Attachment A1
Application Summary Document
Background

Newark Processing Company was a secondary aluminum recycling facility which processed aluminum dross – a by-product of primary and secondary aluminum smelting. Dross consists of varying concentrations of aluminum, aluminum oxides, free metals, and salts. They received the dross from several aluminum smelting companies and processed it on a tolling basis. NPC received two types of dross: white dross, which contained a high enough aluminum content to be fed directly into a rotary furnace for smelting, and black dross, which needed to be processed through a wet mill to concentrate aluminum before smelting. Both the furnaces and wet mill generated by-products (saltcake and dross fines, respectively) that were stockpiled on-site. The by-product from the wet mill was screened by size, and the larger particles were recovered and reprocessed. The smaller particles flowed to a series of cement-lined settling ponds. The sludge that accumulated in these ponds was called "dross fines."

Goal of the Brownfield Project
A $2,000,000 Clean Ohio Revitalization Fund grant for remediation and demolition will eliminate any remaining threats to water quality; eliminate the and threats to children and workers at the daycare adjacent to the Site, and provide a developable site on which an alternative energy generation facility can be constructed. The Property is adjacent to East Main Street, and Property entry is less than ¼-mile from Ohio Route 16, which will soon provide uninterrupted limited-access highway travel from Newark east to Columbus and the interstate system at I-270, and west to Coshocton. City water and sewer are available at the property entrance also. A total project investment of public and private funds in excess of $15,000,000 is likely.

Specific remedial activities proposed for the Property will be conducted under authorization of the Ohio EPA Director under Ohio Administrative Code 3745-27-13. Activities will constitute an equivalent to a 1976 solid waste landfill closure. They are as follows:

- Remove dross materials from the West Pile area for consolidation into the East Pile.
- Consolidate dross from the South Pile and East Pile into a common area that will also include the Plant Area, where all dross materials will be graded into a single pile with minimum 3-percent slopes to promote drainage.
- Grade dross materials in the West Pile area to result in a single pile with minimum 3-percent slopes to promote drainage.
- Cover materials with a geocomposite membrane and a minimum 2-foot-thick soil cover. The multilayer cover will render the direct-contact pathway incomplete, essentially eliminate leaching of rainwater down through dross materials to groundwater, and eliminate wind erosion of dross.
- Demolish remaining concrete foundation and wall sections.
- Remove pole-mounted transformer (assumed to contain PCB liquid) for appropriate off-Property disposal

Match and Other Funding Sources
Erosion and sloughing off of waste materials into the adjacent Licking River has been an issue at the Property for many years. In 2005, the Ohio EPA decided to approach the United States Army Corp of Engineers (USACE) for assistance due to their expertise with designing and constructing stream bank stabilization projects. A memorandum of agreement and a support agreement were signed between Ohio EPA and USACE in 2006 and 2007. In April 2007, Ohio EPA provided USACE $2.8 million dollars for the stabilization project. The project stabilized about 1,600 feet of river bank. The scope of the work included 1) removal of vegetation, rubble, drift and other debris; 2) placement of approximately 17,000 tons of stone; 3) placement of about 21,000 cubic yards of fill and 500 cubic yards of soil; and 4) placement of about 6,550 square yards of geotextile fabric in the stone embankment area.

Investigation Summary
In addition to determining the regulatory status of the site, several attempts were made to characterize the material stockpiled on site. In 1980, NPC analyzed the material stockpiled on site at the request of OEPA. Metals and ammonia were detected in the sample; however, OEPA concluded that the stockpiled material did not require regulation. On February 1991, NPC sampled the dross fines for total metals, pH, percent solids, and chlorides. Results indicated relative high metal content with a pH of 9.6. In January 1992, NPC sampled the aluminum dross fines for organics and metals using the toxicity characteristic leaching procedure. All organics were below detection limits. Barium, cadmium, chromium, lead, were detected, but the concentrations were below the TCLP regulatory limit.

In April 1994, NPC sampled dross fines for total metals. The results indicated high metal content. In May 1999, at the request of OEPA through the AGO and bankruptcy court, the NPC bankruptcy trustee contracted URS Greiner Woodward Clyde to conduct an investigation of the stockpiled material and ground water. URS conducted the investigation in May 1999. URS installed eight direct push borings, collected surface and subsurface dross samples, and collected composite dross sample of the West Dross Pile. Results indicated high metal content in the waste material but all concentrations were below the TCLP regulatory limit. High concentrations of ammonia and chloride were detected, and the pH range was 7.9-10.5. URS analyzed the ground water samples for total and dissolved metals, pH, ammonia, chloride, and fluoride. Ground water samples indicated arsenic, barium, cadmium, nickel, selenium, and fluoride were above their respective maximum contaminant levels for drinking water. Also, high ammonia and chloride concentrations were detected.

In 2004, the city of Newark contracted Civil and Environmental Consultants, Inc. to complete a Phase investigation of the property using the $300,000 in bankruptcy funds that had been awarded to OEPA. In addition, OEPA contributed resources (personnel, Geoprobe® sampling rigs, and monitoring wells) through a grant from USEPA. CEC and OEPA collected samples of soil, dross, dross fines, ground water, surface water, and sediment. OEPA also assessed macroinvertebrate communities in the Licking River and Shawnee Run. All environmental media were analyzed for metals, ammonia, nitrate-nitrite, and volatile organic compounds and all dross stockpiles were analyzed for dioxins. The sample results were compared to the OEPA Voluntary Action Program generic standards. **It was determined that arsenic detected in soil and dross exceed unrestricted generic direct-contact standards; arsenic standards were exceeded**

throughout the East Pile area, South Pile Area, West Pile Area, and Plant Area, qualifying the entire cap construction for Clean Ohio Revitalization Fund grant funding. Ground water exceeds unrestricted potable use standards for ammonia, selenium, fluoride and nitrate-nitrite.

History of the Project Property

NPC began operating in 1980 as a secondary aluminum recycling facility on a 66-acre site adjacent to the Licking River (1367-1601 East Main Street, Newark). The company processed aluminum dross, which is a byproduct of aluminum smelting. Dross consists of aluminum, aluminum oxides, ammonia, free metals, and salts. The dross on site is regulated as a solid waste, not a hazardous waste. During the 1980s and 1990s, Ohio EPA conducted several environmental investigations at the facility. The Agency also took enforcement action against the company in 1988. As a result, NPC was required to monitor surface water in the Licking River and Shawnee Run and submit monitoring data monthly to Ohio EPA, which it did prior to ceasing operations in 1996. At that time, the company estimated that approximately 175,000 tons of aluminum dross and 374,000 tons of dross fines sludge remained at the site. The waste was deposited over about 20 acres on the site and extended as much as 20 feet below the surface. In February 2002, a Preliminary Phase I Assessment completed and submitted by CEC. In October 2003, CEC presented a Plan for a Phase II Assessment. Then, in 2005, a Phase II was completed and a Clean Ohio Revitalization Fund, Round 3 Grant Application was filed.

Licking River Bank Stabilization Project

In 2004, Ohio EPA noted that the Licking River was beginning to erode into the stockpiled material. The material is not as resistant to erosion as native soil and prior attempts by NPC to stabilize the bank had been breached. In 2005, the Ohio EPA decided to approach the United States Army Corp of Engineers (USACE) for assistance due to their expertise with designing and constructing stream bank stabilization projects. The project stabilized about 1,600 feet of river bank. The scope of the work included removal of vegetation, rubble, drift and other debris; placement of approximately 17,000 tons of stone; placement of about 21,000 cubic yards of fill and 500 cubic yards of soil; and placement of about 6,550 square yards of geotextile fabric in the stone embankment area. For many years, erosion and stockpiled waste have threatened the integrity of the Licking River. But rather than building a bridge over these troubled waters, Ohio EPA and the U.S. Army Corps of Engineers (USACE) built a partnership and together rebuilt the river's endangered north bank. Ohio EPA and USACE are pleased to announce the completion of the first phase of this project -- the placement of stone on the bank. This stabilization project behind the former NPC facility will ensure that large amounts of aluminum dross and other waste will no longer wash into the river.

Potential Ecological Effects

Because the high metallic content of the dross may adversely impact sediment-dwelling organisms as it enters the river, Ohio EPA utilized the document, Development and Evaluation of Consensus Based Sediment Quality Guidelines for Freshwater Ecosystems (MacDonald et al, 2000), to determine the potential impact to sediments. This document provides consensus-based "threshold effect concentrations" (TEC) and "probable effect concentrations" (PEC) for metals and organics in sediment.

The TEC is the concentration in sediment below which harmful effects will not likely be observed. The PEC is the concentration above which harmful effects are likely to be observed. Therefore, the concentration of metals at or above the PEC indicates the sediments are polluted and would adversely impact organisms. "Presently, the site generates substantial ammonia loading that flows into the adjacent Licking River. Other site contaminants have leached into groundwater, which in turn discharges to the Licking River. The project will ideally eliminate these water quality threats, while returning the site to condition that will support commercial or industrial development." [from 2005 Brownfield Kickoff Meeting notes]

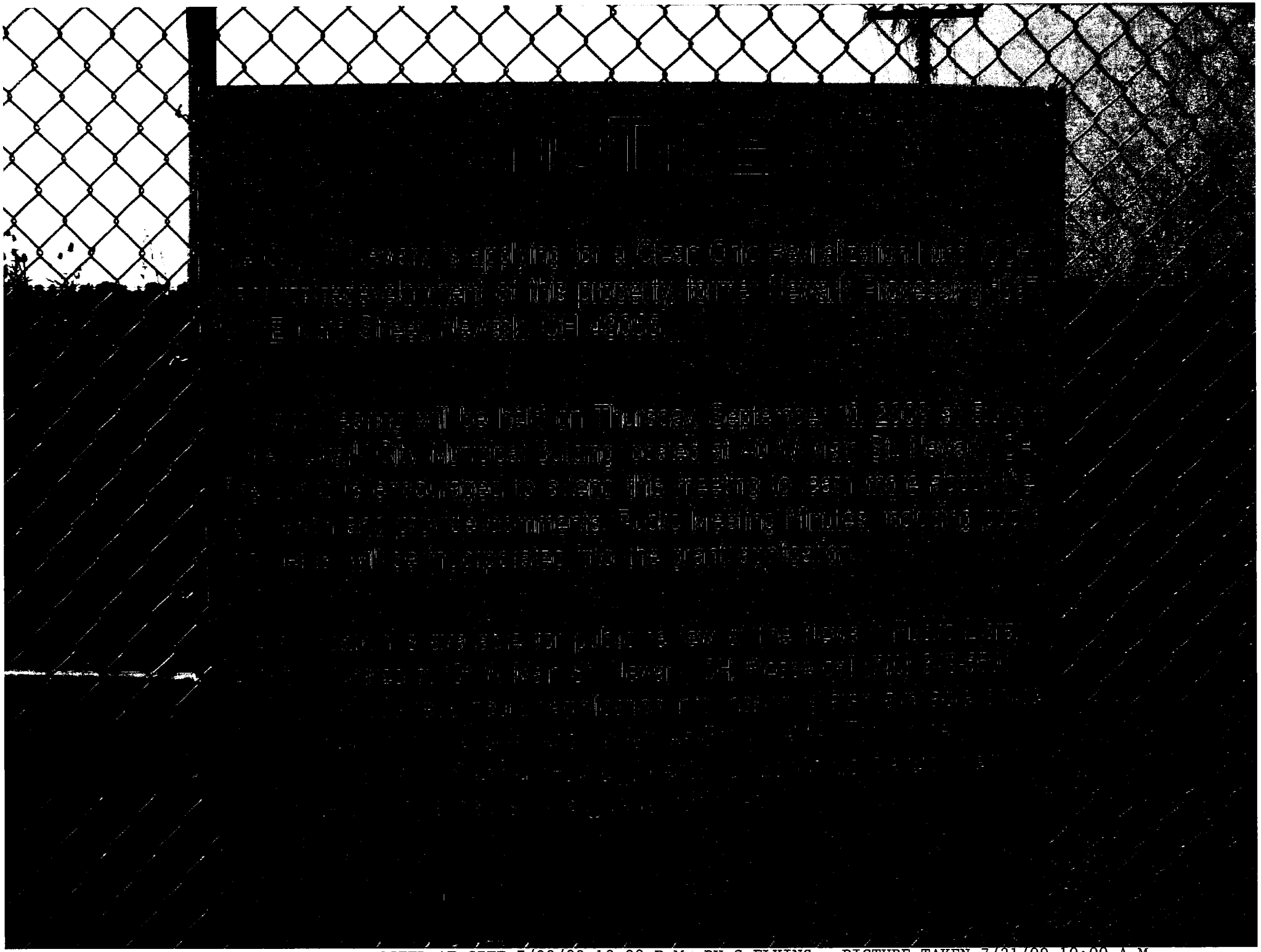
Environmental Improvements and Benefits
After amassing huge piles of the dross, NPC went bankrupt leaving 40 acres with the appearance of a moonscape. The adjacent Licking River is widening by cutting into the dross piles, causing this material to enter the river and be transported downstream. To eliminate this erosion problem, Ohio EPA funded a riverbank stabilization project on the property. CORF funds are requested to demolish several structures, and cap and contain the dross material with 2 feet of clean soil and a geocomposite layer.

Remediation – Readiness to Proceed
Once the Rule 13 authorization is received and grant funding is available, the City of Newark is prepared to authorize completion of the detailed design and bid document preparation. Following expedited contractor selection, construction can begin as early as late autumn 2009.

LEGAL NOTICE
Notice of Public Meeting and
Information Repository for a
Clean Ohio Revitalization Fund Grant

The City of Newark is applying for a grant from to the Clean Ohio Revitalization Fund for redevelopment of property located at 1367-1601 E Main St, Newark, OH. The application is available for review at the Newark Public Library, located at 101 W Main St, Newark, OH until September 11, 2009. A Public Hearing to discuss and solicit comments regarding the grant application will be held on Thursday, September 10, 2009 at 5pm at the Newark City Municipal Building located at 40 W Main St, Newark, OH. Application information is also available online at www.newarkohio.net (Initiatives-Brownfields.) For further information, please contact Stephen Fowler, Director of Economic Development at (740)670-7546 or sfowler@newarkohio.net

(Pub: NADV July 21, '09 #4387966)



POSTED AT SITE 7/20/09 12:30 P.M. BY S ELKINS. PICTURE TAKEN 7/21/09 10:00 A.M.