

Former New Boston Coke Plant Property
COAF-Attachment 1: Application Summary

- A. Historical documentation suggests that the Former New Boston Coke Plant Property (A.K.A. New Boston Coke Corporation property) was developed for commercial and/or industrial use circa 1910. The Property lies in an industrial area developed along the northern shore of the Ohio River and related to the production of steel. A former steel mill located adjacent to and north of the Property began operation in approximately 1894 and included expansions between 1920 and 1948. The steel mill closed in 1980. The coke plant operated between approximately 1917 and 2002. The majority of the coke plant operations were located on the Property. The industrial use of the Property is verified on aerial photographs taken between 1939 and 1978. Previous activities focused on the production of coke. The process of producing coke involves heating coal in ovens to temperatures above 2000°F in the absence of ambient air. The New Boston Coke Plant operated 70 ovens and had a production capacity of approximately 1,100 tons of coke per day. By-products such as volatiles and tars were released during the heating process and were recovered to produce tar, light oils, phenolates, ammonium compounds, and other materials. These by-products and their constituents represent the majority of the contaminants identified at the Property. The Property has remained unoccupied since the closure of the coke plant in April of 2002.
- B. The Property is currently vacant and a part of demolition and redevelopment activities.
- C. The Former New Boston Coke Plant Property abuts railroad tracks and the Ohio River to the south. The former steel mill land to the north has been redeveloped into a retail plaza which includes Wal-Mart as the anchor store. The former diesel repair shop area located immediately west of the Property is being remediated and is expected to be redeveloped as a part of a steel beam distribution operation. The balance of the surrounding area includes a municipal water treatment facility to

the northeast, and miscellaneous commercial/industrial, and residential development.

- D. The structures are in very poor condition and are being removed.
- E. In 2003, following the coke plant shutdown, a remedial action was performed by the US EPA removing over one million gallons of ammonia liquor, 4,000 gallons of sodium hydroxide, PCB oils, transformers, and capacitors, over 13,000 gallons of light oil and sludges, two radiation sources, and two mercury spills. A Preliminary Assessment/Site Inspection (PA/SI) Ohio EPA Division of Emergency and Remedial Response was completed August 30, 2005. Many of the samples collected from the coke plant contained significant levels of organic and inorganic compounds. Soil samples collected from the tank farm, light oil loadout, tar decanter, and quenching station areas had the highest levels of contaminants. The samples collected in these areas consisted of black, oily, coal tar type of material. Compounds such as benzene and Polynuclear hydrocarbons (PNAs) were detected at concentrations greater than 3x the respective background concentration. Sediment samples were analyzed for the same targeted analytes as in soil. The primary sample location was a runoff channel on the east end of the site near the tank farm area. Spilled materials from the tank farm have historically migrated through the flood wall tunnel forming a flow pathway to the Ohio River. Elevated levels of PNAs were detected in this sediment sample indicating off-property migration. In 2001, the OEPA Ecological Assessment Unit performed sampling of surface water, sediment, and biological indicators along Munn Run. According to the water quality study, results of samples collected adjacent to the coke plant indicated greatly reduced macroinvertebrates and a reduced fish community indicating a potential water quality toxics problem within Munn Run. Several monitoring wells were installed on and adjacent to the site in the 1990's and 2004. Elevated levels of metals and benzene were detected in several monitoring wells. Surface and subsurface soils have been found to be contaminated with numerous PNAs and the potential for direct contact exposure to these compounds exists. There are no ground water intakes or well head protection areas within a four mile radius of the coke plant and the majority of surrounding population uses municipal water supplied by the City of Portsmouth. The City of Portsmouth's source for drinking water is the Ohio River. The

surface water intake for the City of Portsmouth is located immediately adjacent to the coke plant site (approximately 500 ft. from the coal tar tank farm). The area surrounding the surface water intake is designated as a source water protection area. The PA/SI investigation concludes that the New Boston Coke facility poses a variety of health concerns to the public and environment. On-property soils are extensively contaminated and exposures through direct contact are a concern. The Ohio River is used as recreational area, fishery, and source of drinking water; therefore, surface water runoff to the Ohio River is also an exposure concern. The most recent 2007 assessment activities followed Remedial Investigation under CERCLA and the National Contingency Plan as stipulated by the Court of Common Pleas-Scioto County Judgement and Decision Entry (12/20/2002) and Ohio EPA VAP (OAC 3745-300). This dual regulatory approach was implemented to permit the gathering of site specific data while attempting to satisfy both programs and maintaining the option for choosing the optimal course for mitigation and restoration of the Property at a later date. The Phase II Property Assessment (dated November 18, 2008) documents chemicals of concern exceeding single chemical, commercial/industrial and construction/excavation direct contact soil standards (OAC 3745-300-08) at the Property and the ground water concentrations exceeding UPUS, or equivalent, and PRGs at the Property. The 2008 assessment report suggests further investigation is necessary to assess the Property.

- F. The potential end users are not known at this time. The Southern Ohio Port Authority has obtained and completed a \$350,000 Brownfield Assessment Grant from the USEPA and hopes that completing the remaining assessment and remediation work required at the site will attract new industrial/commercial development on the property and create economic growth and employment opportunities for the community. The assessment, cleanup, and reuse of the former steel mill properties are a top priority for the Village of New Boston. The master plan for the Village supports the reuse of the former steel mill land. Other sources of funding that will help this project succeed include the \$350,000 USEPA Brownfield Assistance Fund grant, possible emergency removal actions by the USEPA to remediate residual coal tar, SABR assessment and technical assistance provided by the Ohio EPA.

Portsmouth Daily Times on Thursday January 8, 2009.

Notice of public meeting and information repository for a Clean Ohio Assistance Fund Grant for the Former New Boston Coke Plant Property. The Southern Ohio Port Authority (SOPA) is applying for a grant from the Clean Ohio Assistance Fund for a Phase II Environmental Assessment of the Former New Boston Coke Plant Property located at 500-600 River Avenue, New Boston, Ohio. The application is available for review at the New Boston Public Library, located at 3850 Rhodes Avenue, New Boston until Thursday February 26, 2009 (the day after the public meeting).

A public meeting to discuss and solicit comments to the grant application will be held at the New Boston Community Center located at 3980 Rhodes Avenue, New Boston on Wednesday February 25, 2009 at 1:30. Application information is also available online at <http://www.newbostonvillage.com> Any questions may be referred to Robert Walton at 740-354-7541.