

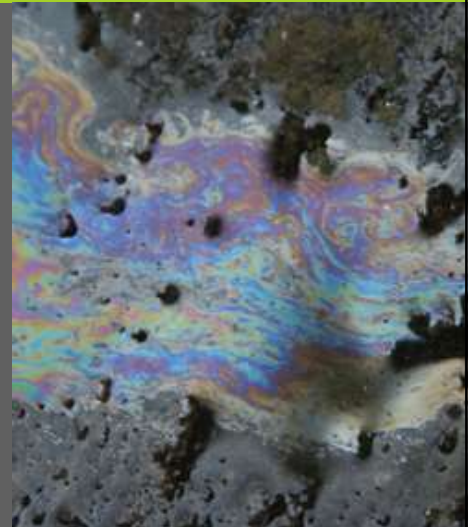
CONTAMINATION & BRIDGE PAINTING

Stan Reinke
517-335-4384
ReinkeS1@Michigan.gov

1

WHY REQUIRED

- To meet the intent of the National Environmental Policy Act (NEPA)
 - Avoidance, minimization or mitigation of an adverse impact
- Natural Resources and Environmental Protection Act (NREPA)
 - Prevent exacerbation of existing contamination
 - Exercise "due care" to protect human health and safety



2

NREPA-NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT

- Part 111: Hazardous Waste
- Part 115: Solid Waste Management
- Part 201: Environmental remediation
- Part 213: Leaking Underground storage tanks (LUST)



3

ENVIRONMENTAL REVIEW

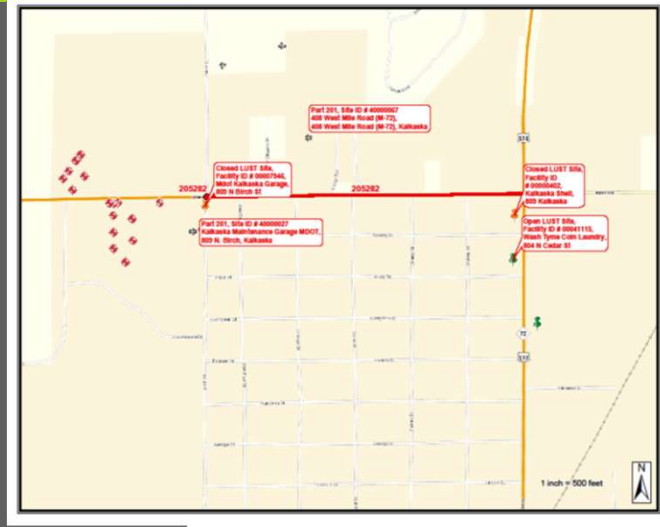


- Desktop GIS review
- Project Area Contamination Survey
 - PACS or Phase I
- Preliminary Site Investigation
 - PSI or Phase II

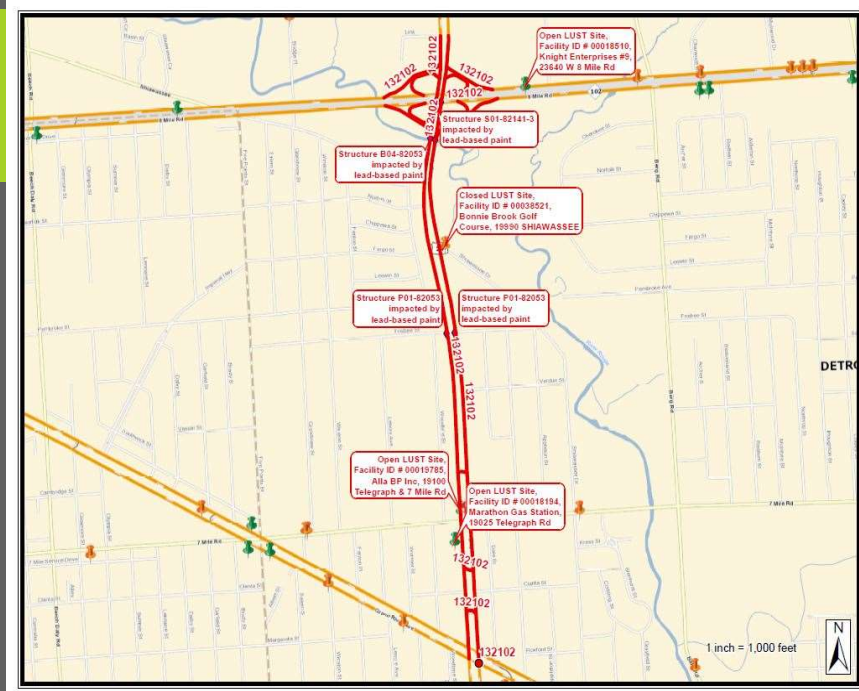
4

DESKTOP REVIEW

- All projects sent for NEPA review are reviewed for contamination
- Environmental Contamination Specialist conducted
- ArcGIS utilized to identify sites within or close to project limits
- Individual maps placed into ProjectWise and linked to ECO
- For design staff to help determine likelihood of encountering contamination within project limits and help with determining cost estimates




5



6

PACS



OFFICE MEMORANDUM

DATE: March 15, 2019

TO: Stan Reside
Environmental Clearance Coordinator/Contamination Specialist
Environmental Services Section
Bureau of Highway Development

FROM: Thomas Simpson, Environmental Quality Specialist
Environmental Services Section
Bureau of Highway Development

SUBJECT: PC 0016
Newfield Southern Railroad property
Approximately three mile line of railway between Jackson and Mechanic Streets
Partially parallel to E. Louis Clark Hwy (I-94 BL (CS 3088))
Jackson, Jackson County
Project Area Contamination Survey

The project area referenced above was researched on March 15, 2019 to determine if known or potential sites of environmental contamination exist that may affect the project's design, cost, or schedule. There are six (6) known sites of environmental contamination identified within and adjacent to the project area. Three of the sites have been identified as Part 213 Contingency/Underground Storage Tanks sites. The remaining three sites have been identified as Part 201 Environmental Contamination sites. The potential risks associated with the site are discussed herein.

Recommendations for contaminated sites located within the project area are based on a review of Michigan Department of Environmental Quality files, databases, and site investigations. The potential contaminated sites listed below have been used as follows:

- **Low Risk:** Can be noted on plan sheets and may need pay items to cover mitigation.
- **Medium Risk:** May require additional review before testing to determine impact.
- **High Risk:** Site will impact project, testing is recommended to assess impact.

Depending on the final plans for the work in the MEDOT right-of-way in the project area, additional testing may need to be considered for sites of medium risk or higher to provide more information to:

- Identify sites that may impact recreation activities within the project.
- Determine if contamination exists, the concentration of any contaminants in the soil and/or groundwater, and, provide specific data that can be used in design and mitigation.
- Estimate of contaminated soil quantities for non-hazardous pay items, and volumes of contaminated groundwater which will require treatment and disposal.

Conducted by Region Resource Specialist

Provides specific data to be used in design and mitigation


Assists in estimating contamination soil quantities (usually provides an amount)

Determines whether further investigation/testing is warranted

Once conducted PACS report is sent to Contamination Specialist for mitigation to be put into NEPA document, Project Manager and its places into PW for design reference

7

PSI

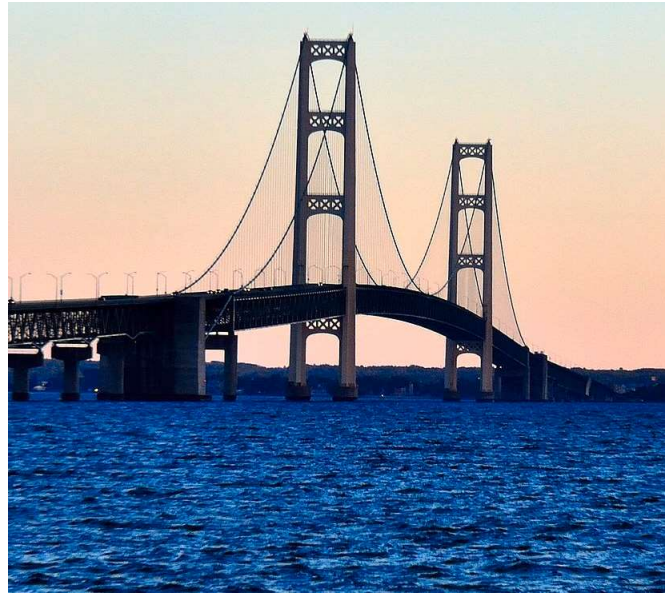


- Conducted when its known that contaminated material will be found.
- Involves the collection and chemical analysis of soil and groundwater samples
- Identifies specific chemicals
- Addresses potential worker safety concerns
- Provides contamination soil quantities and volumes of contaminated groundwater which will require treatment and disposal
- Can be conducted in house with as needed contract through Steve Adams for smaller projects
- Or will be part of contract for project.

8

BRIDGE PAINTING

- GIS desktop review for bridges impacted by lead based paint
- Requirements for structural coatings come from MDOT Standard Specifications for Construction
- Past fines and consent orders between MDOT and MDEQ and MDNR




9

REQUIREMENTS



- Requirements 715.03.A-C of the 2012 Standard Specifications for Construction specifically deal with coating cleaning and coating of existing structural steel and include:
 - Total Enclosures
 - Protect blasting of vehicles, water vessels and pedestrians
 - Prevent release of spent materials
 - Maintain negative pressure
 - Use dust collectors

10



- Hazardous waste contingency plan
- Labeling of spent material containers
- Weekly inspection log
- On site records
- Storage requirements
- Disposal
- Containment requirements
- Bridges over waterways
- Cleanup and storage of spent materials

11

MITIGATION

12SP-205A-01
MICHIGAN
DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION
FOR
NON-HAZARDOUS CONTAMINATED MATERIAL HANDLING AND DISPOSAL
ENV/JCW 1 of 2 APRIL 2014 (07-25-06)
FINAL APPROVAL 10-11

a. Description. This work consists of all labor, equipment, and materials necessary to handle, transport, and dispose of the non-hazardous contaminated material and includes any and all laboratory testing required for the proper disposal of the material. The special provision shall be a written mutual understanding of the Engineer. The quantity of material to be handled shall be verified and approved and is not intended to determine whether or not the material is contaminated. Cost determined on the plans and identified as non-hazardous contaminated material shall be used elsewhere on the project regardless of the laboratory test results unless otherwise directed by the Engineer.

b. Materials. None specified.

c. Construction. Complete this work in accordance with sections 322 and 325 of the General Specifications for Construction, except as modified herein or as directed by the Engineer.

1. Excavation of Non-hazardous Contaminated Material. Excavate non-hazardous contaminated material as shown on the plans or as directed by the Engineer.

2. Temporary Storage of Non-hazardous Contaminated Material. Place excavated non-hazardous contaminated material into a temporarily designated or marked storage or impoundment facility within 2 miles of a road, 100 feet of ditches, or other conditions, such that no runoff may escape from the containment. Cover the non-hazardous contaminated material secondary with plastic sheeting if this material is present at the end of each work day.

Dispose of excavated non-hazardous material as soon as approval is received from the disposal site. The material cannot be stored for longer than 30 days prior to disposal.

3. Sampling and Analysis of Non-hazardous Contaminated Material. The required sampling and analysis for disposal of non-hazardous contaminated material is the Contractor's responsibility. The analysis required is dictated by the Type II disposal facility to be utilized for disposal. Check the results of the analysis against the material to be disposed as defined by the 40 CFR, Part 191 of the Resource Conservation and Environmental Protection Act, the Engineer must be notified immediately. The material must then be disposed as instructed by the Engineer.

4. Disposal of Non-hazardous Contaminated Material. Dispose of non-hazardous contaminated material at a licensed Type II sanitary landfill. Submit the pre-notification meeting the name of the Type II landfill to be used for disposal, the sampling and analysis

ENV/JCW 2 of 2 12SP-205A-01
07-25-06

through the proposed landfill and verification that use of the proposed landfill will meet the requirements of the facility used as a part.

through the proposed landfill is acceptable to the Department and approval is obtained from the Engineer prior to commencing disposal operations. Provide a copy of the laboratory analysis to the Engineer as a requirement of approval for disposal. Following disposal and prior to approval for payment apply to the Engineer written receipts for all non-hazardous contaminated material disposed of.

d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price for the following pay item:

Pay Item	Pay Unit
Non-Haz Contaminated Material Handling and Disposal, LM	_____ Cubic Yards

Non-Haz Contaminated Material Handling and Disposal, LM will be measured by volume in cubic yards, LM. Provide the Engineer receipts from the disposal facility for the number of cubic yards disposed of at that facility prior to payment. Payment will include all costs for material, labor and equipment needed for storage, loading, transportation, handling, and disposal of the non-hazardous contaminated material. Disposal costs will include all documentation required by the landfill.

Payment for excavation of non-hazardous contaminated materials will be included with the related items of work.

Costs in testing and disposal of non-hazardous contaminated materials that are not the fault of the Contractor shall be considered a labor report for extension of time. However, those delays and the resulting extensions of time will not be considered valid reasons for additional payment.

Should the material test hazardous, payment for disposal of hazardous materials will be measured and paid for as a separate item. Disposal includes handling by a licensed hazardous waste handler and disposal at an appropriate licensed disposal facility. Disposal/contract is waived.

- An estimated quantity (i.e., pay item) for the appropriate handling and disposal of non-hazardous contaminated media can be included in the project plans.
- Special provision 12SP-205A-02 outline Non-Hazardous Contaminated Material Handling and Disposal

12



QUESTIONS?