONTAMINANT IN VIOLATION SEC. 3704 OR ANY RULES, PERMIT, ORDER OR VARIANCE ISSUED PURSUANT TO THAT SECTION OF THE ORC.	MAY PERTAIN TO ANY SITE WHERE EMISSIONS OF AN AIR CONTAMINANT OCCURS EITHER AS A PRE-EXISTING CONDITION OF THE SITE OR AS A RESULT OF REMEDIAL ACTIVITIES. SHOULD BE CONSIDERED FOR VIRTUALLY ALL SITES. OUIRE THE MANAGEMENT OF SOLID/HAZARD
HW APC	3734.02		(I)	APP	AIR EMISSIONS FROM HAZARDOUS WASTE FACILITIES	NO HAZARDOUS WASTE FACILITY SHALL EMIT ANY PARTICULATE MATTER, DUST, FUMES, GAS, MIST, SMOKE, VAPOR OR ODOROUS SUBSTANCE THAT INTERFERES WITH THE COMFORTABLE ENJOYMENT OF LIFE OR PROPERTY OR IS INJURIOUS TO PUBLIC HEALTH.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE WILL BE MANAGED SUCH THAT AIR EMISSIONS MAY OCCUR. CONSIDER FOR SITES THAT WILL UNDERGO MOVEMENT OF EARTH OR INCINERATION.
HW	3734.02		(G)	REL	EXEMPTIONS TO SOLID & HAZ WASTE T/S/D REQUIREMENTS	PROVIDES AUTHORITY AND CONDITIONS BY WHICH THE DIRECTOR MAY EXEMPT ANY PERSON FROM PERMITTING OR OTHER REQUIREMENTS GOVERNING THE GENERATION, STORAGE, TREATMENT, TRANSPORT OR DISPOSAL OF SOLID OR HAZARDOUS WASTE.	PERTAINS TO ANY SITE AT WHICH SOLID OR HAZARDOUS WASTE HAS COME TO BE LOCATED. CERTAIN ALTERNATIVES INCLUDE EXCAVATION ACTIVITIES WHICH MAY UNCOVER SOLID AND/OR HAZARDOUS WASTE. SHOULD THOSE ACTIVITIES REQUIRE THE MANAGEMENT OF SOLID/HA
HW	3734.02		(H)	APP	DIGGING WHERE HAZ OR SOLID WASTE FACILITY WAS LOCATED	FILLING, GRADING, EXCAVATING, BUILDING, DRILLING OR MINING ON LAND WHERE HAZARDOUS WASTE OR SOLID WASTE FACILITY WAS OPERATED IS PROHIBITED WITHOUT PRIOR AUTHORIZATION FROM THE DIRECTOR OF THE OHIO EPA.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS OR SOLID WASTE HAS COME TO BE LOCATED. CERTAIN ALTERNATIVES INCLUDE EXCAVATION ACTIVITIES WHICH MAY UNCOVER SOLID AND/OR HAZARDOUS WASTE. SHOULD THOSE ACTIVITIES REQUIRE THE MANAGEMENT OF SOLID/HA
ISW	3734.03			APP	PROHIBITS OPEN DUMPING OR BURNING	PROHIBITS OPEN BURNING OR OPEN DUMPING OF SOLID WASTE OR TREATED OR UNTREATED INFECTIOUS WASTE.	PERTAINS TO ANY SITE AT WHICH SOLID WASTE HAS COME TO BE LOCATED OR WILL BE GENERATED DURING A REMEDIAL ACTION.
APC DSW	3767.13			APP	PROHIBITION OF NUISANCES	PROHIBITS NOXIOUS EXHALATIONS OR SMELLS AND THE OBSTRUCTION OF WATERWAYS.	PERTAINS TO ANY SITE THAT MAY HAVE NOXIOUS SMELLS OR MAY OBSTRUCT WATERWAYS.
DSW	3767.14			APP	PROHIBITION OF NUISANCES	PROHIBITION AGAINST THROWING REFUSE, OIL, OR FILTH INTO LAKES, STREAMS, OR DRAINS.	PERTAINS TO ALL SITES LOCATED ADJACENT TO LAKES, STREAMS, OR DRAINS.
DSW	6111.04			APP	ACTS OF POLLUTION PROHIBITED	POLLUTION OF WATERS OF THE STATE IS PROHIBITED.	PERTAINS TO ANY SITE WHICH HAS CONTAMINATED ON-SITE GROUND OR SURFACE WATER OR WILL HAVE A DISCHARGE TO ON-SITE SURFACE OR GROUND WATER.
DSW	6111.07		A.C	APP	WATER POLLUTION CONTROL REQUIREMENTS - DUTY TO COMPLY	PROHIBITS FAILURE TO COMPLY WITH REQUIREMENTS OF SECTIONS 6111.01 TO 6111.08 OR ANY RULES. PERMIT OR ORDER ISSUED UNDER THOSE SECTIONS.	PERTAINS TO ANY SITE WHICH HAS CONTAMINATED GROUND WATER OR SURFACE WATER OR WILL HAVE A DISCHARGE TO ON-SITE SURFACE OR GROUND WATER.

HW	3734-02.7	A, B	REL	HANDLING LOW-LEVEL RADIOACTIVE WASTE PROHIBITED	A) PROHIBITS COMINGLING LOW LEVEL RADIOACTIVE WASTE WITH ANY TYPE OF SOLID WASTE, HAZARDOUS WASTE, OR INFECTIOUS WASTE. B) NO OWNER OR OPERATOR OF A SOLID, INFECTIOUS OR HAZARDOUS WASTE FACILITY SHALL ACCEPT FOR TRANSFER, STORAGE, TRE	PERTAINS TO ALL SITES AT WHICH LOW LEVEL RADIOACTIVE WASTE HAS COME TO BE LOCATED.
OSW	6111.04.2		APP	RULES REQUIRING COMPLIANCE WITH NATIONAL EFFLUENT STDS	ESTABLISHES REGULATIONS REQUIRING COMPLIANCE WITH NATIONAL EFFLUENT STANDARDS.	PERTAINS TO ANY SITE WHICH WILL HAVE A POINT SOURCE DISCHARGE.
UIC	6111.04.3		APP	INJECTION OF SEWAGE OR WASTES INTO WELLS	ESTABLISHES A REGULATORY PROGRAM FOR THE INJECTION OF WASTES INTO WELLS THAT PREVENTS THE CONTAMINATION OF UNDERGROUND SOURCES OF DRINKING WATER.	PERTAINS TO ANY SITE THAT EITHER HAS OR INTENDS TO INJECT WASTES OF ANY TYPE INTO WELLS.
ODNR	1501.31-23	01, A-B	TBC	LIST OF ENDANGERED ANIMAL SPECIES	LIST OF OHIO ANIMAL SPECIES CONSIDERED ENDANGERED.	MAY APPLY TO REMEDIATION SITES WHERE LISTED SPECIES ARE THREATENED BY CHEMICAL RELEASES. MAY ALSO APPLY AT SITES WHERE REMEDIAL ACTIVITIES COULD DISTURB EXISTING HABITATS.
ODNR	1501-18-1	03, A	TBC	LIST OF ENDANGERED PLANT SPECIES	PLANT SPECIES CONSIDERED ENDANGERED IN OHIO	MAY APPLY AT REMEDIATION SITES WHERE CHEMICAL RELEASE THREATENS LISTED SPECIES. SHOULD ALSO BE CONSIDERED WHERE REMEDIAL ACTIVITIES MAY DISRUPT HABITATS.
OSW	3745-1-03		APP	ANALYTICAL AND COLLECTION PROCEDURES	SPECIFIES ANALYTICAL METHODS AND COLLECTION PROCEDURES FOR SURFACE WATER DISCHARGES.	PERTAINS TO BOTH DISCHARGES TO SURFACE WATERS AS A RESULT OF REMEDIATION AND ANY ON-SITE SURFACE WATERS AFFECTED BY SITE CONDITIONS.
OSW	3745-1-04	A, B, C, D, E	APP	THE "FIVE FREEDOMS" FOR SURFACE WATER	ALL SURFACE WATERS OF THE STATE SHALL BE FREE FROM: A) OBJECTIONABLE SUSPENDED SOLIDS. B) FLOATING DEBRIS, OIL AND SCUM. C) MATERIALS THAT CREATE A NUISANCE. D) TOXIC, HARMFUL OR LETHAL SUBSTANCES. E) NUTRIENTS THAT CREATE NUISANCE GROWTH	PERTAINS TO BOTH DISCHARGES TO SURFACE WATERS AS A RESULT OF REMEDIATION AND ANY ON-SITE SURFACE WATERS AFFECTED BY SITE CONDITIONS.
OSW	3745-1-05	A-C	APP	ANTIDEGRADATION POLICY FOR SURFACE WATER	PREVENTS DEGRADATION OF SURFACE WATER QUALITY BELOW DESIGNATED USE OR EXISTING WATER QUALITY. EXISTING IN-STREAM USES SHALL BE MAINTAINED AND PROTECTED. THE MOST STRINGENT CONTROLS FOR TREATMENT SHALL BE REQUIRED BY THE DIRECTOR TO BE	REQUIRES THAT BEST AVAILABLE TECHNOLOGY (BAT) BE USED TO TREAT SURFACE WATER DISCHARGES. IDWOPA USES THIS RULE TO SET STANDARDS WHEN EXISTING WATER QUALITY IS BETTER THAN THE DESIGNATED USE.
OSW	3745-1-06	A, B	APP	MIXING ZONES FOR SURFACE WATER	(A) PRESENTS THE CRITERIA FOR ESTABLISHING NON-THERMAL MIXING ZONES FOR POINT SOURCE DISCHARGES (B) PRESENTS THE CRITERIA FOR ESTABLISHING THERMAL MIXING ZONES FOR POINT SOURCE DISCHARGES	APPLIED AS A TERM OF DISCHARGE PERMIT TO INSTALL (PTI), WOULD PERTAIN TO AN ALTERNATIVE WHICH RESULTED IN A POINT SOURCE DISCHARGE.
OSW	3745-1-07	C	APP	WATER QUALITY CRITERIA	ESTABLISHES WATER QUALITY CRITERIA FOR POLLUTANTS WHICH DO NOT HAVE SPECIFIC NUMERICAL OR NARRATIVE CRITERIA IDENTIFIED IN TABLES 7-1 THROUGH 7-15 OF THIS RULE.	PERTAINS TO BOTH DISCHARGES TO SURFACE WATERS AS A RESULT OF REMEDIAL ACTION AND ANY SURFACE WATERS AFFECTED BY SITE CONDITIONS.

DSW	3745-1-09	APP	WATER USE DES FOR SCIOTO RIVER	ESTABLISHES WATER USE DESIGNATIONS FOR STREAM SEGMENTS WITHIN THE SCIOTO RIVER BASIN.	PERTINENT IF STREAM OR STREAM SEGMENT IS ON-SITE AND IS EITHER AFFECTED BY SITE CONDITIONS OF IF REMEDY INCLUDES DIRECT DISCHARGE. USED BY DWOPA TO ESTABLISH WASTE LOAD ALLOCATIONS
DSW	3745-1-32	APP	WATER USE DES FOR OHIO RIVER	ESTABLISHES WATER USE DESIGNATIONS FOR STREAM SEGMENTS WITHIN THE OHIO RIVER BASIN.	PERTINENT IF STREAM OR STREAM SEGMENT IS ON-SITE AND IS EITHER AFFECTED BY SITE CONDITIONS OF IF REMEDY INCLUDES DIRECT DISCHARGE. USED BY DWOPA TO ESTABLISH WASTE LOAD ALLOCATIONS.
DSW	3745-1-34	A-D	WATER QUALITY CRITERIA FOR THE OHIO RIVER DRAINAGE BASIN	APPLIES TO DISCHARGES TO STREAMS WITHIN THE OHIO RIVER BASIN. USED BY DSW TO DETERMINE DISCHARGE LIMITS	CONSIDER FOR SITES WITH DISCHARGES TO OHIO RIVER BASIN
DSW	3745-1-35	A-G	SITE-SPECIFIC MODIFICATIONS TO CRITERIA AND VALUES	DESCRIBES STANDARDS BY WHICH AGENCY MAY MAKE SITE SPECIFIC ADJUSTMENTS TO DETERMINE WATER QUALITY STANDARDS AND DISCHARGE LIMITS. CONSIDERS LOCAL CONDITIONS SUCH AS WATER CHEMISTRY OR SENSITIVE SPECIES THAT MAY NECESSITATE MODIFICATION	CONSIDER FOR ANY SITE THAT WILL DISCHARGE TO SURFACE WATERS OF OHIO
DSW	3745-1-37	A-G	METHODOLOGIES FOR DERIVING BIOACCUMULATION FACTORS	USED BY DSW IN PREDICTING HUMAN AND AQUATIC HEALTH EFFECTS OF POLLUTANTS. IMPACTS DISCHARGE LIMITS/	CONSIDER FOR SITES WITH SURFACE WATER DISCHARGES.
DSW	3745-1-40	A,B	DEV. OF AQUATIC LIFE CRITERIA, OHIO RIVER BASIN	USED BY DSW TO CALCULATE CHEMICAL CONCENTRATIONS HARMFUL TO WILDLIFE IN OHIO RIVER BASIN. IMPACTS DISCHARGE STANDARDS.	CONSIDER FOR SITES WITH DISCHARGES IN OHIO RIVER BASIN
APC	3745-15-05	A-I	DE MINIMIS EXEMPTION	GENERALLY EXEMPTS SOURCES WITH LESS THAN 10 LBS/DAY OR 2000LBS/YEAR OF EMISSIONS	CONSIDER FOR SITES WITH INCINERATION, AIR STRIPPING, SOIL VAPOR EXTRACTION OR OTHER POTENTIAL TO EMIT AIR POLLUTANTS
APC	3745-15-06	A1,A2	MAFUNCTION & MAINTENANCE OF AIR POLL CONTROL EQUIPMENT	ESTABLISHES SCHEDULED MAINTENANCE AND SPECIFICS WHEN POLLUTION SOURCE MUST BE SHUT DOWN DURING MAINTENANCE	PERTAINS TO ANY SITE WHICH UTILIZES OR WILL UTILIZE AIR POLLUTION CONTROL EQUIPMENT ON-SITE.
APC	3745-15-07	A	AIR POLLUTION NUISANCES PROHIBITED	DEFINES AIR POLLUTION NUISANCE AS THE EMISSION OR ESCAPE INTO THE AIR FROM ANY SOURCE(S) OF SMOKE, ASHES, DUST, DIRT, GRIME, ACIDS, FUMES, GASES, VAPORS, ODORS AND COMBINATIONS OF THE ABOVE THAT ENDANGER HEALTH, SAFETY OR WELFARE OF T	PERTAINS TO ANY SITE WHICH CAUSES, OR MAY REASONABLY CAUSE, AIR POLLUTION NUISANCES. CONSIDER FOR SITES THAT WILL UNDERGO EXCAVATION, DEMOLITION, CAP INSTALLATION, METHANE PRODUCTION, CLEARING AND GRUBBING, WATER TREATMENT, INCINERATION
APC	3745-15-08	A	CIRCUMVENTION	FORBIDS DILUTION OR OTHER MEANS TO CONCEAL EMISSIONS WITHOUT ACTUAL REDUCTIONS	CONSIDER FOR SITES WITH EMISSIONS TO AIR, AIR STRIPPING, INCINERATION, SOIL VAPOR EXTRACTION ETC.
APC	3745-16-02	B,C	STACK HEIGHT REQUIREMENTS	ESTABLISHES ALLOWABLE STACK HEIGHT FOR AIR CONTAMINANT SOURCES BASED ON GOOD ENGINEERING PRACTICE.	PERTAINS TO ANY SITE THAT HAS OR WILL HAVE AN AIR CONTAMINANT SOURCE ON-SITE (PARTICULATE, DUST, FUMES, GAS, MIST, SMOKE, VAPOR, ODORS) EMITTED FROM A STACK. CONSIDER FOR REMEDIES INCORPORATING INCINERATION, WASTE FUEL RECOVERY AND WAST

APC	3745-17-02	A,B,C	APP	PARTICULATE AMBIENT AIR QUALITY STANDARDS	ESTABLISHES SPECIFIC STANDARDS FOR TOTAL SUSPENDED PARTICULATES.	PERTAINS TO ANY SITE THAT MAY EMIT MEASURABLE QUANTITIES OF PARTICULATE MATTER (BOTH STACK AND FUGITIVE). CONSIDER FOR SITES THAT WILL UNDERGO EXCAVATION, DEMOLITION, CAP INSTALLATION, CLEARING AND GRUBBING, INCINERATION AND WASTE FUEL.
APC	3745-17-05		APP	PARTICULATE NON-DEGRADATION POLICY	DEGRADATION OF AIR QUALITY IN ANY AREA WHERE AIR QUALITY IS BETTER THAN REQUIRED BY 3745-17-02 IS PROHIBITED.	PERTAINS TO SITES IN CERTAIN LOCATIONS THAT MAY EMIT OR ALLOW THE ESCAPE OF PARTICULATES (BOTH STACK AND FUGITIVE). CONSIDER FOR SITES THAT WILL UNDERGO EXCAVATION, DEMOLITION, CAP INSTALLATION, CLEARING AND GRUBBING, INCINERATION.
APC	3745-17-08	A1,A2,B,D	APP	EMISSION RESTRICTIONS FOR FUGITIVE DUST	ALL EMISSIONS OF FUGITIVE DUST SHALL BE CONTROLLED.	PERTAINS TO SITES WHICH MAY HAVE FUGITIVE EMISSIONS (NON-STACK) OF DUST. CONSIDER FOR SITES THAT WILL UNDERGO GRADING, LOADING OPERATIONS, DEMOLITION, CLEARING AND GRUBBING AND CONSTRUCTION UTILIZE INCINERATION OR FUEL RECOVERY (WASTE F
APC	3745-19-04	A,B,C,D	REL	OPEN BURNING STANDARDS IN UNRESTRICTED AREAS	OPEN BURNING WITHOUT PRIOR AUTHORIZATION FROM OHIO EPA IS PROHIBITED.	PERTAINS TO SITES WITHIN AN UNRESTRICTED AREA (OUTSIDE THE BOUNDARY OF A MUNICIPALITY AND A ZONE EXTENDING BEYOND SUCH MUNICIPALITY).
DSW	3745-2-04	A-G	APP	DEVELOPMENT OF WATER QUALITY BASED EFFLUENT LIMITATIONS	USED BY DSW TO DETERMINE WASTE LOAD ALLOCATIONS FOR DISCHARGES TO SURFACE WATER. IMPACTS DISCHARGE LIMITS.	CONSIDER FOR ANY SITE WITH DISCHARGE TO SURFACE WATERS.
DSW	3745-2-05	A,B	APP	CALCULATING WASTELOAD ALLOCATIONS	PROCESS FOR CALCULATING WASTELOAD ALLOCATIONS FOR DISCHARGES.	CONSIDER FOR SITES WITH SURFACE WATER DISCHARGES.
DSW	3745-2-06	A-D	APP	APPLICATION OF PRELIMINARY EFFLUENT LIMITATIONS	METHODOLOGY FOR CALCULATING DISCHARGE LIMITATIONS BASED ON CHEMICAL AND BIOLOGICAL FACTORS.	CONSIDER FOR SITES WITH DISCHARGES TO SURFACE WATERS.
DSW	3745-2-07	A,B	APP	ADDITIVE EFFECTS OF POLLUTANTS	DESCRIBES PROCESS FOR CALCULATING COMBINED EFFECTS OF MULTIPLE WATER CONTAMINANTS. USED TO CALCULATE DISCHARGE LIMITS.	CONSIDER FOR SITES WITH SURFACE WATER DISCHARGES.
DSW	3745-2-08	A-L	APP	MIXING ZONE DEMONSTRATION AND SIZING REQUIREMENTS	METHODS FOR DETERMINING EFFECTS OF MIXING ZONES. USED IN CALCULATING DISCHARGE LIMITS.	CONSIDER FOR SITES WITH SURFACE WATER DISCHARGES.
DSW	3745-2-09	A-F	APP	WHOLE EFFLUENT TOXICITY AND WATER QUALITY BASED LIMITS	METHODS FOR CALCULATING TOXICITY BASED CONSIDERATIONS FOR DISCHARGE LIMITS.	CONSIDER FOR SITES WITH SURFACE WATER DISCHARGES.
DSW	3745-2-11	A-F	APP	DISSOLVED OXYGEN MODELING	METHODS FOR CALCULATING EFFECTS OF DISCHARGE ON DISSOLVED OXYGEN.	CONSIDER FOR SITES WITH SURFACE WATER DISCHARGES.
DSW	3745-2-12	A-O	APP	TOTAL MAXIMUM DAILY LOADS	FURTHER METHODOLOGY FOR CALCULATING DISCHARGES. INCLUDES EFFECTS OF NONPOINT SOURCES.	CONSIDER FOR SITES WITH SURFACE WATER DISCHARGES.
HW	3745-248-01	A-E	APP	APPLICABILITY OF RULES 3745-218-01 TO 3745-218-02	DEFINES CONTAINMENT BUILDING	CONSIDER FOR SITES WITH BUILDINGS FOR TREATMENT, STORAGE OR DISPOSAL.
HW	3745-248-02	A,B	REL	CLOSURE AND POST-CLOSURE CARE OF CONTAINMENT BUILDINGS.	STANDARDS FOR CONTAINMENT BUILDING CLOSURE.	CONSIDER FOR SITES WITH BUILDINGS FOR TREATMENT, STORAGE OR DISPOSAL.

HW	3745-248-11	A-E	REL	DESIGN AND OPERATING STANDARDS FOR CONTAINMENT BUILDING	STANDARDS FOR DESIGN AND OPERATION OF CONTAINMENT BUILDINGS	CONSIDER FOR SITES WITH BUILDINGS FOR TREATMENT, STORAGE OR DISPOSAL
HW	3745-270-01	A-F	APP	PURPOSE, SCOPE, AND APPLICABILITY OF 3745-270	GIVES APPLICABILITY OF LAND DISPOSAL RESTRICTIONS	CONSIDER FOR REMEDIAL OPTIONS INCLUDING LAND DISPOSAL OR LEAVING WASTES IN-PLACE
HW	3745-270-02	A-B	APP	DEFINITIONS IN 3745-270	DEFINITIONS APPLICABLE TO LAND DISPOSAL RESTRICTIONS	CONSIDER FOR REMEDIAL OPTIONS INCLUDING LAND DISPOSAL OR LEAVING WASTES IN-PLACE
HW	3745-270-03	A-D	APP	DILUTION PROHIBITED AS A SUBSTITUTE FOR TREATMENT.	FORBIDS DILUTION AS A MEANS OF ACHIEVING LAND DISPOSAL RESTRICTION LEVELS	CONSIDER FOR REMEDIAL OPTIONS INCLUDING LAND DISPOSAL OR LEAVING WASTES IN-PLACE
HW	3745-270-48	A	APP	UNIVERSAL TREATMENT STANDARDS	GIVES CONTAMINANT CHEMICAL SPECIFIC STANDARDS FOR LAND DISPOSAL	CONSIDER FOR SITES WITH WASTE GENERATION OR ON-SITE DISPOSAL
HW	3745-270-49	A-E	APP	LAND DISPOSAL RESTRICTION FOR CONTAMINATED SOILS	SPECIFIES STANDARDS FOR SOIL TREATMENT	CONSIDER AT SITES WHERE CONTAMINATED SOILS ARE GENERATED
DSIWM	3745-27-08	C,D-H	REL	CONSTRUCTION SPECIFICATIONS FOR SANITARY LANDFILLS	SPECIFIES THE MINIMUM REQUIREMENTS FOR THE SOIL/CLAY LAYERS, GRANULAR DRAINAGE LAYER, GEOSYNTHETICS, LEACHATE MANAGEMENT SYSTEM, GAS MONITORING SYSTEM, ETC. ALSO ESTABLISHES CONSTRUCTION REQUIREMENTS FOR FACILITIES TO BE LOCATED IN GEO	PERTAINS TO ANY NEW SOLID WASTE DISPOSAL FACILITY CREATED ON-SITE AND ANY EXPANSIONS TO EXISTING SOLID WASTE LANDFILLS. PORTIONS ALSO PERTAIN TO AREAS OF CONTAMINATION THAT ARE CAPPED PER SOLID WASTE RULES. MAY SERVE AS SITING CRITERIA
DSIWM	3745-27-13	C	REL	DISTURBANCES WHERE HAZ OR SOLID WASTE FAC WAS OPERATED	REQUIRES THAT A DETAILED PLAN BE PROVIDED TO DESCRIBE HOW ANY PROPOSED FILLING, GRADING, EXCAVATING, BUILDING, DRILLING OR MINING ON LAND WHERE A HAZARDOUS WASTE FACILITY OR SOLID WASTE FACILITY WAS OPERATED WILL BE ACCOMPLISHED. THIS	PERTAINS TO ANY SITE AT WHICH HAZARDOUS OR SOLID WASTE HAS BEEN MANAGED, EITHER INTENTIONALLY OR OTHERWISE. DOES NOT PERTAIN TO AREAS THAT HAVE HAD ONE-TIME LEAKS OR SPILLS.
DSIWM	3745-27-14	A	TBC	POST-CLOSURE CARE OF SANITARY LANDFILL FACILITIES	SPECIFIES THE REQUIRED POST-CLOSURE CARE FOR SOLID WASTE FACILITIES. INCLUDES CONTINUING OPERATION OF LEACHATE AND SURFACE WATER MANAGEMENT SYSTEMS, MAINTENANCE OF THE CAP SYSTEM AND GROUND WATER MONITORING.	SUBSTANTIVE REQUIREMENTS PERTAIN TO ANY NEWLY CREATED SOLID WASTE LANDFILLS ON-SITE. ANY EXPANSIONS OF EXISTING SOLID WASTE LANDFILLS ON-SITE AND ANY EXISTING AREAS OF CONTAMINATION THAT ARE CAPPED PER THE SOLID WASTE RULES.
DSIWM	3745-27-19	J	REL	SANITARY LANDFILL OPERATIONS - SURFACE WATER MGMT.	SURFACE WATER MUST BE DIVERTED FROM AREAS WHERE SOLID WASTE IS BEING, OR HAS BEEN, DEPOSITED. ALSO REQUIRES RUN-ON AND RUN-OFF TO BE CONTROLLED TO MINIMIZE INFILTRATION THROUGH THE COVER MATERIALS AND TO MINIMIZE EROSION OF THE CAP SYSTEM.	PERTAINS TO NEW SOLID WASTE DISPOSAL FACILITIES TO BE CREATED ON-SITE AND EXISTING LANDFILLS THAT WILL BE EXPANDED DURING REMEDIATION. PORTIONS ALSO MAY PERTAIN TO EXISTING AREAS OF CONTAMINATION THAT WILL BE CAPPED IN-PLACE PER SOLID WA
DSIWM	3745-27-19	K	TBC	SANITARY LANDFILL OPERATIONS - LEACHATE MANAGEMENT	REQUIRES REPAIR OF LEACHATE OUTBREAKS; COLLECTION AND TREATMENT OF LEACHATE ON THE SURFACE OF THE LANDFILL; AND ACTIONS TO MINIMIZE CONTROL OR ELIMINATE CONDITIONS CAUSING LEACHATE OUTBREAKS.	PERTAINS TO NEW SOLID WASTE DISPOSAL FACILITIES TO BE CREATED ON-SITE AND EXISTING LANDFILLS THAT WILL BE EXPANDED DURING REMEDIATION. PORTIONS ALSO MAY PERTAIN TO EXISTING AREAS OF CONTAMINATION THAT WILL BE CAPPED IN-PLACE PER SOLID WA
UIC	3745-34-06		APP	PROHIBITION OF UNAUTHORIZED INJECTION	UNDERGROUND INJECTION IS PROHIBITED WITHOUT AUTHORIZATION FROM THE DIRECTOR.	PERTAINS TO SITES AT WHICH MATERIALS ARE TO BE INJECTED UNDERGROUND. CONSIDER FOR TECHNOLOGIES SUCH AS BIOREMEDIATION AND SOIL FLUSHING.

UIC	3745-34-07	APP	NO MOVEMENT OF FLUID INTO UNDERGROUND DRINKING WATER	THE UNDERGROUND INJECTION OF FLUID CONTAINING ANY CONTAMINANT INTO AN UNDERGROUND SOURCE OF DRINKING WATER IS PROHIBITED IF THE PRESENCE OF THAT CONTAMINANT MAY CAUSE A VIOLATION OF THE PRIMARY DRINKING WATER STANDARDS OR OTHER WISE ADVE	PERTAINS TO SITES AT WHICH MATERIALS ARE TO BE INJECTED UNDERGROUND. CONSIDER FOR TECHNOLOGIES SUCH AS BIOREMEDIATION AND SOIL FLUSHING.
UIC	3745-34-08	APP	ELIMINATION OF CLASS IV WELLS	THE INJECTION OF HAZARDOUS OR RADIOACTIVE WASTE DIRECTLY INTO AN UNDERGROUND SOURCE OF DRINKING WATER IS PROHIBITED.	PERTAINS TO SITES AT WHICH MATERIALS ARE TO BE INJECTED UNDERGROUND. CONSIDER FOR TECHNOLOGIES SUCH AS BIOREMEDIATION AND SOIL FLUSHING.
UIC	3745-34-09	APP	REQUIREMENTS FOR WELLS INJECTING HAZARDOUS WASTE	SPECIFIES REQUIREMENTS FOR THE INJECTION OF HAZARDOUS WASTES UNDERGROUND. SEE 3745-34-08 FOR LIMITATIONS 8 OF THE ORC.	PERTAINS TO SITES AT WHICH MATERIALS ARE TO BE INJECTED UNDERGROUND. CONSIDER FOR TECHNOLOGIES SUCH AS BIOREMEDIATION AND SOIL FLUSHING.
UIC	3745-34-10	APP	WAIVER OF REQUIREMENT BY DIRECTOR	THE DIRECTOR MAY AUTHORIZE LESS STRINGENT REQUIREMENTS FOR AN INJECTION THAT DOES NOT OCCUR INTO, THROUGH OR ABOVE AN UNDERGROUND SOURCE OF DRINKING WATER.	PERTAINS TO SITES AT WHICH MATERIALS ARE TO BE INJECTED UNDERGROUND. CONSIDER FOR TECHNOLOGIES SUCH AS BIOREMEDIATION AND SOIL FLUSHING.
UIC	3745-34-13	APP	CLASS V WELLS	SPECIFIES REQUIREMENTS FOR CLASS V WELLS. SEE 3745-34-04 FOR DEFINITIONS.	PERTAINS TO SITES AT WHICH MATERIALS ARE TO BE INJECTED UNDERGROUND. CONSIDER FOR TECHNOLOGIES SUCH AS BIOREMEDIATION AND SOIL FLUSHING.
UIC	3745-34-26	APP	CONDITIONS APPLICABLE TO ALL PERMITS	SPECIFIES MINIMUM CONDITIONS TO BE APPLIED TO ALL UNDERGROUND INJECTIONS.	PERTAINS TO SITES AT WHICH MATERIALS ARE TO BE INJECTED UNDERGROUND. CONSIDER FOR TECHNOLOGIES SUCH AS BIOREMEDIATION AND SOIL FLUSHING.
UIC	3745-34-34	APP	MECHANICAL INTEGRITY	SPECIFIES REQUIREMENTS TO BE MET TO ENSURE MECHANICAL INTEGRITY OF WELLS.	PERTAINS TO SITES AT WHICH MATERIALS ARE TO BE INJECTED UNDERGROUND. CONSIDER FOR TECHNOLOGIES SUCH AS BIOREMEDIATION AND SOIL FLUSHING.
UIC	3745-34-36	APP	PLUGGING AND ABANDONING CLASS I WELLS	SPECIFIES REQUIREMENTS TO BE MET WHEN PLUGGING OR ABANDONING A CLASS I WELL. SEE 3745-34-04 FOR DEFINITIONS.	PERTAINS TO SITES AT WHICH MATERIALS ARE TO BE INJECTED UNDERGROUND. CONSIDER FOR TECHNOLOGIES SUCH AS BIOREMEDIATION AND SOIL FLUSHING.
UIC	3745-34-37	APP	CONSTRUCTION REQUIREMENTS FOR CLASS I WELLS	SPECIFIES CONSTRUCTION AND SITING REQUIREMENTS FOR CLASS I WELLS.	PERTAINS TO SITES AT WHICH MATERIALS ARE TO BE INJECTED UNDERGROUND. CONSIDER FOR TECHNOLOGIES SUCH AS BIOREMEDIATION AND SOIL FLUSHING.
UIC	3745-34-38	TBC	OPERATING, MONITORING & REPORTING REQ FOR CLASS I WELLS	SPECIFIES OPERATING, MONITORING AND REPORTING REQUIREMENTS NECESSARY FOR CLASS I WELLS.	PERTAINS TO SITES AT WHICH MATERIALS ARE TO BE INJECTED UNDERGROUND. CONSIDER FOR TECHNOLOGIES SUCH AS BIOREMEDIATION AND SOIL FLUSHING.
HW	3745-50.44	C1	ADDL PERMIT INFO. HAZ WASTE STORAGE IN CONTAINERS	ESTABLISHES THE SUBSTANTIVE HAZARDOUS WASTE PERMIT REQUIREMENTS NECESSARY FOR OHIO EPA TO DETERMINE ADEQUACY OF CONTAINER STORAGE. INCLUDES INFORMATION SUCH AS DESCRIPTION OF CONTAINMENT SYSTEM, DETAILED DRAWINGS, ETC. SEE OAC 3745-55.	PERTAINS TO ANY SITE AT WHICH STORAGE OF HAZARDOUS WASTE ON-SITE WILL OCCUR IN CONTAINERS. CONSIDER FOR WASTES AND CONTAMINATED SOILS THAT ARE STORED PRIOR TO TREATMENT OR DISPOSAL. THIS, ALONG WITH OTHER PARAGRAPHS OF THIS RULE AND OAC



HW	3745-50-44	C2	APP	ADD'L PERMIT INFO: HAZ WASTE STORAGE/TREAT IN TANKS	ESTABLISHES SUBSTANTIVE HAZARDOUS WASTE PERMIT REQUIREMENTS NECESSARY FOR OHIO EPA TO DETERMINE ADEQUACY OF TANK TREATMENT AND STORAGE UNITS. INCLUDES INFORMATION SUCH AS ASSESSMENT OF STRUCTURAL INTEGRITY, DETAILED PLANS OF TANK SYSTEM	PERTAINS TO ANY SITE AT WHICH STORAGE OR TREATMENT OF HAZARDOUS WASTE IN TANKS WILL OCCUR ON-SITE. THIS, ALONG WITH OTHER PARAGRAPHS OF THIS RULE AND OAC 3745-55-90 THROUGH 3745-55-99, ESTABLISHES THE MINIMUM INFORMATION REQUIRED DURING
HW	3745-50-44	C4	APP	ADD'L PERMIT INFO: HAZ WASTE STORAGE/TREAT IN WASTE PILES	ESTABLISHES SUBSTANTIVE HAZARDOUS WASTE PERMIT REQUIREMENTS NECESSARY FOR OHIO EPA TO DETERMINE ADEQUACY OF WASTE PILES USED TO TREAT OR STORE HAZARDOUS WASTE. INCLUDES INFORMATION SUCH AS WASTE CHARACTERISTICS, DETAILED DESIGN PLANS AND	PERTAINS TO SITES AT WHICH HAZARDOUS WASTE WILL BE STORED OR TREATED IN WASTE PILES. CONSIDER FOR TEMPORARY STORAGE ALSO.
HW	3745-50-44	C8	APP	ADD'L PERMIT INFO: HAZ WASTE T/S/D IN MISC UNITS	ESTABLISHES SUBSTANTIVE HAZARDOUS WASTE PERMIT REQUIREMENTS NECESSARY FOR OHIO EPA TO DETERMINE ADEQUACY OF MISCELLANEOUS UNITS USED TO TREAT OR STORE HAZARDOUS WASTE. INCLUDES INFORMATION SUCH AS WASTE CHARACTERISTICS, DETAILED DESIGN	PERTAINS TO FACILITY/SITE AT WHICH HAZARDOUS WASTE WILL BE STORED, TREATED OR DISPOSED OF IN MISCELLANEOUS UNITS. THIS, ALONG WITH OTHER PARAGRAPHS OF THIS RULE AND OAC 3745-57-90 THROUGH 3745-57-93, ESTABLISHES THE MINIMUM INFORMATION
HW	3745-50-44	C6	APP	ADD'L PERMIT INFO: ENVIRONMENTAL PERFORMANCE STANDARDS	ESTABLISHES SUBSTANTIVE HAZARDOUS WASTE PERMIT REQUIREMENTS NECESSARY FOR OHIO EPA TO DETERMINE ADEQUACY OF SURFACE IMPOUNDMENTS, WASTE PILES, LAND TREATMENT UNITS, LANDFILLS, AND UNDERGROUND INJECTION WELLS USED TO TREAT, STORE OR DISPO	PERTAINS TO SITE AT WHICH HAZARDOUS WASTE WILL BE OR HAS BEEN STORED, TREATED OR DISPOSED OF IN SURFACE IMPOUNDMENTS, WASTE PILES, LAND TREATMENT UNITS, LANDFILLS OR UNDERGROUND INJECTION WELLS. THIS, ALONG WITH OTHER PARAGRAPHS OF THE
HW	3745-50-44	C3	APP	ADD'L PERMIT INFO: HAZ WASTE STORAGE/TREAT IN SURF IMPOUND	ESTABLISHES SUBSTANTIVE HAZARDOUS WASTE PERMIT REQUIREMENTS NECESSARY FOR OHIO EPA TO DETERMINE ADEQUACY OF BOTH NEW SURFACE IMPOUNDMENTS AND EXTENSIONS OF EXISTING SURFACE IMPOUNDMENTS USED TO STORE OR TREAT HAZARDOUS WASTE. INCLUDES	PERTAINS TO ANY SITE AT WHICH EITHER A NEW SURFACE IMPOUNDMENT WILL BE INSTALLED OR AN EXISTING SURFACE IMPOUNDMENT WILL BE EXPANDED THIS, ALONG WITH OTHER PARAGRAPHS OF THIS RULE AND OAC 3745-20-50 THROUGH 3745-33-60, ESTABLISHES THE
HW	3745-51-07	A,B	APP	RESIDUES OF HAZ WASTES IN EMPTY CONTAINERS	REGULATES THE RESIDUES OF HAZARDOUS WASTES FROM EMPTY CONTAINERS. PROVIDES SPECIFIC DEFINITIONS FOR EMPTY CONTAINERS.	PERTAINS TO ANY ALTERNATIVE THAT INCORPORATES STORAGE OF HAZARDOUS WASTE ON-SITE IN CONTAINERS
HW	3745-51-11	A,B,C	APP	CRITERIA FOR LISTING HAZARDOUS WASTE	CRITERIA FOR DETERMINING STATUS OF WASTES	CONSIDER AT SITES WHERE WASTE IS GENERATED DURING REMEDIATION
HW	3745-52-11	A-D	APP	EVALUATION OF WASTES	ANY PERSON GENERATING A WASTE MUST DETERMINE IF THAT WASTE IS A HAZARDOUS WASTE (EITHER THROUGH LISTING OR BY CHARACTERISTIC).	PERTAINS TO SITES AT WHICH WASTES OF ANY TYPE (BOTH SOLID AND HAZARDOUS) ARE LOCATED.
HW	3745-52-20		APP	HAZARDOUS WASTE MANIFEST - GENERAL REQUIREMENTS	REQUIRES A GENERATOR WHO TRANSPORTS OR OFFERS FOR TRANSPORTATION HAZARDOUS WASTE FOR OFF-SITE TREATMENT, STORAGE OR DISPOSAL TO PREPARE A UNIFORM HAZARDOUS WASTE MANIFEST	PERTAINS TO SITES WHERE HAZARDOUS WASTE WILL BE TRANSPORTED OFF-SITE FOR TREATMENT, STORAGE OR DISPOSAL
HW	3745-52-22		APP	HAZARDOUS WASTE MANIFEST - NUMBER OF COPIES	SPECIFIES THE NUMBER OF MANIFEST COPIES TO BE PREPARED	PERTAINS TO SITES WHERE HAZARDOUS WASTE WILL BE TRANSPORTED OFF-SITE FOR TREATMENT, STORAGE OR DISPOSAL
HW	3745-52-23		APP	HAZARDOUS WASTE MANIFEST - USE	SPECIFIES PROCEDURES FOR THE USE OF HAZARDOUS WASTE MANIFESTS INCLUDING A REQUIREMENT THAT THEY BE HAND SIGNED BY THE GENERATOR	PERTAINS TO SITES WHERE HAZARDOUS WASTE WILL BE TRANSPORTED OFF-SITE FOR TREATMENT, STORAGE OR DISPOSAL

HW	3745-52-30	APP	HAZARDOUS WASTE PACKAGING	REQUIRES A GENERATOR TO PACKAGE HAZARDOUS WASTE IN ACCORDANCE WITH U.S. DOT REGULATIONS FOR TRANSPORTATION OFF-SITE.	PERTAINS TO ANY SITE WHERE HAZARDOUS WASTE WILL BE GENERATED BY ON-SITE ACTIVITIES AND SHIPPED OFF-SITE FOR TREATMENT AND/OR DISPOSAL.
HW	3745-52-31	APP	HAZARDOUS WASTE LABELING	REQUIRES PACKAGES OF HAZARDOUS WASTE TO BE LABELED IN ACCORDANCE WITH U.S. DOT REGULATIONS FOR OFF-SITE TRANSPORTATION.	PERTAINS TO ANY SITE WHERE HAZARDOUS WASTE WILL BE GENERATED BY ON-SITE ACTIVITIES AND SHIPPED OFF-SITE FOR TREATMENT AND/OR DISPOSAL.
HW	3745-52-32	APP	HAZARDOUS WASTE MARKING	SPECIFIES LANGUAGE FOR MARKING PACKAGES OF HAZARDOUS WASTE PRIOR TO OFF-SITE TRANSPORTATION	PERTAINS TO ANY SITE WHERE HAZARDOUS WASTE WILL BE GENERATED BY ON-SITE ACTIVITIES AND SHIPPED OFF-SITE FOR TREATMENT AND/OR DISPOSAL.
HW	3745-52-33	APP	HAZARDOUS WASTE PLACARDING	GENERATOR SHALL PLACARD HAZARDOUS WASTE PRIOR TO OFF-SITE TRANSPORTATION.	PERTAINS TO ANY SITE WHERE HAZARDOUS WASTE WILL BE GENERATED BY ON-SITE ACTIVITIES AND SHIPPED OFF-SITE FOR TREATMENT AND/OR DISPOSAL.
HW	3745-52-34	APP	ACCUMULATION TIME OF HAZARDOUS WASTE	IDENTIFIES MAXIMUM TIME PERIODS THAT A GENERATOR MAY ACCUMULATE A HAZARDOUS WASTE WITHOUT BEING CONSIDERED AN OPERATOR OF A STORAGE FACILITY. ALSO ESTABLISHES STANDARDS FOR MANAGEMENT OF HAZARDOUS WASTES BY GENERATORS.	PERTAINS TO A SITE WHERE HAZARDOUS WASTE WILL BE GENERATED AS A RESULT OF THE REMEDIAL ACTIVITIES.
HW	3745-52-40	APP	RECORDKEEPING REQUIREMENTS, THREE YEAR RETENTION	SPECIFIES RECORDS THAT SHALL BE KEPT FOR THREE YEARS	CONSIDER FOR SITES AT WHICH HAZARDOUS WASTES ARE GENERATED
HW	3745-52-41	APP	ANNUAL REPORT	REQUIRES GENERATORS TO PREPARE ANNUAL REPORT TO OPEA	APPLICABLE AT SITES GENERATING WASTES FOR OFF-SITE SHIPMENT
HW	3745-54-13	APP	GENERAL ANALYSIS OF HAZARDOUS WASTE	PRIOR TO ANY TREATMENT, STORAGE OR DISPOSAL OF HAZARDOUS WASTES, A REPRESENTATIVE SAMPLE OF THE WASTE MUST BE CHEMICALLY AND PHYSICALLY ANALYZED.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS IS TO BE TREATED, STORED OR DISPOSED OF (OR HAS BEEN DISPOSED OF).
HW	3745-54-14	APP	SECURITY FOR HAZARDOUS WASTE FACILITIES	HAZARDOUS WASTE FACILITIES MUST BE SECURED SO THAT UNAUTHORIZED AND UNKNOWN ENTRY ARE MINIMIZED OR PROHIBITED.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS IS TO BE TREATED, STORED OR DISPOSED OF (OR HAS BEEN DISPOSED OF).
HW	3745-54-15	APP	INSPECTION REQUIREMENTS FOR HAZARDOUS WASTE FACILITIES	HAZARDOUS WASTE FACILITIES MUST BE INSPECTED REGULARLY TO DETECT MALFUNCTIONS, DETERIORATIONS, OPERATIONAL ERRORS AND DISCHARGES. ANY MALFUNCTIONS OR DETERIORATIONS DETECTED SHALL BE REMEDIATED EXPEDITIOUSLY.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS IS TO BE TREATED, STORED OR DISPOSED OF (OR HAS BEEN DISPOSED OF).
HW	3745-54-17	APP	REQ. FOR IGNITABLE, REACTIVE OR INCOMPATIBLE HAZ WASTES	PRESENTS GENERAL PRECAUTIONS TO BE TAKEN TO PREVENT ACCIDENTAL IGNITION OR REACTION OF IGNITABLE, REACTIVE OR INCOMPATIBLE WASTES.	PERTAINS TO ANY SITE AT WHICH POTENTIALLY REACTIVE, IGNITABLE OR INCOMPATIBLE WASTES ARE PRESENT.
HW	3745-54-18	APP	LOCATION STANDARDS FOR HAZARDOUS WASTE T/S/D FACILITIES	RESTRICTS THE SITING OF HAZARDOUS WASTE FACILITIES IN AREAS OF SEISMIC ACTIVITY OR FLOODPLAINS.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS IS TO BE TREATED, STORED OR DISPOSED OF (OR HAS BEEN DISPOSED OF).

HW	3745-54-31	APP	DESIGN & OPERATION OF HAZARDOUS WASTE FACILITIES	HAZARDOUS WASTE FACILITIES MUST BE DESIGNED, CONSTRUCTED, MAINTAINED AND OPERATED TO MINIMIZE THE POSSIBILITY OF FIRE, EXPLOSION OR UNPLANNED RELEASE OF HAZARDOUS WASTE OR HAZARDOUS CONSTITUENTS TO THE AIR, SOIL OR SURFACE WATER WHICH CO	PERTAINS TO ANY SITE AT WHICH HAZARDOUS IS TO BE TREATED, STORED OR DISPOSED OF (OR HAS BEEN DISPOSED OF).
HW	3745-54-32	APP	REQUIRED EQUIPMENT FOR HAZARDOUS WASTE FACILITIES	ALL HAZARDOUS WASTE FACILITIES MUST BE EQUIPPED WITH EMERGENCY EQUIPMENT, SUCH AS AN ALARM SYSTEM, FIRE CONTROL EQUIPMENT AND A TELEPHONE OR RADIO.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS IS TO BE TREATED, STORED OR DISPOSED OF (OR HAS BEEN DISPOSED OF). SPECIFICATIONS
HW	3745-54-33	APP	TESTING & MAINTENANCE OF EQUIPMENT; HAZ WASTE FACILITIES	ALL HAZARDOUS WASTE FACILITIES MUST TEST AND MAINTAIN EMERGENCY EQUIPMENT TO ASSURE PROPER OPERATION.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE IS TO BE TREATED, STORED OR DISPOSED OF (OR HAS BEEN DISPOSED OF).
HW	3745-54-34	APP	ACCESS TO COMMUNICATIONS OR ALARM SYSTEM; HAZ WASTE FAC	WHENEVER HAZARDOUS WASTE IS BEING HANDLED, ALL PERSONNEL INVOLVED SHALL HAVE IMMEDIATE ACCESS TO AN INTERNAL ALARM OR EMERGENCY COMMUNICATION DEVICE.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE IS TO BE TREATED, STORED OR DISPOSED OF (OR HAS BEEN DISPOSED OF).
HW	3745-54-35	APP	REQUIRED AISLE SPACE AT HAZ WASTE FACILITIES	ADEQUATE AISLE SPACE SHALL BE MAINTAINED TO ALLOW UNOBSTRUCTED MOVEMENT OF PERSONNEL, FIRE EQUIPMENT, SPILL CONTROL EQUIPMENT AND DECONTAMINATION EQUIPMENT INTO ANY AREA OF THE FACILITY OPERATION IN THE EVENT OF AN EMERGENCY.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE IS TO BE TREATED, STORED OR DISPOSED OF (OR HAS BEEN DISPOSED OF). CONSIDER FOR SITES WHERE WASTES WILL BE STORED IN CONTAINERS.
HW	3745-54-37	APP	ARRANGEMENTS/AGREEMENTS WITH LOCAL AUTHORITIES	ARRANGEMENTS OR AGREEMENTS WITH LOCAL AUTHORITIES, SUCH AS POLICE, FIRE DEPARTMENT AND EMERGENCY RESPONSE TEAMS MUST BE MADE. IF LOCAL AUTHORITIES WILL NOT COOPERATE, DOCUMENTATION OF THAT NON-COOPERATION SHOULD BE PROVIDED.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE IS TO BE TREATED, STORED OR DISPOSED OF (OR HAS BEEN DISPOSED OF).
HW	3745-54-52	APP	CONTENT OF CONTINGENCY PLAN; HAZ WASTE FACILITIES	HAZARDOUS WASTE FACILITIES MUST HAVE A CONTINGENCY PLAN THAT ADDRESSES ANY UNPLANNED RELEASE OF HAZARDOUS WASTES OR HAZARDOUS CONSTITUENTS INTO THE AIR, SOIL OR SURFACE WATER. THIS RULE ESTABLISHES THE MINIMUM REQUIRED INFORMATION OF SUCH A	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE IS TO BE TREATED, STORED OR DISPOSED OF (OR HAS BEEN DISPOSED OF).
HW	3745-54-53	APP	COPIES OF CONTINGENCY PLAN; HAZARDOUS WASTE FACILITIES	COPIES OF THE CONTINGENCY PLAN REQUIRED BY 3745-54-50 MUST BE MAINTAINED AT THE FACILITY AND SUBMITTED TO ALL LOCAL POLICE DEPARTMENTS, FIRE DEPARTMENTS, HOSPITALS LOCAL EMERGENCY RESPONSE TEAMS AND THE OHIO EPA.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE IS TO BE TREATED, STORED OR DISPOSED OF (OR HAS BEEN DISPOSED OF).
HW	3745-54-54	APP	AMENDMENT OF CONTINGENCY PLAN; HAZ WASTE FACILITIES	THE CONTINGENCY PLAN MUST BE AMENDED IF IT FAILS IN AN EMERGENCY, THE FACILITY CHANGES (IN ITS DESIGN, CONSTRUCTION, MAINTENANCE OR OPERATION), THE LIST OF EMERGENCY COORDINATORS CHANGE OR THE LIST OF EMERGENCY EQUIPMENT.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE IS TO BE TREATED, STORED OR DISPOSED OF (OR HAS BEEN DISPOSED OF).
HW	3745-54-55	APP	EMERGENCY COORDINATOR; HAZARDOUS WASTE FACILITIES	AT ALL TIMES THERE SHOULD BE AT LEAST ONE EMPLOYEE EITHER ON THE PREMISES OR ON CALL TO COORDINATE ALL EMERGENCY RESPONSE MEASURES.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE IS TO BE TREATED, STORED OR DISPOSED OF (OR HAS BEEN DISPOSED OF).

HW	3745-54-56	A, I	APP	EMERGENCY PROCEDURES; HAZARDOUS WASTE FACILITIES	SPECIFIES THE PROCEDURES TO BE FOLLOWED IN THE EVENT OF AN EMERGENCY.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE IS TO BE TREATED, STORED OR DISPOSED OF (OR HAS BEEN DISPOSED OF).
HW	3745-54-73	A, B	APP	OPERATING RECORD	SPECIFIES RECORDS TO BE KEPT AT TSD FACILITIES	CONSIDER FOR SITES WITH ON-SITE TREATMENT, STORAGE OR DISPOSAL
HW	3745-54-74	A, B, C	APP	AVAILABILITY, RETENTION, AND DISPOSITION OF RECORDS	DISCUSSES RECORD KEEPING RULES AT FACILITIES	CONSIDER AT SITES WITH TREATMENT, STORAGE OR DISPOSAL
HW	3745-54-77	A	APP	ADDITIONAL REPORTS	REQUIRES FACILITIES TO REPORT FIRES, EXPLOSIONS OR OTHER MISHAPS	CONSIDER AT SITES WITH TREATMENT, STORAGE OR DISPOSAL ON-SITE
HW	3745-54-90		APP	GROUND WATER PROTECTION; APPLICABILITY	ESTABLISHES CIRCUMSTANCES UNDER WHICH AN OPERATOR OF A HAZARDOUS WASTE FACILITY MUST IMPLEMENT A GROUND WATER PROTECTION PROGRAM OR A CORRECTIVE ACTION PROGRAM.	PERTAINS TO ALL SITES WITH LAND-BASED HAZARDOUS WASTE UNITS (SURFACE IMPOUNDMENTS, WASTE PILES, LAND TREATMENT UNITS, LANDFILLS); THIS INCLUDES EXISTING LAND-BASED AREAS OF CONTAMINATION.
HW	3745-54-91	A	APP	REQ GROUND WATER PROGRAMS FOR HAZ WASTE FACILITIES	PRESENTS THE GROUND WATER MONITORING AND RESPONSE PROGRAMS REQUIRED FOR HAZARDOUS WASTE LAND-BASED UNITS.	PERTAINS TO ALL SITES WITH LAND-BASED HAZARDOUS WASTE UNITS (SURFACE IMPOUNDMENTS, WASTE PILES, LAND TREATMENT UNITS, LANDFILLS); THIS INCLUDES EXISTING LAND-BASED AREAS OF CONTAMINATION.
HW	3745-54-92		APP	GROUND WATER PROTECTION STANDARD; HAZ WASTE FACILITIES	COMPLIANCE MUST BE ATTAINED WITH THE CONDITIONS SPECIFIED IN THE PERMIT TO ENSURE THAT HAZARDOUS CONSTITUENTS (SEE 3745-54-93) DO NOT EXCEED THE PROMULGATED LIMITS (SEE 3745-54-94).	PERTAINS TO ALL SITES WITH LAND-BASED HAZARDOUS WASTE UNITS (SURFACE IMPOUNDMENTS, WASTE PILES, LAND TREATMENT UNITS, LANDFILLS); THIS INCLUDES EXISTING LAND-BASED AREAS OF CONTAMINATION.
HW	3745-54-93	A, B	APP	HAZARDOUS CONSTITUENTS IN GROUND WATER; HAZ WASTE FAC	REQUIRES THAT PERMIT SPECIFY HAZARDOUS CONSTITUENTS TO WHICH THE GROUND WATER PROTECTION STANDARD OF 3745-54-92 APPLIES. HAZARDOUS CONSTITUENTS ARE CONSTITUENTS IDENTIFIED IN THE APPENDIX OF THIS RULE THAT HAVE BEEN DETECTED IN GROUND W	PERTAINS TO ALL SITES WITH LAND-BASED HAZARDOUS WASTE UNITS (SURFACE IMPOUNDMENTS, WASTE PILES, LAND TREATMENT UNITS, LANDFILLS); THIS INCLUDES EXISTING LAND-BASED AREAS OF CONTAMINATION.
HW	3745-54-94	A, B	APP	CONCENTRATION LIMITS FOR GROUND WATER; HAZ WASTE FAC	PRESENTS THE METHODOLOGY FOR DETERMINING CONCENTRATION LIMITS AND ALTERNATIVE CONCENTRATION LIMITS.	PERTAINS TO ALL SITES WITH LAND-BASED HAZARDOUS WASTE UNITS (SURFACE IMPOUNDMENTS, WASTE PILES, LAND TREATMENT UNITS, LANDFILLS); THIS INCLUDES EXISTING LAND-BASED AREAS OF CONTAMINATION.
HW	3745-54-95	A, B	APP	POINT OF COMPLIANCE FOR GROUND WATER; HAZ WASTE FACIL	ESTABLISHES POINT OF COMPLIANCE AT VERTICAL SURFACE LOCATED AT THE HYDRAULICALLY DOWNGRADE LIMIT OF THE WASTE MANAGEMENT AREA THAT EXTENDS DOWN INTO THE UPPERMOST AQUIFER UNDERLYING THE UNIT(S).	PERTAINS TO ALL SITES WITH LAND-BASED HAZARDOUS WASTE UNITS (SURFACE IMPOUNDMENTS, WASTE PILES, LAND TREATMENT UNITS, LANDFILLS); THIS INCLUDES EXISTING LAND-BASED AREAS OF CONTAMINATION.
HW	3745-54-96	A, B, C	APP	COMPLIANCE PERIOD FOR GROUND WATER; HAZ WASTE FACIL	COMPLIANCE PERIOD DURING WHICH THE GROUND WATER PROTECTION STANDARDS APPLY WILL BE SPECIFIED IN THE PERMIT. RULE REQUIRES THAT THE COMPLIANCE PERIOD FOR A FACILITY UNDERGOING A CORRECTIVE ACTION PROGRAM WILL EXTEND UNTIL IT CAN BE DEMONS	PERTAINS TO ALL SITES WITH LAND-BASED HAZARDOUS WASTE UNITS (SURFACE IMPOUNDMENTS, WASTE PILES, LAND TREATMENT UNITS, LANDFILLS); THIS INCLUDES EXISTING LAND-BASED AREAS OF CONTAMINATION.

HW	3745-54-97	A-H	APP	GEN GROUND WATER MONITORING REQUIREMENTS; HAZ WASTE FAC	PRESENTS GENERAL GROUND WATER MONITORING PROGRAM REQUIREMENTS. INCLUDES NUMBER, LOCATION AND DEPTH OF WELLS, CASING REQUIREMENTS, SAMPLING AND ANALYSIS PROCEDURES, ETC. PRESENTS REQUIREMENTS OF GROUND WATER DETECTION PROGRAM.	PERTAINS TO ALL SITES WITH LAND-BASED HAZARDOUS WASTE UNITS (SURFACE IMPOUNDMENTS, WASTE PILES, LAND TREATMENT UNITS, LANDFILLS). THIS INCLUDES EXISTING LAND-BASED AREAS OF CONTAMINATION.
HW	3745-54-98	A-I	TBC	GROUND WATER DETECTION MONITORING PROG; HAZ WASTE FAC		PERTAINS TO ALL SITES WITH LAND-BASED HAZARDOUS WASTE UNITS (SURFACE IMPOUNDMENTS, WASTE PILES, LAND TREATMENT UNITS, LANDFILLS) AT WHICH HAZARDOUS CONSTITUENTS HAVE NOT BEEN DETECTED IN THE GROUND WATER. THIS INCLUDES EXISTING LAND-BASED
HW	3745-54-99	A-J	TBC	GROUND WATER COMPLIANCE MONITORING PROG; HAZ WASTE FAC	PRESENTS REQUIREMENTS OF GROUND WATER COMPLIANCE MONITORING PROGRAM.	PERTAINS TO ALL SITES WITH LAND-BASED HAZARDOUS WASTE UNITS (SURFACE IMPOUNDMENTS, WASTE PILES, LAND TREATMENT UNITS, LANDFILLS) AT WHICH HAZARDOUS CONSTITUENTS HAVE BEEN DETECTED. THIS INCLUDES EXISTING LAND-BASED AREAS OF CONTAMINATION
HW	3745-55-01	A-F	APP	GROUND WATER CORRECTIVE ACTION PROGRAM; HAZ WASTE FAC	PRESENTS THE REQUIREMENTS OF A GROUND WATER CORRECTIVE ACTION PROGRAM THAT PREVENTS HAZARDOUS CONSTITUENTS FROM EXCEEDING THEIR RESPECTIVE CONCENTRATION LIMITS AT THE COMPLIANCE POINT BY EITHER REMOVAL OR TREATMENT OF THESE HAZARDOUS CONST.	PERTAINS TO ALL SITES WITH LAND-BASED HAZARDOUS WASTE UNITS (SURFACE IMPOUNDMENTS, WASTE PILES, LAND TREATMENT UNITS, LANDFILLS) AT WHICH HAZARDOUS CONSTITUENTS HAVE BEEN DETECTED. THIS INCLUDES EXISTING LAND-BASED AREAS OF CONTAMINATION
HW	3745-55-01	A-C	APP	CORRECTIVE ACTION FOR WASTE MANAGEMENT UNITS	REQUIRES AN APPLICANT FOR A HAZARDOUS WASTE PERMIT TO INSTITUTE CORRECTIVE ACTION FOR ALL RELEASES OF HAZARDOUS WASTE OR CONSTITUENTS FROM ANY WASTE MANAGEMENT UNIT, REGARDLESS OF THE TIME AT WHICH WASTE WAS PLACED IN SUCH UNIT.	PERTAINS TO ALL SITES WITH LAND-BASED HAZARDOUS WASTE UNITS (SURFACE IMPOUNDMENTS, WASTE PILES, LAND TREATMENT UNITS, LANDFILLS) AT WHICH HAZARDOUS CONSTITUENTS HAVE BEEN DETECTED. THIS INCLUDES EXISTING LAND-BASED AREAS OF CONTAMINATION
HW	3745-55-11	A,B,C	APP	GENERAL CLOSURE PERFORMANCE STANDARD; HAZ WASTE FACIL	REQUIRES THAT ALL HAZARDOUS WASTE FACILITIES BE CLOSED IN A MANNER THAT MINIMIZES THE NEED FOR FURTHER MAINTENANCE, CONTROLS, MINIMIZES, ELIMINATES OR PREVENTS POST-CLOSURE ESCAPE OF HAZARDOUS WASTE, HAZARDOUS CONSTITUENTS, LEACHATE, CON	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE IS TO BE TREATED, STORED OR DISPOSED OF (OR HAS BEEN TREATED, STORED OR DISPOSED OF).
HW	3745-55-12	B	TBC	CONTENT OF CLOSURE PLAN; HAZ WASTE FACILITIES	SPECIFIES THE MINIMUM INFORMATION REQUIRED IN A CLOSURE PLAN FOR OHIO EPA TO DETERMINE THE ADEQUACY OF THE PLAN.	SUBSTANTIVE REQUIREMENTS PERTAIN TO ANY SITE AT WHICH HAZARDOUS WASTE IS TO BE TREATED, STORED OR DISPOSED OF (OR HAS BEEN TREATED, STORED OR DISPOSED OF).
HW	3745-55-14		APP	DISPOSAL/ DECON OF EQUIPMENT, STRUCTURES & SOILS	REQUIRES THAT ALL CONTAMINATED EQUIPMENT, STRUCTURES AND SOILS BE PROPERLY DISPOSED OF OR DECONTAMINATED. REMOVAL OF HAZARDOUS WASTES OR CONSTITUENTS FROM A UNIT MAY CONSTITUTE GENERATION OF HAZARDOUS WASTES.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE IS TO BE TREATED, STORED OR DISPOSED OF (OR HAS BEEN TREATED, STORED OR DISPOSED OF).
HW	3745-55-17	B	APP	POST-CLOSURE CARE AND USE OF PROPERTY	SPECIFIES THE POST-CLOSURE CARE REQUIREMENTS, INCLUDING MAINTENANCE, MONITORING AND POST-CLOSURE USE OF PROPERTY.	PERTAINS TO ALL SITES WITH LAND-BASED HAZARDOUS WASTE UNITS (LANDFILLS AND SURFACE IMPOUNDMENTS, WASTE PILES, LAND TREATMENT UNITS AND TANKS THAT MEET REQUIREMENTS OF LANDFILLS AFTER CLOSURE). THIS INCLUDES EXISTING LAND-BASED AREAS OF C

HW	3745-55-18	B	TBC	POST-CLOSURE PLAN	PRESENTS THE INFORMATION NECESSARY FOR OHIO EPA TO DETERMINE THE ADEQUACY OF A POST-CLOSURE PLAN.	PERTAINS TO ALL SITES WITH LAND-BASED HAZARDOUS WASTE UNITS (LANDFILLS AND SURFACE IMPOUNDMENTS), WASTE PILES, LAND TREATMENT UNITS AND TANKS THAT MEET REQUIREMENTS OF LANDFILLS AFTER CLOSURE). THIS INCLUDES EXISTING LAND-BASED AREAS OF C.
HW	3745-55-19	B	APP	NOTICE TO LOCAL LAND AUTHORITY	REQUIRES THAT A RECORD OF THE TYPE, LOCATION AND QUANTITY OF HAZARDOUS WASTES DISPOSED OF IN EACH UNIT BE SUBMITTED TO THE LOCAL LAND AUTHORITY AND THE DIRECTOR OF THE OHIO EPA. ALSO REQUIRES THAT A NOTATION TO THE DEED TO THE FACILITY P	PERTAINS TO ALL SITES WITH LAND-BASED HAZARDOUS WASTE UNITS (LANDFILLS AND SURFACE IMPOUNDMENTS), WASTE PILES, LAND TREATMENT UNITS AND TANKS THAT MEET REQUIREMENTS OF LANDFILLS AFTER CLOSURE). THIS INCLUDES EXISTING LAND-BASED AREAS OF C.
HW	3745-55-71		APP	CONDITION OF CONTAINERS	CONTAINERS HOLDING HAZARDOUS WASTE MUST BE MAINTAINED IN GOOD CONDITION (NO RUST OR STRUCTURAL DEFECTS).	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE WILL BE STORED IN CONTAINERS.
HW	3745-55-72		APP	COMPATIBILITY OF WASTE WITH CONTAINERS	HAZARDOUS WASTES PLACED IN CONTAINER MUST NOT REACT WITH THE CONTAINER MATERIAL OR LINER MATERIAL.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE WILL BE STORED IN CONTAINERS.
HW	3745-55-73		APP	MANAGEMENT OF CONTAINERS	CONTAINERS HOLDING HAZARDOUS WASTE MUST BE CLOSED (EXCEPT TO ADD OR REMOVE WASTE) AND MUST NOT BE HANDLED IN A MANNER THAT MAY RUPTURE THE CONTAINER OR CAUSE IT TO LEAK.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE WILL BE STORED IN CONTAINERS.
HW	3745-55-74		APP	CONTAINER INSPECTIONS	REQUIRES AT LEAST WEEKLY INSPECTIONS OF CONTAINER STORAGE AREAS.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE WILL BE STORED IN CONTAINERS.
HW	3745-55-75	A,B,C,D	APP	CONTAINER STORAGE AREA CONTAINMENT SYSTEM	REQUIRES THAT CONTAINER STORAGE AREAS HAVE A CONTAINMENT SYSTEM AND SPECIFIES THE MINIMUM REQUIREMENTS OF SUCH A SYSTEM.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE WILL BE STORED IN CONTAINERS.
HW	3745-55-76		APP	CONTAINER REQUIREMENTS FOR IGNITABLE/REACTIVE WASTES	PRESENTS GENERAL PRECAUTIONS TO BE TAKEN TO PREVENT ACCIDENTAL IGNITION OR REACTION OF IGNITABLE OR REACTIVE WASTES THAT WILL BE STORED IN CONTAINERS.	PERTAINS TO ANY SITE AT WHICH POTENTIALLY REACTIVE OR IGNITABLE WASTES THAT ARE STORED, OR ARE TO BE STORED, IN CONTAINERS.
HW	3745-55-77	A,B,C	APP	CONTAINER REQUIREMENTS FOR INCOMPATIBLE WASTES	PRESENTS GENERAL PRECAUTIONS TO BE TAKEN WHEN DEALING WITH INCOMPATIBLE WASTES.	PERTAINS TO ANY SITE AT WHICH POTENTIALLY INCOMPATIBLE WASTES ARE PRESENT.
HW	3745-55-78		APP	CONTAINER CLOSURE REQUIREMENTS	SPECIFIES CLOSURE REQUIREMENTS FOR CONTAINERS AND CONTAINMENT SYSTEM.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE WILL BE STORED IN CONTAINERS.
HW	3745-55-91	A,B,D	REL	ASSESSMENT OF EXISTING TANK SYSTEMS INTEGRITY	REQUIRES THAT EACH EXISTING TANK USED TO STORE OR TREAT HAZARDOUS WASTE THAT DOES NOT HAVE SECONDARY CONTAINMENT BE TESTED TO ASSURE TANK INTEGRITY.	PERTAINS TO ANY SITE WHICH HAS EXISTING HAZARDOUS WASTE TREATMENT OR STORAGE TANKS THAT LACK SECONDARY CONTAINMENT.
HW	3745-55-92	A-G	REL	DESIGN & INSTALLATION OF NEW TANK SYSTEMS OR COMPONENTS	REQUIRES A SECONDARY CONTAINMENT SYSTEM FOR TANKS AND ASSESSMENT TO DETERMINE TANK INTEGRITY.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE WILL BE EITHER STORED OR TREATED IN TANKS.
HW	3745-55-93	A-G,J	REL	CONTAINMENT AND DETECTION OF RELEASES FOR TANK SYSTEMS	REQUIRES SECONDARY CONTAINMENT AND LEAK DETECTION SYSTEMS FOR TANKS.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE WILL BE EITHER STORED OR TREATED IN TANKS.

HW	3745-55-94	A,B,C	REL	GENERAL OPERATING REQUIREMENTS FOR TANK SYSTEMS	GENERAL OPERATING REQUIREMENTS FOR TANK SYSTEMS.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE WILL BE EITHER STORED OR TREATED IN TANKS.
HW	3745-55-95	A,D	REL	INSPECTIONS OF TANK SYSTEMS	REQUIRES INSPECTIONS AT LEAST ONCE EACH OPERATING DAY.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE WILL BE EITHER STORED OR TREATED IN TANKS.
HW	3745-55-96	A,B,C,E	REL	RESPONSE TO LEAKS OR SPILLS OF TANK SYSTEMS	REQUIRES THAT UNFIT TANKS BE REMOVED FROM USE AND FURTHER RELEASES BE PREVENTED.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE WILL BE EITHER STORED OR TREATED IN TANKS.
HW	3745-55-97	A,B	REL	CLOSURE AND POST-CLOSURE CARE FOR TANK SYSTEMS	SPECIFIES CLOSURE AND POST-CLOSURE REQUIREMENTS FOR TANK SYSTEMS.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE WILL BE EITHER STORED OR TREATED IN TANKS.
HW	3745-55-98		REL	TANK REQUIREMENTS FOR IGNITABLE/REACTIVE WASTES	PRESENTS GENERAL PRECAUTIONS TO BE TAKEN TO PREVENT ACCIDENTAL IGNITION OR REACTION OF IGNITABLE OR REACTIVE WASTES THAT ARE TREATED OR STORED IN TANKS.	PERTAINS TO ANY SITE AT WHICH POTENTIALLY REACTIVE OR IGNITABLE WASTES ARE STORED OR TREATED (OR TO BE STORED OR TREATED) IN EXISTING TANKS.
HW	3745-55-99	A,B	REL	TANK REQUIREMENTS FOR INCOMPATIBLE WASTES	PRESENTS GENERAL PRECAUTIONS TO BE TAKEN WHEN DEALING WITH POTENTIALLY INCOMPATIBLE WASTES THAT ARE STORED OR TREATED IN TANKS.	PERTAINS TO ANY SITE AT WHICH POTENTIALLY INCOMPATIBLE WASTES ARE STORED OR TREATED (OR TO BE STORED OR TREATED) IN TANKS.
HW	3745-56-20	A,B	APP	APPLICABILITY OF RULES CONCERNING SURFACE IMPOUNDMENT	SPECIFIES THAT THE RULES OF 3745-56 SHALL APPLY TO SURFACE IMPOUNDMENTS USED TO TREAT OR STORE HAZARDOUS WASTES	CONSIDER FOR SITES WITH SURFACE IMPOUNDMENTS
HW	3745-56-28	A,B,C	APP	CLOSURE & POST-CLOSURE OF SURFACE IMPOUNDMENTS	PROVIDES CLOSURE AND POST-CLOSURE REQUIREMENTS FOR SURFACE IMPOUNDMENTS.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE WILL BE TREATED OR STORED IN SURFACE IMPOUNDMENTS (LAGOONS). PERTAINS TO SITES WHICH HAVE SURFACE IMPOUNDMENTS THAT WILL NOT BE (OR HAVE NOT BEEN) CLEAN CLOSED.
HW	3745-56-51	A-F	APP	DESIGN & OPERATING REQUIREMENTS FOR WASTE PILES	SPECIFIES THE DESIGN AND OPERATION REQUIREMENTS FOR WASTE PILES. INCLUDES LINER SYSTEM, LEACHATE COLLECTION AND REMOVAL SYSTEM, WIND DISPERSAL PREVENTION AND RUN-ON/RUN-OFF CONTROL.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE WILL BE EITHER STORED OR TREATED IN WASTE PILES.
HW	3745-56-54	A,B	APP	MONITORING & INSPECTION OF WASTE PILES	WASTE PILES MUST BE MONITORED DURING CONSTRUCTION OR INSTALLATION AND OPERATION.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE WILL BE EITHER STORED OR TREATED IN WASTE PILES.
HW	3745-56-58	A,B,C	APP	CLOSURE & POST-CLOSURE CARE FOR WASTE PILES	SPECIFIES CLOSURE AND POST-CLOSURE CARE REQUIREMENTS FOR WASTE PILES.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE WILL BE EITHER STORED OR TREATED IN WASTE PILES.
HW	3745-56-59	A	APP	CONSTRUCTION INSPECTIONS FOR WASTE PILES	ALLOWS OHIO EPA THE OPPORTUNITY TO INSPECT WASTE PILES DURING CONSTRUCTION.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS WASTE WILL BE EITHER STORED OR TREATED IN WASTE PILES.
HW	3745-56-60	A,B	APP	SPECIAL REQUIREMENTS FOR 'F' WASTES IN WASTE PILES	PROHIBITS THE PLACEMENT OF HAZARDOUS WASTES F020, F021, F022, F023, F026 AND F027 IN WASTE PILES.	PERTAINS TO ANY SITE AT WHICH HAZARDOUS F-WASTES WILL BE EITHER STORED OR TREATED IN WASTE PILES.
HW	3745-57-72	A-H	APP	CORRECTIVE ACTION MANAGEMENT UNITS.	DISCUSSES RULES FOR CORRECTIVE ACTION MANAGEMENT UNITS	CONSIDER FOR SITES WITH ON-SITE TREATMENT, STORAGE OR DISPOSAL

DW	3745-81-11	A,B,C	REL	MAXIMUM CONTAMINANT LEVELS FOR INORGANIC CHEMICALS	PRESENTS MAXIMUM CONTAMINANT LEVELS FOR INORGANICS.	PERTAINS TO ANY SITE WHICH HAS CONTAMINATED GROUND OR SURFACE WATER THAT IS EITHER BEING USED, OR HAS THE POTENTIAL FOR USE, AS A DRINKING WATER SOURCE.
DW	3745-81-12	A,B,C	REL	MAXIMUM CONTAMINANT LEVELS FOR ORGANIC CHEMICALS	PRESENTS MCLS FOR ORGANICS.	PERTAINS TO ANY SITE WHICH HAS CONTAMINATED GROUND OR SURFACE WATER THAT IS EITHER BEING USED, OR HAS THE POTENTIAL FOR USE, AS A DRINKING WATER SOURCE.
DW	3745-81-15	A,B	REL	MAX CONTAMINANT LEVELS FOR RADIUM-226, RADIUM-228 AND GROSS ALPHAS	PRESENTS MCLS FOR RADIUM-226, RADIUM-228 AND GROSS ALPHA PARTICLE ACTIVITY.	PERTAINS TO ANY SITE WHICH HAS CONTAMINATED GROUND OR SURFACE WATER THAT IS EITHER BEING USED, OR HAS THE POTENTIAL FOR USE, AS A DRINKING WATER SOURCE.
DW	3745-81-16	A,B	REL	MAX CONTAM LEVELS FOR BETA PARTICLE & PHOTON RADIOACTIVITY	PRESENTS MCLS FOR BETA PARTICLE AND PHOTON RADIOACTIVITY FROM MAN-MADE RADIONUCLIDES.	PERTAINS TO ANY SITE WHICH HAS CONTAMINATED GROUND OR SURFACE WATER THAT IS EITHER BEING USED, OR HAS THE POTENTIAL FOR USE, AS A DRINKING WATER SOURCE.
DW	3745-81-25	A,D	TBC	ANALYTICAL METHODS FOR RADIOACTIVITY	PRESENTS ANALYTICAL METHODS FOR RADIOACTIVITY.	PERTAINS TO ANY SITE WHICH HAS CONTAMINATED GROUND OR SURFACE WATER THAT IS EITHER BEING USED, OR HAS THE POTENTIAL FOR USE, AS A DRINKING WATER SOURCE.
DW	3745-81-27	A,E	TBC	ANALYTICAL TECHNIQUES	PRESENTS GENERAL ANALYTICAL TECHNIQUES FOR MCLS.	PERTAINS TO ANY SITE WHICH HAS CONTAMINATED GROUND OR SURFACE WATER THAT IS EITHER BEING USED, OR HAS THE POTENTIAL FOR USE, AS A DRINKING WATER SOURCE.
GW	3745-9-04	A,B	REL	LOCATION/SITING OF NEW GW WELLS	MANDATES THAT GROUND WATER WELLS BE A) LOCATED AND MAINTAINED SO AS TO PREVENT CONTAMINANTS FROM ENTERING WELL B) LOCATED SO AS TO BE ACCESSIBLE FOR CLEANING AND MAINTENANCE.	PERTAINS TO ALL GROUND WATER WELLS ON THE SITE THAT EITHER WILL BE INSTALLED OR HAVE BEEN INSTALLED SINCE FEB. 15, 1975. WOULD PERTAIN DURING THE FS IF NEW WELLS ARE CONSTRUCTED FOR TREATABILITY STUDIES.
GW	3745-9-05	A1,B,H	REL	CONSTRUCTION OF NEW GW WELLS	SPECIFIES MINIMUM CONSTRUCTION REQUIREMENTS FOR NEW GROUND WATER WELLS IN REGARDS TO CASING MATERIAL, CASING DEPTH, POTABLE WATER, ANNULAR SPACES, USE OF DRIVE SHOE, OPENINGS TO ALLOW WATER ENTRY, CONTAMINANT ENTRY.	PERTAINS TO ALL GROUND WATER WELLS ON THE SITE THAT EITHER WILL BE INSTALLED OR HAVE BEEN INSTALLED SINCE FEB. 15, 1975. WOULD PERTAIN DURING THE FS IF NEW WELLS ARE CONSTRUCTED FOR TREATABILITY STUDIES.
GW	3745-9-06	A,B,D,E	APP	CASING REQUIREMENTS FOR NEW GW WELLS	ESTABLISHES SPECIFIC REQUIREMENTS FOR WELL CASINGS, SUCH AS SUITABLE MATERIAL, DIAMETERS AND CONDITION.	PERTAINS TO ALL GROUND WATER WELLS ON THE SITE THAT EITHER WILL BE INSTALLED OR HAVE BEEN INSTALLED SINCE FEB. 15, 1975. WOULD PERTAIN DURING THE FS IF NEW WELLS ARE CONSTRUCTED FOR TREATABILITY STUDIES.
GW	3745-9-07	A,F	REL	SURFACE DESIGN OF NEW GW WELLS	ESTABLISHES SPECIFIC SURFACE DESIGN REQUIREMENTS, SUCH AS HEIGHT ABOVE GROUND, WELL VENTS, WELL PUMPS, ETC.	PERTAINS TO ALL GROUND WATER WELLS ON THE SITE THAT EITHER WILL BE INSTALLED OR HAVE BEEN INSTALLED SINCE FEB. 15, 1975. WOULD PERTAIN DURING THE FS IF NEW WELLS ARE CONSTRUCTED FOR TREATABILITY STUDIES.
DW	3745-9-09	A,C,D1,E,G	REL	MAINTENANCE & OPERATION OF GW WELLS	ESTABLISHES SPECIFIC MAINTENANCE AND MODIFICATION REQUIREMENTS FOR CASING, PUMP AND WELLS IN GENERAL	PERTAINS TO ALL GROUND WATER WELLS ON THE SITE THAT EITHER WILL BE INSTALLED OR HAVE BEEN INSTALLED SINCE FEB. 15, 1975. WOULD PERTAIN DURING THE FS IF NEW WELLS ARE CONSTRUCTED FOR TREATABILITY STUDIES.



GW	3745-9-10	A.B.C	IREL	ABANDONMENT OF TEST HOLES & GW WELLS	FOLLOWING COMPLETION OF USE, WELLS AND TEST HOLES SHALL BE COMPLETELY FILLED WITH GROUT OR SIMILAR MATERIAL OR SHALL BE MAINTAINED IN COMPLIANCE OF ALL REGULATIONS.	PERTAINS TO ALL GROUND WATER WELLS ON THE SITE THAT EITHER WILL BE INSTALLED OR HAVE BEEN INSTALLED SINCE FEB. 15, 1975. GIVES EXCEPTIONS FROM MONITORING, SOIL LINER, CAPPING, GEOMEMBRA
GW	3745-9-11		IREL	USE OF WELLS FOR DISPOSAL	NO PERSON SHALL USE ANY WELL TO INJECT OR REINJECT ANY SUBSTANCE INTO THE GROUND WITHOUT NECESSARY PERMITS.	MAY PERTAIN TO SYSTEMS THAT ENTAIL INJECTION OR REINJECTION OF FLUID INTO THE GROUND. CONSIDER FOR IN-SITU BIOREMEDIATION, SOIL FLUSHING AND GROUND WATER PLUME CONTAINMENT.

**APPENDIX III**  
**EXPLANATION OF COSTS**



Department of Energy  
Portsmouth Site Office  
P.O. Box 700  
Piketon, Ohio 45661-0700  
Phone: 740-897-5010  
Fax: 740-897-2982

OEPA  
2003 MAY 19 AM 9:17

May 5, 2003  
EM-97-0723

Ms. Maria Galanti  
Ohio Environmental Protection Agency  
Southeast District Office  
2195 Front Street  
Logan, Ohio 43138

Dear Ms. Galanti:

**QUADRANT II CLEANUP ALTERNATIVE STUDY/CORRECTIVE MEASURES STUDY  
(CAS/CMS) ESTIMATES**

The purpose of this letter is to provide clarification on estimates presented to Ohio EPA during recent meetings and to provide the rationale for not revising the CAS/CMS estimates to reflect the latest technical approach.

During the course of the Core and Technical Team meetings (comprised of USDOE, USEPA, and OEPA) for Quadrant II, several issues were raised regarding differences between the Quadrant II CAS/CMS estimates and the latest budget estimates for the Quadrant II Preferred Plan. Estimates were developed during the preparation of the Quadrant II CMS/CAS to clarify cost differences between each of the developed alternatives. Since these estimates were intended for comparison purposes, some portions of the project scope which were common to all CMS alternatives were not included. In addition, all CMS Groundwater Alternatives were assumed to have no ongoing source of Dense Non-aqueous Phase Liquid (DNAPL) within the units being recommended for remediation. These estimates were appropriate for their intended use, facilitated decision making for the quadrant, and were an integral part of the Quadrant II CMS/CAS that was subsequently approved by USEPA and OEPA.

During the finalization of the Preferred Plan for Quadrant II, it became apparent that DNAPL was a significant factor affecting cleanup of the X-701B Groundwater Plume. As a result, refinements were made to several of the alternatives developed during the CAS/CMS by a Core Team comprised of USDOE, USEPA, and OEPA. Based on the results of these refinements, USDOE has initiated formalized multi-year budget planning for the proposed remediation of X-701B. The budget estimates were prepared in accordance with USDOE guidance and address all factors that affect the overall cost of the proposed remedy. Included in these factors are subcontractor overhead, site overhead, sales tax, and escalation.

**APPENDIX IV**  
**RESPONSIVENESS SUMMARY**

## SUMMARY OF COMMENTS RECEIVED DURING THE PUBLIC COMMENT PERIOD

This responsiveness summary responds to significant comments submitted on the preferred plan for the X-701B SWMU in Quadrant II of the Portsmouth Gaseous Diffusion Plant and is intended to be consistent with Sections 113(k) (2) (B) (iv) and 117(B) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA). This section requires that Agency respond "... to each of the significant comments, criticisms, and new data submitted in written or oral presentations" on the preferred plan. One comment was submitted to Ohio EPA during the public comment period regarding a potential technology to be considered regarding groundwater remedial activities.

The administrative record index for the U.S. Department of Energy (U.S. DOE) site which includes the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI), the Cleanup Alternatives Study/Corrective Measures Study (CAS/CMS) and the Preferred Plan is available to the public at the US DOE Environmental Information Center located in Piketon, Ohio or in the Ohio EPA South East District Office located in Logan, Ohio. The public notice alerting the public of their opportunity to comment on the preferred plan was placed in the *Pike County News Watchman* on September 17<sup>th</sup> and September 21, 2003. The public comment period closed on October 28, 2003. A public meeting to discuss the preferred plans was held on October 7, 2003, at the Ohio University South Center 1864 Shyville Road, Piketon, Ohio.

### 1.2 Summary of Comments

The public comments regarding the U.S. DOE site are organized into the following categories:

- (1) Summary of comments and Agency responses to citizens regarding the preferred plan.

in the plume can help maintaining several fold high concentration for dissolved oxygen (DO), which causes an explosion in the growth of beneficial microbes. These microbes metabolize the residual contaminants and cleanse the plume.

Based on past experience, VEETech recommends testing and incorporation of D2SO4 to bolster the effectiveness of the re-circulating KMnO4 oxidation treatment technology. It is further recommended that following Chemical Oxidation, Bioremediation using augmentation of native microbes be deployed to achieve complete closure for the contaminated plume.

Out of many remediation technology for the treatment of TCE contaminated Ponds, one of the innovative technology will be to treat the contaminated pond water with sonically vibrated-chemical oxidation technology (SVCOT). It has been envisioned that treatment of vast contaminated land and large amount of soil and water poses a tremendous challenge to apply simple laboratory techniques for treatment. In reality, an economical and viable technology is needed to overcome the problem. By using chemical oxidation alone does not guarantee a mixing process or dispersion of oxidant in the water plume or the non-aqueous phase. Due to the lack of mixing or proper agitation in the chemical oxidation treatment, the process will take an enormous time period for remediation. A stagnant chemical oxidation process cannot be realistic remediation technology for TCE remediation in contaminated ponds. Pegasus Technical Services (PTS) proposes a remediation technology for the treatment of contaminated ponds. This technology is based upon the concept of providing continuous agitation of the plume with oxidant using low frequency vibration technology. Low frequency vibration is provided through the generation of sound waves in a flow through a pipe. With proper selection of flow rate of fluid and monitoring the oxidant concentration, it is possible to achieve an enhanced remediation of TCE from the contaminated ponds.

**Ohio EPA Response:**

The preferred plan and the decision document do not discuss the use of a specific oxidant to remediate the contaminated groundwater. The type and the amount of oxidant to be used will be discussed during the design phase of remedy implementation. Currently, US DOE is conducting studies of soils and groundwater from the X-701B SWMU area to determine the amount of and type of oxidant that will result in the removal of contaminants in order to achieve the remedial goals outlined in this decision document. Potential use of the oxidant and processes described by

**PORTSMOUTH DOCUMENT RELEASE FORM**

DOCUMENT DESCRIPTION (TO BE COMPLETED BY REQUESTER)

DOCUMENT NUMBER None DRAFT  FINAL  DOCUMENT DATE 12/08/03

DOCUMENT TITLE/IDENTIFIER Ohio EPA's Decision Document for the X-701B SWMU in Quadrant II Of the U.S. DOE Portsmouth Facility, Piketon, Ohio

AUTHOR(S) (NAME AND AFFILIATION) Ohio Environmental Protection Agency (OEPA)

PURPOSE OF RELEASE For Inclusion into the Administrative Record Files and Public Requests at the Environmental Information Center

ADC CLASSIFICATION REVIEW (WHERE POSSIBLE) \_\_\_\_\_

REQUESTER Janie Crowait, Administrative Record Librarian Signature/Date 12/12/03

PATENT, CLASSIFICATION, AND PUBLIC RELEASE REVIEWS  
(COMPLETED BY CLASSIFICATION AND TECHNICAL REVIEW OFFICE)

- |                          |                                     |   |                                     |   |
|--------------------------|-------------------------------------|---|-------------------------------------|---|
| PATENT REVIEW:           | <input checked="" type="checkbox"/> | DOCUMENT DOES NOT CONTAIN PATENTABLE/PROPRIETARY INFORMATION AND HAS PATENT CLEARANCE | <input type="checkbox"/>            | CONTAINS PATENTABLE/PROPRIETARY INFORMATION AND CAN NOT BE RELEASED |
| CLASSIFICATION REVIEW:   | <input checked="" type="checkbox"/> | DOCUMENT IS UNCLASSIFIED  | <input type="checkbox"/>            | DOCUMENT IS CLASSIFIED  |
| PUBLIC RELEASE APPROVAL: | <input type="checkbox"/>            | NOT APPROVED FOR RELEASE  | <input type="checkbox"/>            | CONTAINS UCNI   |
|                          | <input checked="" type="checkbox"/> | APPROVED FOR RELEASE  | <input checked="" type="checkbox"/> | DOES NOT CONTAIN UCNI   |
|                          | <input type="checkbox"/>            | INTERNAL USE ONLY   |                                     |   |

REMARKS \_\_\_\_\_

CLASSIFICATION AND TECHNICAL INFORMATION OFFICE AH Thomas 12/12/03  
Signature/Date

SEND TO OSTI?  YES  NO

REMARKS \_\_\_\_\_