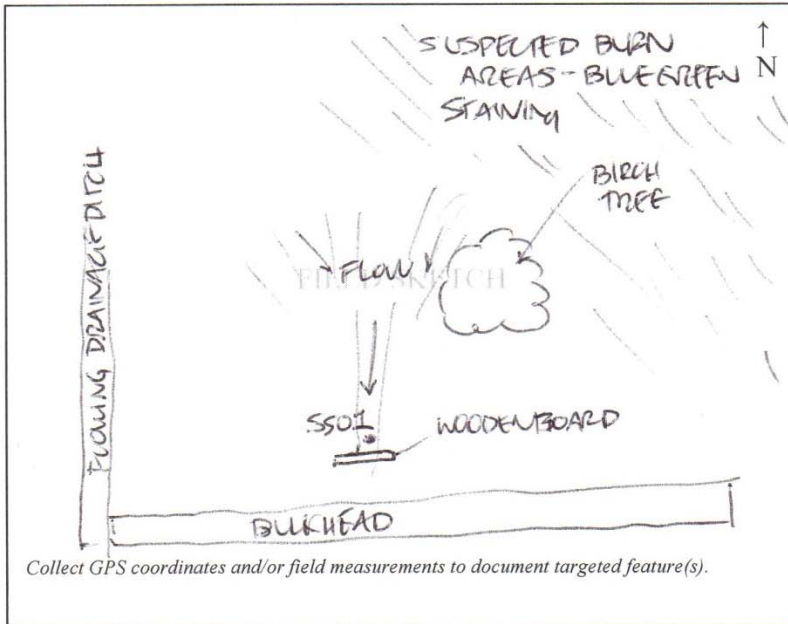


**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
CALUMET AND HECLA - LAKE LINDEN OPERATIONS
TARGETED INSPECTION FORM**



Representative photograph of sample location and/or targeted feature.

Inspection Date: 10/15/14 Feature Identification/Name: COAL DOCK SHORELINE / EROSION CHANNEL

Geographic Area: HUBBELL COAL DOCK AREA Property Identification Number: 014-307-001-25

OBSERVATIONS (Including description and sketch) Inspector/Sampler: M. CASTILLO / D. UEBAU

Circle the appropriate answer;

Potential Physical Hazard: ☒ Yes ☐ No Potential Chemical Hazard: ☒ Yes ☐ No
Capped Area: Yes ☐ No Residual Process Material: Yes ☒ No Abandoned Container: Yes ☐ No
Stressed Vegetation: ☒ Yes ☐ No Visible Staining: Yes ☒ No Building Materials: Yes ☒ No

Describe Targeted Feature:

A CHANNELIZED DRAINAGE AREA NEAR THE SOUTHERN PROPERTY BOUNDARY. CHANNEL APPEARS ERODED, RECEIVING RUNOFF FROM THE SITE, THE CHANNEL ENTERS A VOID BEHIND THE BUCKHEAD WHERE TORCH LAKE SURFACE WATER IS VISIBLE.

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

SAMPLE COLLECTED FROM 0-6", DARK BROWN/BLACK, SAND AND GRAVEL, COARSE TO MEDIUM GRAINED, SAMPLE COLLECTED AT 1315

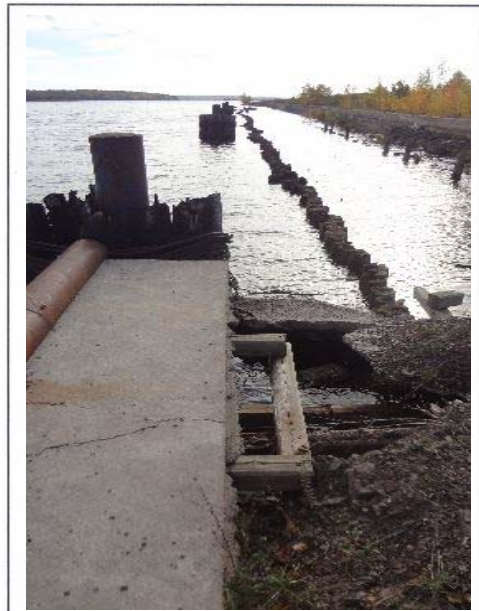
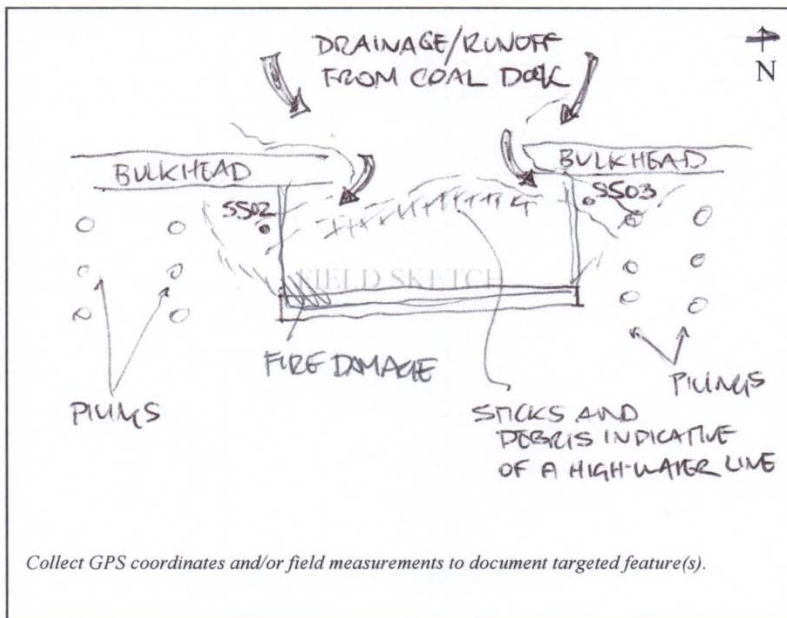
CHL-SS01-101514

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

THE EROSION OF CONTACT WATER AND CONTAMINATED SEDIMENT SURFACE SOIL MAY COULD MIGRATE FROM THE SITE AND ENTER TORCH LAKE. PHYSICAL HAZARDS MAY BE PRESENT DUE TO DEGRADATION OF THE BUCKHEAD

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts): (UNDERMINING)

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
CALUMET AND HECLA – LAKE LINDEN OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 10/15/14 Feature Identification/Name: COAL DOCK SHORE LINE/EROSION CHANNELS
Geographic Area: HUBBELL COAL DOCK AREA Property Identification Number: 014-307-001-25

OBSERVATIONS (Including description and sketch) Inspector/Sampler: M. CASTILLO / D. WEAVER

Circle the appropriate answer;

Potential Physical Hazard: ☒ Yes ☐ No Potential Chemical Hazard: ☒ Yes ☐ No
Capped Area: Yes ☐ No Residual Process Material: Yes ☐ No Abandoned Container: Yes ☐ No
Stressed Vegetation: ☒ Yes ☐ No Visible Staining: Yes ☐ No Building Materials: Yes ☐ No

Describe Targeted Feature:

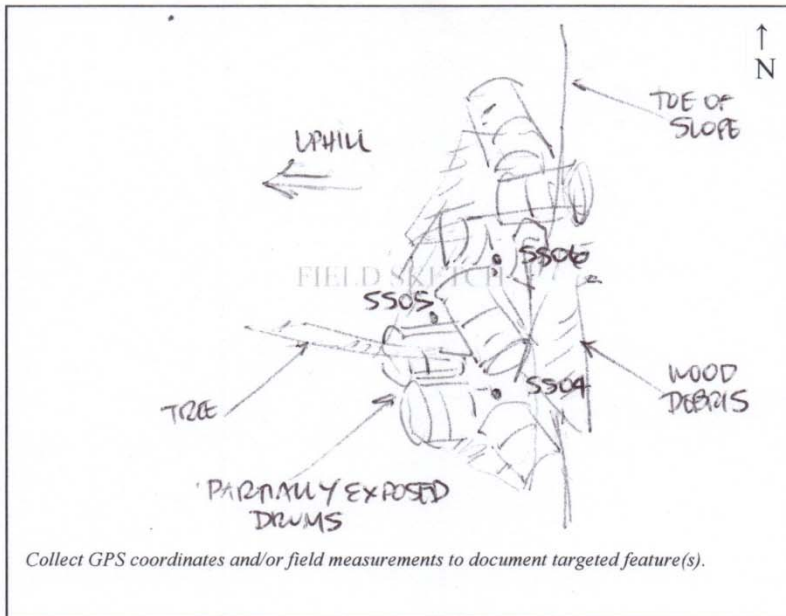
THE OPEN FLAT AREA OF THE COAL DOCK FEATURES BURN AREAS (SUSPECTED) COAL AND OTHER WASTES ON THE GROUND SURFACE; RUNOFF FROM THESE AREAS ARE GENERALLY PREVENTED FROM ENTERING THE LAKE ALONG THE BULKHEAD; ERODED CHANNELS HAVE FORMED THAT APPEAR TO DISCHARGE
SAMPLING ACTIVITIES (Sample Description, Sample Time, Requested Analyses):
SAMPLES COLLECTED FROM 0-6"; BROWN/DARK ~~GRAY~~ SAND AND GRAVEL, COARSE TO MEDIUM GRAINED
CHL-SS02-101514 SAMPLES COLLECTED AT ~~1340~~ 1340 AND 1413
CHL-SS03-101514

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

POTENTIALLY CONTAMINATED RUNOFF AND SOIL FROM THE SITE MAY WASH/ERODE FROM THE SITE AND DEPOSIT IN THE LAKE THROUGH DRAINAGE PATHWAYS; PHYSICAL HAZARDS ARE PRESENT DUE TO ERODED VOIDS IN THE BULKHEAD.

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
CALUMET AND HECLA – LAKE LINDEN OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 10/15/14 Feature Identification/Name: PARTIALLY BURIED DRUMS

Geographic Area: HUBBELL COALDOCK AREA Property Identification Number: 014-307-001-25

OBSERVATIONS (Including description and sketch) Inspector/Sampler: M. CASTILLO/D. LIEBAU

Circle the appropriate answer;

Potential Physical Hazard: ☒ Yes ☐ No Potential Chemical Hazard: ☒ Yes ☐ No
Capped Area: Yes ☐ No Residual Process Material: Yes ☒ No Abandoned Container: ☒ Yes ☐ No
Stressed Vegetation: ☒ Yes ☐ No Visible Staining: Yes ☒ No Building Materials: Yes ☒ No

Describe Targeted Feature:

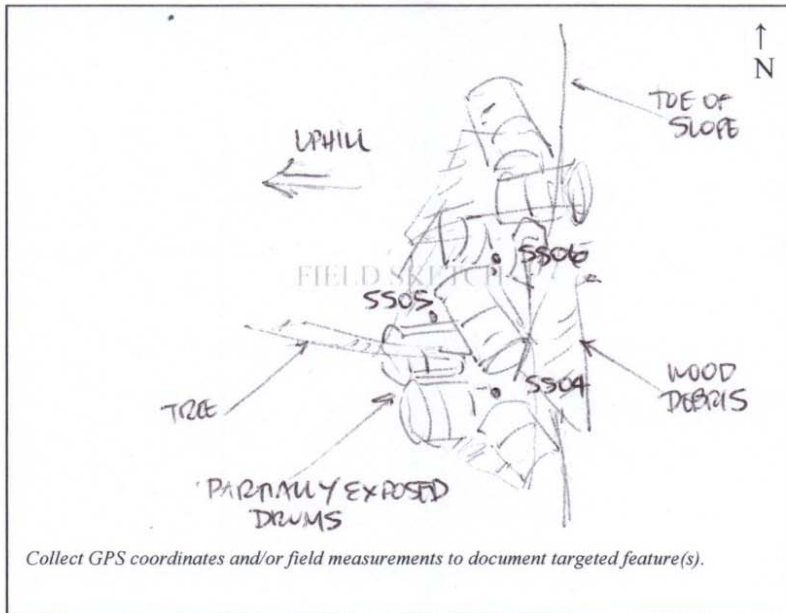
UP TO 10 DRUMS PROTRUDING FROM THE TOE OF THE SLOPE FROM THE UPPER COAL DOCK TO THE LOWER COAL DOCK; DRUMS ARE IN VARIOUS STATES OF DEGRADATION. UNCLEAR IF DRUMS ARE FULL OR EMPTY. COLLECT SOIL SAMPLES FROM 0-6" BROWNISH BLACK SANDY LOAM, ORGANICS, STANDING WATER/WET SOILS CHL-SS04-101514, CHL-SS05-101514, AND CHL-SS06-101514 SAMPLES COLLECTED BETWEEN 1430 AND 1450

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

DRUMS ARE PARTIALLY BURIED AND STANDING WATER IS PRESENT, MAKING THE POTENTIAL FOR LEAKING DRUM CONTENTS TO SEEP INTO SOIL AND GROUNDWATER, EROSION OF IMPACTED SOILS IS ALSO A POSSIBILITY; PHYSICAL HAZARDS ARE POSED

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts): BY THE DRUMS AND POTENTIAL SPILLAGE.

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
CALUMET AND HECLA – LAKE LINDEN OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 10/15/14 Feature Identification/Name: PARTIALLY BURIED DRUMS

Geographic Area: HUBBELL COALDOCK AREA Property Identification Number: 014-307-001-25

OBSERVATIONS (Including description and sketch) Inspector/Sampler: M. CASTILLO/D. LIEBAU

Circle the appropriate answer;

Potential Physical Hazard: ☒ Yes ☐ No Potential Chemical Hazard: ☒ Yes ☐ No
Capped Area: Yes ☐ No Residual Process Material: Yes ☒ No Abandoned Container: ☒ Yes ☐ No
Stressed Vegetation: ☒ Yes ☐ No Visible Staining: Yes ☒ No Building Materials: Yes ☒ No

Describe Targeted Feature:

UP TO 10 DRUMS PROTRUDING FROM THE TOE OF THE SLOPE FROM THE UPPER COAL DOCK TO THE LOWER COAL DOCK; DRUMS ARE IN VARIOUS STATES OF DEGRADATION

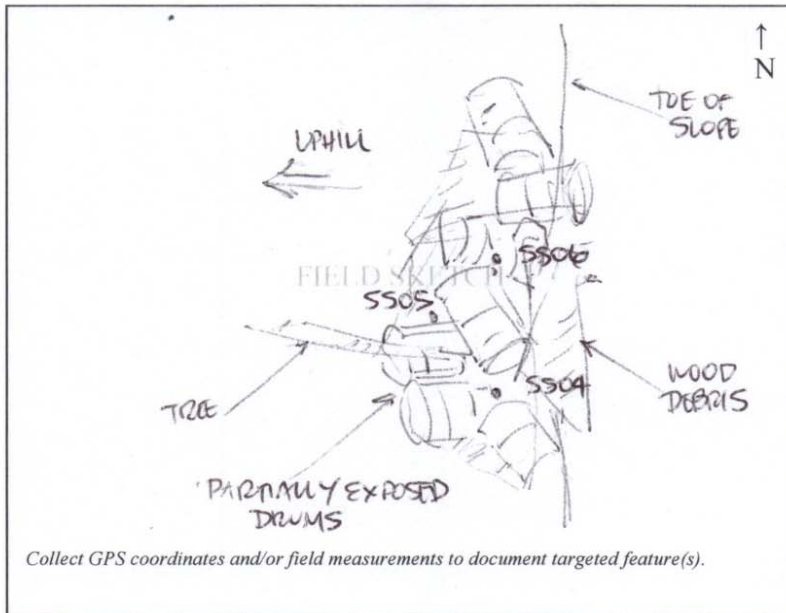
Sampling Activities (Sample Description, Sample Time, Requested Analyses): UNCLEAR IF DRUMS ARE FULL OR
COLLECT SOIL SAMPLES FROM 0-6"; BROWNISH BLACK SANDY LOAM, ORGANICS,
STANDING WATER/WET SOILS CHL-SS04-101514, CHL-SS05-101514, AND
CHL-SS06-101514 SAMPLES COLLECTED BETWEEN 1430 AND 1450

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

DRUMS ARE PARTIALLY BURIED AND STANDING WATER IS PRESENT, MAKING THE
POTENTIAL FOR LEAKING DRUM CONTENTS TO SEEP INTO SOIL AND GROUNDWATER,
EROSION OF IMPACTED SOIL IS ALSO A POSSIBILITY; PHYSICAL HAZARDS ARE POSED

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts): BY THE DRUMS AND
POTENTIAL SPILLAGE.

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
CALUMET AND HECLA – LAKE LINDEN OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 10/15/14 Feature Identification/Name: PARTIALLY BURIED DRUMS

Geographic Area: HUBBELL COALDOCK AREA Property Identification Number: 014-307-001-25

OBSERVATIONS (Including description and sketch) Inspector/Sampler: M. CASTILLO/D. LIEBAU

Circle the appropriate answer;

Potential Physical Hazard: ☒ Yes ☐ No Potential Chemical Hazard: ☒ Yes ☐ No
Capped Area: Yes ☐ No Residual Process Material: Yes ☒ No Abandoned Container: ☒ Yes ☐ No
Stressed Vegetation: ☒ Yes ☐ No Visible Staining: Yes ☒ No Building Materials: Yes ☒ No

Describe Targeted Feature:

UP TO 10 DRUMS PROTRUDING FROM THE TOE OF THE SLOPE FROM THE UPPER COAL DOCK TO THE LOWER COAL DOCK; DRUMS ARE IN VARIOUS STATES OF DEGRADATION

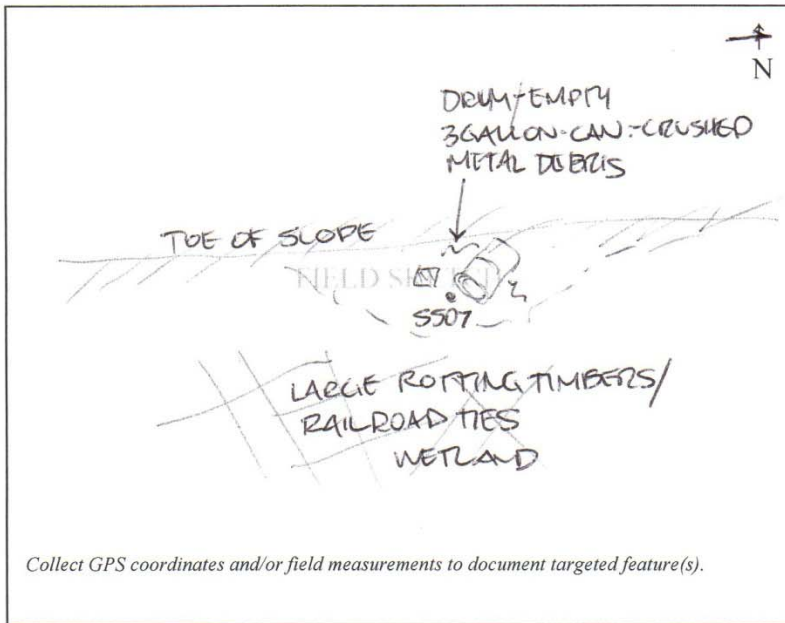
Sampling Activities (Sample Description, Sample Time, Requested Analyses): UNCLEAR IF DRUMS ARE FULL OR
COLLECT SOIL SAMPLES FROM 0-6" BROWNISH BLACK SANDY LOAM, ORGANICS, STANDING WATER/WET SOILS CHL-SS04-101514, CHL-SS05-101514, AND CHL-SS06-101514 SAMPLES COLLECTED BETWEEN 1430 AND 1450

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

DRUMS ARE PARTIALLY BURIED AND STANDING WATER IS PRESENT, MAKING THE POTENTIAL FOR LEAKING DRUM CONTENTS TO SEEP INTO SOIL AND GROUNDWATER, EROSION OF IMPACTED SOILS IS ALSO A POSSIBILITY; PHYSICAL HAZARDS ARE POSED

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts): BY THE DRUMS AND POTENTIAL SPILLAGE.

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
CALUMET AND HECLA – LAKE LINDEN OPERATIONS
TARGETED INSPECTION FORM**



Representative photograph of sample location and/or targeted feature.

Inspection Date: 10/15/14 Feature Identification/Name EMPTY DRUM & SMALL CONTAINER

Geographic Area: HUBBEL COAL DOK AREA Property Identification Number: 014-307-001-25

OBSERVATIONS (Including description and sketch) Inspector/Sampler: M. CASTILLO / D. LIEBAU

Circle the appropriate answer;

Potential Physical Hazard: Yes ☒ No ☐ Potential Chemical Hazard: ☒ Yes ☐ No
Capped Area: Yes ☒ No ☐ Residual Process Material: Yes ☒ No ☐ Abandoned Container: ☒ Yes ☐ No
Stressed Vegetation: Yes ☒ No ☐ Visible Staining: Yes ☒ No ☐ Building Materials: Yes ☒ No ☐

Describe Targeted Feature:

EMPTY 55 GALLON DRUM LYING ON ITS SIDE, INTACT NEXT TO A SMALL CRUSHED APPROX. 3 GALLON CONTAINER; METAL BANDS AND ROPS PROTRUDING FROM THE GROUND ADJACENT TO THE CONTAINERS

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

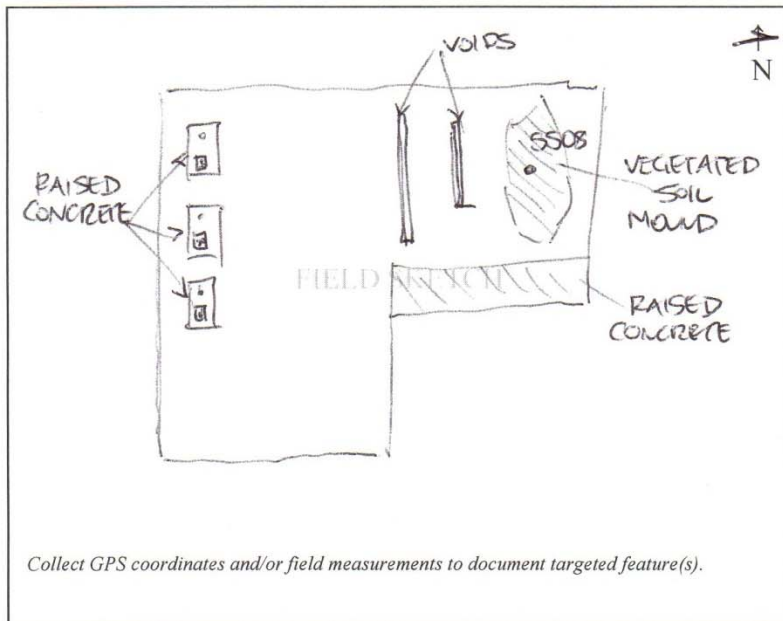
COLLECT SOIL SAMPLE FROM 0-6", BROWNISH BLACK SOIL, ORGANICS
CHL-SS07-101514 AT 1517

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

CONTAINERS ARE EMPTY, CONTENTS MAY HAVE SEEPED OR LEACHED INTO SOIL OR NEARBY/ADJACENT WETLAND AREA; PHYSICAL HAZARDS ASSOCIATED WITH THE CONTAINERS ARE MINIMAL

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
CALUMET AND HECLA – LAKE LINDEN OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 10/15/14 Feature Identification/Name SOIL MOUND/COAL DOCK SUBSTATION

Geographic Area: HUBBELL COAL DOCK AREA Property Identification Number: 014-307-001-25

OBSERVATIONS (Including description and sketch) Inspector/Sampler: _____

Circle the appropriate answer;

Potential Physical Hazard: ☒ Yes ☐ No Potential Chemical Hazard: Yes ☐ No ☒ No
Capped Area: Yes ☐ No ☒ No Residual Process Material: Yes ☐ No ☒ No Abandoned Container: Yes ☐ No ☒ No
Stressed Vegetation: Yes ☐ No ☒ No Visible Staining: Yes ☐ No ☒ No Building Materials: ☒ Yes ☐ No

Describe Targeted Feature:

RAISED SLAB APPROXIMATELY 3-4' ABOVE GRADE; SOIL DEPOSIT COMMINGLED WITH BUILDING DEBRIS ON NORTH SIDE OF SLAB; SALM PRESET ON THE SLAB
LIGHT VEGETATIVE COVERING ON SOIL MOUND; ORGANICS

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

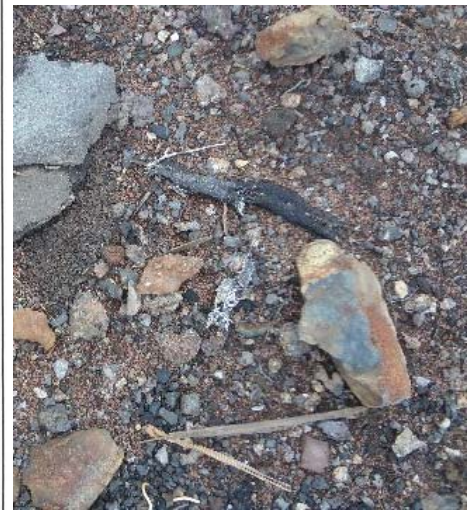
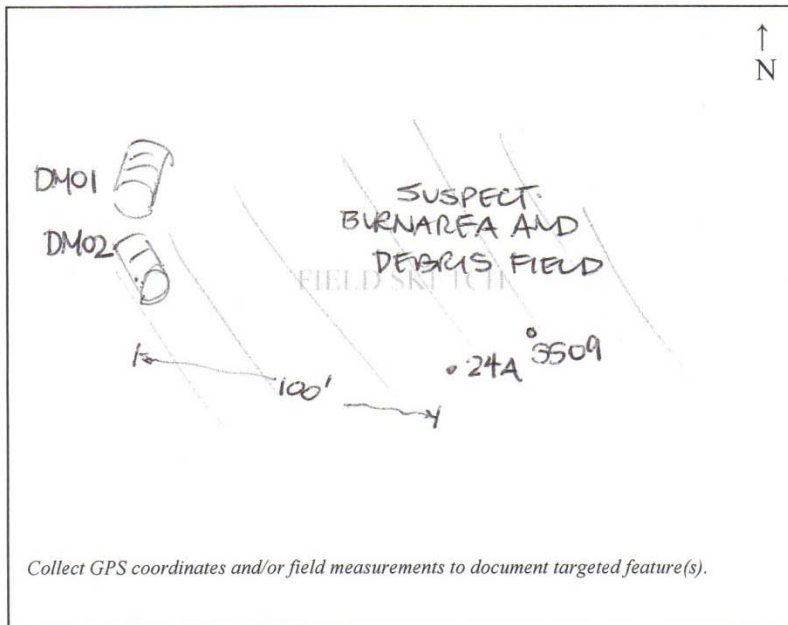
COLLECT SAMPLE C4L-SS08-101514 AT 1530. SOIL BROWNISH BLACK, LOAM, ORGANICS AND BUILDING DEBRIS FRAGMENTS THROUGHOUT, LIKELY LESS THAN 10YD³ OF MATERIAL

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

DEBRIS WOULD BE PRONE TO WIND AND WATER EROSION, POTENTIAL DISTRIBUTION ACROSS THE SITE, TRESPASSERS INVESTIGATING MOUND COULD CONTACT POTENTIAL ASBESTOS CONTAMIN MATERIALS IN THE SOIL

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
CALUMET AND HECLA – LAKE LINDEN OPERATIONS
TARGETED INSPECTION FORM**



Representative photograph of sample location and/or targeted feature.

Inspection Date: 10/14/14 Feature Identification/Name: DEBRIS FIELD/BURN AREA

Geographic Area: QUEBEC COAL DOK Property Identification Number: 014307-001-25

OBSERVATIONS (Including description and sketch) Inspector/Sampler: M. CASTILLO / QUEBEC

Circle the appropriate answer;

Potential Physical Hazard: Yes No Potential Chemical Hazard: Yes No
Capped Area: Yes No Residual Process Material: Yes No Abandoned Container: Yes No
Stressed Vegetation: (Yes) No Visible Staining: (Yes) No Building Materials: Yes No

Describe Targeted Feature:

FIBROUS BLACK WIRE WRAP LOCATED IN A SUSPECTED BURN AREA, APPROXIMATELY 100 FEET EAST OF DRUMS DM01 AND DM02; VICINITY OF INSPECTION LOCATION SAKMS

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

CHL-ASBBK 24A-101414 - BLACK FIBROUS WIRE WRAP.

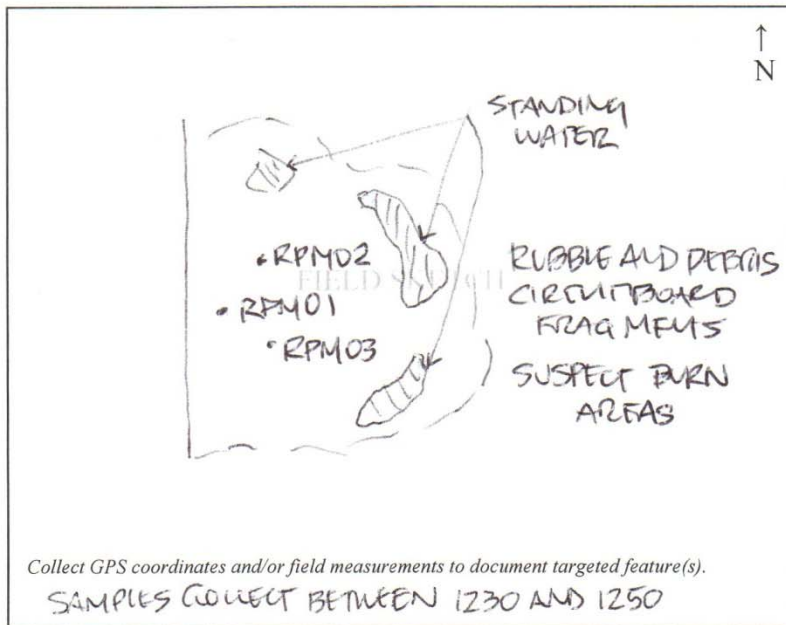
SAMPLED AT 1515

CHL-SS09-101914 - BLACK SOIL/CINDERS, 0-6"

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

WIND AND WATER EROSION HAVE THE POTENTIAL TO TRANSPORT WASTES AND CONTAMINATED MEDIA TO THE LAKE; EVIDENCE OF TRESSPASSELS BASED ON SMALL EXCAVATIONS, SIMILAR TO THOSE THAT MIGHT BE MADE BY SOMEONE WITH SOIL IN THE AREA IS GENERALLY BLACK, CINDERS AND COAL, BLUE/GREEN STAINING IS PRESENT IN THE SOILS AS WELL AS FRAGMENTS OF WIRE AND WASTE MATERIALS

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
CALUMET AND HECLA – LAKE LINDEN OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 10/15/14 Feature Identification/Name WIRE WRAP/SHEATHING (SUSPECT)
SUSPECT BURN AREA

Geographic Area: HUBBELL COAL DOCK AREA Property Identification Number: 014-307-001-25

OBSERVATIONS (Including description and sketch) Inspector/Sampler: M. CASTILLO/DUEBN

Circle the appropriate answer;

Potential Physical Hazard: Yes ☒ No ☐ Potential Chemical Hazard: ☒ Yes ☐ No
Capped Area: Yes ☒ No ☐ Residual Process Material: ☒ Yes ☐ No Abandoned Container: Yes ☒ No ☐
Stressed Vegetation: ☒ Yes ☐ No Visible Staining: ☒ Yes ☐ No Building Materials: Yes ☒ No ☐

Describe Targeted Feature:

SUSPECTED WIRE AND CABLE WRAP SCRAPS COVERING THE GROUND SURFACE IN SUSPECTED BURN AREAS, MATERIALS WOULD HAVE BEEN WASTE PRODUCTS FROM COPPER RECOVERY/SALVAGE OPERATIONS AT THE PROPERTY, MATERIALS ARE POTENTIALLY OIL-LADEN

Sampling Activities (Sample Description, Sample Time, Requested Analyses): BLUE-GREEN STAINING IN SURFACE COLLECTED SAMPLES TO BE ANALYZED AS "SOLIDS" SOILS

FOR PCB ANALYSIS: CHL-RPM01-101514 - FIBROUS ROPE-LIKE MATERIAL, WHITE/GREY, OILY (WIRE WRAP); CHL-RPM02-101514 - BLACK WRAPPED FIBROUS MAT (WIRE SHEATHING); CHL-RPM03-101514 - BLACK PLASTIC LIKE WRAP MATERIAL, APPEARS BURNT/CHARRED

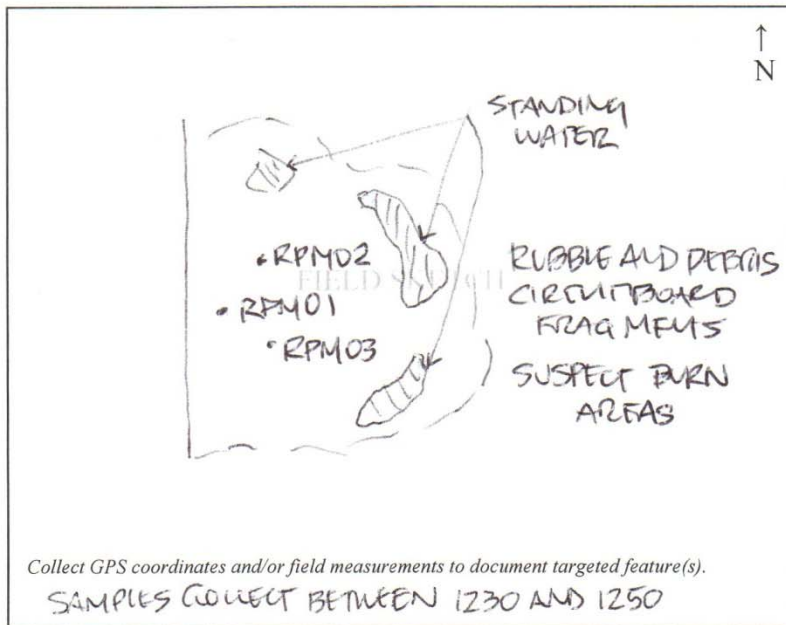
Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

EXPOSED MATERIALS MAY BE WEATHERING AND DECOMPOSING, LEACHING/RELEASING HAZARDOUS CHEMICALS TO SOIL AND GROUNDWATER/SURFACE WATER. WIND AND WATER EROSION COULD RESULT IN THE MIGRATION OF CONTAMINANTS TO AGR

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

AND TORCH LAKE
CHL-ASBBLK 22(A-C) AND CHL-RPM01-101514 ARE THE SAME MATERIALS
CHL-ASBBLK 37(A-C) AND CHL-RPM02-101514 ARE THE SAME MATERIALS

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
CALUMET AND HECLA – LAKE LINDEN OPERATIONS
TARGETED INSPECTION FORM**



Representative photograph of sample location and/or targeted feature.

Inspection Date: 10/15/14 Feature Identification/Name WIRE WRAP/SHEATHING (SUSPECT)
SUSPECT BURN AREA

Geographic Area: HUBBELL COAL DOCK AREA Property Identification Number: 014-307-001-25

OBSERVATIONS (Including description and sketch) Inspector/Sampler: M. CASTILLO/DUEBN

Circle the appropriate answer;

Potential Physical Hazard: Yes ☒ No ☐ Potential Chemical Hazard: ☒ Yes ☐ No
Capped Area: Yes ☒ Residual Process Material: ☒ Yes ☐ No Abandoned Container: Yes ☒ No
Stressed Vegetation: ☒ Yes ☐ No Visible Staining: ☒ Yes ☐ No Building Materials: Yes ☒ No

Describe Targeted Feature:

SUSPECTED WIRE AND CABLE WRAP SCRAPS COVERING THE GROUND SURFACE IN SUSPECTED BURN AREAS, MATERIALS WOULD HAVE BEEN WASTE PRODUCTS FROM COPPER RECOVERY/SALVAGE OPERATIONS AT THE PROPERTY, MATERIALS ARE POTENTIALLY OIL-LADEN

Sampling Activities (Sample Description, Sample Time, Requested Analyses): BLUE-GREEN STAINING IN SURFACE COLLECTED SAMPLES TO BE ANALYZED AS "SOLIDS" SOILS

FOR PCB ANALYSIS: CHL-RPM01-101514 - FIBROUS ROPE-LIKE MATERIAL, WHITE/GRAY, OILY (WIRE WRAP); CHL-RPM02-101514 - BLACK WRAPPED FIBROUS MAT (WIRE SHEATHING); CHL-RPM03-101514 - BLACK PLASTIC LIKE WRAP MATERIAL, APPEARS BURNT/CHARRED

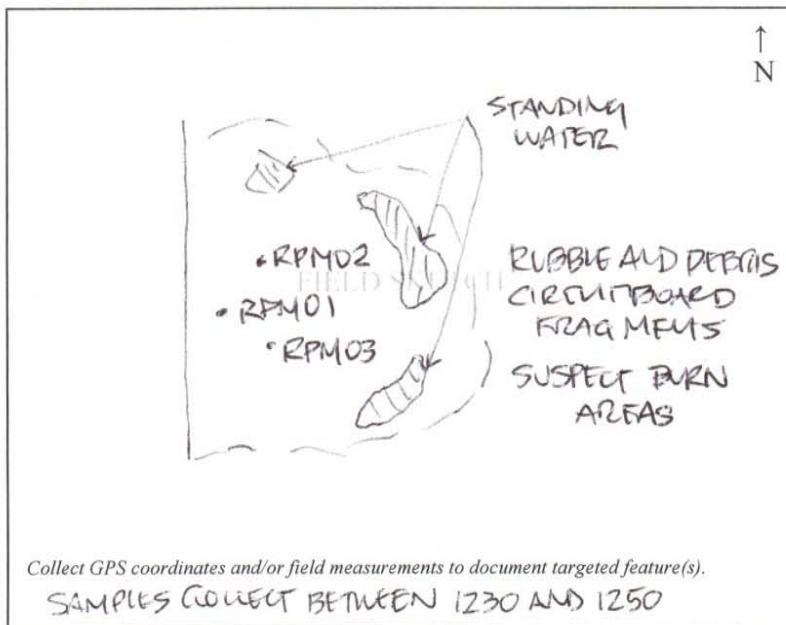
Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

EXPOSED MATERIALS MAY BE WEATHERING AND DECOMPOSING, LEACHING/RELEASING HAZARDOUS CHEMICALS TO SOIL AND GROUNDWATER/SURFACE WATER. WIND AND WATER EROSION COULD RESULT IN THE MIGRATION OF CONTAMINANTS TO AGR

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts): AND TORCH LAKE

CHL-ASBBLK 22(A-C) AND CHL-RPM01-101514 ARE THE SAME MATERIALS
CHL-ASBBLK 37(A-C) AND CHL-RPM02-101514 ARE THE SAME MATERIALS

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
CALUMET AND HECLA – LAKE LINDEN OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 10/15/14 Feature Identification/Name WIRE WRAP/SHEATHING (SUSPECT)
SUSPECT BURN AREA

Geographic Area: HUBBELL COAL DOCK AREA Property Identification Number: 014-307-001-25

OBSERVATIONS (Including description and sketch) Inspector/Sampler: M. CASTILLO/DUEBN

Circle the appropriate answer;

Potential Physical Hazard: Yes ☐ No ☒ Potential Chemical Hazard: ☒ Yes ☐ No
Capped Area: Yes ☐ No ☒ Residual Process Material: ☒ Yes ☐ No Abandoned Container: Yes ☐ No ☒
Stressed Vegetation: ☒ Yes ☐ No Visible Staining: ☒ Yes ☐ No Building Materials: Yes ☐ No ☒

Describe Targeted Feature:

SUSPECTED WIRE AND CABLE WRAP SCRAPS COVERING THE GROUND SURFACE IN SUSPECTED BURN AREAS, MATERIALS WOULD HAVE BEEN WASTE PRODUCTS FROM COPPER RECOVERY/SALVAGE OPERATIONS AT THE PROPERTY, MATERIALS ARE POTENTIALLY OIL-LADEN

Sampling Activities (Sample Description, Sample Time, Requested Analyses): BLUE-GREEN STAINING IN SURFACE COLLECTED SAMPLES TO BE ANALYZED AS "SOLIDS" SOILS

FOR PCB ANALYSIS: CHL-RPM01-101514 - FIBROUS ROPE-LIKE MATERIAL, WHITE/GRAY, OILY (WIRE WRAP); CHL-RPM02-101514 - BLACK WRAPPED FIBROUS MAT (WIRE SHEATHING); CHL-RPM03-101514 - BLACK PLASTIC LIKE WRAP MATERIAL, APPEARS BURNT/CHARRED

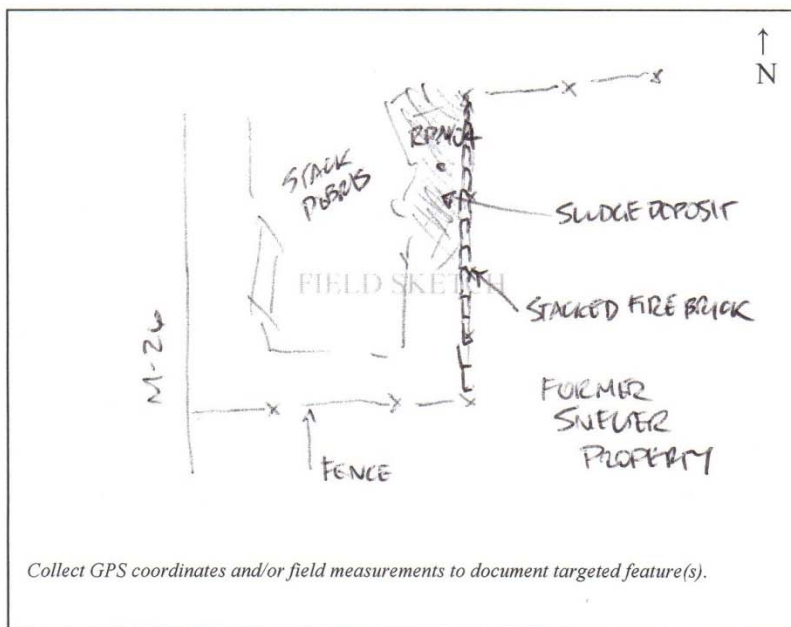
Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

EXPOSED MATERIALS MAY BE WEATHERING AND DEGRADING, LEACHING/RELEASING HAZARDOUS CHEMICALS TO SOIL AND GROUNDWATER/SURFACE WATER. WIND AND WATER EROSION COULD RESULT IN THE MIGRATION OF CONTAMINANTS TO AFR

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

CHL-ASBBLK 22(A-C) AND CHL-RPM01-101514 ARE THE SAME MATERIALS
CHL-ASBBLK 37(A-C) AND CHL-RPM02-101514 ARE THE SAME MATERIALS

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
CALUMET AND HECLA – LAKE LINDEN OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 10/15/14 Feature Identification/Name: DEMOLISHED STACK - SLUDGE

Geographic Area: HUBBELL COAL DOLK AREA Property Identification Number: 04-307-001-75

OBSERVATIONS (Including description and sketch) Inspector/Sampler: M. CASTILLO / D. LIEPNU

Circle the appropriate answer;

Potential Physical Hazard: Yes ☒ No ☐ Potential Chemical Hazard: Yes ☒ No ☐
Capped Area: Yes ☐ No ☒ Residual Process Material: Yes ☒ No ☐ Abandoned Container: Yes ☐ No ☒
Stressed Vegetation: Yes ☒ No ☐ Visible Staining: Yes ☒ No ☐ Building Materials: Yes ☐ No ☒

Describe Targeted Feature:

TAN, BLUE-GREEN TINTED FINE SLUDGE ACCUMULATED AT THE BASE OF THE DEMOLISHED STACK; MATERIAL APPEARS TO BE ERODING OUT OF THE STACK DEBRIS AND MIGRATING WITH THE POTENTIAL TO IMPACT THE NEIGHBORING INDUSTRIAL PROPERTY

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

COLLECTED A GRAB SAMPLE OF THE SLUDGE FROM 0-3", GREENISH BLUE, TAN, SILT-LIKE POSSIBLY ASH AND DEBRIS "WASHING OUT" OF STACK WASTE, WET/MUDDY
CUL-RPM04-101514 COLLECTED AT 1630

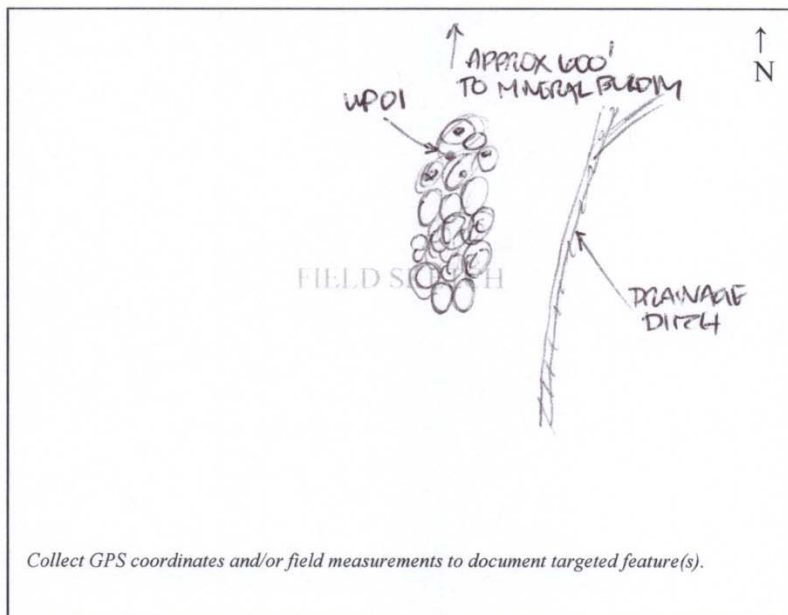
Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

DIRECT CONTACT, POTENTIAL MIGRATION OFF PROPERTY; STACK AND DEBRIS PRESENT A SIGNIFICANT PHYSICAL HAZARD; WHEN DRY MATERIAL MAY BE DISPOSED BY WIND, WATER LIKELY TO BE MAJOR CONTRIBUTOR IN EROSION AND ACCUMULATION

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

STACKED FIRE BRICK HAS BEEN PLACED ALONG THE PROPERTY FENCE LINE, PRESUMABLY TO MITIGATE MIGRATION OF THE SLUDGE

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
CALUMET AND HECLA – LAKE LINDEN OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 10/15/14 Feature Identification/Name WASTE PILES / DUMPED PILES

Geographic Area: HUBBELL COAL DOK AREA Property Identification Number: 014-307-001-95

OBSERVATIONS (Including description and sketch) Inspector/Sampler: M. CASTILLO / D. HERAN

Circle the appropriate answer;

Potential Physical Hazard: ☒ Yes ☐ No Potential Chemical Hazard: ☒ Yes ☐ No
Capped Area: Yes ☐ No Residual Process Material: ☒ Yes ☐ No Abandoned Container: ☒ Yes ☐ No
Stressed Vegetation: ☒ Yes ☐ No Visible Staining: Yes ☐ No Building Materials: ☒ Yes ☐ No

Describe Targeted Feature:

MULTIPLE WASTE PILES IN THE NORTH CENTRAL PORTION OF THE PROPERTY; PILES APPEAR TO BE DUMP TRUCK LOADS CONTAINING BRICKS, TRANSITE, AND OTHER BUILDING MATERIALS BLACK CINDER/COAL MATRIX

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

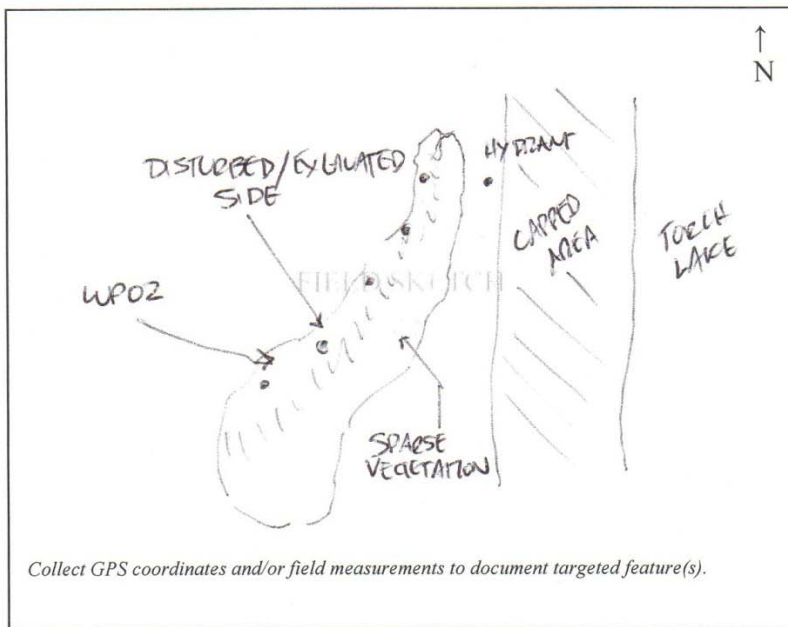
COLLECTED A 5-POINT COMPOSITE SOIL SAMPLE FROM 5 DIFFERENT WASTE PILES SOIL WAS DARK BROWN TO BLACK WITH GRAVEL; SAMPLE ALIQUOTS COLLECTED FROM 0-6" CUP-QA-CUP01E ⇒ CHL-WPO1-101514 SAMPLE COLLECTED AT 1020

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

DEBRIS PILES POSE PHYSICAL HAZARD TO TRESPASSERS DUE TO ROUGH TERRAIN AND EXPOSED DEBRIS; PILES ARE NOT VEGETATED AND PRONE TO WIND AND WATER EROSION PILES ARE WITHIN 100' OF THE DRAINAGE CHANNEL (FLOWING) THAT DIVIDES THE TWO PROPERTIES THE DRAINAGE CHANNEL DISCHARGES TO TORCH LAKE

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
CALUMET AND HECLA – LAKE LINDEN OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 10/15/14 Feature Identification/Name WASTE PILE / SUSPECT CAP SCRAPE

Geographic Area: HUBBEL COAL DOCK Property Identification Number: 014.307-001-75

OBSERVATIONS (Including description and sketch) Inspector/Sampler: M. CASTILLO / D. LIEBAU

Circle the appropriate answer;

Potential Physical Hazard: ☒ Yes ☐ No Potential Chemical Hazard: ☒ Yes ☐ No
Capped Area: Yes ☐ No Residual Process Material: ☒ Yes ☐ No Abandoned Container: ☒ Yes ☐ No
Stressed Vegetation: ☒ Yes ☐ No Visible Staining: Yes ☐ No Building Materials: ☒ Yes ☐ No

Describe Targeted Feature:

LARGE DEBRIS PILE, GENERALLY PARALLEL TO THE SHORELINE, SPARSELY VEGETATED, WEST SIDE OF PILE APPEARS TO HAVE BEEN OPEN CUT AND IS NOT VEGETATED, BUILDING DEBRIS DRUM CARCASS, AND OTHER MATERIALS ARE PRESENT IN A BLACK CINDER/COAL/SOIL MIX MATRIX

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

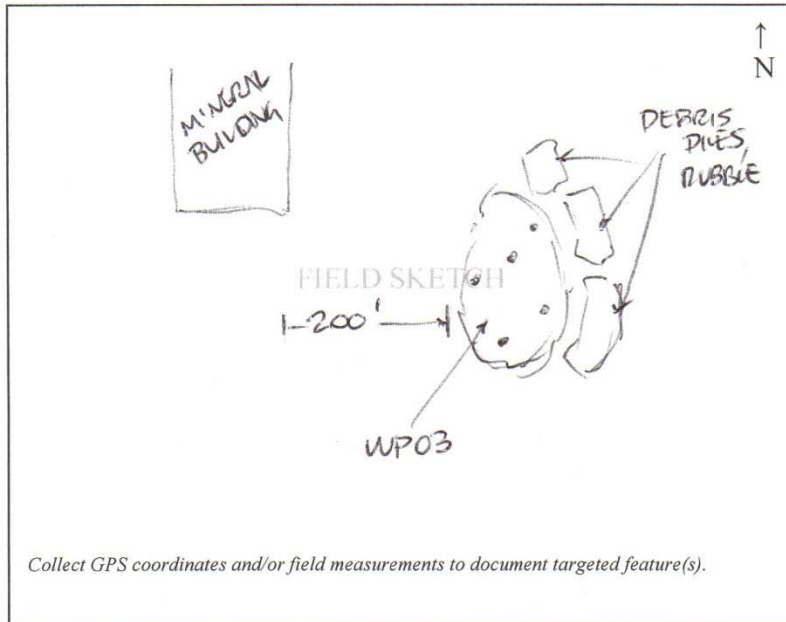
COLLECTED A FIVE-POINT COMPOSITE SAMPLE FROM THE WASTE PILE, COMPOSITE ANALYSES COLLECTED FROM 0-6" BLACK CINDER/COAL/SOIL

CLWPO2A - EWPO2E → CHL - WPO2 - 101514 COLLECTED AT 1638

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

DEBRIS/WASTE PILE IS SPARSELY TO NON VEGETATED, WIND AND RAIN EROSION COULD TRANSPORT SOIL FROM THE PILE TO THE LAKE AND DISPERSE ACROSS THE SITE; PHYSICAL HAZARDS THAT ARE PRESENT WOULD INCLUDE METAL DEBRIS AND BRICK PROTRUDING FROM THE WASTE PILE; CAP AREA BETWEEN THE PILE AND THE LAKE MAY PROVIDE AN
Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts): EROSION BUFFER

**ABANDONED MINING WASTES TORCH LAKE NON-SUPERFUND SITE
CALUMET AND HECLA – LAKE LINDEN OPERATIONS
TARGETED INSPECTION FORM**



Inspection Date: 10/15/14 Feature Identification/Name MINERAL BUILDING - DEBRIS PILES

Geographic Area: HUBBEL COAL DOCK AREA Property Identification Number: 014-307-001-75

OBSERVATIONS (Including description and sketch) Inspector/Sampler: M. CASTRO / D. EBAU

Circle the appropriate answer;

Potential Physical Hazard: ☒ Yes No Potential Chemical Hazard: ☒ Yes No
Capped Area: Yes ☒ No Residual Process Material: Yes ☒ No Abandoned Container: ☒ Yes No
Stressed Vegetation: ☒ Yes No Visible Staining: Yes ☒ No Building Materials: ☒ Yes No

Describe Targeted Feature:

LARGE DEBRIS PILE AT THE SOUTHEAST END OF THE MINERAL BUILDING, BUT APPROX EAST. VARIOUS WASTE STREAMS, INSULATING CEMENTIOUS MATERIAL, ROOFING, FIRE BRICKS, GLASS METAL DEBRIS IN A SOIL/LINDER MATRIX, WASTE PILE IS SPARSELY VEGETATED

Sampling Activities (Sample Description, Sample Time, Requested Analyses):

COLLECTED 5 PART COMPOSITE SAMPLE FROM MULTIPLE SIDES OF THE PILE, SOIL WAS BROWNISH/BLACK WITH COAL AND DEBRIS, MAMMOTS COLLECTED FROM 0-4" CWP-03A - CWP03E ⇒ CHL - WP03-101514 COLLECTED AT 1656

Potential Exposure Pathways (Ingestion, Inhalation, Direct Contact):

WASTE PILE IS SUBJECT TO WIND AND WATER EROSION, SOIL CAN BE TRANSPORTED/DISPERSED THE COMMINCED NATURE OF THE PILE WITH METAL DEBRIS/CONCRETE, AND DAMAGED ACM MAKES IT A PHYSICAL HAZARD TO TRFESSASSERS

Other Relevant Below and Above Ground Features (Conduit, Drainage Swales, Culverts):