



STATEMENT OF BASIS

REGION III
ID # PAD 010 466 688

New Castle Rolls, Inc. (a.k.a Xaloy, Inc., former Tanner Plating Division of New Castle Industries, Inc.)
New Castle, Pennsylvania
June 2014

Facility/Unit Type:	Hazardous Waste Treatment, Storage, Disposal Facility
Contaminants:	Chromium in two shallow pits and aquifers
Media:	Groundwater, fill material/soil
Proposed Remedy:	Maintenance of a surface cap and implementation of land and groundwater use restrictions

I. INTRODUCTION

The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis (SB) to solicit public comment on its proposed remedy for the New Castle Rolls Inc. facility (Facility), which is subject to EPA's Corrective Action program under the Solid Waste Disposal Act, as amended, commonly referred to as the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Sections 6901 *et seq.*

EPA is providing a 30-day public comment period on this SB and may modify its proposed remedy based on comments received during this period. EPA will announce its selection of a final remedy for the Facility in a Final Decision and Response to Comments (Final Decision) after the comment period has ended. Information on the Corrective Action program as well as a fact sheet for the Facility can be found by navigating to <http://www.epa.gov/reg3wcmd/correctiveaction.htm>.

The Administrative Record (AR) for the Facility contains all documents on which EPA's proposed remedy is based. See Section IX for information on how you may review the AR.

II. FACILITY BACKGROUND

The approximately 5.2-acre facility is located at 925 Industrial Street, New Castle, PA. The Facility is located in an area zoned M-2 Heavy Industrial on the flood plain of the Shenango River. The manufacturing building on the Facility property is approximately 650 by 78 feet. A small office building is located approximately 100 feet northwest of the manufacturing

building. The office building is currently used for old file storage. A six-foot high chain link fence surrounds the manufacturing building and office building.

New Castle Industries, Inc. (New Castle) operated the Facility as a storage facility under EPA ID number PAD010466688. The Facility manufactured and re-manufactured calendar rolls for the production of plastic sheet products. Current and/or historic roll manufacturing began with receipt of steel tube of specified thickness and diameter. Sandblasting of the outer surface may be required to remove oxide scale. Final fabrication processes include machining the outer tube diameter to specified tolerances followed by chrome plating to provide a hardened surface. The outer chrome plated surface is further machined and polished to customer specifications and tolerances. The chromium plating area is located in the west-central portion of the on-site building. The current system includes three active plating tanks and a floor drain system. New Castle ended its operations at the Facility in August of 1980. The Facility is currently owned and operated by Xaloy, Inc. and is used in the same capacity as when operated by New Castle.

Electroplating operations at the Facility resulted in the release of metals to soil and groundwater. The primary metal of concern in soil and groundwater is chromium. The Facility continues manufacturing and plating operations. An impervious cover/surface cap will be maintained over the plating area inside the building. The adjacent outside area next to the current production building will also have an impervious cover/surface cap. Both surface cap areas will be maintained under an Environmental Covenant implemented pursuant to Pennsylvania Uniform Environmental Covenant Act, 27 Pa.C.S §§ 6501-6517 (UECA) and recorded on the deed to the Facility property. Groundwater usage is restricted by a Municipal ordinance and by the Environmental Covenant.

Soil	<p>A Phase I Environmental Site Assessment (ESA) was completed in 2003. Funding was provided by Tanner Plating, a division of New Castle Industries, Inc., and owned by Ampco Pittsburgh Corporation. This was part of a pre-purchase agreement with Xaloy, Inc. During the site inspection, six solid waste management units (SWMU's) were identified and delineated.</p> <p>As a follow up to the Phase I, a Phase II ESA was completed in July 2003 to collect fill material/soil and groundwater samples from identified areas of recognized environmental concern. Hexavalent chromium, antimony, lead, and arsenic were identified as the contaminants of concern (COCs) in fill material based on Facility operations and historical data.</p> <p>Seventy three borings were advanced throughout the Facility and adjoining properties.</p> <p>The soil sampling results can be found in the Final Report (2012) which is included in the AR.</p>
Groundwater	<p>Groundwater beneath the Facility exists in two shallow aquifers. The first is located seven feet below ground surface (bgs) and the other at 20 feet bgs. In 2009, these aquifers were designated as non-use aquifers by PADEP. No deeper aquifers exist in the vicinity of the Facility.</p> <p>Groundwater investigations were completed by Facility owners beginning in July 2003. Phase 2 subsurface investigation activities at the Facility property included the installation of 21 Geoprobe borings, 12 temporary monitoring wells, and 12 permanent monitoring wells. Wells were designed to characterize both of the plumes, each of which exhibit distinctly different flow patterns.</p> <p>Fate and transport analysis required under Pennsylvania Department of Environmental Protection's (PADEP) Land Recycling and Remediation Standards Act (Act 2) required evaluation of the Facility's groundwater data using the PENTOXSD model to determine if groundwater discharge to the stream meets the applicable surface water quality criteria for the Shenango River Watershed. The model results show that the diffuse flow of chromium concentrations within the shallow and the deep plume do not represent an unacceptable risk to the Shenango River now, or in the foreseeable future.</p> <p>The groundwater sampling results can be found in the Final Report (2012) which is included in the AR.</p>

III. SUMMARY OF ENVIRONMENTAL INVESTIGATIONS

During the environmental investigations, soil concentrations were screened against PADEP Site Specific Standards (SSSs) for industrial soil. EPA has determined that the PADEP SSSs are protective of human health and the environment for individual contaminants at this Facility. Groundwater samples were screened against federal drinking water standards known as Maximum Contaminant Levels (MCLs).

Area	Description
<p>5.2-Acre Facility Parcel (entire facility)</p>	<p>Electroplating operations resulted in the release of metals to soil and groundwater at the Facility. The metals of concern found in soil include hexavalent chromium (0.21 mg/kg - 1400 mg/kg), lead (6.9 mg/kg – 51900 mg/kg), arsenic (3.4 mg/kg – 55.9 mg/kg) and antimony (0.5 mg/kg - 115 mg/kg). The metal of concern in groundwater is chromium found in the range of <200 ug/L – 80,000 ug/L.</p> <p>Remedial investigative findings show groundwater containing dissolved chromium has migrated off the Facility property to the south/southeast under three downgradient industrial properties with concentrations of hexavalent chromium in groundwater (10.2 µg/L in monitoring well 30D and 1200 µg/L in MW-28D) at the farthest property line of the most downgradient property (Resco Products Inc.). In accordance with procedures set forth in Act 2, soil and groundwater analytical data demonstrate that metals concentrations do not represent an unacceptable risk to human health or the environment, under a non-residential (commercial/industrial) land use scenario (i.e., excludes schools, nursing homes, or other residential-style facilities or recreational areas). Fate and transport modeling shows attainment of the Act 2 Site Specific standard through exposure pathway elimination for hexavalent chromium and antimony in fill material/soil and chromium, antimony, and arsenic in groundwater.</p>

Under the Government Performance and Results Act (GPRA), EPA has set national goals to address RCRA corrective action facilities. Under GPRA, EPA evaluates two key environmental clean-up indicators for each facility: (1) Current Human Exposures Under Control and (2) Migration of Contaminated Groundwater Under Control. The Facility met these indicators on April 15, 2014. The environmental indicator determinations are available at www.epa.gov/reg3wcmd/ca/pa.htm.

IV. REMEDIATION

Lead was detected at a concentration of 51,900 mg/kg in one surface fill sampling event (0-2 ft bgs) collected from TB-4 located at the eastern end of the New Castle building, during the Phase II ESA. The Direct Contact Medium Specific Concentrations (MSC) for lead is 1,000 mg/kg and the Soil to Groundwater MSC is 450 mg/kg. Based on these sampling results, and contamination delineation, an area 4 ft x 6ft x 2ft was excavated, with the excavated materials disposed off-site.

An impermeable cap consisting of asphalt and concrete was installed over a 100 foot x 26 foot area outside the current building, in the former ventilation and scrubber system area. In addition a contiguous impermeable cap consisting of concrete was installed over the 50 foot x 60 foot area inside the current building and presently used as the Plating Area.

Groundwater exposure pathway elimination is further limited through the Environmental Covenant that prohibits groundwater usage at the Facility for any purpose and through a New Castle municipal ordinance that prohibits non-potable uses of groundwater at the Facility and the adjoining sites listed in the M-2 Heavy Industrial Zoning District of the Seventh Ward.

A UECA Waiver Request was submitted to PADEP in a letter dated May 20, 2010 pertaining to off-site, downgradient properties. PADEP approved the UECA Waiver Request on August 5, 2010. In addition, PADEP has approved a Non-Use Aquifer Determination for the adjacent and downgradient RESCO Products property (formerly New Castle Refractories, Inc. and Dixon Ticonderoga) in a letter dated October 1, 2009.

V. CORRECTIVE ACTION OBJECTIVES

Corrective Action Objectives:

1. Soils

EPA has determined that the PADEP SSSs calculated for soils are protective of human health and the environment for individual contaminants at this Facility provided that the Facility is not used for residential purposes. Therefore, EPA's Corrective Action Objective for the Facility soils is to attain the applicable SSSs and maintain long term control of exposure to soils by requiring the compliance with and maintenance of land use restrictions at the Facility.

2. Groundwater

EPA expects final remedies to return groundwater to its maximum beneficial use within a timeframe that is reasonable given the particular circumstances of the project. For projects where aquifers are either currently used for water supply or have the potential to be used for water supply, EPA will use the National Primary Drinking Water Standard Maximum Contaminant Levels promulgated pursuant to Section 42 U.S.C. §§ 300f et seq. of the Safe Drinking Water Act and codified at 40 C.F.R. Part 141.

PADEP has designated the aquifer under the Facility as a non-use aquifer, therefore, EPA has determined that maximum beneficial use of the shallow groundwater at the Facility is recharge flow to the Shenango River. The standard in this proposed remedy is the cleanup levels established by PADEP's PENTOXSD Single Discharge Wasteload Allocation Program to protect the Shenango River from groundwater discharging from the Facility.

EPA's corrective action objective for Facility-related groundwater is to prevent recharge flow to the Shenango River at levels above acceptable PENTOXSD levels and to control human exposure to the hazardous constituents remaining in the groundwater by requiring compliance with and maintenance of groundwater use restrictions at the Facility.

VI. PROPOSED REMEDY

EPA's proposed remedy for the Facility is the continued maintenance of the concrete and asphalt caps in accordance with the PADEP-approved Post-Remedial Care Plan in the Final Report and the implementation of and compliance with land and groundwater use restrictions to minimize the potential for human exposure to contamination and protect the integrity of the final remedy.

Environmental Covenants are required under Pennsylvania Law for remediated facilities that require land use restrictions and are being relied upon by EPA's Corrective Action program to implement the proposed remedy. PADEP has approved an Environmental Covenant prepared under UECA which sets forth the following land and groundwater use restrictions and inspection requirements:

1. Restrict Facility property to non-residential use
2. Inspect and maintain concrete and asphalt caps and provide written notification annually to PADEP upon completion of inspection
3. Future building renovations at the Facility property must utilize slab-on-grade construction. No structures will extend to a depth below the seasonal high water table.
4. Prohibit installation of water supply wells on the Facility property and groundwater use for any purpose.

The Facility owner recorded the Environmental Covenant for the Facility with the County of Lawrence Recorder of Deeds on June 4, 2012. The Facility owner also has responsibility for the continued implementation of its Post-Remedial Care Plan.

VII. EVALUATION OF PROPOSED REMEDY

Threshold Criteria	Evaluation
1) Protect human health and the environment	Groundwater and soil exposures have been reduced to below risk based levels in accordance with PADEP and EPA guidance. Since current and anticipated future land use is non-residential, land use restrictions have been implemented at the Facility to restrict future property use to ensure that human health and the environment will remain protected.
2) Achieve media cleanup objectives	EPA's proposed remedy meets the appropriate objectives based on assumptions regarding current and reasonably anticipated future land and groundwater uses. The anticipated land use for the Facility is non-residential. The facility has removed the sources of releases to the extent practical. The surface cap and proposed land and groundwater use restrictions will control potential direct contact risks.
3) Remediating the Source of Releases	In all proposed remedy decisions, EPA seeks to eliminate or reduce further releases of hazardous wastes or hazardous constituents that may pose a threat to human health and the environment. The facility has removed the sources of releases to the extent practical. Therefore, EPA has determined that this criterion has been met.

Balancing Criteria	Evaluation
1) Long-Term Effectiveness	The proposed remedy will maintain protection of human health and the environment over time by controlling exposure to the hazardous constituents remaining in soil and groundwater. EPA's proposed remedy requires compliance with maintenance of the land and groundwater use restrictions which are contained in the environmental covenant that has already been placed on the title to the Facility property.
2) Reduction of Toxicity, Mobility, or Volume of Hazardous Waste	The reduction of toxicity, mobility and volume of hazardous constituents at the Facility has already been achieved by the removal and/or capping of areas at the Facility that have high levels of contaminants. In addition, exposure to hazardous constituents remaining in the groundwater is controlled by requiring the implementation of groundwater use restrictions and the continued implementation of the Facility Post-Remedial Care Plan set forth in

	<p>the Environmental Covenant. Groundwater quality has improved over time as disposal areas have been capped to prevent infiltration of product and rainwater through the historic fill and into the aquifer.</p>
3) Short-Term Effectiveness	<p>EPA's proposed remedy does not involve any activities, such as construction or excavation that would pose short-term risks to workers, residents, or the environment.</p>
4) Implementability	<p>The components of EPA's proposed remedy have already been implemented. Under PADEP oversight, the concrete and asphalt caps were installed and have been maintained. PADEP has also imposed land and groundwater use restrictions that minimize the potential for human exposure to contamination and protect the integrity of the caps.</p>
5) Cost	<p>The capital costs associated with the installation of the existing cap, along with the groundwater and surface water monitoring have already been incurred. The costs associated with maintaining the existing cap and the land and groundwater use restrictions are estimated to be less than \$1000 per year. Therefore, EPA's proposed remedy is cost effective.</p>
6) Community Acceptance	<p>EPA will evaluate community acceptance based on comments received during the public comment period, and will address any comments in the Final Decision.</p>
7) State/Support Agency Acceptance	<p>EPA is proposing that the remedy approved by PADEP is sufficient to protect human health and the environment. EPA is endorsing this approach, subject to public comment.</p>

VIII. FINANCIAL ASSURANCE

EPA has evaluated whether financial assurance for corrective action is necessary to implement the proposed remedy at the former New Castle Industries facility. Because the costs associated with maintaining the existing cap and the land and groundwater use restrictions are estimated to be less than \$1000 per year, EPA is proposing that financial assurance not be required.

IX. PUBLIC PARTICIPATION

Interested persons are invited to comment on EPA's proposed. The public comment period will last thirty calendar days from the date that notice is published in a local newspaper. Comments may be submitted by mail, fax, e-mail, or phone to Mr. Grant Dufficy, at the address listed below.

A public meeting will be held upon request. Requests for a public meeting should be made to Mr. Grant Dufficy at the address listed below. A meeting will not be scheduled unless one is requested.

The Administrative Record contains all the information considered by EPA for the proposed remedy at this Facility. The Administrative Record is available at the following location[s]:

U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103
Contact: Mr. Grant Dufficy (3LC30)
Phone: (215) 814-3455
Fax: (215) 814 - 3113
Email: dufficy.grant@epa.gov

Date: 7.15.14



John A. Armstead, Director
Land and Chemicals Division
US EPA, Region III

IX. INDEX TO ADMINISTRATIVE RECORD

- Environmental Priorities Initiative Preliminary Assessment of New Castle Industries, Incorporated, Tanner Plating Division for USEPA, prepared by NUS Corporation July 31, 1990
- Phase I ESA - Site Contamination Assessment Report ENVIRON International Corporation, June, 2003
- Phase II ESA - Site Contamination Assessment Report ENVIRON International Corporation, July 2003
- Environmental Indicator Inspection Report for New Castle Industries, Incorporated, Tanner Plating, Division December 2003
- Municipal Ordinance, ordained and enacted by the Council of the City New Castle, Pennsylvania, Part Eleven – Health and Sanitation Code, of the Codified Ordinances of the City of New Castle, Pennsylvania - Title Five, Article 1160, adopted by City Council on February 11, 2010, and approved by the Mayor on February 12, 2010
- Final PADEP Municipal Ordinance EC Waiver letter, May 20, 2010
- PADEP Remedial Investigation Report (ACT 2 Report) - Final Report, February 14, 2012 Volume I and II
- Former Tanner Plating Property Environmental Covenant, including Activity and Use Plan, Recorded in Lawrence County on June 4, 2012
- Request for Waiver of Environmental Covenants, submitted to PADEP, dated May 20, 2010, pertaining to off-site, downgradient properties
- Non-Use Aquifer Determination for adjacent and downgradient RESCO Products property (formerly New Castle Refractories, Inc. and Dixon Ticonderoga), from PADEP dated October 1, 2009