

Volume 9

Materials Control Enclosure &  
Explosives Bunker

MCE1 & XPB1

# Volume 9 - Table of Contents

## **A. General Information**

- A1 General Facility Description**
- A2 Chemical and Physical Analysis**
- A3 Waste Analysis Plan**
- A4 Security Procedures and Equipment**
- A5 Inspection Schedules**
- A6 Preparedness and Prevention**
- A7 Contingency Plan**
- A8 Traffic Information**
- A9 Facility Location Information**
- A10 Personnel Training Program**
- A11 Closure and Postclosure Plan (C/PC)**
- A12 Closure and Postclosure Cost Estimates**
- A13 Topographical Map**
- A14 Liability Mechanism**
- A15 Financial Assurance Instrument**

## **B. Supplemental Information**

- B1 Status of Compliance with other Federal laws**
- B2 Corrective Action Information**
- B3 Hydrogeologic Report**
- B4 Environmental Assessment**
- B5 Environmental Monitoring Program**

# Volume 9 - Table of Contents

## **B6 Engineering Plans Index**

<b>B6-EB.1</b>	<b>Explosives Storage Plans and Details</b>
<b>B6-EB.2</b>	<b>ML229 Type 2 Outdoor Magazine</b>
<b>B6-60.0</b>	<b>DLS-6 Materials Control Enclosure</b>
<b>B6-60.1</b>	<b>Site Development Plan / DLS-6</b>
<b>B6-60.2</b>	<b>DLS-6 Floor Plan, Elevations, and Details</b>
<b>B6-60.3</b>	<b>DLS-6 Floor Plan and Details</b>
<b>B6-60.4</b>	<b>DLS-6 Exterior Elevations and Building Details</b>

## **C. Facility Specific Information**

<b>C1</b>	<b>Use and Management of Containers</b>
<b>C4</b>	<b>Treatment</b>
<b>C13</b>	<b>Air emissions from process vents, equipment leaks, tanks, containers and surface impoundments</b>



FORM EQP 5111 Template

**A1: GENERAL FACILITY DESCRIPTION**

**(Volume 9)**

**See Volume 1**

**A1: General Facility Description**

FORM EQP 5111 TEMPLATE

**A2: CHEMICAL AND PHYSICAL ANALYSES**

**(Volume 9)**

**See Volume 1**

**A2: Chemical and Physical Analysis**

FORM EQP 5111 TEMPLATE

**A3: WASTE ANALYSIS PLAN (WAP)**

**(Volume 9)**

**See Volume 1**

**A3: Waste Analysis Plan**

**A4: SECURITY PROCEDURES AND EQUIPMENT**

40 CFR §264.14

**(Volume 9)**

**See Volume 1**

**A4: Security Procedures and Equipment**

FORM EQP 5111 TEMPLATE

**A5: INSPECTION REQUIREMENTS**

**(Volume 9)**

**See Volume 1**

**A5: Inspection Requirements**

FORM EQP 5111 TEMPLATE

**A6: PREPAREDNESS AND PREVENTION OR WAIVER**

**(Volume 9)**

**See Volume 1**

**A6: Preparedness and Prevention or Waiver**

## FORM EQP 5111 TEMPLATE MODULE A7

### A7: CONTINGENCY PLAN

(Volume 9)

This document is an attachment to the Michigan Department of Environment, Great Lakes, and Energy's (EGLE) Instructions for Completing Form EQP 5111, Operating License Application Form for Hazardous Waste Treatment, Storage, and Disposal Facilities. See Form EQP 5111 for details on how to use this attachment.

The administrative rules promulgated pursuant to Part 111, Hazardous Waste Management, of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), R 299.9501, R 299.9508(1)(b), R 299.9504(1)(c), R 299.9521(3)(b), R 299.9607, and Title 40 of the Code of Federal Regulations (CFR) §§264.50 through 264.56, and 270.14(b)(7), establish requirements for contingency plans at hazardous waste management facilities. All references to 40 CFR citations specified herein are adopted by reference in R 299.11003. This license application template addresses requirements for a contingency plan at the hazardous waste management facility for DLD Environmental Services, Inc (DLD) in Plainwell,, Michigan.

It is recommended that DLD perform annual drill exercises with the local fire department and emergency responders using the contingency plan to make sure all staff are familiar with the plan and determine whether the plan needs any updating.

(Check as appropriate)

- Applicant for Operating License for Existing Facility
- Applicant for Operating License for New, Altered, Enlarged, or Expanded Facility

## Table of Contents

This template is organized as follows:

### INTRODUCTION

#### A7.A BACKGROUND INFORMATION

- A7.A.1 Purpose of the Contingency Plan
- A7.A.2 Description of Facility Operations
- A7.A.3 Identification of Potential Situations

#### A7.B EMERGENCY COORDINATORS

- A7.B.1 Identification of Primary and Alternate Emergency Coordinators
- A7.B.2 Qualifications of the Emergency Coordinators

Table A7.B.1 Identification of Primary and alternate Emergency Coordinators

- A7.B.3 Authority to Commit Resources

#### A7.C IMPLEMENTATION OF THE CONTINGENCY PLAN

#### A7.D EMERGENCY PROCEDURES

- A7.D.1 Immediate Notification Procedures for Facility Personnel and State and Local Agencies with Designated Response Roles

Table A7.D.1 Federal, State, and Local Response Contacts

- A7.D.2 Procedures to Be Used for Identification of Releases
- A7.D.3 Procedures to Be Used to Assess Potential Hazards to Human Health and the Environment
- A7.D.4 Procedures to Determine if Evacuation is Necessary and Immediate Notification of Michigan Pollution Emergency Alerting System and National Response Center

- A7.D.5 Procedures to Be Used to Ensure That Fires, Explosions, and Releases Do Not Occur, Reoccur, or Spread During the Emergency**
- A7.D.6 Procedures to Be Used to Monitor Equipment Should Facility Operations Cease**
- A7.D.7 Procedures to Provide Proper Treatment, Storage, and Disposal for Any Released Materials**
- A7.D.8 Procedures for Cleanup and Decontamination**

#### **A7.E RESUMPTION OF OPERATIONS AND RECORD KEEPING REQUIREMENTS**

- A7.E.1 Procedures to Be Used Prior to Resuming Operations**
- A7.E.2 Record Keeping Requirements**
  - A7.E.2(a) Operating Record**
  - A7.E.2(b) Written Incident Report**

#### **A7.F PROCEDURE FOR ASSESSING OFFSITE RISK DURING AND AFTER A FIRE/EXPLOSION INCIDENT OR SIGNIFICANT RELEASE**

#### **A7.G PROCEDURES FOR REVIEWING AND AMENDING THE CONTINGENCY PLAN**

**Attachment A7.1 DLS-8 Evacuation Route Diagram**

**Attachment A7.2 DLS-9 Evacuation Route Diagram**

**Attachment A7.3 DLS-8 & DLS-9 Emergency Equipment Descriptions**

**Attachment A7.4 Checklist for Tracking Facility Response Actions During and After a Fire/Explosion Incident**

## INTRODUCTION

### A7.A BACKGROUND INFORMATION

#### A7.A.1 Purpose of the Contingency Plan [R 299.9607 and 40 CFR §264.51 and 264.53]

See Volume 1, Section A7.A.1

#### A7.A.2 Description of Facility Operations

Reference is made to Volume 1, Section A7.A.2, with the addition of the following information specific to new hazardous waste management units MCE1 & XPB1.

The building housing MCE18 be built of hydrophobic cement and steel, and will have secondary containment in compliance with the containment standards. The entire area will be fully licensed, as it is intended for hazardous waste storage.

MCE1: This storage facility will be locate a specified distance away from all other buildings as required in order to store explosives.

XPB1: This building will be a fully enclosed

See volume 9, Section B6 for engineering drawings applicable to MCE1 & XPB1.

#### A7.A.3 Identification of Potential Situations

See volume 1, Section A7.A.3

### A7.B EMERGENCY COORDINATORS [R 299.9607 and 40 CFR §264.52 and 264.55]

#### A7.B.1 Identification of Primary and Alternate Emergency Coordinators [R 299.9607 and 40 CFR §264.52 and 264.55]

See Volume 1, Section A7.B.1.

#### A7.B.2 Qualifications of the Emergency Coordinators [R 299.9607 and 40 CFR §264.55]

See Volume 1, Section A7.B.2.

**Table A7.B.1 Identification of Primary and Alternate Emergency Coordinators**

See Volume 1, Table A7.B.1.

**A7.B.3 Authority to Commit Resources**  
[R 299.9607 and 40 CFR §264.55]

See Volume 1, Section A7.B.3.

**A7.C IMPLEMENTATION OF THE CONTINGENCY PLAN**  
[R 299.9607 and 40 CFR §264.51, 264.52, and 264.56]

See Volume 1, Section A7.C.

**A7.D EMERGENCY PROCEDURES**  
[R 299.9607 and 40 CFR §264.51, 264.52, and 264.56]

**A7.D.1 Immediate Notification Procedures for Facility Personnel and State and Local Agencies with Designated Response Roles**  
[R 299.9607 and 40 CFR §264.51, 264.52, and 264.56]

See Volume 1, Section A7.D.1.

**A7.D.2 Procedures to Be Used for Identification of Releases**  
[R 299.9607 and 40 CFR §264.51, 264.52, and 264.56]

See Volume 1, Section A7.D.2.

**A7.D.3 Procedures to Be Used to Assess Potential Hazards to Human Health and the Environment**  
[R 299.9607 and 40 CFR §264.51, 264.52, and 264.56]

See Volume 1, Section A7.D.3.

**A7.D.4 Procedures to Determine if Evacuation Is Necessary and Immediate Notification of Michigan Pollution Emergency Alerting System, and the National Response Center**

[R 299.9607 and 40 CFR §264.51, 264.52, and 264.56]

Reference is made to Volume 1, Section A7.D.4, with the addition of the following information specific to MCE1 & XPB1:

- Upon completion, evacuation plans for MCE1 & XPB1 will be included in Volume 9, Attachment A7-1.

**A7.D.5 Procedures to Be Used to Ensure that Fires, Explosions, and Releases Do Not Occur, Reoccur, or Spread During the Emergency**

[R 299.9607 and 40 CFR §264.51, 264.52, and 264.56(e), 264.227, and 264.200]

Reference is made to Volume 1, Section A7.D.4, with the addition of the following information specific to MCE1 & XPB1:

- Upon completion, MCE1 & XPB1 Evacuation Diagrams will be provided in Volume 9, Attachment A7-1
- Upon completion, MCE1 & XPB1 Evacuation Diagrams will be provided in Volume 9, Attachment A7-2
- Upon completion, an Emergency Equipment List for MCE1 & XPB1 will be provided in Volume 9, Attachment A7-3.

**A7.D.6 Procedures to Be Used to Monitor Equipment Should Facility Operations Cease**

[R 299.9607 and 40 CFR §264.51, 264.52, and 264.56(f)]

See Volume 1, Section A7.D.6.

**A7.D.7 Procedures to Provide Proper Treatment, Storage, and Disposal for Any Released Materials**

[R 299.9607 and 40 CFR §264.51, 264.52, and 264.56(g)]

See Volume 1, Section A7.D.7.

**A7.D.8 Procedures for Cleanup and Decontamination**

[R 299.9607 and 40 CFR §264.51, 264.52, and 264.56(h)]

See Volume 1, Section A7.D.8.

**A7.E NOTIFICATION AND RECORD KEEPING REQUIREMENTS**

[R 299.9607 and 40 CFR §264.51, 264.52, and 264.56(l) and (j)]

**A7.E.1 Procedures to Be Used to Notify State and Federal Officials Prior to Commencement of Operations**

[R 299.9607 and 40 CFR §264.51, 264.52, and 264.56]

See Volume 1, Section A7.E.1.

**A7.E.2 Record Keeping Requirements**

[R 299.9607 and 40 CFR §264.51, 264.52, and 264.56(j)]

See Volume 1, Section A7.E.2.

**A7.E.2(a) Operating Record**

See Volume 1, Section A7.E.2(a)

**A7.E.2(b) Written Incident Report**

See Volume 1, Section A7.E.2(b)

**A7.F Procedure for Assessing Offsite Risk During and After a fire/explosion incident or Significant Release**

[R 299.9521(3)(b) and R 299.9607 and 40 CFR §264.56(d)]

See Volume 1, Section A7.F

**A7.G PROCEDURES FOR REVIEWING AND AMENDING THE CONTINGENCY PLAN**

[R 299.9607 and 40 CFR §264.54]

See Volume 1, Section A7.G.

FORM EQP 5111 Template

**A8: Traffic Information**

**(Volume 9)**

**See Volume 1**

**A8: Traffic Information**

**A9 - FACILITY LOCATION INFORMATION**

40 CFR §270.14(b)(11)

**(Volume 9)**

**See Volume 1**

**A9: Facility Location Information**

**A10: PERSONNEL TRAINING PROGRAM**

**(Volume 9)**

**See Volume 1**

**A10: Personnel Training Program**

FORM EQP 5111 Template

**A11: Closure and Postclosure Plan**

**(Volume 9)**

**See Volume 1**

**A11: Closure and Postclosure Plan**

FORM EQP 5111 TEMPLATE

**A12: CLOSURE AND POSTCLOSURE CARE COST ESTIMATES**

**(Volume 9)**

**(Hazardous Waste Units MCE1 & XPB1)**

This document is an attachment to the Michigan Department of Environment, Great Lakes, and Energy's *Instructions for Completing Form EQP 5111, Operating License Application Form for Hazardous Waste Treatment, Storage, and Disposal Facilities*. See Form EQP 5111 for details on how to use this attachment.

The administrative rules promulgated pursuant to Part 111, Hazardous Waste Management, of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), R 299.9702 and Title 40 of the Code of Federal Regulations (CFR), Part 264, Subpart H, establishes requirements for providing financial assurance for closure and, if necessary, postclosure care. Specifically, R 299.9702(1) requires the preparation of associated cost estimates. This license application template addresses the requirement for preparing a closure cost estimate and, if necessary, a postclosure care cost estimate. The cost estimates provided in this attachment are based on the closure and postclosure care activities detailed in Template A11. All references to 40 CFR citations specified herein are adopted by reference in R 299.11003.

This template is organized as follows:

**A12.A CLOSURE COST ESTIMATE**

**A12.A.1 Closure Cost Estimate Breakdown**

Table A12.A.1	Facility Closure Cost Estimate Breakdown by Unit
Table A12.A.2	Container Storage Areas Closure Cost Estimate
Table A12.A.3	Tank Systems Closure Cost Estimate
Table A12.A.4	Miscellaneous Units Closure Cost Estimate

**A12.B POSTCLOSURE COST ESTIMATE**

*(Since no hazardous waste will be left behind at closure, the following template sections are not applicable)*

**A12.A CLOSURE COST ESTIMATE**  
[R 299.9702(1) and 40 CFR §264.142]

Reference is made to Volume 1, Section A12.A, with the addition of the following information specific to MCE1 & XPB1:

The cost closure information found in Tables A12.A.2, A12.A.3, and A12.A.4, below, shall be cumulative with those tables found in Volume 1 and any other volumes whose hazardous waste management units are approved and operational.

**A12.A.1 Closure Cost Estimate Breakdown**

**Table A12.A.1 Facility Closure Cost Estimate Breakdown by Unit\***

1.	Container Storage Areas	\$ TBD
2.	Tank Systems	\$ NA
3.	Surface Impoundments	\$ NA
4.	Waste Piles	\$ NA
5.	Landfills	\$ NA
6.	Incinerators	\$ NA
7.	Miscellaneous Units	\$ NA
8.	Boilers and Industrial Furnaces	\$ NA
<b>Total Closure and Postclosure Care Estimate</b> (add lines 1 through 11)		\$ TBD

\* Tables not included at this time for Land Treatment Units, Drip Pads, and Hazardous Waste Munitions and Explosives Storage Units

**Table A12.A.2 Container Storage Areas Closure Cost Estimate**

<b>Activity</b> If certain activities are not expected to be performed, enter "NA" as the Estimated Cost.		<b>Estimated Cost</b>
1.	Demolition and Removal of Containment	\$ NA
2.	Removal of Soil	\$ NA
3.	Backfill	\$ NA
4.	Decontamination	\$ TBD
5.	Sampling and Analysis	\$ TBD
6.	Monitoring Well Installation	\$ NA
7.	Transportation	\$ TBD
8.	Treatment and Disposal of Waste Inventory and Other Cleanup Wastes	\$ TBD
9.	<b>Subtotal of Closure Costs</b> (Add lines 1 through 8)	\$ TBD
10.	Engineering Expenses (typically 10% of closure costs, excluding certification of closure.)	\$ TBD
11.	Certification of Closure	\$ TBD
12.	<b>Subtotal</b> (Add Lines 9, 10, and 11])	\$ TBD
13.	Contingency Allowance (typically 20% of closure costs, engineering expenses, and cost of certification of closure.)	\$ TBD
14.	Landfill Closure	\$ NA
<b>Total Closure Cost</b> (Add Lines 12, 13, and 14)		\$ TBD

**Table A12.A.3 Tank Systems Closure Cost Estimate**

Not applicable to hazardous waste units MCE1 & XPB1

**Table A12.A.4 Miscellaneous Units Closure Cost Estimate**

Not applicable to hazardous waste units MCE1 & XPB1

FORM EQP 5111 TEMPLATE

**A13: Topographical Map**

**(Volume 9)**

**See Volume 1**

**A13: Topographical map**

**A14: LIABILITY MECHANISM**

40 CFR §270.14(b)(17)

**(Volume 9)**

*To Be Determined*

**A15: FINANCIAL ASSURANCE INSTRUMENT**

40 CFR §270.14(b)(17)

**(Volume 9)**

*To Be Determined*

**B1: STATUS OF COMPLIANCE WITH OTHER FEDERAL LAWS**

40 CFR §270.14(b)(20)

**(Volume 9)**

**See Volume 1**

**B1: Status of Compliance With Other Federal Laws**

FORM EQP 5111 TEMPLATE

**B2: CORRECTIVE ACTION INFORMATION**

**(Volume 9)**

**See Volume 1**

**B2: Corrective Action Information**

FORM EQP 5111 Template

**B3: HYDROGEOLOGICAL REPORT**

**(Volume 9)**

**See Volume 1**

**B3: Hydrogeological Report**

FORM EQP 5111 Template

**B4: ENVIRONMENTAL ASSESSMENT**

**(Volume 9)**

**See Volume 1**

**B4: Environmental Assessment**

**B5: ENVIRONMENTAL MONITORING PROGRAMS**

**(Volume 9)**

***As Recommended***

**B6: ENGINEERING PLANS INDEX**

(Volume 9)

**Index of Attachments**

**ATTACHMENT**

**DESCRIPTION**

**XPB1**

- |                |  |
|----------------|--|
| <b>B6-EB.1</b> | <b>Drawing A101, Blueprint 21084DA101.dwg<br/>Explosives Storage Plans and Details</b> |
| <b>B6-EB.2</b> | <b>Blueprint<br/>ML229 Type 2 Outdoor Magazine</b>                                     |

**MCE1**

- |                |  |
|----------------|--|
| <b>B6-60.0</b> | <b>Sheet Index<br/>DLS-6 Materials Control Enclosure</b>   |
| <b>B6-60.1</b> | <b>Drawing C001, Blueprint 21084RC001.dwg<br/>Site Development Plan / DLS-6</b>                  |
| <b>B6-60.2</b> | <b>Drawing A101, Blueprint 09024JA101.dwg<br/>DLS-6 Floor Plan, Elevations, and Details</b>      |
| <b>B6-60.3</b> | <b>Drawing A102, Blueprint 21084RA101.dwg<br/>DLS-6 Floor Plan and Details</b>                   |
| <b>B6-60.4</b> | <b>Drawing A201, Blueprint 21084RA201.dwg<br/>DLS-6 Exterior Elevations and Building Details</b> |

# DLD Environmental Services, Inc. Phase 8 - Materials Control Enclosure

Broad Street, Plainwell, Michigan 49080

January 29, 2010 for State Submittal  
September 8, 2022 for State Submittal

**PROJECT  
LOCATION**



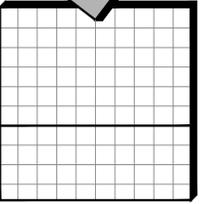
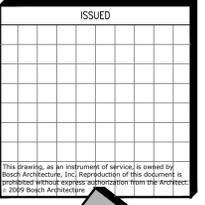
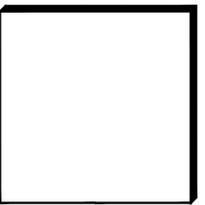
 **LOCATION MAP**  
NOT TO SCALE

### SHEET INDEX

COVER SHEET + INDEX

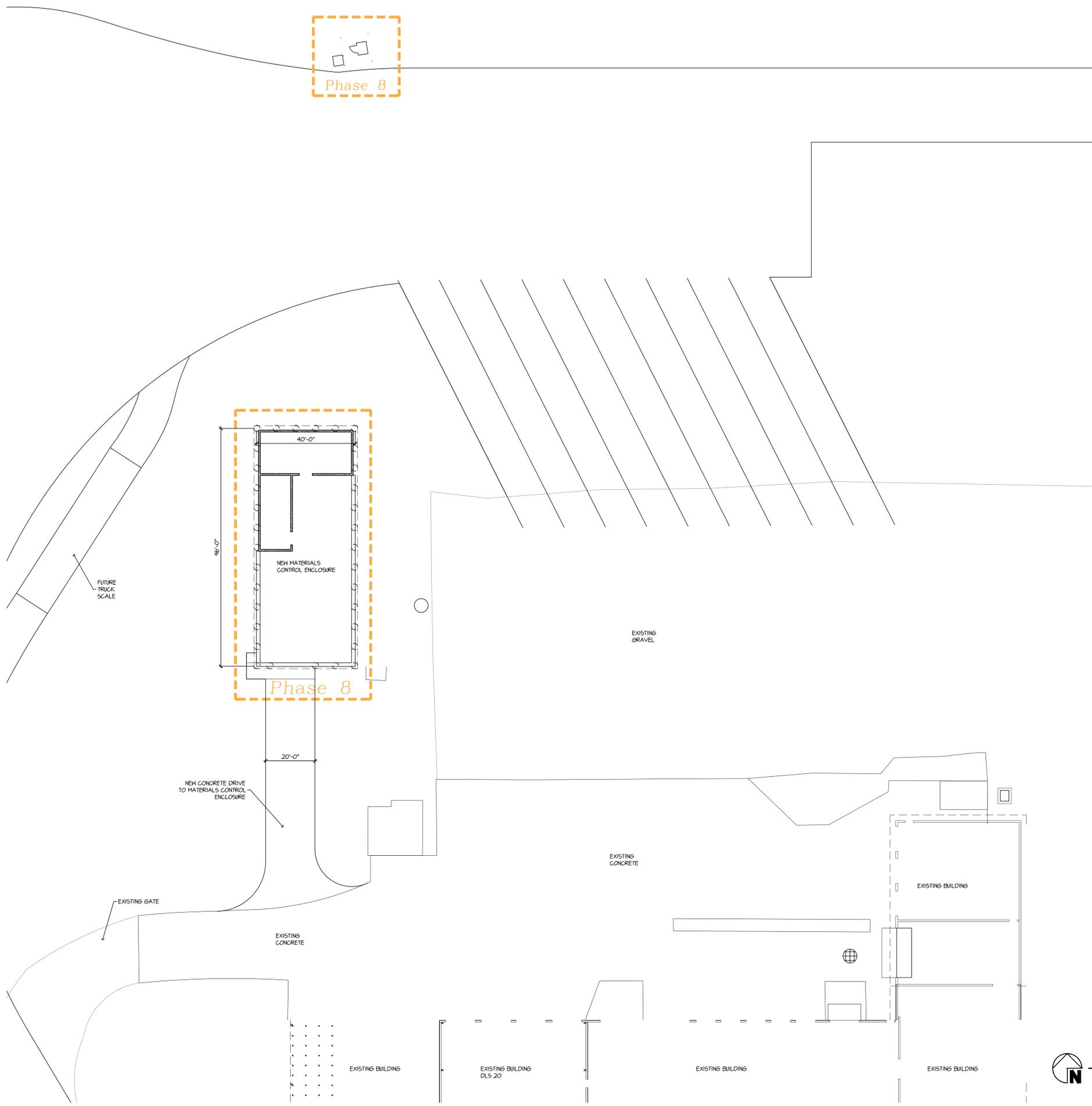
C001	SITE DEVELOPMENT PLAN
A101	STAND ALONE FLOOR PLAN + DETAILS
A201	EXTERIOR ELEVATIONS + BUILDING SECTION

DLD Environmental Services, Inc.  
Phase 8 - Materials Control Enclosure  
Broad Street  
Plainwell, Michigan 49080

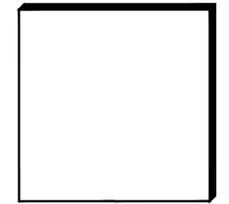


- GENERAL NOTES (SITE WORK)**
1. THE SOILS INVESTIGATION REPORT IS AVAILABLE TO THE GENERAL CONTRACTOR UPON REQUEST.
  2. FOUNDATION DESIGN CAPACITIES:
 

DESCRIPTION	CAPACITY
A. STRIP FOOTINGS	GROSS 2,000 PSF
B. SPREAD FOOTINGS	GROSS 2,000 PSF
  3. DEMOLITION
    - A. REMOVAL OF EXISTING UTILITIES, STRUCTURES AND SLABS SHALL BE AS SHOWN ON THE CONSTRUCTION DRAWINGS. IF REMOVAL LIMITS ARE NOT SHOWN THEY SHALL BE THE MINIMUM REQUIRED TO COMPLETE THE PROJECT.
    - B. DISCONNECTS OF ALL UTILITIES TO BE REMOVED SHALL BE BY THE TRADE INVOLVED OR THE APPROPRIATE UTILITY CO. AS DIRECTED BY THE GENERAL CONTRACTOR.
    - C. DISPOSAL OF MATERIAL REMOVED SHALL BE OFF SITE BY THE GENERAL CONTRACTOR.
  4. SITE PREPARATION:
    - A. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE PERFORMED BY THE CONTRACTOR IN COMPLIANCE WITH ACT 341.
    - B. ORGANIC TOPSOIL SHALL BE STRIPPED FROM THE CONSTRUCTION AREA TO DEPTHS RANGING FROM APPROXIMATELY 6" TO 30" AND STOCKPILED AS INSTRUCTED BY THE ARCHITECT FOR LATER USE.
    - C. IT IS REQUIRED THAT DENISIFICATION OF THE EXISTING SOILS BE PERFORMED BEFORE ANY FOOTINGS ARE CONSTRUCTED. SEE DIVISION 2 OF THE SPECIFICATION FOR ADDITIONAL INFORMATION.
  5. EARTHWORK:
    - A. CALL MISS DIG AT 1-800-482-7171 BEFORE BEGINNING EXCAVATION.
    - B. EXCAVATION SHALL BE LEVEL TO EXACT DEPTHS AND DIMENSIONS INDICATED ON DRAWINGS.
    - C. CONSTRUCTION OF FOUNDATIONS AND SLABS ON GRADE WILL BE ON COMPACTED FILL IN MOST AREAS. LAYERED COMPACTION SHALL BE PERFORMED TO A MINIMUM DENSITY OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM DESIGNATION D 1557 VALUES AND AS OUTLINED IN THE SPECIFICATIONS DIVISION 2.
    - D. EXTREME CARE SHALL BE TAKEN NOT TO DISTURB OR DAMAGE EXISTING FOOTINGS, FOUNDATIONS, FLOORS, AND UTILITY OR STORM LINES. CONTRACTOR SHALL PROVIDE ALL REQUIRED SHORING AND BRACING TO PREVENT CAVING OR SETTLEMENT OF EXISTING STRUCTURES OR UTILITIES.
    - E. PLACE 6 INCHES OF BANK RUN SAND COMPACTED TO 95% OF MAXIMUM DENSITY UNDER ALL FLOOR SLABS ON GRADE.
    - F. SOIL TESTING WILL BE CONTRACTED AND PAID FOR BY THE GENERAL CONTRACTOR.
    - G. SITE SHALL BE FINE GRADED BEFORE PLACING TOP SOIL OR GRANULAR BASE MATERIAL.
    - H. EXTERIOR SURFACE DRAINAGE SHALL BE AWAY FROM BUILDINGS.
    - I. AFTER BACKFILL IS PLACED AND PRIOR TO PLACING CONCRETE FLOORS, THE SOIL WILL BE TREATED FOR TERMITE CONTROL.



DLD Environmental Services, Inc.  
 Phase 8 - Materials Control Enclosure  
 Broad Street  
 Plainville, Michigan 49080



ISSUED	
01-29-2010	FOR STATE SUBMITAL
09-08-2022	FOR STATE SUBMITAL

This drawing, as an instrument of service, is owned by Bosch Architecture, Inc. Reproduction of this document is prohibited without express authorization from the Architect © 2022 Bosch Architecture, Inc.

**bosch**  
 ARCHITECTURE  
 ENGINEERING  
 INTERIOR DESIGN  
 8065 Vineyard Parkway  
 Kalamazoo, Michigan 49009  
 ph: 269-321-5151  
 www.boscharch.com

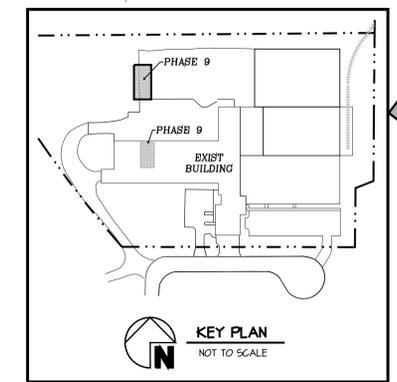
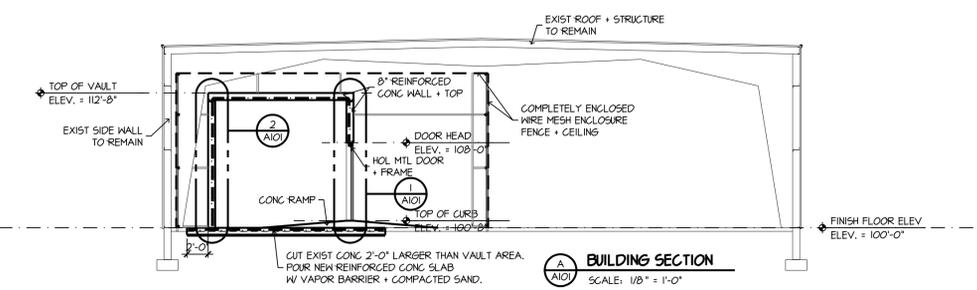
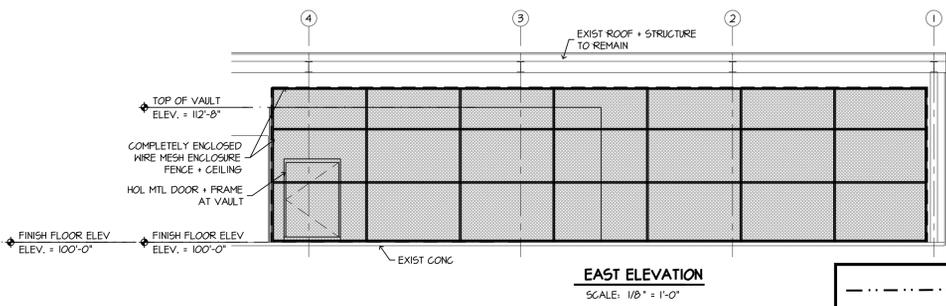
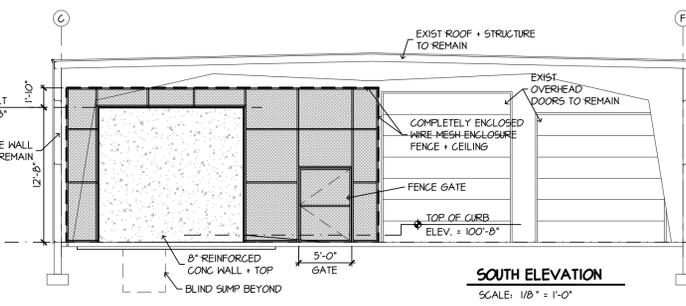
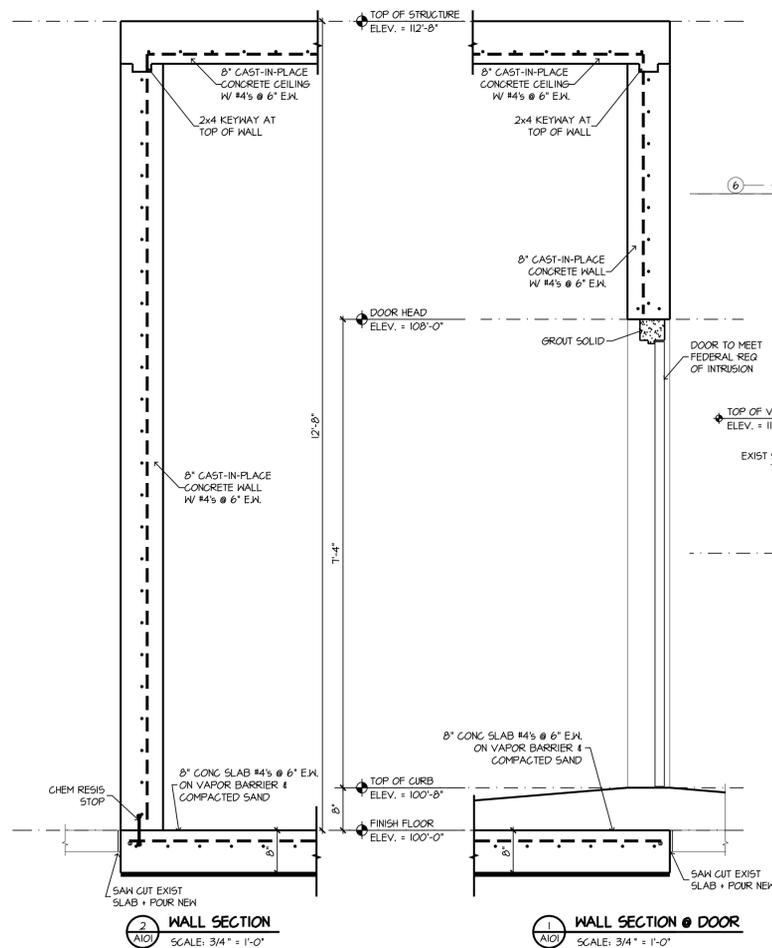
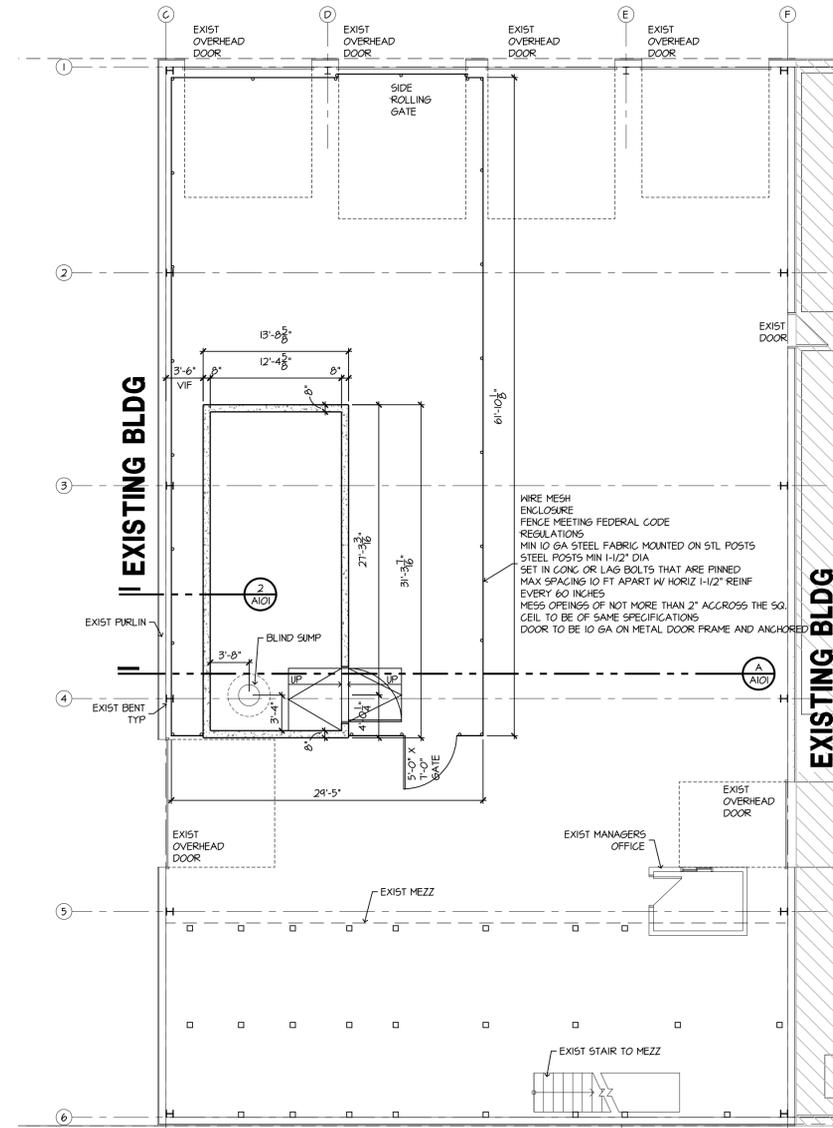
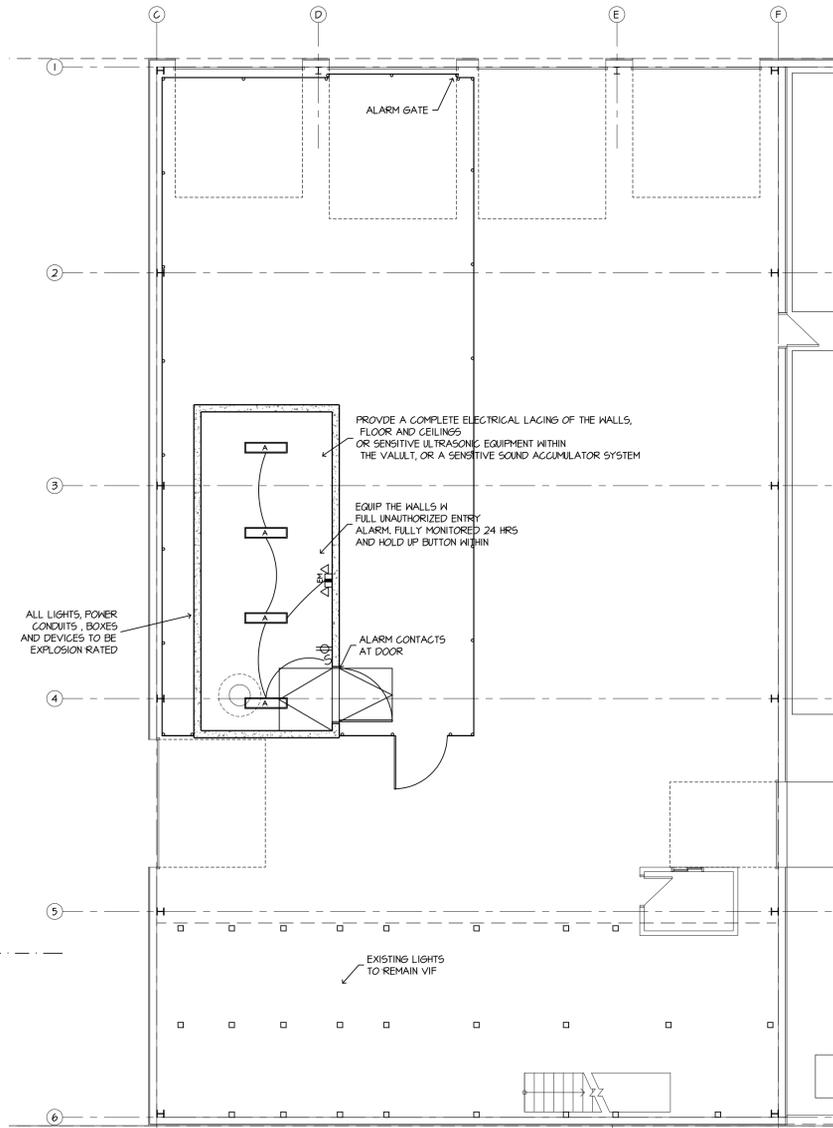
JOB NUMBER  
 21084R

SITE  
 DEVELOPMENT  
 PLAN

C001

**SITE DEVELOPMENT PLAN**  
 SCALE: 1" = 20'

- GENERAL NOTES:**
1. ALL CUTTING AND PATCHING SHALL BE BY THE TRADE INVOLVED IN THE WORK.
  2. SEE WALL KEY FOR WALL CONSTRUCTION.
  3. VERIFY ALL DIMENSIONS IN THE FIELD BEFORE ORDERING ANY MATERIALS.
  4. PROVIDE SOLID WOOD BLOCKING @ DOORS, CABINETS, SHELVING, BORROWED LITES, GRAB BARS, AND BEHIND DOOR STOPS, ETC.
  5. ALL DIMENSIONS ARE NOMINAL TO FINISHED SURFACES UNLESS NOTED OTHERWISE.
  6. THE CONTRACTOR SHALL VISIT THE SITE AND EXAMINE THE PREMISES.
  7. IT IS THE RESPONSIBILITY OF THE CONTRACTORS TO OBTAIN CLARIFICATION OF ANY DISCREPANCIES.
  8. ALL FIRE EXTINGUISHERS TO BE FINAL PLACED BY THE LOCAL FIRE MARSHAL.



**Drug & Laboratory Disposal**  
 Phase 9 - Materials Control Enclosure  
 Broad Street  
 Plainwell, Michigan 49080

ISSUED  
1-29-2010 FOR STATE SUBMITTAL

This drawing, as an instrument of service, is owned by Bosch Architectural, Inc. Reproduction of this document is prohibited without explicit authorization from the architect. © 2009 Bosch Architectural.

**bosch**  
ARCHITECTURE  
ENGINEERING  
INTERIOR DESIGN  
8175 Creekside Drive, Ste. 220  
Portage, Michigan 49024  
ph: 269-321-5151  
www.boscharch.com

JOB NUMBER  
09024J

**EXIST WAREHOUSE FLOOR + ELEC PLAN, ELEVATIONS + BLDG DETAILS**

A101



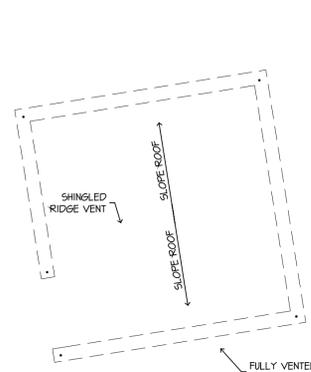


# Attachment B6-EB-1 (Volume 9)

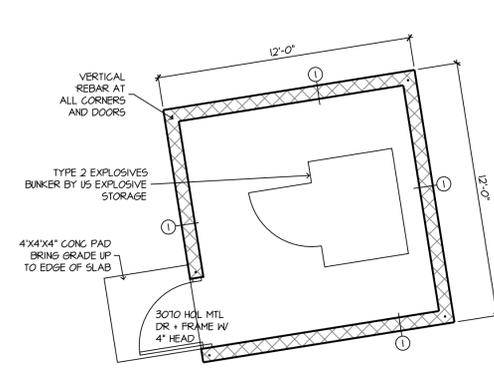
### GENERAL NOTES:

1. ALL CUTTINGS AND PATCHING SHALL BE BY THE TRADE INVOLVED IN THE WORK.
2. SEE WALL KEY FOR WALL CONSTRUCTION.
3. VERIFY ALL DIMENSIONS IN THE FIELD BEFORE ORDERING ANY MATERIALS.
4. PROVIDE SOLID WOOD BLOCKING @ DOORS, CABINETS, SHELVING, BORROWED LITES, GRAB BARS, AND BEHIND DOOR STOPS, ETC.
5. ALL DIMENSIONS ARE NOMINAL TO FINISHED SURFACES UNLESS NOTED OTHERWISE.
6. THE CONTRACTOR SHALL VISIT THE SITE AND EXAMINE THE PREMISES.
7. IT IS THE RESPONSIBILITY OF THE CONTRACTORS TO OBTAIN CLARIFICATION OF ANY DISCREPANCIES.
8. ALL FIRE EXTINGUISHERS TO BE FINAL PLACED BY THE LOCAL FIRE MARSHAL.

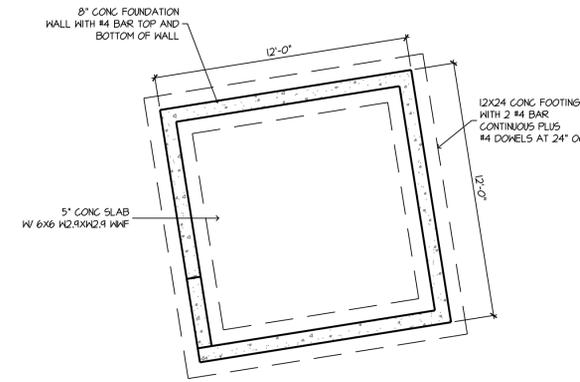
### WALL TYPES:



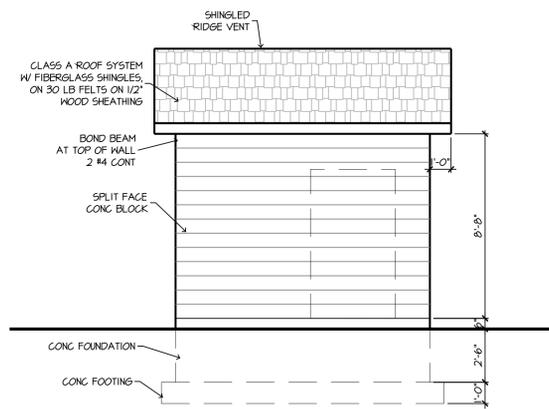
**ROOF PLAN**  
SCALE: 1/4" = 1'-0"



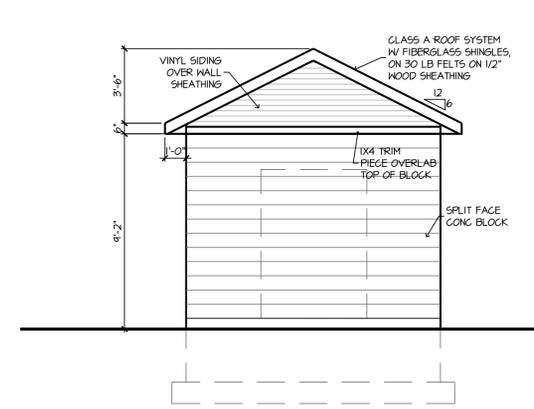
**FLOOR PLAN**  
SCALE: 1/4" = 1'-0"



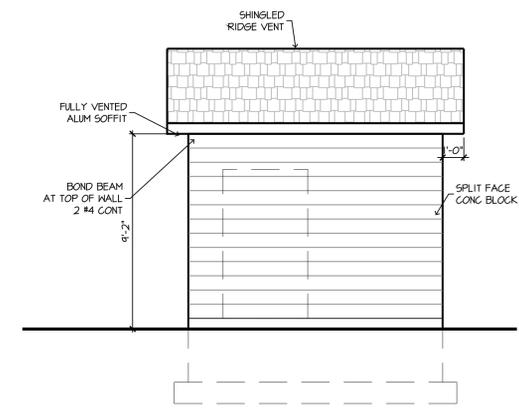
**FOUNDATION PLAN**  
SCALE: 1/4" = 1'-0"



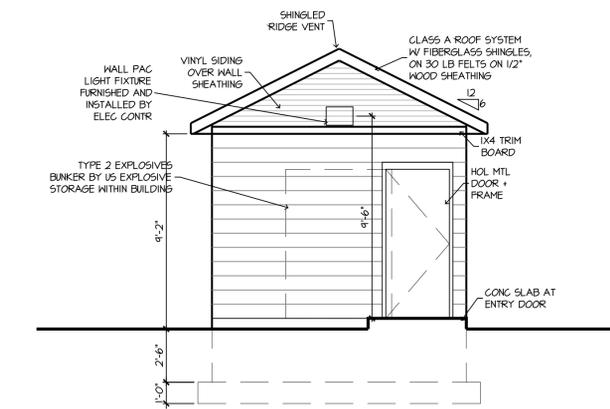
**SOUTH ELEVATION**  
SCALE: 1/4" = 1'-0"



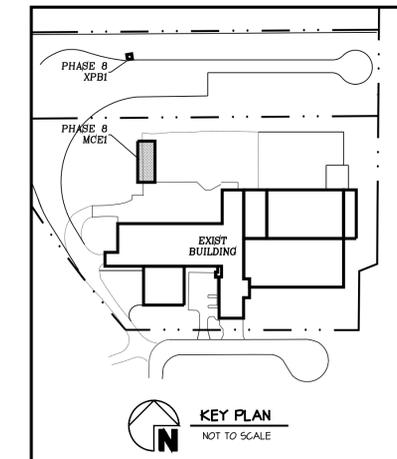
**EAST ELEVATION**  
SCALE: 1/4" = 1'-0"



**NORTH ELEVATION**  
SCALE: 1/4" = 1'-0"

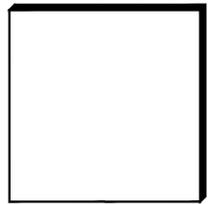


**WEST ELEVATION**  
SCALE: 1/4" = 1'-0"



**KEY PLAN**  
NOT TO SCALE

**DLD Environmental Services, Inc.**  
 Phase 8 - XPBI Explosion Bunker  
 Broad Street  
 Plainwell, Michigan 49080



ISSUED
01-29-2010 FOR STATE SUBMITTAL
06-03-2022 FOR STATE SUBMITTAL

This drawing, as an instrument of service, is owned by Bosch Architecture, Inc. Reproduction of this document is prohibited without express authorization from the Architect or DLD Earth Architecture.

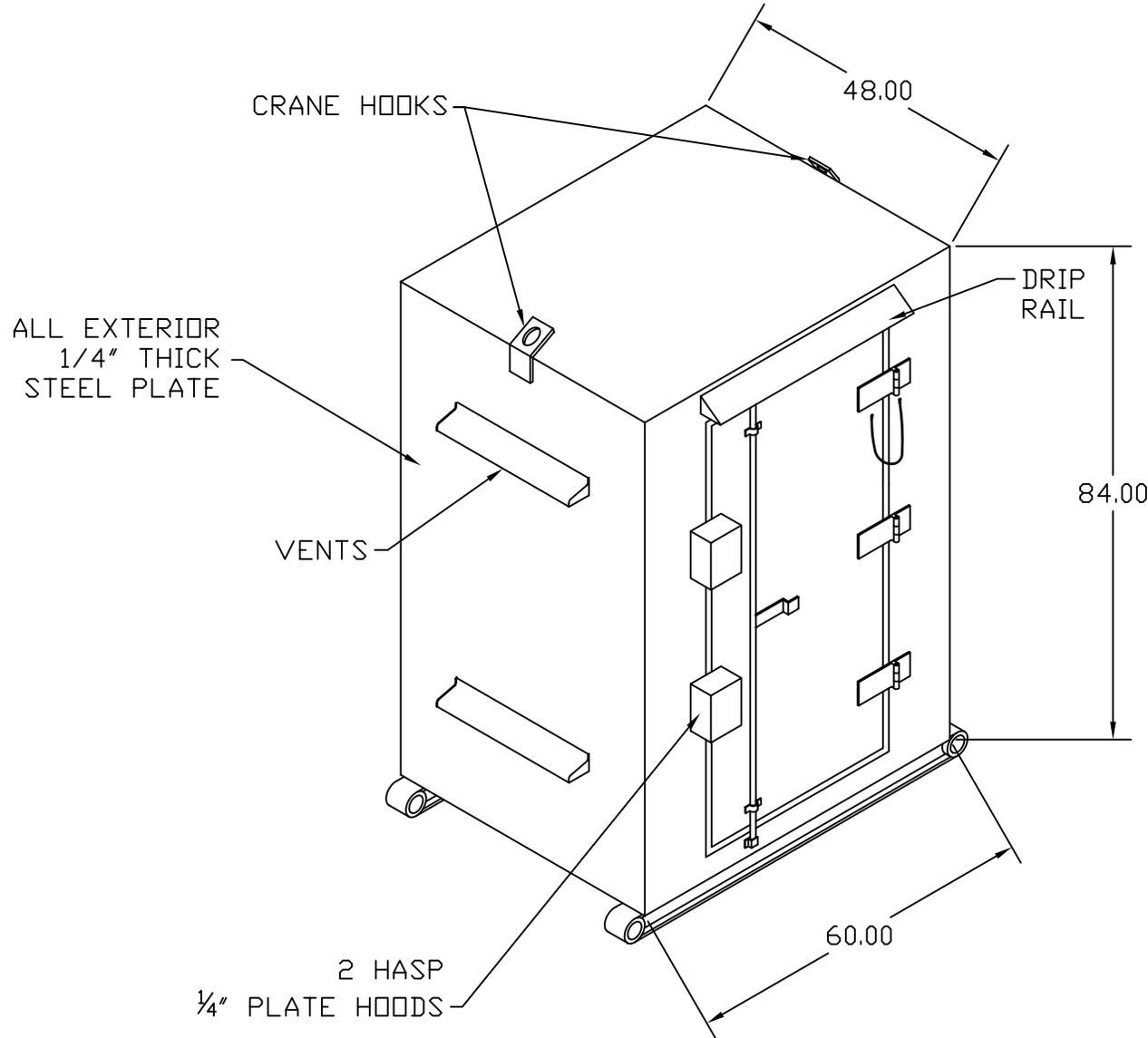
**bosch**  
 ARCHITECTURE  
 ENGINEERING  
 INTERIOR DESIGN  
 8065 Vineyard Parkway  
 Kalamazoo, Michigan 49009  
 ph: 268-321-5151  
 www.boscharch.com

**FND, FLOOR, ROOF PLAN + DETAILS**

**A101**

ML229  
TYPE 2 OUTDOOR MAGAZINE

INTERIOR LINED WITH 3" HARDWOOD  
BUILT TO ATF SPECIFICATIONS



GENERAL NOTES:

- 1- ALL MATERIAL AND WORKMANSHIP SHALL CONFORM WITH THE REQUIREMENTS OF THE LATEST REVISION OF THE UBC 1997. DESIGN ACCORDING TO AISC, ASD, AND WITH ANSI/ ASCE 7-95.
- 2- NO LOADS OTHER THAN THOSE GIVEN UNDER "DESIGN DATA" BELOW SHALL BE IMPOSED ON THE "STRUCTURE." DESIGN DATA (MATERIALS)  
STRUCTURAL QUALITY ASTM SPECIFICATION, A36 ER70S WELDING WIRE.  
DESIGN DATA IN ACCORDANCE WITH ANSI/ ASCE 7-95:

ALL DIMENSIONS SHOWN ON THIS PRINT ARE FOR YOUR REFERENCE. TOLERANCES ARE  $\pm 1"$  UNLESS OTHERWISE NOTED.

DATE: 9-27-04

DRAWN BY: KB

APPROVAL PRINT

THIS PRINT IS CONFIRMATION OF YOUR ORDER AND ILLUSTRATES THE APPROXIMATE LOCATION OF FACTORY INSTALLED OPTIONS. CUSTOMER APPROVAL IS REQUIRED BEFORE MANUFACTURING CAN BEGIN. ANY CHANGES MADE AFTER CUSTOMER APPROVAL MAY INCUR EXTRA CHARGES AND DELAY ESTIMATED DELIVERY.

SIGNATURE \_\_\_\_\_

PLEASE PRINT NAME \_\_\_\_\_

DATE \_\_\_\_\_

LEGAL NOTE

THIS DRAWING IS THE PROPERTY OF U.S. CHEMICAL STORAGE, LLC. ANY DUPLICATION OF THIS DRAWING IN WHOLE OR IN PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW.



**U.S. EXPLOSIVE  
storage®**

MANUFACTURING FACILITY  
1806 River Road, Hwy 268 W.  
Wilkesboro, NC 28697  
PHONE: 1.888.583.9823  
FAX: 1.336.838.0045

FORM EQP 5111 TEMPLATE

**C1: USE AND MANAGEMENT OF CONTAINERS**

**(Volume 9)**

This document is an attachment to the Michigan Department of Environment, Great Lakes, and Energy's *Instructions for Completing Form EQP 5111, Operating License Application Form for Hazardous Waste Treatment, Storage, and Disposal Facilities*. See Form EQP 5111 for details on how to use this attachment.

R 299.9614 of the administrative rules promulgated pursuant to Part 111, Hazardous Waste Management, of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); R 29.4101 to R 29.4505 promulgated pursuant to the provisions of the Michigan Fire Protection Act, PA 207, as amended (Act 207); and Title 40 of the Code of Federal Regulations (CFR) §§270.14(d), 270.15, and Part 264, Subpart I, establish requirements for the use and management of containers. All references to 40 CFR citations specified herein are adopted by reference in R 299.11003.

This license application template addresses requirements for the use and management of containers at the *DLD Environmental Services, Inc. (DLD)* facility in *Plainwell*, Michigan. This template addresses the condition of containers, compatibility of waste with containers, management of containers, inspections, containment, special requirements for ignitable or reactive waste, special requirements for incompatible wastes, and closure.

*(Check as appropriate)*

Applicant for Operating License for Existing Facility:

R 299.9614 use and management of containers

Applicant for Operating License for New, Altered, Enlarged, or Expanded Facility:

R 299.9614 use and management of containers

## Table of Contents

This template is organized as follows:

### INTRODUCTION

### C1.A DESCRIPTION OF CONTAINERS

### C1.B CONDITION OF CONTAINERS

### C1.C COMPATIBILITY OF WASTE WITH CONTAINERS

### C1.D MANAGEMENT OF CONTAINERS

### C1.E INSPECTIONS

### C1.F CONTAINMENT

#### C1.F.1 Secondary Containment System Design and Operation for Containers with Free Liquids

- C1.F.1(a) Requirement for Base or Liner
- C1.F.1(b) Containment System Drainage
- C1.F.1(c) Containment System Capacity
- C1.F.1(d) Control of Run-on
- C1.F.1(e) Removal of Liquids from Containment System

#### C1.F.2 Secondary Containment System Design and Operation for Containers with No Free Liquids

- C1.F.2(a) Containment System Drainage
- C1.F.2(b) Container Management

### C1.G SPECIAL REQUIREMENTS OF IGNITABLE OR REACTIVE WASTE

### C1.H SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES

### C1.I CLOSURE

## INTRODUCTION

Reference is made to Volume 1, Attachment "Introduction"

### **C1.A DESCRIPTION OF CONTAINERS**

[R 299.9614 and 40 CFR §264.171]

Reference is made to Volume 1, Attachment C1.A in addition to the following information which is specific to MCE1 & XPB1.:

MCE1: The Materials Control Enclosure containment area, referred to as MCE1 (see Volume 9, Part I, Attachment B6-60.2), will be used to store a maximum of 10,780 gallons of hazardous waste. This maximum total volume may be accumulated by any combination of containers up to and including 330 gallon intermediate bulk containers. (see Volume 9, Attachments B6-60)

XPB1: DLD proposes to use a Type 2 magazine, surrounded by a barricade, to store a maximum of 50 pounds of explosive materials (27 CFR 555.203 (b)). The combination of the Type 2 magazine and the barricade (the building in which the magazine will be placed) will be referred to as the Explosives Storage unit. (see Volume 9, Attachments B6-EB)

### **C1.B CONDITION OF CONTAINERS**

[R 299.9614 and 40 CFR §264.171]

Reference is made to Volume 1, Attachment C1.B

### **C1.C COMPATIBILITY OF WASTE WITH CONTAINERS**

[R 299.9614 and 40 CFR §264.172]

Reference is made to Volume 1, Attachment C1.C

### **C1.D MANAGEMENT OF CONTAINERS**

[R 299.9614 and 40 CFR §264.173]

Reference is made to Volume 1, Attachment C1.D in addition to the following information which is specific to MCE1 and/ or XPB1.:

**XPB1:**

Explosive materials will also be handled in accordance to 27 CFR §555.214 (a) – (d). This regulation states that:

- (1) Explosive materials within a magazine are not to be placed directly against interior walls and must be stored so as to not interfere with ventilation. To prevent contact of stored explosives materials with walls, a non-sparking lattice work or other non-sparking material may be used.
- (2) Containers of explosive materials are to be stored so that marks are visible. Stocks of explosive materials are to be stored so they can be easily counted and checked upon inspection.
- (3) Except with respect to fiberboard or other non-metal containers, containers of explosive materials are not to be unpacked or repacked inside a magazine to within 50 feet of a magazine, and must not be unpacked or repacked close to other explosive materials. Containers of explosive materials must be closed while being stored.
- (4) Tools used for opening or closing containers of explosive materials are to be of non-sparking materials, except that metal slitters may be used for opening fiberboard containers. A wood wedge and fiber, rubber, or wooden mallet is to be used for opening or closing wood containers of explosive materials. Metal tools other than non-sparking transfer conveyors are not to be stored in any magazine containing high explosives.

The explosives magazine is also required by 27 CFR §555.215 to be kept clean, dry, and free of grit, paper, empty packages, containers, and rubbish.

**C1.E INSPECTIONS**

[R 299.9614 and 40 CFR §264.174]

Reference is made to Volume 1, Attachment C1.E

**C1.F CONTAINMENT**

[R 299.9614 and 40 CFR §264.175 and 270.15]

Reference is made to Volume 1, Attachment C1.F in addition to the following information which is specific to MCE1 and/ or XPB1.:

**XPB1**

DLD proposes to use a Type 2 magazine, surrounded by a barricade, to store a maximum of 50 pounds of explosive materials (27 CFR 555.203 (b)). The combination of the Type 2 magazine and the barricade (the building in which the magazine will be placed) will be referred to as the Explosives Storage unit. (see Volume 9, Attachments B6-EB)

**MCE1**

In addition to regulations required in 40 CFR §264.175 and §270.15, the Materials Control Enclosure will also conform to 21 CFR §1301.72 (a) and (b) for Schedule I through V controlled substances.

**C1.F.1 Secondary Containment System Design and Operation for Containers with Free Liquids**

[R 299.9614 and 40 CFR §264.175(a) and 270.15(a)]

**XPB1**

Detailed design drawings for the secondary containment systems and container storage areas are provided in Volume 6, Part I, Attachment B6-60.1 for DLS-6A and in Volume 6, Part I, Attachment B6-60.2 for DLS-6B.

**MCE1**

Detailed design drawings for the secondary containment systems and container storage areas are provided in Volume 6, Part III, Attachments B6-EB.1 and B6-EB.2.

**C1.F.1(a) Requirement for Base or Liner**

[R 299.9614 and 40 CFR §264.175(b)(1) and 270.15(a)(1)]

Reference is made to Volume 1, Attachment C1.F.1(a)

**C1.F.1(b) Containment System Drainage**

[R 299.9614 and 40 CFR §264.175(b)(2) and 270.15(a)(2)]

Liquids that accumulate as the result of a leak or spill will be removed immediately upon detection and returned to a container for reprocessing. Accumulation due to precipitation is removed within 24 hours of detection and put in containers for analysis and/or processing. Accumulation due to floor condensation is removed as soon as possible after a thaw and put in containers for analysis and/or processing.

**C1.F.1(c) Containment System Capacity**

[R 299.9614 and 40 CFR §264.175(b)(3) and 270.15(a)(3)]

**MCE1**

Containment area MCE1 will be limited to a maximum of 29,700 gallons of hazardous waste. Following regulation 40 CFR §264.175(b)(3), this area would require a total containment capacity of 2,970 gallons (10% of the volume of containers). The total containment capacity for DLS-21 is 20,781 gallons, which exceeds what is required. (See MCE1 floor plan drawings in Volume 9, Attachment B6-60.3.)

**C1.F.1(d) Control of Run-on**  
[R 299.9614 and 40 CFR §§264.175(b)(4) and 270.15(a)(4)]

Reference is made to Volume 1, Attachment C1.F.1(d) in addition to the following information which is specific to XPB1.:

**XPB1**

The barricade that surrounds the Type 2 explosives magazine is designed as a fully enclosed structure that provides secondary containment. It will be covered by a roof, enclosed on all sides, and surrounded by six-inch to curbing. The area around the Explosives Storage unit will also be sloped away from the area to control run-on.

**C1.F.1(e) Removal of Liquids from Containment System**  
[R 299.9614 and 40 CFR §§264.175(b)(5) and 270.15(a)(5)]

Reference is made to Volume 1, Attachment C1.F.1(e)

**C1.F.2 Secondary Containment System Design and Operation for Containers with No Free Liquids**  
[R 299.9614 and 40 CFR §264.175 and 270.15(b)(1)]

Within XPB1 and MCE1, DLD shall manage containers with no free liquids using the operating guidelines presented in Volume 9, Section C1.F.1.

**C1.F.2(a) Containment System Drainage**  
[R 299.9614 and 40 CFR §264.175 and 270.15(b)(2)]

Within XPB1 and MCE1, DLD shall manage containers with no free liquids using the operating guidelines presented in Volume 9, Section C1.F.1.

**C1.F.2(b) Containment Management**  
[R 299.9614 and 40 CFR §264.175 and 270.15(b)(2)]

Within XPB1 and MCE1, DLD shall manage containers with no free liquids using the operating guidelines presented in Volume 9, Section C1.F.1.

**C1.G SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTE**  
[R 299.9614 and 40 CFR §264.176 and 270.15(b)(2)]

Reference is made to Volume 1, Attachment C1.G

**C1.H SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES**  
[R 299.9614 and 40 CFR §264.177(c) and 270.15(b)(2)]

Reference is made to Volume 1, Attachment C1.H

**C1.I CLOSURE**  
[R 299.9614 and 40 CFR §264.178]

Reference is made to Volume 1, Attachment C1.I

**C4: TREATMENT**  
**(Volume 9)**

**Table of Contents**

This template is organized as follows:

**C4. A LAB PACKING**

**C4.B COMMINGLING**

**C4.G STORAGE**

**C4: TREATMENT**  
(Volume 9)

**C4.A LAB PACKING**

Lab packing conducted in the MCE1 & XPB1 Containment Areas will follow the guidelines presented in Volume 1, Section C4.A: Lab Packing.

**C4.B COMMINGLING**

Reference is made to Volume 1, Section C4.B.

**C4.G STORAGE**

See Volume 9, Attachment C1, Containers, for storage information.

FORM EQP 5111 Template

**C13: AIR EMISSIONS FROM EQUIPMENT LEAKS,  
TANKS, AND CONTAINERS**

**(Volume 9)**

**See Volume 1**

**C13: Air Emissions from Equipment Leaks,  
Tanks, and Containers**