

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
BROWNFIELDS QUARTERLY PROGRESS REPORT
APRIL - JUNE 2008**

Project Title: FY 2007 – Cuyahoga Soil and Water Conservation District
City of Cleveland, Dike 14 – Brownfield Assessment
Assistance ID No.: BF-00E11601-0

Modifications to the Work Plan: No modifications. * **Bold type indicates new information**

Project Results Summary:

The findings of the environmental assessments completed for Dike 14 revealed that the 88-acre Property is a confined disposal facility constructed by the US Army Corps of Engineers to contain contaminated sediments dredged from Federal navigation channels in the Cuyahoga River and Lake Erie, primarily from Cleveland Harbor. Approximately 8-acres in the southwest portion of the site was previously a former unpermitted municipal solid waste landfill. The Phase II Property Assessment identified numerous contaminants of concern (COCs) at Dike 14. The highest detected levels were from an approximately 4-acre area on the western portion of the site, identified as Exposure Unit 2. Following these findings a Property Specific Human Health Risk Assessment and a Level 3 Ecological Risk Assessment were conducted to determine the risks associated with the COCs present. The results of the Property Specific Human Health Risk Assessment and the Level 3 Ecological Risk Assessment show elevated risk levels present for human and ecological receptors in Exposure Unit 2. Implementation of a remedy will be necessary to eliminate any potentially unacceptable exposures of the ecological receptor populations in Exposure Unit 2. Additional risks for ecological receptors were identified in Exposure Unit 1 for metals. Due to the urban location of Dike 14 and its manmade nature it is likely that the concentrations of these metals are within the background levels for the City of Cleveland. A determination of background metals for the Cleveland area should be performed to eliminate consideration of these metals in the ecological risk.

Permission was granted by the US EPA to utilize remaining funds to conduct a background metals study within the Cleveland area, near Dike 14. A sampling and analysis plan was developed, site for soil samples were delineated, permissions were obtained, and additional samples were taken. Sampling locations include sites in the Village of Bratenhal, immediately east of Dike 14 and Forest Hills Park in Cleveland Heights. Sampling results were reviewed by Partners Environmental and the Ohio EPA. Partners Environmental is working with the Ohio EPA on putting the finishing strokes on the Eco Risk Level 3 and evaluating the background data and comparing it to the on- site soils. This comparison of background to site soils should help better define areas that may require remedial measures.

A final report will be presented at a Stakeholders Meeting in September 2008.

Status of Activities During Reporting Period

Task 1: Community Outreach (ongoing)

Community outreach has been accomplished by meeting with the Dike 14 Environmental Education Collaborative (EEC). The EEC is comprised of a number of organizations that are working together to protect and restore Dike 14 as a public nature preserve and outdoor environmental education. The Dike 14 EEC meetings are summarized below.

September 21, 2006: Ms. Jan Rybka of the Cuyahoga Soil and Water Conservation District (SWCD) and Mr. Dan Brown of Partners Environmental Consulting, Inc. (Partners) discussed the brownfield assessment activities planned for the Dike 14 Confined Disposal Facility (CDF). Mr. John Loftus of the Cleveland-Cuyahoga County Port Authority (Port Authority), Mr. John Blackman of Partners and Mr. Kristopher Bruestle of Davey Resource Group (Davey) also attended the meeting and answered questions.

December 6, 2006: Ms. Jan Rybka of the Cuyahoga SWCD, Mr. John Loftus of the Port Authority, and Mr. John Blackman and Mr. John Garvey of Partners, discussed the status of the brownfield assessment activities and answered questions. The EEC members wish to continue to provide environmental education at the site, but the fieldwork will limit activities. EEC members asked for a projected timeframe for the soil testing. Cuyahoga SWCD and Partner's Environmental are working to submit the required documents to the US EPA and Ohio EPA in late December or early January.

January 18, 2007: EEC members are working on two open house events on Dike 14 in May and September. EEC members are also planning individual educational activities on site. Each collaborative member will keep a record of additional stakeholders and materials distributed to the public.

March 15, 2007: Presentation was made to the Stakeholder Committee on March 15, during the regular meeting of the Dike 14 Environmental Education Collaborative. Sixteen people were in attendance. Ms. Rybka explained the sampling process and timetable for completing the project. Stakeholders were presented with updated information regarding the current work tasks and findings to date, which include oil at the southern edge of the site and methane at the northern edge near the mouth of Doan Brook. Data is being compared to potential risk factors.

May 5, 2007: The Dike 14 Environmental Education Collaborative held an Open House at the site on Saturday, May 5, 2007. Four hundred fifty (450) people were in attendance. Environmental Education Collaborative members discussed the development of the site, the current environmental assessment, and provided tours on a designated path. A database of stakeholders has been created that will be used for future outreach efforts, including the community meeting later this fall.

Information regarding the Dike 14 Environmental Assessment is kept updated on www.cuyahogaswcd.org website. Project updates are provided at the monthly Dike 14 Environmental Education Collaborative meetings and meetings of the Dike 14 Advisory

Committee.

May 16, 2007: Ms. Rybka, Cuyahoga SWCD was asked by the City of Cleveland Planning Department to make a short presentation to the Ohio Coastal Management Grant Program Evaluation Review Team. The presentation focused on how grant monies that were obtained earlier for Dike 14 help leverage additional funding from the US EPA to conduct the environmental assessment.

June 21, 2007: Ms. Rybka provided a brief update about the project to the Dike 14 Environmental Education Collaborative.

July 19, 2007: Ms. Rybka provided a brief update about the project to the Dike 14 Environmental Education Collaborative.

August 16, 2007: Ms. Rybka provided a brief update about the project to the Dike 14 Environmental Education Collaborative. Planning underway for the fall open house/education program at the site.

August 21, 2007: A meeting was convened with the major stakeholders, including Cuyahoga SWCD, Cleveland-Cuyahoga County Port Authority, City of Cleveland, Partner's Environmental, Davey Resource Group and others to discuss the Phase II report findings and preliminary risk assessment findings. The stakeholders requested a Level 2 Ecological Risk Assessment be conducted in an effort to draw better conclusions regarding risks to workers and visitors to Dike 14. An initial discussion took place regarding the community meetings in late fall.

September 20, 2007: Ms. Rybka provided a brief update about the project to the Dike 14 Environmental Education Collaborative. Final coordination underway for the fall open house/education program at the site.

September 23, 2007: Fall open house and education program for the public at Dike 14. Three hundred people attended the event and had an opportunity to learn about the assessment work and preliminary results.

October 3, 2007: The major stakeholders including Cuyahoga SWCD, Cleveland-Cuyahoga County Port Authority, City of Cleveland, Partner's Environmental, Davey Resource Group met to review the progress to date and discuss in more detail the upcoming public meetings.

October 18, 2007: The upcoming public meetings were discussed at the Dike 14 Environmental Education Collaborative meeting. A draft of the "hot card" announcing the dates of December 5 and 6th was distributed for review. Arrangements for meeting locations were made. Media was contacted.

October 24, 2007: Location for educational signs about Dike 14 are determined next to the entrance.

December 5, 2007: Community meeting at Cleveland Lakefront State Park Office. An overview of the project was provided. Partner's Environmental and Davey Resource Group outlined the assessment process and results. A brief discussion followed regarding some potential next steps to make the site environmentally secure and open to the public. Questions and answers were recorded. . Fifty-four people were in attendance.

December 6, 2007: Community meeting at St. Phillip Neri Community Center in Cleveland's Glenville community. An overview of the project was provided. Partner's Environmental and Davey Resource Group outlined the assessment process and results. A brief discussion followed regarding some potential next steps to make the site environmentally secure and open to the public. Questions and answers were recorded. Twenty-four people were in attendance.

January 17, 2008: Staff attended the Dike 14 Environmental Education Collaborative meetings and reported about the project and desire to collect soil samples to determine background contamination levels.

February 6, 2008: Meeting with City of Cleveland Planning Department, EEC members and Dike 15 Advisory Group members about concept plan for Dike 14, including long term maintenance.

February 21, 2008: Dike 14 EEC meeting to discuss assessment progress and community meeting with the Port Authority.

February 29, 2008: Meet with the Cleveland Cuyahoga Port Authority Director, EEC members, planning officials, and community representatives to discuss long term operations and maintenance of Dike 14.

March 7, 2008: Provided an overview about Dike 14 and the environmental assessment; tour of the dike for 27 Kent State University graduate students.

March 11, 2008: Attend Port Authority Public Meeting about Port relocation to support Dike 14.

March 18, 2008: Attend a Bratenahl Village public meeting at the request of Mayor Licastro in support of Dike 14.

May 3, 2008-Migration Mania on Dike 14. Attendance at the event was 212. Participants were taken on a tour of the site to learn about the ongoing work to preserve the site as a nature preserve. Staff discussed the environmental assessment and current effort to obtain background contaminant levels in the soils.

May 15, 2008-Dike 14 Environmental Education Collaborative. Staff reported that the soil samples were retrieved from locations in Bratenahl and Cleveland Heights-Forest Hill Park.

Community outreach will be ongoing through the entire grant period.

Task 2: Selection of Consultant (Task Completed)

Partners Environmental Consulting, Inc. (Partners) was selected as the environmental consultant for the project. Partners' project responsibilities include: preparing a Quality Assurance Project Plan (QAPP); preparing a Sampling and Analysis Plan (SAP), including a Health and Safety Plan (HASP); conducting a Phase I Property Assessment; reviewing historical information, environmental reports, plans and permits for the property; conducting a Phase II Property Assessment; conducting a Human Health Risk Evaluation and Ecological Risk Evaluation; preparing a Remedial Action Plan (RAP); and assisting with community outreach and quarterly reporting.

Partners teamed with Davey Resource Group (Davey), who will conduct ecological and wetlands consulting for the project. Davey's project responsibilities include: conducting a baseline ecological inventory; inspecting proposed Phase II sample locations to identify wetlands or sensitive ecological conditions; and assisting Partners with the Ecological Risk Evaluation.

February 22, 2007-Personnel changes for the project included: John Garvey replacing Dan Brown as the Ohio Voluntary Action Plan Certified Professional; Liam McEvoy replacing Tim Scherer as the Partners Environmental Phase II Field Team Leader; Jessica Hickey replaces Kristopher Bruestle as the Davey Resource Group project Manager.

Task 3: QAPP and Health and Safety Plan (Task Completed)

Partners prepared a Quality Assurance Project Plan (QAPP) and Sampling and Analysis Plan (SAP), including a Health and Safety Plan (HASP), to be followed during the Phase II Assessment.

December 21, 2006: A conference call was conducted prior to submittal of the QAPP. Ms. Jan Rybka of the Cuyahoga SWCD, Mr. John Blackman and Mr. John Garvey of Partners, Ms. Karla Auker and Ms. Jan Pels of the United States Environmental Protection Agency (USEPA) discussed the QAPP. Partners relayed its plan to conduct the Phase II fieldwork in February 2007, when the ground is frozen and the vegetation and wildlife are dormant. Ms. Pels and Ms. Auker said they would expedite their reviews of the QAPP and SAP so that the Phase II fieldwork is not delayed.

January 2, 2007: The QAPP and SAP were submitted to the USEPA for review on January 2, 2007.

February 8, 2007: A conference call was conducted to discuss the USEPA's comments to the SAP and QAPP. Mr. John Blackman and Mr. John Garvey of Partners, and Ms. Karla Auker and Ms. Jan Pels of the USEPA participated in the call. Ms. Auker asked that Partners leave stakes in at the sample locations until the assessment is completed. She also asked Partners to clarify that we are sure about the number of hand auger soil samples that will be required due to access

issues with the Geoprobe. Ms. Aufer asked Partners to clarify that we would sample free product (LNAPL or DNAPL) if it is encountered in a groundwater monitoring well. She asked Partners to clarify the number of sediment samples that will be collected and analyzed. She suggested that we check our references to figures in the text as some numbers may be incorrect. With regard to Figure 3 (sampling grid), Ms. Aufer asked Partners to number the grid nodes and establish the sampling grid at Dike 14 so we can determine the number and type of samples to be collected at each sample location. Ms. Aufer closed by asking Partners to submit the SAP to Mr. Rod Beals at Ohio EPA for review and comment via VAP Technical Assistance. Jan Pels indicated that she would be providing her comments on the QAPP soon.

February 15, 2007: A conference call was conducted with USEPA and Ohio EPA to discuss the SAP. Ms. Netzly-Watkins prepared the following summary of the call.

Attendees:

Karla Aufer, USEPA

John Garvey, John Blackman, Liam McEvoy, Partners Environmental

Jan Rybka, Cuyahoga Co. SWCD

Sue Netzly-Watkins, Ohio EPA-DEIR

John Loftus (unable to attend)- Cuyahoga Co. Port Authority

Jerry Parker (unable to attend)- Ohio EPA-DSIWM

Purpose of the meeting: Discuss the focus the Dike 14 sampling effort. Objectives for this phase of Phase II sampling at Dike 14 are to collect surface and subsurface samples across the 88-acre Dike 14 property.

1) Purpose of Sampling: The purpose of the sampling will be to gather data to begin a determination on the human and ecological risks associated with exposures to the soils, sediment and surface water at the property. Sue noted that VAP applies residential land use standards at properties used for recreational purposes. A property specific risk assessment may be used to assess any risk associated to exposures to ecological receptors and human exposures associated with recreational activities.

Partners will contact Cleveland Museum of Natural History. Harvey with the Museum has been active on the Dike 14 workgroup and the Museum has conducted studies of the flora and fauna located on Dike 14. It would be helpful to better know the depths of burrowing animals at the property in order to best select sampling depths to assess soil that may be considered available for direct contact. Currently, the sampling plan focuses most sampling in the 0 -2 foot soil horizon and may also be expanded to a 2 - 4 foot soil horizon, based on the likelihood of these subsurface soils being available for direct contact. Right now there are no plans for utilities or other subsurface infrastructure on Dike 14.

2) Ground Water Sampling: Exposures related to ground water will not be within the scope of this sampling plan. The emphasis of this sampling effort is to better assess the direct contact exposure issues that may exist to a human-recreating at the property. Contact with and

the ingestion of ground water at this property is not being considered for this assessment. It was determined that it would be a better use of the limited sampling budget to focus the sampling on exposures to: soils, sediment and surface water on Dike 14.

3) OAC 3745-27-13 Authorization: "Rule -13" was deemed necessary for a portion of the property that was a former municipal landfill. Partners is working with Jerry Parker (Ohio EPA-DSWIM) on finalizing the necessary information needed to obtain authorization under OAC 3745-27-13. Please confirm with Jerry Parker that this authorization has been granted prior to conducting intrusive activities in areas that require Rule -13.

4) Sampling Strategy: The purpose of this sampling effort is to gather a larger body of data from the property. The sampling strategy selected does not anticipate a specific future site layout. A 300 x 300 sampling grid was selected. The goal is to get a better understanding on the types of chemicals of concern (COCs) and the concentrations these COCs are present. Sample "nodes" or locations are shown in Figure 3 of the December sampling plan. The node is represented by the transect of the grid lines. 49 grid nodes are shown on this figure. If a node falls in an area of the property where it is not possible to collect a soil sample, the sample location may be relocated. Example: Node appears on armored slope. The sample will be collected at an up-land area. 7 sediment and 7 surface water samples are planned. A sediment sample will replace a soil sample that falls in a node area. It is anticipated that the material that makes up much of the upper soils of Dike 14 consist of similar river/lake dredge materials. Some areas on Dike 14 have become wetland areas vs. upland areas. Soil cores will help provide further insight on the soil matrix across Dike 14.

20 Geoprobe sample borings are planned at the property. This includes borings on and off the landfill. Depth of borings will be 10 feet. 10 feet was selected largely because it was the depth describe in the Rule 13. 20 hand auger samples will be collected. Karla asked Partners to consider biasing samples towards areas of the property that are currently being used as trails on the property.

5) Chemicals of Concern (COCs): VOC sampling may be scaled back to save analytical costs. We discussed collecting 20 samples for VOC analysis. Partners will evaluate the number of VOC samples needed to establish a statistically valid data set. Samples would be screened and selected for further analysis based on screening results. Partners will double check historic data to also determine what VOCs were detected in prior assessments. The work plan notes ENCOR sampling was planned for VOCs on the property. Ohio EPA advised confirming with the Certified Lab(s) to see if they are certified to conduct analysis for this method.

US EPA is reviewing the QAAP and will provide Partners with feedback soon. Ohio EPA asked if methane gas is considered a COC for the landfill area. It was noted that mercury may also be a COC at the property. Ohio EPA noted that low level mercury (Hg) analysis may need

to be considered as part of the scope of this study. Ohio EPA's surface water - wildlife criteria standard is very low and requires low level Hg detection limits in order to show if the surface water-wildlife criteria standard was exceeded. If this level of assessment will be outside the scope of the work being conducted at Dike 14, it would be helpful to provide clear data quality objectives in the report to explain what the scope of the sampling is.

6) Data Quality Objectives (DQO's): Ohio EPA recommends clarifying what the purposes and limitations are for this sampling effort. Explain how the data collected may be used to make decisions regarding additional assessment work or regarding remedial measures that may be warranted to reach a specific endpoint. (I'm assuming the QAAP discusses the usability of the data collected.) It is helpful to describe why samples are collected as well as describe why some data collection activities were excluded. Discrete samples were selected by Partners vs composite samples. Briefly describe the purpose for this decision.

7) Timing: Sampling activities are planned to begin the last week of February, beginning of March 2007. Partners plans to be on site soon to mark the planned sampling locations. Partners will revise a table to show the sample location (depth)/sample ID, COCs to be analyzed - standards that data will be compared to. The revised table will be forwarded to Karla and Sue early next week.

Please fee free to contact me if you have questions (330) 963-1201 or Susan.Netzly@epa.state.oh.us

February 20-22, 2007: Partners mobilized to Dike 14 and used a GPS unit to locate the grid nodes on 300 feet by 300 feet spacing. The sampling grid paralleled the eastern and southern property boundaries. Black plastic stakes 3 feet tall with pink ribbon for visibility were used to mark each grid node. The grid node number was written on each stake with marker paint. These stakes will remain in place until the assessment is completed. In addition, the GPS coordinates of each grid node were recorded to assist in locating the stakes in the thick vegetation.

February 28, 2007: Partners submitted additional information to Ms. Karla Auken and Ms. Jan Pels of the USEPA and Ms. Susan Netzly-Watkins of Ohio EPA-DERR to review. The information submitted included a table summary of prior sediment sampling results obtained from the U.S. Army Corps of Engineers (USACE) for the Cuyahoga River and Lake Erie sediments disposed at Dike 14. The historical analytical data was submitted to justify the chemicals of concern (COCs) selected for analysis during this assessment. A wide range of COCs were detected in the sediment samples including VOCs, SVOCs, PAHs, PCBs, pesticides, petroleum hydrocarbons, metals and cyanide. The maximum concentrations of eight (8) COCs exceed the current VAP generic direct-contact soil standards for residential land use: benzo(a) pyrene, benzo(a)anthracene, dibenz(a,h)anthracene, arsenic, cadmium, mercury, PCBs and petroleum hydrocarbons (as oil & grease).

Also submitted was a table detailing the sampling and analyses to be conducted at Dike 14 during the brownfields assessment. The table lists the grid nodes, the locations of which were

shown on an aerial photograph of Dike 14. The table also includes the sample type (geoprobe, hand auger, sediment) to be collected at each grid node. Surface water samples were not included because no surface water was observed in the wetland areas when the grid nodes were staked. Partners sampling plan includes six (6) discretionary samples, which could include surface water samples from the wetland areas during the Spring of 2007. The total depth and planned depths of samples for analysis were also listed in the table. Geoprobe borings will terminate at 10 feet and samples from 0-2 and 2-4 feet will be submitted for analysis. Hand auger samples will terminate at 2 feet and samples from 0-2 feet will be submitted for analysis. Sediment samples will be from depths of 0-0.5 feet and are not expected to be significantly different than the "soil" samples from depths of 0-2 and 2-4 feet. As requested, Partners contacted Harvey Webster with the Cleveland Museum of Natural History to confirm that burrowing animals at Dike 14 would not be expected to burrow deeper than 4 feet. Based on the prior sediment sampling data, PCBs, PAHs and the eight (8) RCRA metals were selected as the primary COCs. Every soil/sediment sample will be analyzed for the primary COCs. Secondary COCs were identified including: hexavalent chromium, cyanide, TPH, pesticides, herbicides, VOCs, and SVOCs. Approximately 25% of the soil/sediment samples will be analyzed for the secondary COCs. Although petroleum hydrocarbons (oil & grease) were detected above TPH saturation limits, TPH is considered to be a secondary COC because saturation is not a risk-based standard and is of limited use in a risk assessment.

March 5, 2007: Partners responded to the concerns brought up in the February 15, 2007 conference call with the following letter:

March 5, 2007

Ms. Karla M. Auker
U.S. Environmental Protection Agency
Brownfields Project Manager
25089 Center Ridge Road
Westlake, Ohio 44145

Re: Response to Comments from Ohio EPA on the Sampling & Analysis Plan for the
U.S. EPA Funded Brownfields Assessment of Dike 14 CDF, Cleveland, Ohio

Dear Ms. Auker,

As requested, Partners Environmental Consulting, Inc. (Partners) is responding to the comments from Susan Netzly-Watkins of the Ohio Environmental Protection Agency (EPA), Division of Emergency and Remedial Response (DERR), regarding the Sampling and Analysis Plan (SAP) for the Dike 14 Confined Disposal Facility (CDF). Ms. Netzly's comments were provided by email following a conference call on February 15, 2007.

Mr. John Garvey, Mr. John Blackman and Mr. Liam McEvoy of Partners, Ms. Jan Rybka of the Cuyahoga Soil & Water Conservation District (SWCD), Ms. Susan Netzly-Watkins of the Ohio EPA and Ms. Karla Auker of the U.S. EPA participated in the conference call. The purpose of the call was to discuss the sampling to be conducted as part of the Dike 14 during the USEPA funded Brownfields Assessment of the property.

Ms. Netzly-Watkins' comments are repeated below in bold type followed by Partners' responses in normal type. There are seven (7) comments and associated responses.

Comment 1) Purpose of Sampling: The purpose of the sampling will be to gather data to begin a determination on the human and ecological risks associated with exposures to the soils, sediment and surface water at the property. Sue noted that VAP applies residential land use standards at properties used for recreational purposes. A property specific risk assessment may be used to assess any risk associated to exposures to ecological receptors and human exposures associated with recreational activities.

Partners will contact Cleveland Museum of Natural History. Harvey with the Museum has been active on the Dike 14 workgroup and the Museum has conducted studies of the flora and fauna located on Dike 14. It would be helpful to better know the depths of burrowing animals at the property in order to best select sampling depths to assess soil that may be considered available for direct contact. Currently, the sampling plan focuses most sampling in the 0-2 foot soil horizon and may also be expanded to a 2 - 4 foot soil horizon, based on the likelihood of these subsurface soils being available for direct contact. Right now there are no plans for utilities or other subsurface infrastructure on Dike 14.

Partners' Response: Your comment about the purpose of the sampling is correct. It is to gather data to begin a determination of the human and ecological risks associated with exposures to the soils, sediment and surface water at the property. The analytical results will be compared to the Ohio Voluntary Action Program (VAP) single chemical generic numerical standards for residential land use. In addition, a risk assessment will be conducted to assess the risks to ecological receptors and human recreational users.

Partners contacted Mr. Harvey Webster with the Cleveland Museum of Natural History to inquire about burrowing animals at the property. Mr. Webster relayed our question to a biologist with the museum, Mr. Tim Matheson. According to Mr. Matheson, a sampling depth of 4 feet should be adequate for the types of burrowing animals present at Dike 14. Therefore, Partners plans to submit soil samples from depths of 0-2 feet and 2-4 feet below ground surface (bgs) for analysis at all Geoprobe borings. The Geoprobe borings will extend to a depth of 10 feet, although samples from depths below 4 feet will not be analyzed unless significant indications of contamination are observed. The soil descriptions from sampling to a depth of 10 feet at geoprobe borings will provide valuable information for use in future planning regarding vertical variability of the materials in Dike 14. Hand auger soil samples will be from the 0-2 feet depth interval. Sediment samples will be obtained from the 0-0.5 foot depth interval.

Comment 2) Ground Water Sampling: Exposures related to ground water will not be within the scope of this sampling plan. The emphasis of this sampling effort is to better assess the direct contact exposure issues that may exist to a human recreating at the property. Contact with and the ingestion of ground water at this property is not being considered for this assessment.

It was determined that it would be a better use of the limited sampling budget to focus the sampling on exposures to: soils, sediment and surface water on Dike 14.

Partners' Response: Since the primary purpose of the USEPA funded Brownfields Assessment of Dike 14 is to evaluate direct contact with soils, sediment and surface water by a human recreating at the property and ecological impacts from contamination in these media, no groundwater monitoring wells will be installed during this assessment. Direct contact with and ingestion of groundwater by humans is an incomplete exposure pathway since no potable water wells are present or will be installed in the future at the property. The funds that might have been spent to install groundwater monitoring wells, obtain and analyze groundwater samples will be used for collecting and analyzing additional soil, sediment and surface water samples.

Comment 3) OAC 3745-27-13 Authorization: "Rule -13" was deemed necessary for a portion of the property that was a former municipal landfill. Partners is working with Jerry Parker (Ohio EPA-DSWIM) on finalizing the necessary information needed to obtain authorization under OAC 3745-27-13. Please confirm with Jerry Parker that this authorization has been granted prior to conducting intrusive activities in areas that require Rule -13.

Partners' Response: A Rule 13 Authorization letter was issued by Jerry Parker of the Ohio EPA, Division of Solid and Infectious Waste Management (DSIWM). A copy of the letter, dated February 23, 2007, is attached.

Comment 4) Sampling Strategy: The purpose of this sampling effort is to gather a larger body of data from the property. The sampling strategy selected does not anticipate a specific future site layout. A 300 x 300 sampling grid was selected. The goal is to get a better understanding on the types of chemicals of concern (COCs) and the concentrations these COCs are present. Sample "nodes" or locations are shown in Figure 3 of the December sampling plan. The node is represented by the transect of the grid lines. 49 grid nodes are shown on this figure. If a node falls in an area of the property where it is not possible to collect a soil sample, the sample location may be relocated. Example: Node appears on armored slope. The sample will be collected at an up-land area. 7 sediment and 7 surface water samples are planned. A sediment sample will replace a soil sample that falls in a node area. It is anticipated that the material that makes up much of the upper soils of Dike 14 consist of similar river/lake dredge materials. Some areas on Dike 14 have become wetland areas vs. upland areas. Soil cores will help provide further insight on the soil matrix across Dike 14.

20 Geoprobe sample borings are planned at the property. This includes borings on and off the landfill. Depth of borings will be 10 feet. 10 feet was selected largely because it was the depth describe in the Rule 13. 20 hand auger samples will be collected. Karla asked Partners to consider biasing samples towards areas of the property that are currently being used as trails on the property.

Partners' Response: After the conference call, Partners went to the property to stake the 49 grid nodes and determine the types of samples that can be collected at each grid node. A Global Positioning System

(GPS) unit was used to locate the grid nodes with a spacing of approximately 300 feet. A black plastic stake several feet tall with pink ribbon for visibility was installed at each grid node. Each grid node was numbered and the appropriate number was written on the stake with a paint marker. The stakes will remain in-place at the grid nodes until all sample collection, laboratory analysis and data evaluation has been completed. An aerial photo showing the 49 grid nodes (numbered from 0,0 to 7,3) is attached.

After staking the 49 grid nodes, and considering the apparent limits of the landfill based on historical aerial photographs and Dike 14 construction plans in prior reports, Partners determined that 11 Geoprobe borings will be installed at grid nodes within the limits of the landfill. Twelve (12) additional Geoprobe borings will be installed at grid nodes outside the limits of the landfill. Due to thick vegetation and other accessibility limitations, a hand auger will be used to sample surface soil at 23 grid nodes that cannot be accessed with a Geoprobe without causing significant damage to surface soil and vegetation at the property. Sediment samples are planned for 3 grid nodes in wetland areas. Partners believes that 3 sediment samples will be adequate because the "sediments" in the seasonal wetland areas appear to be the same as the "soil" at other areas of Dike 14. No surface water was observed at any of the grid nodes. However, we have planned 6 discretionary samples that could include surface water if it accumulates in wetland areas this Spring. Where grid nodes are close to existing trails, soil samples will be collected from the trail areas. Discretionary samples will also be used to sample areas of the property that are currently being used if grid nodes are not present in those areas. A table listing the grid nodes, sample type, total depth, sample intervals (for analysis) and analytical parameters for each sample is attached.

Comment 5) Chemicals of Concern (COCs): VOC sampling may be scaled back to save analytical costs. We discussed collecting 20 samples for VOC analysis. Partners will evaluate the number of VOC samples needed to establish a statistically valid data set. Samples would be screened and selected for further analysis based on screening results. Partners will double check historic data to also determine what VOCs were detected in prior assessments. The work plan notes ENCOR sampling was planned for VOCs on the property. Ohio EPA advised confirming with the Certified Lab(s) to see if they are certified to conduct analysis for this method.

US EPA is reviewing the QAAP and will provide Partners with feedback soon. Ohio EPA asked if methane gas is considered a COC for the landfill area. It was noted that mercury may also be a COC at the property. Ohio EPA noted that low level mercury (Hg) analysis may need to be considered as part of the scope of this study. Ohio EPA's surface water - wildlife criteria standard is very low and requires low level Hg detection limits in order to show if the surface water-wildlife criteria standard was exceeded. If this level of assessment will be outside the scope of the work being conducted at Dike 14, it would be helpful to provide clear data quality objectives in the report to explain what the scope of the sampling is.

Partners' Response: Based on a review of prior sediment sampling results (table attached), Partners determined that maximum

concentrations of several PAHs, several RCRA metals, PCBs and oil & grease exceeded the VAP generic numerical standards for residential use and TPH soil saturation limits. Partners selected PCBs, PAHs and RCRA metals as the primary COCs based on the sediment sampling data. COCs that were detected at maximum concentrations below generic numerical standards were determined to be secondary COCs; these include VOCs, SVOCs, pesticides, herbicides and cyanide. Hexavalent chromium is also considered to be a secondary COC because historical chromium concentrations were for total chromium. Although maximum oil & grease concentrations exceeded TPH saturation limits, oil & grease (TPH) is considered a secondary COC because soil saturation is not a risk-based standard that can be used to evaluate human or ecological risk.

As indicated in the table "Grid Nodes, Sample Types/Depths and Analytical Parameters", a total of 78 soil and sediment samples will be analyzed for the primary COCs including PCBs, PAHs (or SVOCs including PAHs) and RCRA metals. Twenty (20) soil, sediment and discretionary samples will be analyzed for the secondary COCs including VOCs, SVOCs, pesticides, herbicides, TPH, cyanide and hexavalent chromium.

An EPA Method 5035 soil sampling tool (Environmental Sampling Supply Lock N' Load Handles and Syringes) will be used to collect all soil samples for VOC analysis by Method 8260B. Belmont Laboratory will conduct all Method 8260B VOC analyses. Belmont is an Ohio VAP certified laboratory for Method 8260B. Information on the ESS Lock N' Load soil sampling tool is attached.

Low-level mercury analyses are not planned since surface water was not observed when the sample locations (grid nodes) were staked on Dike 14. If surface water is only present in wetland areas for short periods of time after periods of heavy precipitation, surface water sampling and analysis may not be warranted. However, if the decision is made to sample seasonal surface water later this Spring, then the low level mercury analytical method (EPA Method 1631, Revision E) will be used to quantify mercury concentrations in surface water at Dike 14. Belmont Labs subcontracts this analysis to another laboratory (Mercury One, Ltd.).

Monitoring will be conducted in the field for the presence of methane and hydrogen sulfide gasses in the 11 borings planned for grid nodes within the apparent limits of the landfill. After sampling soils to a depth of 10 feet bgs, the sampler will be removed and the borehole will be covered with plastic and allowed to stand for at least an hour. After the waiting period, a small hole will be cut into the plastic and the probe of a multi-gas meter will be inserted to check for detectable levels of methane and hydrogen sulfide. The borehole will be filled with granular bentonite after soil sampling and methane/hydrogen sulfide monitoring is completed.

Comment 6) Data Quality Objectives (DQO's): Ohio EPA recommends clarifying what the purposes and limitations are for this sampling effort. Explain how the data collected may be used to make decisions regarding additional assessment work or regarding remedial measures that may be warranted to reach a specific endpoint. (I'm assuming the QAAP discusses the usability of the data collected.) It is helpful to describe why samples are collected as well

as describe why some data collection activities were excluded. Discrete samples were selected by Partners vs composite samples. Briefly describe the purpose for this decision.

Partners' Response: The scope of work for the Brownfields Assessment of Dike 14 was defined in the grant application prepared by the Cuyahoga SWCD. The grant application states, "Assessment funds are being sought to determine what, if any environmental concerns are associated with the site. Since the site is a CDF, stakeholders want to know what, if any risks are associated with using the site for passive recreation and education. The Dike 14 Environmental Education Cooperative (EEC) holds public open house tours and environmental education programs at the site. Since the dredged materials were deemed too contaminated to dump into Lake Erie, the levels of contaminants in the soil may be of risk to the general public, which is already coming to the site on a periodic basis." The Phase II section of the application specifies that environmental samples consisting of disposed sediments, surface water, and/or groundwater will be submitted for laboratory analysis. It also states that a risk assessment will be conducted based on the master plan for the property. Finally, it states that remedial alternatives will be evaluated consistent with the proposed end use of the property. Partners scope of work for the U.S. EPA Funded Brownfields Assessment follows the requirements of the grant application.

It is important to note that the scope of work for the Brownfields Assessment of Dike 14 does NOT include evaluating the possibility of day lighting Doan Brook, which has been suggested by certain environmental groups. It also does NOT include evaluating potential contaminant levels in flora and fauna at the property. Only environmental media including soil, sediments and surface water (if any) on Dike 14 will be evaluated. The scope of work does NOT include evaluating potential offsite impacts from the sediments in Dike 14 or the wastes in the closed landfill that is part of Dike 14 (i.e., potential impacts to surface water in Lake Erie, groundwater and adjoining properties).

Decisions about the need for additional assessment or remedial activities will be made at the completion of this Brownfields Assessment project. It is anticipated that Partners, U.S. EPA, Ohio EPA, Cuyahoga SWCD, Cleveland-Cuyahoga County Port Authority and the Dike 14 Environmental Education Collaborative will all be involved in the decision making process. The main decision that needs to be made is whether additional assessment activities need to be performed to adequately evaluate soil, sediments and surface water at Dike 14. Depending on the types and levels of contamination in environmental media at Dike 14, additional assessment of flora and fauna may be warranted. Although not required to evaluate the proposed recreational use of Dike 14, additional assessment would be required if it becomes necessary to evaluate potential impacts to offsite areas (i.e., Lake Erie, groundwater and adjoining properties). Additional funds would be required to conduct any additional assessment activities at Dike 14.

Data validation and usability is discussed in detail in Section 4 of the QAPP. Sample handling procedures will be evaluated. All

analytical results will undergo data verification and validation. Precision, accuracy, bias, contamination, sample representativeness, sensitivity, quantitation limits and completeness will all be evaluated. Any data that is determined not to be usable will be removed from the data set for the property.

Partners decided not to collect and analyze composite samples because the Ohio VAP typically uses discrete samples. Because this is the first assessment of Dike 14, we believe discrete sampling is needed to evaluate the heterogeneity of the fill material. Composite sampling could mask hot spots or other variations in contaminant distribution. We were also concerned that composite samples could obscure the locations and depths of contamination. If resampling is required to verify the results of a discrete sample, the precise location and depth of the sample will be known and can be reproduced. However, if a composite sample contains elevated levels of contamination, each discrete sample location/depth in the composite sample would have to be resampled separately to identify the source(s) of the contamination.

Comment 7) Timing: Sampling activities are planned to begin the last week of February, beginning of March 2007. Partners plans to be on site soon to mark the planned sampling locations. Partners will revise a table to show the sample location (depth)/sample ID, COCs to be analyzed - standards that data will be compared to. The revised table will be forwarded to Karla and Sue early next week.

Partners' Response: The Geoprobe soil sampling is scheduled for March 7-9, 2007. The hand auger sampling will be conducted the week of March 19-23, 2007 (provided the ground is not frozen).

A table titled "Grid Nodes, Sample Types/Depths and Analytical Parameters" was emailed to Karla Auker and Susan Netzly-Watkins on February 27, 2007. The table lists the sample locations (grid nodes), sample types (Geoprobe, hand auger, sediment), sample depths, analytical parameters and numbers of samples to be analyzed at each sample location.

Partners trusts that the information provided in this letter will allow you to grant conditional approval of the SAP for the U.S. EPA Funded Brownfields Assessment of the Dike 14 CDF. Partners will revise and resubmit the SAP to incorporate the information summarized in this letter and any other changes that have been discussed in conference calls or emails.

Please contact our office if you have any additional comments or questions about the sampling activities to be conducted at Dike 14. We can be reached at 440-248-6005.

Sincerely,
Partners Environmental Consulting, Inc.

John T. Blackman, CPG
Senior Project Manager

John T. Garvey, CP118
Director of Brownfields Services

Attachments

Rule 13 Authorization

Aerial Photo Identifying Grid Nodes

Table Summary of Prior Sediment Sampling Results

Table of Grid Nodes, Sample Types/Depths and Analytical Parameters

ESS Lock N' Load Soil Sampling Tool Information

cc: Susan Netzly-Watkins
Janine H. Rybka
John Loftus

{End of Letter, no Attachments provided in this Progress Report}

Task 4: Phase I Site Assessment (Task Completed)

Partners is conducting a Phase I Property Assessment of the Dike 14 CDF. The Phase I is being conducted in accordance with the requirements of the Ohio Voluntary Action Program (VAP), although it will not be submitted to Ohio EPA to obtain a Covenant Not-to-Sue (CNS). The revisions to the QAPP and SAP and setting up the sampling grid delayed completion of the VAP Phase I report. Partners was near completion of the VAP Phase I at the end of February 2007.

March 8, 2007: The VAP Phase I Property Assessment was completed and submitted.

Task 5: Phase II Property Assessment

Partners is currently scheduled to conduct the Phase II sample collection in March 2007, subject to conditional approval of the QAPP and SAP by Ms. Karla Auker and Ms. Jan Pels of the USEPA. Changes to the sampling and analysis plan for the Brownfields Assessment of Dike 14 due to input from the USEPA and Ohio EPA are summarized in Task 4 above.

March 7-9, 2007: Partners conducted Geoprobe soil sampling at Dike 14. A total of 23 borings were installed using a track-mounted Geoprobe. The samples were submitted to Belmont Labs for the analyses specified in the SAP.

March 20-22, 2007: Partners conducted hand auger soil sampling at Dike 14. A total of 24 borings were sampled using a stainless steel hand auger. The samples were submitted to Belmont Labs for the analyses specified in the SAP.

April 17, 2007: Partners conducted sediment and surface water sampling at Dike 14. Only two (2) areas of with surface water were present during Spring. Two (2) sediment and two (2) surface water samples were collected and submitted to Belmont Labs for the analyses specified in the SAP.

April-June 2007: Analytical results were provided by Belmont Labs. Partners reviewed the results, prepared tables comparing the various COCs to generic standards, prepared sample location figures and began writing the Phase II Property Assessment report.

July-September 2007: Draft report for review has been submitted to the Ohio Environmental Protection Agency (Ohio EPA). Ohio EPA has reviewed report, but will not comment since the property is not under the Voluntary Action Program (VAP). Ohio EPA did submit corrections which will be incorporated into the final draft to be completed October 2007.

Task 6: Preliminary Risk Assessment and Remedial Action Planning

A preliminary risk assessment will be conducted to evaluate the risks to human health and the environment from the chemicals of concern (COCs) detected during the Phase II assessment. The preliminary risk assessment will follow the requirements of the Ohio VAP, although it will not be submitted to Ohio EPA to obtain a CNS. The risk assessment will be based on non-residential (commercial-industrial) land use and no potable or non-potable use of ground water. The preliminary risk assessment is scheduled for August 2007, but it may be completed sooner.

March-April 2007: Davey Resource Group (Davey) personnel performed background research on the Property to establish preliminary baseline ecological inventory for their portion Level 1 Ecological Risk Assessment (ERA).

June 21, 2007: Davey personnel mobilized to Dike 14 to delineate jurisdictional wetlands. A sub-meter GPS unit was used to create a to-scale site plan that will show the locations and extent of jurisdictional wetlands on the Dike 14 property.

August 2007: The Wetlands Delineation Report was issued by Davey. Results indicate that seven wetlands totaling 2.298 acres were identified on the Property.

July-September 2007: A Level I Ecological Risk Assessment (ERA) was completed by Davey and submitted for review to the Ohio EPA. The Level I ERA determined that a Level 2 ERA was necessary to further evaluate ecological risks. The Level 2 ERA is currently being complete.

August 2007: The Property Specific Human Health Risk Assessment was completed and submitted to all interested parties. Comments were received from the Ohio EPA and an Interim Draft was issued reflecting these changes. At this time we are awaiting final review **by the Ohio EPA**. The Risk Assessment found that with the exception of an identified Hot Spot area, Exposure Unit 2, the levels of chemicals of concern at the Property do not exceed acceptable cancer and non-cancer risks for adult and child recreational users or for the construction/excavation worker. Exposure Unit 2 contains levels of chemicals of concern, which exceed acceptable cancer and non-cancer risks.

September-November 2007: The Level 2 ERA was completed and submitted to the Ohio EPA for review. Comments were received from the Ohio EPA and a final report was issued, dated November 1, 2007. Based on the findings of the Level 2 ERA, the Ohio EPA indicated that a Level 3 ERA would be required. The Level 3 was conducted and a Draft Level 3 ERA report was issued to the stakeholders and submitted to the Ohio EPA for their review and comment, dated November 14, 2007. The results of the Level 3 ERA show elevated risk levels present for

the ecological receptors in Exposure Unit 2. Implementation of a remedy will be necessary to eliminate any potentially unacceptable exposures of the ecological receptor populations in Exposure Unit 2. The risk calculations also show somewhat elevated risk levels present for the ecological receptors in Exposure Unit 1, predominantly for PCBs. Additional risks in Exposure Unit 1 were indicated for chromium, lead, selenium and mercury. These constituents account for an added HQ_{LOAEL} value of 4 to the risks associated with the American Robin and an added HQ_{LOAEL} value of 1 for the Short tailed shrew. Due to the urban location of Dike 14 and its manmade nature it is likely that the concentrations of these metals are within the background levels for the City of Cleveland. A determination of background metals for the Cleveland area should be performed to eliminate consideration of these metals in the ecological risk. At this time Partners is awaiting review of the Level 3 ERA report by the Ohio EPA before issuing a final report. The final report will be completed by March 2008.

November 1, 2007: Ohio EPA comments incorporated into the Property Specific Human Health Risk Assessment and the final report was issued.

As the remedial action plan will be dependent on development of a final site plan and may incorporate the findings of a metals background study, it was not yet developed for Dike 14. The funds allotted for the remedial action plan were used to complete the Level 3 ERA which was not anticipated at the time the contract was developed.

January-March 2008: Approval was obtained from the US EPA to use the remaining funds to conduct a background contaminant study. Staff coordinated with the Ohio EPA, US EPA, Partner's Environmental to determine the process for collecting soil samples from sites near Dike 14 to be analyzed.

April-June 2008: Sites for taking samples were chosen by the Project Manager, environmental consultants and the Ohio EPA. Permission for taking core samples were obtained from the Village of Bratenahl and City of Cleveland Heights.

Task 7: Procurement/Financial Reporting

Quarterly reports and financial statements will be issued by the Project Manager on a quarterly basis.

Task 8: Background Metals Investigation at Dike 14

Since grant funds were remaining at the completion of the tasks outlined in the original proposal, the Project Manager received permission from the US EPA in March to extend the grant until the end of 2008.

The stakeholders are in support of continuing efforts to prepare the site for future use. At the public meetings, the Cleveland-Cuyahoga County Port Authority offered the use of "beneficial dredging" to remediate the 5 acre site that needs to be capped to meet ecological risk standards. Representatives from the US EPA and Ohio EPA suggested conducting a Background Metals Investigation on soils from selected areas near the dike to determine what type of capping materials could be used.

In mid-March, Partner's Environmental provided a proposal for Background Metals Investigation at Dike 14. The proposal indicated that the work would be conducted in general accordance with the Ohio Voluntary Action Program (VAP) rules. All sampling and analysis completed as part of this study shall be conducted in accordance with the approved methods presented in the US EPA approved *Dike 14 Confined Disposal Facility Brownfield Assessment*, dated April 19, 2007 and the *Quality Assurance Project Plan (QAPP)*, dated March 20, 2007.

Partner's Environmental proposed to obtain soil samples at three different depths from 30 sampling points. The OEPA will provide their Site Investigation Field Unit and a field geologist to conduct the sampling. A total of 60 soil samples will be collected for laboratory submission. The OEPA is providing analysis for 20 of the samples and the remaining samples will be sent to Belmont Labs in accordance with the QAPP.

Conference calls will be held to determine appropriate sites, a sampling schedule, and delegation of task, including access agreements and utilities checks.

June 2008-Background Contaminants Study completed.

Problems Encountered/Assistance Needed

The Ohio EPA reviewed the background contaminants study and was concerned about some of the data. Ohio EPA reviewed the numbers and calculations and had their lab rerun some samples due to some metals interference causing some odd Selenium values.

Partners Environmental is working with the Ohio EPA on putting the finishing strokes on the Eco Risk Level 3 and evaluating the background data and comparing it to the on-site soils. This comparison of background to site soils should help better define areas that may require remedial measures.

Rule 13 Authorization

December 12, 2006: An authorization under Ohio Administrative Code (OAC) 3745-27-13 (Rule 13) was required for a portion of the Dike 14 CDF. Historical information obtained during the Phase I and historical reviews revealed that approximately 8-acres of the 88-acre CDF was the site of a landfill operated by the City of Cleveland. Ms. Jan Rybka of the Cuyahoga SWCD, and Mr. John Blackman and Mr. John Garvey of Partners, met with Mr. John Schmidt and Mr. Murat Tukul, of the Ohio EPA, on December 12, 2006 to discuss the landfill and the proposed brownfield assessment activities. Mr. Schmidt and Mr. Tukul indicated that CDFs, in general, are not considered solid waste facilities and do not require Rule 13 authorizations. However, they indicated that a Rule 13 authorization is required for the approximately 8-acre landfill portion of the Dike 14 CDF.

January 17, 2007: Partners prepared a Rule 13 authorization under paragraph (G) for a (D)(3) facility. The Rule 13 authorization was submitted to Mr. Jerry Parker of Ohio EPA for review

on January 17, 2007. Mr. Parker is responsible for solid waste facilities located in Cuyahoga County, Ohio.

January 31, 2007: Mr. Jerry Parker of Ohio EPA-DSIWM requested that Partners revise and resubmit the Rule 13 application. Mr. Parker requested that the Port Authority's details be included in the cover letter. He also requested that the purpose of the soil borings be stated in the Rule 13 request. A plan view of the proposed sample locations was requested. In addition, Mr. Parker requested a detail drawing of a backfilled borehole. He requested that granular bentonite be used to abandon the Geoprobe borings. Mr. Parker requested that the revised Rule 13 application be submitted in a 3-ring binder that allows for the insertion of subsequent revisions.

February 9, 2007: The Ohio EPA received the revised Rule 13 application.

February 23, 2007: Mr. Jerry Parker of Ohio EPA-DSIWM issued a Rule 13 Authorization letter for the Dike 14 CDF. The letter was addressed to Jan Rybka of the Cuyahoga SWCD.

April 6, 2007: Prepared the Rule 13 Certification Report (which was required) and sent it to Ohio EPA.

VAP Technical Assistance

Ms. Karla Aufer of the USEPA requested that the SAP for the Brownfields Assessment of Dike 14 be submitted to Mr. Rod Beals of Ohio EPA for review via VAP Technical Assistance. Partners assisted Ms. Jan Rybka of the Cuyahoga SWCD in preparing the request for VAP Technical Assistance. The request was submitted to Ohio EPA by Jan Rybka on February 13, 2007. As requested, Partners forwarded a copy of the SAP to Mr. Rod Beals, Director of the Ohio EPA-NEDO. Ms. Susan Netzly-Watkins of Ohio EPA-DERR reviewed the SAP prepared by Partners and participated in a conference call to discuss the sampling and analysis plan. The summary prepared by Ms. Netzly-Watkins is included in Task 4 above.

The Ohio EPA provided technical assistance to assist in developing a Background Metals Investigation. Ohio EPA staff helped to coordinate conference calls to determine the type of sites near Dike 14 that would be suitable to collecting samples. The staff was also instrumental in establishing the protocols to use in the development of a new Sampling Plan. The Ohio EPA provided staff and equipment to take samples from multiple locations in the Village of Bratenahl (just east of Dike 14) and in Forest Hills Park in Cleveland Heights, just a few miles southeast of the site. Samples have been sent to the certified labs for analysis.

In mid-March, Partner's Environmental provided a proposal for Background Metals Investigation at Dike 14. The proposal indicated that the work would be conducted in general accordance with the Ohio Voluntary Action Program (VAP) rules.

Tracey Nichols, City of Cleveland Economic Development Director informed the Dike 14 Environmental Education Committee that the Cuyahoga County Development Office

received US EPA Revolving Loan funding that could potentially be tapped in to for additional efforts on Dike 14 related to the remediation.

Deliverables/Work Products

- QAPP, submitted January 2, 2007; conditional approval February 2007
- SAP, submitted January 2, 2007; conditional approval February 2007
- Rule 13 Authorization issued February 23, 2007
- VAP Phase I Environmental Site Assessment; completed/submitted March 8, 2007
- Draft Property Specific Human Health Risk Assessment; submitted August 2007
- Interim Draft Property Specific Human Health Risk Assessment; submitted Sept. 2007
- Final Property Specific Human Health Risk Assessment; submitted Nov. 2007
- Wetlands Delineation; submitted August 2007
- Level I Ecological Risk Assessment; submitted August 2007
- Level II Ecological Risk Assessment; submitted October 2007
- Draft Level III Ecological Risk Assessment; submitted November 2007
- Background Metals Investigation, expected June 2008**

Remedial Options Plan, no longer planned under current contract

Schedule/Percent Completed

Task	Scheduled Completion	Anticipated Completion
Community Outreach	March 2008	50%
QAPP & SAP, HASP	November 2006	January 2, 2007 - 100%
Phase I Property Assessment	November 2006	March 8, 2007 - 100%
Historical Reviews/Research	November 2006	February 2, 2007 - 100%
Rule 13 Authorization	New Task-Not Scheduled	February 23, 2007 - 100%
Phase II Property Assessment	July 2007	October 2007 – 100%
Human Health Risk Assessment	August 2007	October 2007 – 100%
Ecological Risk Assessment (Level I-III)	<i>November 2007</i>	<i>March 2008 – 100%</i>
Remedial Action Plan	<i>November 2007</i>	<i>No Longer Planned</i>
Background Metals Investigation	<i>June 2008</i>	<i>99%</i>

2.2 Funds Expended

Summary of Expenses by Category (Report period through June 30, 2008)

Budget Category	Budgeted Amount	Previous Expense	Current Quarter Expenses	Cumulative Expense
Personnel	10,600	7,389.24	449	7,838.24
Benefits/fringe (30% personnel)	0	2,212.50	135	2,347.50
Travel	1,850	31.24	0	31.24
Contractual	187,550	165,173.50	11,078.55	176,252.05
Total Expenses	200,000	\$174,706.48	11,662.55	186,469.03

2.3 Budget description (January –March 2008))

Personnel-Project management, meeting coordination, stakeholder outreach and involvement, accounting, reporting

SWCD personnel Rybka 13.75 hours @ 32.35/hr

Benefits @ 30%

Travel @ .505/mile 0

Contractual Services-Phase I, Phase II, SAP, QAPP, stakeholder/community meetings reporting, research, fees

Partners Environmental Consulting, Inc. \$ 11,078.55

3.0 Brownfields Program Measures of Success (as of June 30, 2008)

3.1 Measures of Success-Grant Program Indicators

The project is on budget and on schedule. As a result of a stakeholder's meeting and a small amount of funds remaining, the Program Manager has asked the USEPA Grant Manager if the funds may be used for a background level study near the site. This would utilize remaining funds and get the site closer to being accessible to the public on a regular basis for environmental programming.

3.2 Qualitative Indicators of Success

The City of Cleveland asked Cuyahoga SWCD to provide a report to a grant evaluation team to demonstrate how the initial funding from a Coastal Management Grant has spurred additional funding, to help determine risk and, ultimately, get the site ready for the public use.

The City of Cleveland has asked that the Dike 14 Environmental Education Collaborative members

meet with the Planning Department on a regular basis to discuss future plans for the site including long term operations and maintenance and funding issues for future restoration and site planning efforts . The Cleveland Cuyahoga County Port Authority has been an active and supportive partner in the effort.

Port Authority seeking funding for additional background research and remediation plan. Possibility of removing sheet pile. **The Cleveland Cuyahoga County Port Authority will assist in removing metal debris from the site. They have also offered to provide “beneficial dredgings” from Port operations to cap the 5 acre “hot spot”, if the dredging are deemed acceptable to place on the site.**

Cuyahoga SWCD’s mission is to promote conservation of land and aquatic resources in a developed environment through stewardship initiatives, education programs and technical assistance.

Contact:

Janine Rybka, District Administrator
Cuyahoga Soil and Water Conservation District
6100 West Canal Road,
Valley View, Ohio 44125
jrybka@cuyahogawcd.org