Mahoning River, Ohio
Environmental Dredging
Draft Feasibility Study
and
Environmental Impact Statement
Trumbull and Mahoning Counties

APPENDIX E
HAZARDOUS, TOXIC, AND RADIOLOGICAL WASTE
I. INTRODUCTION

This report presents a summary of the results of a Phase I Environmental Site Assessment (ESA) conducted by the U. S. Army Corps of Engineers, Pittsburgh District (USACE), as part of the Mahoning River Environmental Ecosystem Restoration Project. The Environmental Site Assessment was performed to identify potential sources of hazardous, toxic, or radioactive waste (HTRW) that could impact thirteen (13) proposed laydown sites (Sites I through XIII), and seven (7) staging areas (to be used for dam removals) during construction. The thirteen (13) proposed laydown sites will be used to dewater the contaminated sediments after dredging the bottom and banks of the Mahoning River. These sites are listed as follows:

1. Site I, Copperweld
2. Site II, Packard Park
3. Site III, Gould-Stewart Park
4. Site IV, Warren Wastewater Treatment Plant
5. Site V, Weathersfield Township
6. Site VI, Niles
7. Site VII, Lafarge
8. Site VIII, Girard
9. Site IX, Interstate 80
10. Site X, North Youngstown
11. Site XI, South Youngstown
12. Site XII, Castlo

The 7 proposed staging areas will be used to store equipment and supplies during the removal of a dam. The names of these sites are as follows:

1. Warren North Dam Staging Site
2. Warren Summit Street Dam Staging Site
3. Crescent Street Dam Staging Site
4. Mahoning Avenue Dam Staging Site
5. Haselton Street Dam Staging Site
6. Struthers Street Dam Staging Site
7. Lowellville Dam Staging Site.

Twenty (20) laydown and staging sites were investigated.
The study area is located in northeastern Ohio. It includes 20 sites (specified above) along approximately 31 miles of the lower Mahoning River from Warren, Ohio to the Ohio-Pennsylvania border.

The Mahoning River Ecosystem Restoration involves the removal and remediation of contaminated in-river and river bank sediments for the purpose of environmental enhancement, water quality improvement, and restoration of ecosystem habitat.

As part of the Environmental Site Assessment, the USACE conducted an environmental data base search; examined aerial photographs; requested landowners to answer questions pertaining to the land that they owned; examined Sanborn maps; interviewed local officials and people on or near the project site; reviewed records from the State of Ohio Environmental Protection Agency (OhioEPA) Northeast District Office; reviewed past land ownership (deed search); and conducted a walkover of each project site within and immediately adjacent to the property.

II. ENVIRONMENTAL BASELINE STUDY

Prior to initiating any site preparation work, an Environmental Baseline Study will be conducted to characterize the soils present at the site. The purpose of the testing program is to characterize the existing chemical conditions of the on-site soil. If a Phase II Site Investigation was conducted at the site, it can serve as the Environmental Baseline Study. After construction activities are complete, post-construction samples will be collected to again characterize the site, and compare the chemical testing data to the pre-construction, soil conditions. Post construction chemical testing will determine if the site is contaminated or clean. If the site is contaminated, it must be cleaned to pre-construction site conditions.

III. SUMMARY OF THE RESULTS BY SITE

1. Site I Copperweld

Site I, Copperweld, is composed of two parcels of land; the western section of the site is owned by Copperweld Steel Company, and Warren Steel Holding LLC holds title to the eastern tract of land. The site has a history of industrial use that can be seen on-site today. The industrial features include three lagoons (one of which is currently dried-up with the sediments exposed), five above grade petroleum crude oil tanks/wells, and piles of debris, coal, slag, and fill that is scattered throughout the property. Aerial photographs show that the lagoons were present at the site as early as 1972. Mr. Lemster, President of Steel Equipment Corporation, indicated on the returned Environmental Site Assessment Questionnaire, that he has knowledge of past or current existence of hazardous substances on the project site.

Summary of Findings and Action Items:

- Due to the industrial history and environmental findings at Site I (Tract numbers 100 E and 101 E), a Phase II Site Investigation is recommended to be conducted. Soil samples
should be taken to the depth of excavation, and analyzed to characterize and confirm the presence of on-site contaminants.

- It is recommended that the lagoons be avoided, if possible. However, if an agreement is reached with the regulatory agencies to place dredged material into the lagoons, the Real Estate and environmental terms of the agreement must be met.
- The five above grade petroleum crude oil tanks/wells, and the treatment building (northeastern corner of the site) should be avoided.
- If debris is present in the selected work area, it should be removed prior to start-up of project activities.
- All work should be conducted under a Safety and Health Plan (SHP). The plan should be developed to cover construction activities including specific chemical hazard information, hazard mitigation information, and personal protective equipment to address the contaminated soils and environmental concerns.

Based on evaluation of the data, a Phase II Site Investigation is recommended at Site I, Copperweld (Tract numbers 100 E and 101 E). The Phase II Site Investigation will be coordinated with the OhioEPA and USEPA.

2. Warren North River Road Dam

The Warren North River Road Dam site is owned by Herbert G. Thomas since 1994. The property is situated in a residential neighborhood in Warren Ohio. This parcel of land is a vacant lot with houses bordering two sides of the site; the Mahoning River is positioned to the west. The eastern section of the 0.3-acre site is grass covered; the western portion of the property is undisturbed and vegetated with brush and tress. Aerial photographs show that region was developing into a residential area in 1959.

Summary of Findings and Action Items:

- Based on the environmental data base search, aerial photographs, a deed search, and the site reconnaissance, there is no evidence of contamination at the Warren North River Road Dam site, Tract #100 E-1.
- The property is very well maintained and there is nothing to suggest that it has ever been used commercially or industrially.
- It is recommended that the project work activities be conducted under a SHP.

The environmental condition of the Warren North River Road Dam site (Tract #100 E-1) is suitable for construction use. There is no evidence to suggest a significant probability of incurring CERCLA liability due to subject property transaction.

3. Site II Packard Park

Site II, Packard Park, is basically sections of a baseball field owned by the City of Warren. The Chief Deputy Recorder, Trumbull County Recorder Office, said that the Packard Car Family
donated the land to the City of Warren in the early 1900s, and having lived in this area all of her life (she is approximately 60 years old), she said that this land has always been a park. The 1938 aerial photographs reiterate this information, and show the development of a park and the presence of baseball fields. An on-site interview with the Head Custodian of the Warren City High School (located adjacent to the project site) said that no hazardous materials were ever stored at the site and confirmed the findings regarding this site - that the property was always used as a ball park.

Summary of Findings and Action Items:

- The evidence (aerial photographs, deed search, environmental data base search, site reconnaissance, and interviews) indicates that Site II, Packard Park, has been a park since the early 1900s. There is no evidence to indicate that the site is contaminated.
- Two piles of concrete debris are present at the southern section of the property and should be removed prior to start-up of project activities.
- It is recommended that the project work activities be conducted under a SHP.

The environmental condition of Site II, Packard Park, is suitable for construction use. There is no evidence to suggest a significant probability of incurring CERCLA liability due to subject property transaction.

4. **Warren Summit Street Dam**

The Warren Summit Street Dam property is owned by Ohio Edison and is the location of a former electrical power plant and substation. Records from the OhioEPA, Northeast District Office, were obtained to determine the recent, environmental history of the site. A Phase I ESA was initiated in the summer of 1995 to start the process of demolishing the power plant facility. A Phase II ESA was completed in February 1997. By mid-May 1999, two, 250-foot smokestacks, the majority of the power house, and boiler house were brought down to grade. However, construction work ceased when two of the three soil/debris piles on-site were tested and found to contain PCBs in concentrations greater than 50 parts per million. During the summer of 2002, the City of Warren was cleaning-up the site, but ran out of money before the project was completed. According to Sue Netzly-Watkins (OhioEPA) via a telephone conversation on April 4, 2005, the USEPA has started to remove the PCB contaminated stockpiled material in February 2005.

Summary of Findings and Action Items:

- The PCB contaminated soil/debris stockpiles may still be on the Warren Summit Street Dam site (Tract #3700 E), although it is understood that the USEPA is in the process of removing the stockpiles. It is recommended that additional environmental studies and site reconnaissances be conducted during the Planning, Engineering, and Design (PED) phase of the Mahoning River Dredging Project to determine the status of the PCB contaminated stockpiles. The sampling and testing data performed by the USEPA should also be studied. One possibility may be to investigate other, less desirable properties.
located adjacent to the contaminated area as a possible staging/access site during removal of the dam if Tract #3700 E has CERCLA liability concerns. A final course of action will be made during the PED phase, after all information is analyzed, and the environmental/cultural resource clearances are obtained.

5. **Site III Gould – Stewart Park**

Site III, Gould-Stewart Park (Tract #3200 E-3), is owned by the City of Warren. In a discussion with Barbara Adams (Chief Deputy Recorder, Trumbull County Recorder Office), she said that this property has always been a park with baseball fields for as long as she can remember (she is approximately 60 yrs old). In addition, Barbara said that in the 1930s, Mill League baseball games were played at the park. The 1938 aerial photographs confirm this information and show the development of a park. However, Mr. Daniel Notar, Planning Coordinator for the City of Warren, stated on an Environmental Site Assessment Questionnaire that the property has been used by the steel mills in the past as a laydown area for equipment and steel products.

**Summary of Findings and Action Items:**

- Due to the close proximity to WCI Steel Incorporated and the suspected industrial use of the property as a storage area for steel manufacturing, it is possible that Site III, Gould-Stewart Park (Tract #3200 E-3), may be contaminated. A Phase II Site Investigation should be conducted. Soil samples should be taken to the depth of excavation, and analyzed to characterize and confirm the presence of on-site contaminants.
- Two, above ground storage tanks containing petroleum crude oil and a pump are situated at the south-central portion of the site and should be avoided.
- All work should be conducted under a SHP.

Based on evaluation of the data, a Phase II Site Investigation is recommended at Site III, Gould-Stewart Park (Tract #3200 E-3). The Phase II Site Investigation will be coordinated with the OhioEPA and USEPA.

6. **Site IV Warren WTP**

Site IV, Warren Wastewater Treatment Plant (WTP), is owned by the City of Warren. The parcel of land that the USACE is interested in obtaining is adjacent to the wastewater treatment process units and is used as an off-site storage facility. The commercial use of the site was reiterated by Mr. James Wilden, City of Warren wastewater treatment plant supervisor, who indicated in the Environmental Site Assessment Questionnaire that the property has been used for industry in the past. Mr. Wilden said that he was not aware of any hazardous waste or contamination on the site. The site reconnaissance showed that the northern part of the 40-acre site has a shooting range; an above ground storage tank containing flammable, crude oil; an oil well; an asphalt debris pile (approximately 150-cubic yards in size); concrete pipe debris; and currently serves as a storage/processing area for solid waste material from the wastewater
treatment plant (called “Nature’s Blend”). The larger, southern portion of the property is undisturbed and heavily vegetated with grass, brush, weeds, and trees.

Summary of Findings and Action Items:

- Due to the industrial history and recent environmental findings at Site IV, Warren WTP (Tract #3200 E-1), it is recommended that the northern section of the site, where the industrial materials are stored, be avoided, if possible. If this is not possible, a Phase II Investigation should be conducted. Soil samples should be taken to the depth of excavation, and analyzed to characterize and confirm the presence of on-site contaminants.

- It is recommended that the southern section of Site IV, Warren WTP (Tract #3200 E-1) be used as the laydown area to dewater the dredged material. Based on aerial photographs, a deed search, and the site reconnaissance, there is no evidence of contamination at the southern half of Site IV, Tract #100 E-1.

- If debris is present in the selected work area, it should be removed prior to start-up of project activities.

- All work should be conducted under a Safety and Health Plan (SHP). The plan should be developed to cover construction activities including specific chemical hazard information, hazard mitigation information, and personal protective equipment to address the contaminated soils and environmental concerns.

Based on evaluation of the data, it is recommended to avoid the northern half of Site IV, WTP (Tract # 3200 E-1), or if that is not possible, a Phase II Site Investigation is recommended at that half of the site. The Phase II Site Investigation will be coordinated with the OhioEPA and USEPA. No evidence of contamination was detected at the southern section of Site IV, Warren WTP (Tract #3200 E-1) and this half of the site should be used as the laydown area to dewater the dredged material.

7. Site V Weathersfield Township

Site V, Weathersfield Township, contains two parcels of land; the western section of the site is owned by the Pittsburgh, Youngstown, and Ashtabula Railroad since 1928, and Edward A. Kleese, Jr. holds title to the eastern tract of land. The majority of the site is heavily vegetated with grass, bushes, and trees, and shows no signs of contamination. Within the eastern half of the site, nine small lakes exist and are believed to be formed by the excavation and removal of topsoil for commercial use. This is backed-up by aerial photographs which show that the site was rural farmland through 1966. In 1972, the aerials show two lakes present on the property with vegetation being cleared between the lakes.

Summary of Findings and Action Items:

- The evidence (aerial photographs, deed search, environmental data base search, and site reconnaissance) indicates that Site V, Weathersfield Township (Tract numbers 2800 E-1 and 2801-E-1) is free of contamination.
• An above ground storage tank containing flammable material and an undetermined pump are situated on-site and should be avoided.
• It is recommended that the project work activities be conducted under a SHP.

The environmental condition of Site V, Weathersfield Township (Tract numbers 2800 E-1 and 2801-E-1), is suitable for construction use. There is no evidence to suggest a significant probability of incurring CERCLA liability due to subject property transaction.

8. **Site VI Niles**

Site VI, Niles, contains two parcels of land; the western section of the site is owned by the Ohio Edison Company since 1956, and the City of Niles holds title to the eastern tract of land since 1979. The site is in a residential area with no industry near-by. The western half of the site, adjacent to the Main Street Bridge, contains mounds of fill material, debris from the Water Department, a rusted 55-gallon drum on the edge of the river, building materials, and three light poles along East 1\(^{st}\) Street. According to an on-site interview by a maintenance person from the City of Niles Water Department, the western portion of the site was used as a dumping area for soil and debris when water lines were repaired. Also, they stated that plans have been made to use this site in the near future to store light poles by the Niles Electric Department. The eastern half of the site is mostly wooded; however, a portion of this section of the laydown site is covered with grass and mowed for access to a pumping station. Mr. Mark Hess, Development Coordinator for the City of Niles indicated on the Environmental Site Assessment Questionnaire that he does not have any knowledge of hazardous substances on the property.

**Summary of Findings and Action Items:**

• Based on the industrial history, aerial photographs, and the site reconnaissance, the evidence indicates that Site VI (Tract #2501 E), which serves as a storage area (containing mounds of fill material, debris from the Water Department, a rusted 55-gallon drum on the edge of the river, building materials, and three light poles along East 1\(^{st}\) Street), may be contaminated. It is recommended that this tract be avoided, if possible. If the Tract #2501 E is used, a Phase II Site Investigation is recommended to be conducted. Soil samples should be taken to the depth of excavation, and analyzed to characterize and confirm the presence of on-site contaminants.
• It is recommended that Tract #2500 E at Site VI be used as the laydown area to dewater the dredged material. The pumping station on this tract of land should be avoided.
• If debris is present in the selected work area, it should be removed prior to start-up of project activities.
• All work should be conducted under a Safety and Health Plan (SHP). The plan should be developed to cover construction activities including specific chemical hazard information, hazard mitigation information, and personal protective equipment to address the contaminated soils and environmental concerns.

Based on evaluation of the data, a Phase II Site Investigation is recommended at Site VI, Niles, (Tract #2501 E). The Phase II Site Investigation will be coordinated with the OhioEPA and
USEPA. Tract #2500 E is considered suitable for the intended project use subject to the stipulations noted above.

9. **Site VII Lafarge**

Site VII, Lafarge, is owned by the Standard Slag Company since 1987. The entire site is covered with slag, and stockpiles of slag exist throughout the site. Also, two crude oil tanks/wells are present on-site; one is situated in the northern section of the project site, the other is positioned at the southern end. Aerial photographs indicate that by 1938, an industrial mill was already in-place on the Lafarge Site. Mr. Mark Vergallito, Environmental Manager for Lafarge NA, stated in his Environmental Site Assessment Questionnaire, that the Lafarge site and adjoining property have been used by industry in the past, and that slag has been present on this site for decades.

**Summary of Findings and Action Items:**

- Due to the industrial history and recent environmental investigation conducted at Site VII, Tract #1900 E-1, the evidence indicates that the site may be contaminated. A Phase II Site Investigation is recommended to be conducted. Soil samples should be taken to the depth of excavation, and analyzed to characterize and confirm the presence of on-site contaminants.
- The two crude oil tanks/wells should be avoided.
- If debris is present in the work area, it should be removed prior to start-up of project activities.
- All work should be conducted under a Safety and Health Plan (SHP). The plan should be developed to cover construction activities including specific chemical hazard information, hazard mitigation information, and personal protective equipment to address the contaminated soils and environmental concerns.

Based on evaluation of the data, a Phase II Site Investigation is recommended at Site VII, Lafarge (Tract #1900 E-1). The Phase II Site Investigation will be coordinated with the OhioEPA and USEPA.

10. **Site VIII Girard**

Site VIII, Girard, is owned by McDonald Industrial Land Company and Toro Enterprises (joint use agreement) since 1990. The project site is heavily vegetated with tall grasses, weeds, and trees with no visible soil staining. An oil tank/well is present at the western side of the property. Based on the twentieth century aerial photographs, structures are present at the site. In the 1938 photographs, the site is covered with trees and grasses and shows a small residential development consisting of 6-7 buildings which are gone by 1979. The laydown site remained unchanged in 1959, 1966, 1972, and 1979. In 1979, the oil tank and well is established.
Summary of Findings and Action Items:

- The evidence (aerial photographs, deed search, environmental data base search, and site reconnaissance) indicates that Site VIII, Girard (Tract #1800 E) is free of contamination.
- An above ground storage tank containing flammable material and an undetermined pump are situated on-site and should be avoided.
- It is recommended that the project work activities be conducted under a SHP.

The environmental condition of Site VIII, Girard (Tract #1800 E), is suitable for construction use. There is no evidence to suggest a significant probability of incurring CERCLA liability due to subject property transaction.

11. Site IX I-80 Area

Site IX is a site situated north and south of I-80 and owned by R.W. Sidley, Inc. On the southern laydown site, large piles of slag, twenty to thirty feet high, overgrown with grasses, weeds, and small brush exist on the property, and drop off fairly close to the river. Near the edge of the river along the access road, residential debris including a television, garbage, a range hood, and two 55-gallon drums, has been discarded. Immediately east of the southern laydown site is a construction/disposal site with large piles of fill material, discarded concrete in large sections, asphalt, and gravel piles.

The northern portion of Site IX has been cleared of all vegetation and exposes a mixture of native soil and slag. The stripped vegetation has been piled along the edge of the property. An abandoned, concrete pump house owned by A.M. Byers Company steel mill is present along the edge of the river.

The 1959 and 1966 aerial photographs show that the entire site has been excavated and is a large depression in the ground. In 1972, the construction of Interstate 80 divides the site in two; the giant hole is being filled-in by slag material at the section of the site south of I-80. Adjacent to the northern portion of the site, an auto salvage yard is forming and is present just northeast of the site today. Mr. Robert C. Sidley, Chairman of R.W. Sidley, Inc stated on the Environmental Site Assessment Questionnaire that no hazardous materials have been placed on site; however, slag has been dumped on the southern portion of the property. Mr. Rob Bidwell, mechanic for Muffley Auto Collision said that Site IX is being used to dispose of concrete debris material.

Summary of Findings and Action Items:

- Due to the industrial history and recent environmental investigation conducted at Site IX, Tract #1600 E-1 and Tract #1600 E-2, the evidence indicates that the site may be contaminated. A Phase II Site Investigation is recommended to be conducted. Soil samples should be taken to the depth of excavation, and analyzed to characterize and confirm the presence of on-site contaminants.
- The two crude oil tanks/wells should be avoided.
• If debris is present in the work area, it should be removed prior to start-up of project activities.
• All work should be conducted under a Safety and Health Plan (SHP). The plan should be developed to cover construction activities including specific chemical hazard information, hazard mitigation information, and personal protective equipment to address the contaminated soils and environmental concerns.
• It is recommended that a waste management plan be prepared prior to the onset of excavation activities to ensure that contaminated soils are dealt with in an orderly and lawful manner.

Based on evaluation of the data, a Phase II Site Investigation is recommended at Site IX, I-80 Area (Tract numbers 1600 E-1 and 1600 E-2). The Phase II Site Investigation will be coordinated with the OhioEPA and USEPA.

12. Crescent Street Dam Staging Area

The Crescent Street Dam Staging Site is owned by the IGS Real Estate Development, Inc. since 2000. This project parcel is vegetated with high grass, weeds, brush, and trees. Piles of concrete debris and steel byproducts are present on the property. Old fencing is situated on the staging area and a concrete wall exists along the western edge of the lot. Near the dam, large piles of slag, fifteen to twenty feet high, are located near the edge of the Mahoning River. The aerial photographs show industrial activity prior to 1938 and commercial activity continues until approximately 1979 when very little steel mill activity was observed. The 1938 aerial shows the area as containing railroad tracks and a very large coal pile. By 1981, the steel plant to the north and west of the area is closed and the railroad tracks have been removed.

Mr. Harry Silverman, President of the IGS Real Estate Development Corporation stated in the Environmental Site Assessment Questionnaire that the property has been used for industry in the past, but he does not know of any hazardous materials that may be present on the property. The industrial use of the property was reiterated in an on-site interview with Mr. Mike Pacifico, Controller for Industrial Waste Control (IWC), who said that the Crescent Street Dam Site used to be an old steel mill for the Ohio Works.

Summary of Findings and Action Items:

• Due to the industrial history and recent environmental investigation conducted at the Crescent Street Dam Staging Site, Tract numbers 1100 E-1, 701 E-1, and 701 E-3, the evidence indicates that the site may be contaminated. A Phase II Site Investigation is recommended to be conducted. Soil samples should be taken to the depth of excavation, and analyzed to characterize and confirm the presence of on-site contaminants.
• The two crude oil tanks/wells should be avoided.
• If debris is present in the work area, it should be removed prior to start-up of project activities.
• All work should be conducted under a Safety and Health Plan (SHP). The plan should be developed to cover construction activities including specific chemical hazard information.
information, hazard mitigation information, and personal protective equipment to address the contaminated soils and environmental concerns.

- It is recommended that a waste management plan be prepared prior to the onset of excavation activities to ensure that contaminated soils are dealt with in an orderly and lawful manner.

Based on evaluation of the data, a Phase II Site Investigation is recommended at the Crescent Street Dam Staging Site (Tract numbers 1100 E-1, 701 E-1, and 701 E-3). The Phase II Site Investigation will be coordinated with the OhioEPA and USEPA.

13. Site X North Youngstown

Site X, North Youngstown, is owned by the Mount Claire Properties since 1985. The entire property is vegetated with tall grass, brush, and trees. A railroad line is present to the north of the property. The Mahoning River borders the laydown site on the east, west, and south. At the northeast entrance to the property, there is discarded construction debris consisting of roofing materials, concrete blocks, waste concrete, siding, a door, and a plastic sign. Aerial photographs indicate that cut or fill activities have occurred at Site X prior to 1938. The aerial photographs from 1938 show a series of fill zones extending across the site suggesting that the area is being filled out to the river from the railroad tracks. In 1959, a bare spot in the middle of the site indicates either a cut or fill activity. The 1965 and 1981 photographs show that the cutting or filling operations continued until 1994, which shows the site as it is today - level and flat.

Summary of Findings and Action Items:

- Due to the industrial history and recent environmental investigation conducted at Site X (Tract #1000 E-1) the evidence indicates that the site may be contaminated. A Phase II Site Investigation is recommended to be conducted. Soil samples should be taken to the depth of excavation, and analyzed to characterize and confirm the presence of on-site contaminants.
- If debris is present in the work area, it should be removed prior to start-up of project activities.
- All work should be conducted under a Safety and Health Plan (SHP). The plan should be developed to cover construction activities including specific chemical hazard information, hazard mitigation information, and personal protective equipment to address the contaminated soils and environmental concerns.
- It is recommended that a waste management plan be prepared prior to the onset of excavation activities to ensure that contaminated soils are dealt with in an orderly and lawful manner.

Based on evaluation of the data, a Phase II Site Investigation is recommended at Site X, North Youngstown (Tract #1000 E-1). The Phase II Site Investigation will be coordinated with the OhioEPA and USEPA.
14. **Mahoning Avenue Dam Staging Area**

The Mahoning Avenue Dam Staging Area is owned by the Brier Hill Slag Company since 1998. A wide variety of construction materials - consisting of piles of gravel, 24 and 36-inch diameter PVC pipe, piles of concrete, 18 and 24-inch diameter concrete pipe, manhole inlets and lids, a trench box, construction equipment, an old field trailer, PVC fittings, scrap wood, and pallets, are stored on the staging area. Rubbish piles including a golf bag, tires, 20-gallon drums, wire fence fabric, and waste concrete are also present on-site. Railroad lines are located to the west of the property. In addition, a City of Youngstown sewage pump station and an old construction storage building owned by Maruchi and Gafney Construction Company are present to the north. Stored outside of the construction storage building (owned by others) are four 55-gallon drums containing used oils and six 5-gallon buckets containing hydraulic oils. The soil around the drums is stained, and stained debris is stacked around the drums and buckets. The aerial photographs also indicate that as early as 1938 and through 1981, unidentified items were being stored across the area.

**Summary of Findings and Action Items:**

- The site reconnaissance and aerial photographs show that the Mahoning Avenue Dam Staging Area (Tract numbers 900 E, 901 E-1, and 901 E-2) has a long history of being used as a dump/storage site for an extensive list of industrial supplies and debris. The evidence suggests that the site may be contaminated. A Phase II Site Investigation is recommended to be conducted. Soil samples should be taken to the depth of excavation, and analyzed to characterize and confirm the presence of on-site contaminants.
- If debris is present in the work area, it should be removed prior to start-up of project activities.
- All work should be conducted under a Safety and Health Plan (SHP). The plan should be developed to cover construction activities including specific chemical hazard information, hazard mitigation information, and personal protective equipment to address the contaminated soils and environmental concerns.
- It is recommended that a waste management plan be prepared prior to the onset of excavation activities to ensure that contaminated soils are dealt with in an orderly and lawful manner.

Based on evaluation of the data, a Phase II Site Investigation is recommended at the Mahoning Avenue Dam Staging Area (Tract numbers 900 E, 901 E-1, and 901 E-2). The Phase II Site Investigation will be coordinated with the OhioEPA and USEPA.

15. **Site XI South Youngstown**

Site XI, South Youngstown, is owned by the Exal Corporation since 1993. The main area (Tract #801 E-2) that will be used as a laydown site to dewater the dredged material is situated to the northwest of the Exal plant; an additional, small laydown area (Tract #200 E-4) is approximately 1500-feet downstream of the main site. The larger, laydown site is covered with high grass and scattered debris on the western part of the property, while the eastern part is fill material.
consisting of some stone and aggregate, fill, and asphalt debris. Additionally, no vegetation exists on the eastern part of the site. On the small laydown site downstream of the main site, a 4’-0 x 4’-0 x 10’-0 metal building belonging to PTMW Inc. is present.

The 1938 through 1981 aerial photographs show that the property is being disturbed by excavation activities. In addition, a 1959 photograph continues to show the property being disturbed and unidentifiable items being stored. The photographs suggest that this laydown site could have been used as a disposal area for an industrial mill located immediately southeast of the property. By 1994, the area is free of vegetation and is a flat, open site.

Mr. Dan Manula, Mayor of the City of Struthers, stated in the Environmental Site Assessment Questionnaire that previously, a tank of isobutene was present on-site. Mr. Manula also indicated that the site has been used for industry in the past, but that he is not aware of any hazardous materials being stored on-site. The use of this site by industry was reiterated by Mr. Lee Lincoln Scott, maintenance manager for Exal Corporation, in an interview in which he said that Site XI was the location of a steel mill in the past.

Summary of Findings and Action Items:

- The site reconnaissance, aerial photographs, landowner contact, and on-site interviews show that Site XI (Tract numbers 200 E-4 and 801 E-2) has a long history of being used by industry. The evidence suggests that the site may be contaminated. A Phase II Site Investigation is recommended to be conducted. Soil samples should be taken to the depth of excavation, and analyzed to characterize and confirm the presence of on-site contaminants.
- If debris is present in the work area, it should be removed prior to start-up of project activities.
- All work should be conducted under a Safety and Health Plan (SHP). The plan should be developed to cover construction activities including specific chemical hazard information, hazard mitigation information, and personal protective equipment to address the contaminated soils and environmental concerns.
- It is recommended that a waste management plan be prepared prior to the onset of excavation activities to ensure that contaminated soils are dealt with in an orderly and lawful manner.

Based on evaluation of the data, a Phase II Site Investigation is recommended at Site XI, South Youngstown (Tract numbers 200 E-4 and 801 E-2). The Phase II Site Investigation will be coordinated with the OhioEPA and USEPA.

16. Haselton – Center Street Dam Staging Area

The Haselton – Center Street Dam Staging Area is owned by the City of Youngstown since 1993. The city purchased the property from LTV Steel Company, Inc., indicating a former industrial presence. The staging area is covered with high grass, weeds, brush, and a few trees. Several debris piles consisting of discarded construction and residential wastes are present on the
property. Railroad tracks and a fence are present to the north of the project site. The Mahoning River is located to the west and south of the staging area. The 1938 aerial photograph shows extensive mill development with buildings and railroad tracks with side tracks running through the property. By 1959, the buildings are gone, but the railroad tracks remain in the area.

Summary of Findings and Action Items:

- Based on the deed search, aerial photographs, and the site reconnaissance, the Haselton-Center Street Dam Staging Area, Tract #701 E, has a history of being used by the steel industry, and this information suggests that the site may be contaminated. A Phase II Site Investigation is recommended to be conducted. Soil samples should be taken to the depth of excavation, and analyzed to characterize and confirm the presence of on-site contaminants.
- If debris is present in the work area, it should be removed prior to start-up of project activities.
- All work should be conducted under a Safety and Health Plan (SHP). The plan should be developed to cover construction activities including specific chemical hazard information, hazard mitigation information, and personal protective equipment to address the contaminated soils and environmental concerns.
- It is recommended that a waste management plan be prepared prior to the onset of excavation activities to ensure that contaminated soils are dealt with in an orderly and lawful manner.

Based on evaluation of the data, a Phase II Site Investigation is recommended at the Haselton-Center Street Dam Staging Area (Tract #701 E). The Phase II Site Investigation will be coordinated with the OhioEPA and USEPA.

17. **Struthers – Bridge Street Dam Staging Area**

The Struthers – Bridge Street Dam Staging Area is owned by the City of Struthers since 2003. The immediate area of the site is covered with high grass and weeds with no apparent vegetative distress. Five monitoring wells were found within the project property (the drums are believed to be associated with a Phase II ESA Investigation). In the immediate area of each monitoring well, 55-gallon drums containing waste soil were present. Railroad lines are present to the south and east of the site. In addition, a wastewater treatment plant and three baseball fields are present to the south. A flat, grassy field with a few discarded drums is present to the west, while the Mahoning River is to the north of the site.

Mr. Dan Manula, Mayor of the City of Struthers, stated in the Environmental Site Assessment Questionnaire that a Phase I ESA has been completed for the site, and that a Phase II ESA is being conducted (as of July 6, 2004). Mr. Manula also indicated that the site has been used for industry in the past, but that he is not aware of any hazardous materials stored on-site. The use of this site by industry was also seen in the aerial photographs. The 1938, 1959, 1965, and 1981 aerials show a large, steel mill complex located across the entire dam staging area. By 1994, the
entire complex is gone and the site is a flat, open field similar to what was recorded by the present site investigation.

Summary of Findings and Action Items:

- The aerial photographs, landowner contact, and site reconnaissance have shown that a steel mill was located on the Struthers – Bridge Street Dam Staging Area (Tract #500 E). The industrial use of this property has prompted a Phase I ESA and Phase II ESA (being performed as of July 6, 2004 by others). The Phase II Environmental Site Investigation report should be completed and available to the USACE for analysis during the PED Phase of the Mahoning River Project. The testing results will confirm if CERCLA liability issues exist on-site.
- If debris is present in the work area, it should be removed prior to start-up of project activities.
- All work should be conducted under a Safety and Health Plan (SHP). The plan should be developed to cover construction activities including specific chemical hazard information, hazard mitigation information, and personal protective equipment to address the contaminated soils and environmental concerns.
- It is recommended that a waste management plan be prepared prior to the onset of excavation activities to ensure that contaminated soils are dealt with in an orderly and lawful manner.

The results of the Phase II Environmental Site Investigation (conducted by others) for the Struthers – Bridge Street Dam Staging Area (Tract #500 E), will be studied and analyzed during the PED phase of the Mahoning River Project. The real estate work will be coordinated with the OhioEPA and USEPA.

18. Site XII Castlo

Site XII is currently owned by the Castlo Community Improvement Corporation. The site is vegetated with weeds, brush, and trees. Coal fines are present over the entire tract of land. A few empty drums have been discarded along with old railroad ties, tires, and scrap metal. Three asphalt disposal piles and numerous concrete debris piles are near the right side of the access road, while PVC pipe disposal piles are on the left. On the south edge of the laydown site, the City of Struthers has designated an area for disposing of grass clippings, tree mulch, yard waste, and other miscellaneous vegetative materials.

On the adjoining property to the west, an abandoned mill is located about 1500 feet from the edge of the laydown site. Approximately fifty, rusted, punctured, and dented 55-gallon drums are stored outside of the mill structure, immediately to the north of the building. Some drums are open and contain a tar-like substance similar to an asphalt resurfacing material. The adjoining property to the west is a pipe materials storage yard, while the Mahoning River is located to the north.
The deed search reveals that the property has had an industrial use since at least 1900 when the Struthers Furnace Company held title to the property. The Struthers Furnace Company passed the title to the Struthers Iron & Steel Company in 1928. Aerial photographs also show that Site XII had railroad spur lines and large piles of coal associated with the steel industry as early as 1938. The property is used industrially until the aerial photographs reveal in 1994 that the project site had been cleared significantly and appears as it does today - an open field of grass, brush, and trees.

An on-site interview with Mr. William D. DeCicco, Executive Director of the Castlo Community Improvement Corporation, said that local landscaping businesses use the area for composting vegetative material. Mr. DeCicco also said that clean fill was brought onto the site to fill-in low areas.

The project site and adjacent property were formerly a part of the Youngstown Sheet and Tube Company steel mill. The principal operational use of the property was as a material storage yard. Under the OhioEPA Voluntary Action Program, a Phase I and a Phase II ESA were performed on the Castlo Industrial Park property including the laydown site. Results of the Phase II ESA indicated elevated levels of some chemical of concern (COC) consisting of metals and residual petroleum hydrocarbons, primarily polynuclear aromatic hydrocarbons existing across much of the property.

Three sampling locations contained concentrations of COCs that exceed their applicable direct-contact standard for industrial land use. During a telephone conversation with Mr. DeCicco on 1 April 2005, he stated that these three areas were remediated in November and December of 2004. The purpose of the remediation was to use Clean Ohio Revitalization funding to remove the soils contaminated with benzo(a)pyrene to the extent that the property would meet the OhioEPA Voluntary Action Program standards for a No Further Action (NFA) letter. In addition, miscellaneous railroad ties and scrap 55-gallon drums were planned to be removed to preclude these residual chemicals from leaching onto the Castlo property. As of the beginning of April 2005, the Castlo Community Improvement Corporation is still waiting to receive the NFA letter.

Summary of Findings and Action Items:

- The aerial photographs, an on-site interview, and site investigation have shown that Site XII, Tract #400 E-1, has an industrial history that dates back to 1900.
- The industrial use of this property prompted a Phase I and Phase II ESI investigations (conducted by Castlo). The results of the Phase II ESI indicated elevated levels of metals and residual petroleum hydrocarbons, primarily polynuclear aromatic hydrocarbons, existing across much of the property. Selected sections of the Castlo Industrial Park property were cleaned-up using Clean Ohio Revitalization funding. As of the beginning of April 2005, the Castlo Community Improvement Corporation is waiting for a No Further Action letter under the Voluntary Action Program.
- If debris is present in the work area, it should be removed prior to start-up of project activities.
• All work should be conducted under a Safety and Health Plan (SHP). The plan should be developed to cover construction activities including specific chemical hazard information, hazard mitigation information, and personal protective equipment to address the contaminated soils and environmental concerns.

• It is recommended that a waste management plan be prepared prior to the onset of excavation activities to ensure that contaminated soils are dealt with in an orderly and lawful manner.

Site XII, Tract #400 E-1, may have undergone remedial action since the site was investigated for HTRW concerns (Phase I Investigation) by the USACE in May 2004. A site reconnaissance and analysis of the Phase II Site Investigation will be conducted at Tract #400 E-1 to determine if any part of this property was cleaned-up as part of the Voluntary Action Program performed by Castlo. Pending the outcome of the site reconnaissance and data review, soil testing at Tract #400 E-1 may be required. If additional testing is needed, the Phase II Site Investigation will be coordinated with the OhioEPA and USEPA.

19. Lowellville – 1st Street Dam Staging Area

The central section of the Lowellville – 1st Street Dam Staging Area, Tract #203 E, is owned by Mr. James E. Sheely since 1999. CSX Transportation, Inc. holds the land title to the northern one-third (1/3) of the property (Tract #201 E-2, next to the railroad tracks); and it is not known who owns the southern one-third (1/3) of the site (Tract #204 E, adjacent to the Mahoning River). The majority of the staging site is covered with high grass, weeds, and trees. An access road runs through the middle of the property to the river bank. Railroad lines are present to the north of the access road and parcel. A vacant residential property is to the east and west of the site. The Mahoning River is to the south of the property.

The 1938, 1959, 1965, 1981, and 1994 aerial photographs show that the surrounding area of the left bank, where the project site is located, is a residential development. From 1938 to 1994, the Lowellville-1st Street Dam Staging Site has trees, an open area, and what appears to be a driveway. No building is visible on any of the aerial photographs.

Mr. James E. Sheely, private owner of the central section of the site (Tract #203 E), stated in the Environmental Site Assessment Questionnaire that the site was not used, or to the best of his knowledge, ever used for industry. He also stated that he does not have any knowledge of hazardous materials or wastes being dumped or present on his property.

During the site reconnaissance of the northern one-third (1/3) of the Lowellville-1st Street Dam Staging Site, Tract #201 E-2, a pile of asphalt was detected on the adjoining property, just to the west of the Lowellville-1st Street Dam Staging Site, suggesting that dumping occurs in the area. In addition, the railroad line may be a source of contamination because railroad cars may remain in the area for relatively long periods of time with the possibility that potentially contaminated cargo may have been loaded, unloaded, or spilled onto the ground surface.
Summary of Findings and Action Items - Lowellville-1\textsuperscript{st} Street Dam Staging Site – Tract # 203 E and Tract #204 E:

- Based on the landowner contact, aerial photographs, a deed search, and the site reconnaissance, there is no evidence of contamination on the southern two-thirds (2/3) of the Lowellville-1\textsuperscript{st} Street Dam Staging Site – Tract # 203 E and Tract #204 E. These two tracts appear to be undisturbed, and there is nothing to suggest that it has ever been used commercially.
- It is recommended that the project work activities be conducted under a SHP.

The environmental condition of the southern two-thirds (2/3) of the Lowellville-1\textsuperscript{st} Street Dam Staging Site – Tract # 203 E and Tract #204 E are suitable for construction use. There is no evidence to suggest a significant probability of incurring CERCLA liability due to subject property transaction.

Summary of Findings and Action Items - Lowellville-1\textsuperscript{st} Street Dam Staging Site – Tract # 201 E-2:

- Due to the environmental findings observed during the site reconnaissance, the northern one-third (1/3) of the Lowellville-1\textsuperscript{st} Street Dam Staging Site, Tract #201 E-2, may be contaminated. It is recommended that Tract #201 E-2 be avoided, if possible.

Based on the above statement, Tract #201 E-2, Lowellville-1\textsuperscript{st} Street Dam Staging Site should be avoided. If it can not be avoided, a Phase II Site Investigation is recommended at Tract #201 E-2. The Phase II Site Investigation will be coordinated with the OhioEPA and USEPA.

20. Site XIII Falcon

Site XIII, Falcon, is owned by the Falcon Foundry Company since 1988. The site is covered with sand deposits from foundry operations, rocks, and gravel. Minimal vegetation exists on the site. Two burn piles are present near the edge of the river on the property. Throughout the entire site are discarded, crushed, and rusted 55-gallon and 20-gallon open drums and lids, round sanding disks, and plastics. A 30,000-gallon, above ground, rusted, storage tank is located on the northwest edge of the property. A discarded couch, tarps, and an open battery are present on the east end of the site. In addition, a discarded steel casting is located on a large rock pile. Ohio Edison Substation 6751 is located to the east of the property and is designated as a hazardous voltage area. Falcon Foundry Company is located to the west of the property, railroad tracks are to the north just beyond the easement road, and the Mahoning River is to the south.

Early aerial photographs, in 1938, show that an industrial building is situated within the limits of Site XIII. By 1959, this building is gone and the property is partially wooded and partially covered with grass and weeds. The Falcon Foundry building is present in 1965. In 1994, about half of the laydown site is covered by sand and the remaining portion is still wooded.
In an on-site interview with Mr. Gary Slaven, president of the Falcon Foundry Company, he said that only sand is disposed of on the project site. To his knowledge, he is not aware of any hazardous or contaminated materials on Site XIII. On the foundry’s property, small transformers containing PCBs are stored. Mr. Slaven said that the transformers are checked annually to ensure that no oil has leaked from this electrical equipment.

Summary of Findings and Action Items:

- The site reconnaissance, aerial photographs, and an on-site interview show that Site XIII, Tract #200 E, has a long, industrial history. The evidence suggests that the site may be contaminated. A Phase II Site Investigation is recommended to be conducted. Soil samples should be taken to the depth of excavation, and analyzed to characterize and confirm the presence of on-site contaminants.
- If debris is present in the work area, it should be removed prior to start-up of project activities.
- All work should be conducted under a Safety and Health Plan (SHP). The plan should be developed to cover construction activities including specific chemical hazard information, hazard mitigation information, and personal protective equipment to address the contaminated soils and environmental concerns.
- It is recommended that a waste management plan be prepared prior to the onset of excavation activities to ensure that contaminated soils are dealt with in an orderly and lawful manner.

Based on evaluation of the data, a Phase II Site Investigation is recommended at Site XIII, Falcon (Tract #200 E). The Phase II Site Investigation will be coordinated with the OhioEPA and USEPA.