

ENVIRONMENTAL COVENANT

This is an environmental covenant executed pursuant to the Uniform Environmental Covenants Act, West Virginia Code Chapter 22, Article 22B, to restrict the activities on, and uses of, the following described property:

Century Aluminum of West Virginia, Inc. (CAWV), Ravenswood Facility. The Industrial Portion of the property consists of approximately 312 acres (as defined on the Potesta Map dated July 11, 2016 and on the 312 Acre Century Industrial Plant Site Description, both at Attachment A) identified as the "Industrial Portion" as determined by the U.S. Environmental Protection Agency (see USEPA letter dated October 14, 1999 at Attachment B) upon which the CAWV primary aluminum reduction facility is located.

Six specific Parcels, five of which are within the boundary of the Industrial Portion of the property (Areas 1, 2, 3, 5a, and 13) and the sixth (Area 7) contained within the property boundary of Constellium property, are separately identified and bear specific environmental restrictions. These Parcels (as defined on the Potesta Map dated November 10, 2015 and Six Survey Descriptions, all at Attachment C) are identified as Areas 1, 2, 3, 5a, 7 (within the Constellium Property boundary), and 13.

Activities on and uses of the above-described property that may result in excessive human exposure or in the release of a contaminant that was contained as part of the remedial action related to this covenant are prohibited. Those activities and uses include, but are not limited to:

Property (312 acre Industrial Portion):

- *Non-residential Use – Use of the property for any purpose other than as nonresidential property as defined by the West Virginia Voluntary Remediation and Redevelopment Act (W. Va. Code §22-22-2(q)).*
- *Engineering controls – Integrity of the existing security fence around the property shall be maintained and kept in good condition to prevent trespassing on the property.*
- *Groundwater Use Restriction – Extraction of groundwater on the property for any use except for ground water monitoring and/or remediation.*

Areas 1, 2, 3, 5a, 13 (within the 312 acre Industrial Portion):

- *Materials Management Plan – Activities on and uses of the six Parcels are subject to the Materials Management Plan documented at Section 3.3 in the TCR Corrective Measures Implementation (CMI) Plan dated September 2013, Revised October 2013 (the Materials Management Plan is included at Attachment D).*

- *Excavation Restriction – Excavation, drilling or penetration on specified portions of the property unless such excavation, drilling or penetration is conducted by the owner or its contractor who is qualified and knowledgeable about releases and exposures to contaminants known to exist at the property. The owner will be required to perform the work in accordance with a Health and Safety Plan and the Materials Management Plan specific to the property and developed by a Licensed Remediation Specialist or similarly qualified individual. The owner will also be required to remediate any disturbed area of the property in a manner which assures that an equivalent amount of engineering control of the property is achieved at the conclusion of the work. The owner shall provide written notice to the holder(s), the Secretary of the West Virginia Department of Environmental Protection and the U.S. Environmental Protection Agency, Region III of the intent to conduct such work.*

The following additional restriction applies to Area 13:

- *Engineering Controls - Security fencing, video monitoring, and signage must be maintained to prevent trespassing onto the Parcel.*

Area 7:

- *Non-residential Use – Use of the property for any purpose other than as nonresidential property as defined by the West Virginia Voluntary Remediation and Redevelopment Act (W. Va. Code §22-22-2(q)).*
- *Engineering Controls - Soil and vegetative cover shall be maintained, and monitored to ensure its integrity. This includes but is not limited to, keeping the area free of debris that may damage the cover, ensuring vegetation such as trees or bushes are removed before root systems can compromise the cover, and occasional mowing of the area to afford proper inspection.*
- *Groundwater Use Restriction – Extraction of groundwater on the Parcels for any use except for ground water monitoring and/or remediation.*
- *Materials Management Plan – Activities on and uses of the six Parcels are subject to the Materials Management Plan documented at Section 3.3 in the TCR Corrective Measures Implementation (CMI) Plan dated September 2013, Revised October 2013 (the Materials Management Plan is included at Attachment D).*
- *Excavation Restriction – Excavation, drilling or penetration on specified portions of the property unless such excavation, drilling or penetration is conducted by the owner or its contractor who is qualified and knowledgeable about releases and exposures to contaminants known to exist at the property. The owner will be required to perform the work in accordance with a Health and Safety Plan and the Materials Management Plan specific to the property and*

developed by a Licensed Remediation Specialist or similarly qualified individual. The owner will also be required to remediate any disturbed area of the property in a manner which assures that an equivalent amount of engineering control of the property is achieved at the conclusion of the work. The owner shall provide written notice to the holder(s), Secretary of the West Virginia Department of Environmental Protection and the U.S. Environmental Protection Agency, Region III of the intent to conduct such work.

The current owner of record of the property, and its contact information is:

Century Aluminum of West Virginia, Inc.
Attn: Site Manager
State Route 2
P.O. Box 98
Ravenswood, West Virginia 26164

The following entity is the holder of this covenant:

Century Aluminum of West Virginia, Inc.
Attn: Erich Squire
One South Wacker Drive, Suite 1000
Chicago, Illinois 60606

The facts regarding the remediation response project at this property are:

The property has been in use as a primary aluminum reduction facility since 1957. Industrial activities associated with primary aluminum production have resulted in solid waste management units on the property that were investigated through the U.S. Environmental Protection Agency, Region III and the corrective action program under the Resource Recovery and Conservation Act (RCRA). The main constituents of interest relating to primary aluminum reduction include cyanide and fluoride from spent potliner management and polycyclic aromatic hydrocarbons (PAHs) from production of carbon anodes using solid pitch. Other constituents of interest at the site that exceeded risk-based cleanup targets for residential land use include arsenic, cadmium, chromium, mercury and polychlorinated biphenyls. Potential exposure pathways are groundwater and surface and subsurface soil. The groundwater potential exposure pathway is eliminated by the restriction on use of the site's groundwater. The human health risk assessment for the soil exposure pathways considered nonresident, future industrial or

construction worker potential exposure, and was deemed within acceptable risk for nonresidential use.

The owner(s) of the property shall provide written notice to the holder, the Secretary of the West Virginia Department of Environmental Protection, and the U.S. Environmental Protection Agency, Region III (EPA Region III) within 10 days following transfer of a specified interest in the property subject to this covenant, changes in use of the property, application for building permits regarding the property, or proposals for any site work affecting the contamination on the property.

The owner(s), shall conduct inspections of the property to monitor compliance with this covenant at least *every one hundred eighty (180) calendar days*, and shall submit two (2) signed copies of the inspection monitoring report to WVDEP, DLR headquarters in Charleston, WV, and EPA Region III within thirty (30) days of the inspection.

This covenant shall not be amended, modified or terminated except by written instrument executed in accordance with the W.Va. Code § 22-22B-9, or § 22-22B-10, by and between the owner(s) at the time of the proposed amendment, modification or termination, the Secretary of the WVDEP; EPA Region III; the holder of this covenant. Additionally, the then current owner(s) of the property shall provide the Secretary of WVDEP and EPA Region III written notice of the pendency of any proceeding or any proceeding that could lead to a foreclosure, as referred to in W. Va. Code §22-22B-9(a)(4), within seven (7) days of the owner's receiving notice of the pendency of such proceedings. Within five (5) days of executing an amendment, modification or termination of this environmental covenant, the owner shall record such amendment, modification or termination with the Clerk of the County Commission, and within five (5) calendar days thereafter, the owner shall provide a true copy of the recorded amendment, modification or termination to the Secretary of WVDEP.

The administrative record for the environmental response project reflected in this covenant is maintained in the United States Environmental Protection Agency, 1650 Arch Street, Philadelphia, Pennsylvania 19103 and is entitled:

U.S. EPA Docket Number: RCRA-03-2012-0115CA.

WVDEP and EPA Region III are granted full right of access to the Property for the purpose of implementation or enforcement of this covenant.

Pursuant to W.Va. Code §22-22B-11(a), a civil action for injunctive or other equitable relief for violating this covenant may be maintained by EPA.

All restrictions and other requirements described in this environmental covenant shall run with the land and shall be binding upon all holders and the current owner and their grantees, lessees, authorized agents, employees or persons acting under their direction or control.

IN WITNESS WHEREOF, the following holder has executed this covenant on the dates indicated.

Century Aluminum of West Virginia, Inc.

Printed Name: CAWV, Inc., by Erich Squire

Title: Vice President



Signature

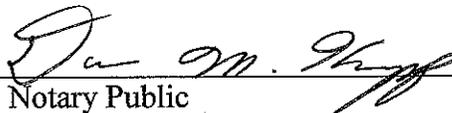
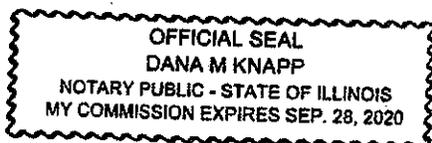
11/29/2016

Date

I, Dana M. Knapp, a Notary Public in and for the County of Cook, State of Illinois, do hereby certify that the holder(s) whose name is signed above, this day executed this document in my presence or this day acknowledged same to be true act and deed of said holder(s).

Given under my hand this the 29th day of November, 2016.

My commission expires 9/28/2020.



Notary Public

West Virginia Department of Environmental Protection

Printed Name: Patricia A. Hickman

Title: Director, Division of Land Restoration

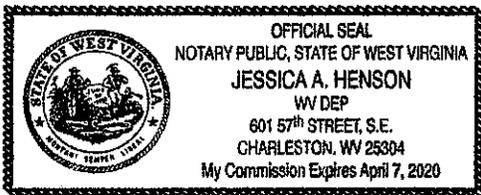
Patricia A. Hickman
Signature

12-2-16
Date

I, Jessica A. Henson, a Notary Public in and for the County of Kanawha, State of West Virginia, do hereby certify that Patricia A. Hickman, whose name is signed above as the representative of the agency, this day executed this document in my presence or this day acknowledged same to be true act and deed of said holder(s).

Given under my hand this the 2nd day of December, 2016.

My commission expires April 7, 2020.



Jessica A. Henson
Notary Public

The clerk will return the recorded document to:

Ms. Patty Hickman, Director
WVDEP, DLR
601 57th Street
Charleston, West Virginia 25304

Attachments A through D on following pages.

Environmental Covenant - Attachment A

- Land Use Map of 312 Acre Century Industrial Plant Site by Potesta dated July 11, 2016
- 312 Acre Century Industrial Plant Site Survey Description

Environmental Covenant - Attachment B

- U. S. Environmental Protection Agency Letter dated October 14, 1999

Environmental Covenant - Attachment C

- Land Use Map by Potesta dated November 10, 2015
- Six Survey Descriptions: Area 1, Area 2, Area 3, Area 5a, Area 7, Area 13

Environmental Covenant - Attachment D

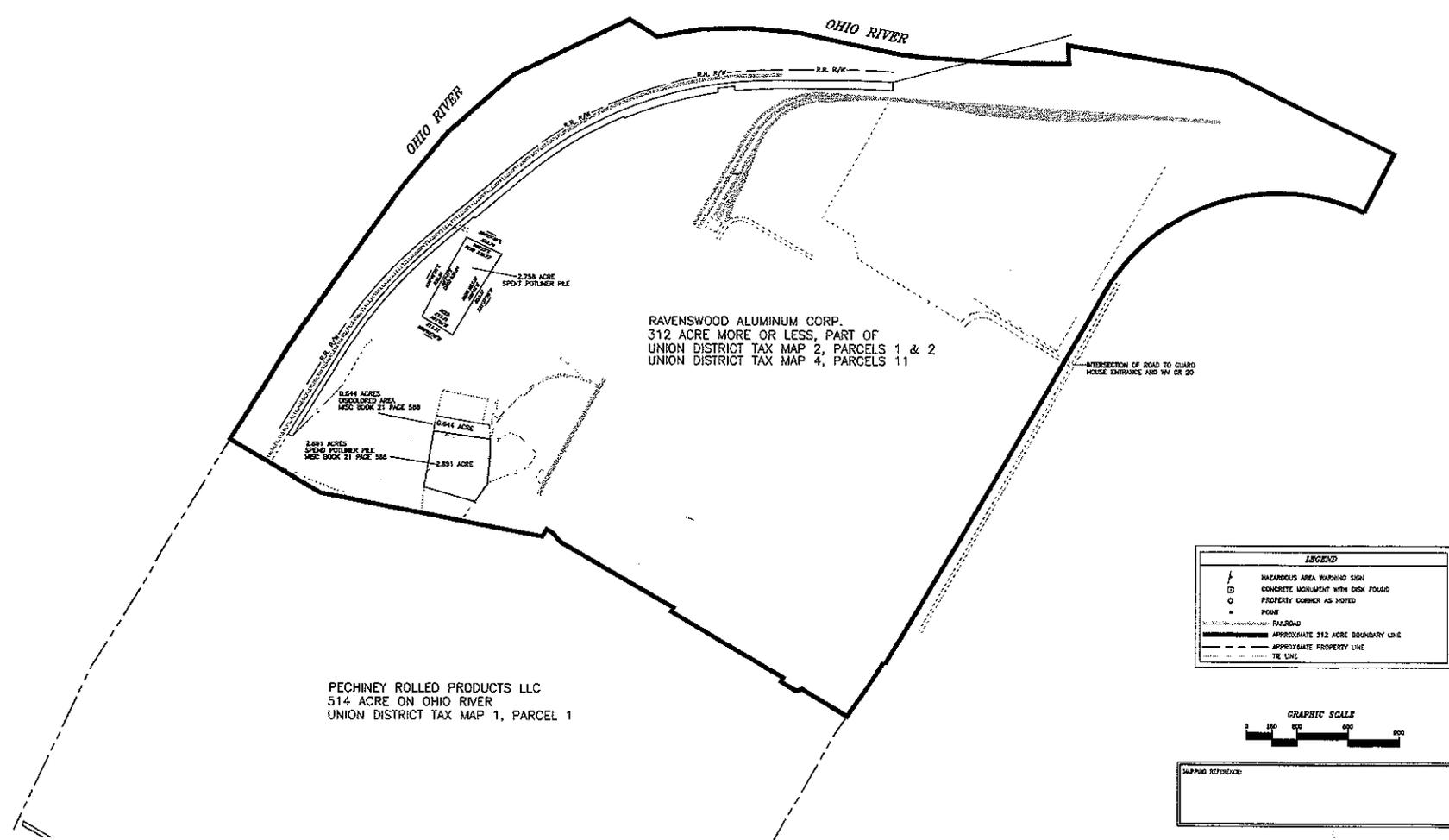
- Material Management Plan (Section 3.3 of CMI Plan dated September 2013, Revised October 2013).

Environmental Covenant – Attachment A

- Land Use Map of 312 Acre Century Industrial Plant Site by Potesta dated July 11, 2016
- 312 Acre Century Industrial Plant Site Survey Description

MAP SHOWING
THE APPROXIMATE LOCATION OF THE
312 ACRE CENTURY INDUSTRIAL PLANT SITE
SITUATE ALONG COUNTY ROUTE 20
UNION DISTRICT, TAX MAPS 1, 2 & 4
JACKSON COUNTY, WEST VIRGINIA
SCALE: 1"=200' DATE: JULY 11, 2015

No.	Date	Revision

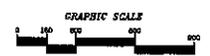


RAVENSWOOD ALUMINUM CORP.
 312 ACRE MORE OR LESS, PART OF
 UNION DISTRICT TAX MAP 2, PARCELS 1 & 2
 UNION DISTRICT TAX MAP 4, PARCELS 11

PECHINEY ROLLED PRODUCTS LLC
 514 ACRE ON OHIO RIVER
 UNION DISTRICT TAX MAP 1, PARCEL 1

LEGEND

	HAZARDOUS AREA WARNING SIGN
	CONCRETE MONUMENT WITH DISK FOUND
	PROPERTY CORNER AS SHOWN
	POINT
	RAILROAD
	APPROXIMATE 312 ACRE BOUNDARY LINE
	APPROXIMATE PROPERTY LINE
	TIE LINE



NOTHING REPRODUCED

15-0400
CAD File No.
Drawn
Checked
Approved
NOTED
DATE
17-11-18
Date
15-0400
Project No.

POTESTA & ASSOCIATES, INC.
 ENGINEERS, ARCHITECTS, SURVEYORS
 1000 WEST VIRGINIA AVENUE, SUITE 200
 MARTINSBURG, WV 26151
 TEL: (304) 841-1400 FAX: (304) 841-1071
 E-MAIL: info@potesta.com potesta.com

POTESTA

ISSUE DATE 07/11/16
 CENTURY ALUMINUM
 RAVENSWOOD
 WEST VIRGINIA

CENTURY ALUMINUM PLANT SITE
 APPROX- 312 ACRE INDUSTRIAL SITE
 JACKSON CO., WEST VIRGINIA

312 ACRES MORE OR LESS RESERVATION

A tract of land situate in Union District of Jackson County, West Virginia, lying along the southern boundary of the Ohio River and along the northern right of way line of Jackson County Route 20, being more particularly described as follows;

Beginning at a point on the northern right of way line of Jackson County Route 20, which has an approximate latitude of 38.932047 and a longitude of 81.822023, said point is the property corner to the Pechiney Rolled Products tract, found on record as being tax parcel 1, of Map 1 in Union District, and the subject tract now or formerly Ravenswood Aluminum 312 acres more or less, which is a combination of tax parcels 1 and 2, of tax map 2, and tax parcel 11, of tax map 4 all of Union District, Jackson County, thence leaving the right of way line of said road,

Running in a northerly direction with the property line of both tracts, to a point at the low water mark of the Ohio River, having an approximate latitude of 38.936316 and longitude of 81.834677, thence leaving the property line of the Pechiney Rolled Products tract,

Up river with the low water mark of Ohio River in a northern direction to a point at the northeastern corner of said tract, to a point that has an approximate latitude of 38.941133 and a longitude of 81.810585, thence leaving the river and running in a southern direction,

To a point in the northern right of way line of Jackson County Route 20, which has an approximate latitude of 38.932047, and a longitude of 81.811042, thence running in a southwest direction along the northern right of way line of said road, to the place of beginning, being a description of a 312 acre more or less tract, for reservation, said description does not represent an actual boundary survey.

There are two tracts of land lying within the 11.42 acre "AREA 3" of the 312 acre reservation, that are to be excluded and not made part of said survey description, and are shown as follows;

A 0.644 acre tract named "Discolored Puddle Area", that is described in Miscellaneous Book 21 at Page 588, and is described as follows:

That certain lot or parcel of land situate in Union District, Jackson County, West Virginia, and being more particularly bounded and described as follows: Beginning at 1/2" rebar found at Ravenswood Works coordinates S-5837.66', E-3020.75', said rebar being the northeasterly corner of a 2,891 acre parcel previously retained and reserved by Kaiser Aluminum and Chemical Corporation in deed recorded in Deed Book 284, page 48; thence along the northerly division line of said 2,891 acre parcel, N. 83° 55' 00" W, for a distance of 337.04 feet to a 1/2" iron rebar found at Ravenswood Works coordinates S-5966.6', E-2709.38'; thence leaving said 2,891 acre parcel and forming lines through and severing the lands of which tire herein described 0,644 acre is a part, currently owned by Century Aluminum of West Virginia, Inc. (Deed Book 284, page 48) for the following three (3) bearings and distances: N08° 01' 00" E. 91.62 feet to a 1/2" iron rebar set; S.81° 49' 14" E. 318.31 feet to a 1/2" iron rebar set; S,

05° 07' 00" E. 81.50 feet to the point of beginning, containing 28,054 square feet or 0.644 acres, more or less.

The second tract containing 2.891 acres tract named "Spend Potliner Pile", that is described in Miscellaneous Book 21 at Page 588, and is described as follows:

Beginning at a point, said point having coordinates of S-5893.13, E-3057.74; Thence S 3 deg. 56 min. W for a distance of 199.81 feet to a point, said point having coordinates of 3-6074:73, E-3141.08; Thence S 33 deg., 08 min. W for a distance of 129.70 feet to a point; said point having coordinates of S-6204.02, E-3130.78; Thence N 75 deg, 05 min. W for a distance of 313,48 feet to a point, said point having coordinates of S-6278.13, E- 2826.19; Thence N 8 deg. 02 min. E for a distance of 332.66 feet to a point; said point having coordinates of S-5966.66, E-2709.38; Thence S 83 deg, 55 min. E for a distance of 337.04 feet to a point; said point having coordinates of S-5837.66, E-3020.75; Thence S 5 deg. 07 min. E for a distance of 66.67 feet to the place of beginning, containing 2.891 acres, more or less, as shown upon that certain Ravenswood Aluminum drawing BF-238- RW rev. 1, reference is hereby made to said drawing for a more complete description of the tract herein described, All references to "grid system" are to the Kaiser Aluminum & Chemical Corporation Ravenswood Works Coordinate System as depicted on Drawing No. RSK-190 "Aluminum Plant Control Monuments" revision March, 1956

Environmental Covenant – Attachment B

- U.S. Environmental Protection Agency Letter dated October 12, 1999



500-002-118-09

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

October 14, 1999

Mr. Gail Graban
Manager of Environmental Affairs
Century Aluminum of West Virginia, Inc.
P.O. Box 98
Ravenswood, West Virginia 26164

Re: Century Aluminum Future Land Use Letter, dated March 5, 1998
Administrative Order No. RCRA-III-069-CA

Dear Gail,

As you are aware, EPA held a thirty (30) day public comment period in May/June 1998 on the future land use of the approximately 300 acres of Century property currently being used for industrial purposes. In Century's letter dated March 5, 1998, Century provided EPA with documentation supporting their position that the reasonably anticipated future land use should remain industrial. The referenced letter was included in the administrative file for this public comment. EPA's policy is that current and reasonable expected future land use and corresponding human and environmental exposure scenarios should be considered in both selection and timing of remedial actions.

There were no public comments received by EPA on the future land use notice. For the purposes of completing the RCRA Facility Investigation Final Report, Century may assume the reasonably anticipated future land use to be industrial in developing human and environmental exposures scenarios. An industrial land use determination does not apply to groundwater or to the transfer of contaminants from soil to groundwater.

If you have any questions, please feel free to contact me at 215-814-3435.

Sincerely,

A handwritten signature in cursive script that reads "Michael A. Jacobi".

Michael A. Jacobi
General Operations Branch (3WC23)

cc: Robert Greaves (3WC23),
S. Pontiveros (WVDEP),
Naresh Shah (WVDEP)

Environmental Covenant – Attachment C

- Land Use Map by Potesta dated November 10, 2015
- Six Survey Descriptions: Area 1, Area 2, Area 3, Area 5a, Area 7, Area 13

PLAT OF SURVEY
SHOWING SIX AREAS TO BE RESERVED
ON THE CENTURY ALUMINUM PLANT SITE
SITUATE ALONG COUNTY ROUTE 20
UNION DISTRICT, TAX MAPS 1, 2 & 4
JACKSON COUNTY, WEST VIRGINIA
SCALE: 1"=200' DATE: NOVEMBER 10, 2015

No.	Date	Revision

15-0400
 000 Title No.
 JLC
 Drawn
 ERS
 Checked
 JMD
 Approved
 NOTED
 Scored
 11-10-15
 Date
 15-0400
 1750001 Job No.

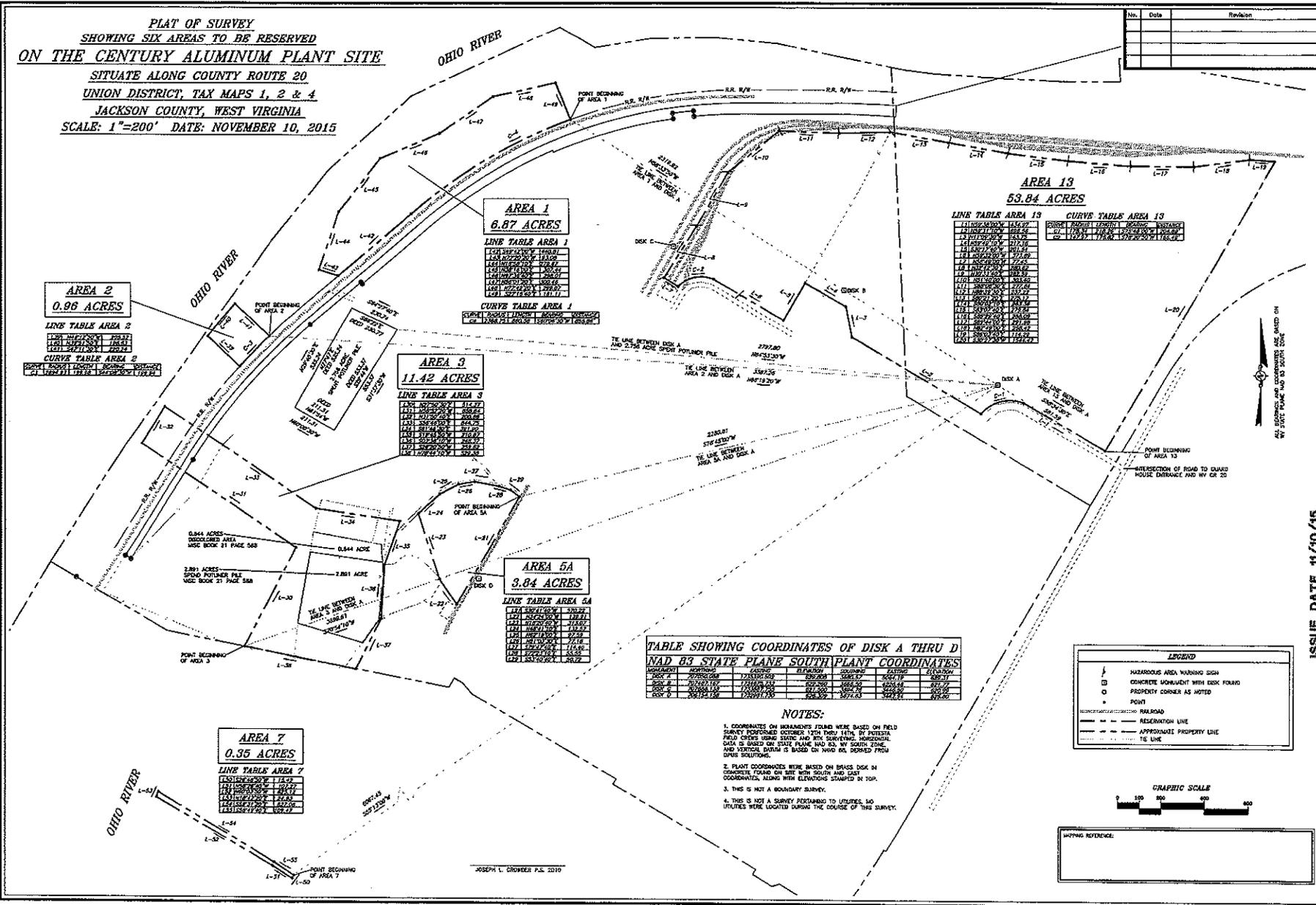
POTESTA & ASSOCIATES, INC.
 1000 WEST MAIN STREET, SUITE 100
 JACKSONVILLE, FLORIDA 32202
 TEL: (904) 344-4400 FAX: (904) 344-0001
 www.potesta.com potestainc.com

POTESTA

CENTURY ALUMINUM
 BAVENWOOD
 WEST VIRGINIA

CENTURY ALUMINUM PLANT SITE
 SIX AREAS OF RESERVATION
 JACKSON CO., WEST VIRGINIA

01
 Drawing No.



AREA 1
6.87 ACRES

LINE TABLE AREA 1

LINE NO.	START POINT	END POINT	LENGTH
L-41	1041.522100	1041.522100	0.00
L-42	1041.522100	1041.522100	0.00
L-43	1041.522100	1041.522100	0.00
L-44	1041.522100	1041.522100	0.00
L-45	1041.522100	1041.522100	0.00
L-46	1041.522100	1041.522100	0.00
L-47	1041.522100	1041.522100	0.00
L-48	1041.522100	1041.522100	0.00
L-49	1041.522100	1041.522100	0.00
L-50	1041.522100	1041.522100	0.00
L-51	1041.522100	1041.522100	0.00
L-52	1041.522100	1041.522100	0.00
L-53	1041.522100	1041.522100	0.00
L-54	1041.522100	1041.522100	0.00
L-55	1041.522100	1041.522100	0.00
L-56	1041.522100	1041.522100	0.00
L-57	1041.522100	1041.522100	0.00
L-58	1041.522100	1041.522100	0.00
L-59	1041.522100	1041.522100	0.00
L-60	1041.522100	1041.522100	0.00
L-61	1041.522100	1041.522100	0.00
L-62	1041.522100	1041.522100	0.00
L-63	1041.522100	1041.522100	0.00
L-64	1041.522100	1041.522100	0.00
L-65	1041.522100	1041.522100	0.00
L-66	1041.522100	1041.522100	0.00
L-67	1041.522100	1041.522100	0.00
L-68	1041.522100	1041.522100	0.00
L-69	1041.522100	1041.522100	0.00
L-70	1041.522100	1041.522100	0.00
L-71	1041.522100	1041.522100	0.00
L-72	1041.522100	1041.522100	0.00
L-73	1041.522100	1041.522100	0.00
L-74	1041.522100	1041.522100	0.00
L-75	1041.522100	1041.522100	0.00
L-76	1041.522100	1041.522100	0.00
L-77	1041.522100	1041.522100	0.00
L-78	1041.522100	1041.522100	0.00
L-79	1041.522100	1041.522100	0.00
L-80	1041.522100	1041.522100	0.00
L-81	1041.522100	1041.522100	0.00
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L-83	1041.522100	1041.522100	0.00
L-84	1041.522100	1041.522100	0.00
L-85	1041.522100	1041.522100	0.00
L-86	1041.522100	1041.522100	0.00
L-87	1041.522100	1041.522100	0.00
L-88	1041.522100	1041.522100	0.00
L-89	1041.522100	1041.522100	0.00
L-90	1041.522100	1041.522100	0.00
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L-93	1041.522100	1041.522100	0.00
L-94	1041.522100	1041.522100	0.00
L-95	1041.522100	1041.522100	0.00
L-96	1041.522100	1041.522100	0.00
L-97	1041.522100	1041.522100	0.00
L-98	1041.522100	1041.522100	0.00
L-99	1041.522100	1041.522100	0.00
L-100	1041.522100	1041.522100	0.00

CURVE TABLE AREA 1

DISK	START POINT	END POINT	LENGTH
DISK A	1041.522100	1041.522100	0.00
DISK B	1041.522100	1041.522100	0.00
DISK C	1041.522100	1041.522100	0.00
DISK D	1041.522100	1041.522100	0.00

AREA 3
11.42 ACRES

LINE TABLE AREA 3

LINE NO.	START POINT	END POINT	LENGTH
L-101	1041.522100	1041.522100	0.00
L-102	1041.522100	1041.522100	0.00
L-103	1041.522100	1041.522100	0.00
L-104	1041.522100	1041.522100	0.00
L-105	1041.522100	1041.522100	0.00
L-106	1041.522100	1041.522100	0.00
L-107	1041.522100	1041.522100	0.00
L-108	1041.522100	1041.522100	0.00
L-109	1041.522100	1041.522100	0.00
L-110	1041.522100	1041.522100	0.00
L-111	1041.522100	1041.522100	0.00
L-112	1041.522100	1041.522100	0.00
L-113	1041.522100	1041.522100	0.00
L-114	1041.522100	1041.522100	0.00
L-115	1041.522100	1041.522100	0.00
L-116	1041.522100	1041.522100	0.00
L-117	1041.522100	1041.522100	0.00
L-118	1041.522100	1041.522100	0.00
L-119	1041.522100	1041.522100	0.00
L-120	1041.522100	1041.522100	0.00
L-121	1041.522100	1041.522100	0.00
L-122	1041.522100	1041.522100	0.00
L-123	1041.522100	1041.522100	0.00
L-124	1041.522100	1041.522100	0.00
L-125	1041.522100	1041.522100	0.00
L-126	1041.522100	1041.522100	0.00
L-127	1041.522100	1041.522100	0.00
L-128	1041.522100	1041.522100	0.00
L-129	1041.522100	1041.522100	0.00
L-130	1041.522100	1041.522100	0.00
L-131	1041.522100	1041.522100	0.00
L-132	1041.522100	1041.522100	0.00
L-133	1041.522100	1041.522100	0.00
L-134	1041.522100	1041.522100	0.00
L-135	1041.522100	1041.522100	0.00
L-136	1041.522100	1041.522100	0.00
L-137	1041.522100	1041.522100	0.00
L-138	1041.522100	1041.522100	0.00
L-139	1041.522100	1041.522100	0.00
L-140	1041.522100	1041.522100	0.00
L-141	1041.522100	1041.522100	0.00
L-142	1041.522100	1041.522100	0.00
L-143	1041.522100	1041.522100	0.00
L-144	1041.522100	1041.522100	0.00
L-145	1041.522100	1041.522100	0.00
L-146	1041.522100	1041.522100	0.00
L-147	1041.522100	1041.522100	0.00
L-148	1041.522100	1041.522100	0.00
L-149	1041.522100	1041.522100	0.00
L-150	1041.522100	1041.522100	0.00
L-151	1041.522100	1041.522100	0.00
L-152	1041.522100	1041.522100	0.00
L-153	1041.522100	1041.522100	0.00
L-154	1041.522100	1041.522100	0.00
L-155	1041.522100	1041.522100	0.00
L-156	1041.522100	1041.522100	0.00
L-157	1041.522100	1041.522100	0.00
L-158	1041.522100	1041.522100	0.00
L-159	1041.522100	1041.522100	0.00
L-160	1041.522100	1041.522100	0.00
L-161	1041.522100	1041.522100	0.00
L-162	1041.522100	1041.522100	0.00
L-163	1041.522100	1041.522100	0.00
L-164	1041.522100	1041.522100	0.00
L-165	1041.522100	1041.522100	0.00
L-166	1041.522100	1041.522100	0.00
L-167	1041.522100	1041.522100	0.00
L-168	1041.522100	1041.522100	0.00
L-169	1041.522100	1041.522100	0.00
L-170	1041.522100	1041.522100	0.00
L-171	1041.522100	1041.522100	0.00
L-172	1041.522100	1041.522100	0.00
L-173	1041.522100	1041.522100	0.00
L-174	1041.522100	1041.522100	0.00
L-175	1041.522100	1041.522100	0.00
L-176	1041.522100	1041.522100	0.00
L-177	1041.522100	1041.522100	0.00
L-178	1041.522100	1041.522100	0.00
L-179	1041.522100	1041.522100	0.00
L-180	1041.522100	1041.522100	0.00
L-181	1041.522100	1041.522100	0.00
L-182	1041.522100	1041.522100	0.00
L-183	1041.522100	1041.522100	0.00
L-184	1041.522100	1041.522100	0.00
L-185	1041.522100	1041.522100	0.00
L-186	1041.522100	1041.522100	0.00
L-187	1041.522100	1041.522100	0.00
L-188	1041.522100	1041.522100	0.00
L-189	1041.522100	1041.522100	0.00
L-190	1041.522100	1041.522100	0.00
L-191	1041.522100	1041.522100	0.00
L-192	1041.522100	1041.522100	0.00
L-193	1041.522100	1041.522100	0.00
L-194	1041.522100	1041.522100	0.00
L-195	1041.522100	1041.522100	0.00
L-196	1041.522100	1041.522100	0.00
L-197	1041.522100	1041.522100	0.00
L-198	1041.522100	1041.522100	0.00
L-199	1041.522100	1041.522100	0.00
L-200	1041.522100	1041.522100	0.00

AREA 5A
3.84 ACRES

LINE TABLE AREA 5A

LINE NO.	START POINT	END POINT	LENGTH
L-201	1041.522100	1041.522100	0.00
L-202	1041.522100	1041.522100	0.00
L-203	1041.522100	1041.522100	0.00
L-204	1041.522100	1041.522100	0.00
L-205	1041.522100	1041.522100	0.00
L-206	1041.522100	1041.522100	0.00
L-207	1041.522100	1041.522100	0.00
L-208	1041.522100	1041.522100	0.00
L-209	1041.522100	1041.522100	0.00
L-210	1041.522100	1041.522100	0.00
L-211	1041.522100	1041.522100	0.00
L-212	1041.522100	1041.522100	0.00
L-213	1041.522100	1041.522100	0.00
L-214	1041.522100	1041.522100	0.00
L-215	1041.522100	1041.522100	0.00
L-216	1041.522100	1041.522100	0.00
L-217	1041.522100	1041.522100	0.00
L-218	1041.522100	1041.522100	0.00
L-219	1041.522100	1041.522100	0.00
L-220	1041.522100	1041.522100	0.00
L-221	1041.522100	1041.522100	0.00
L-222	1041.522100	1041.522100	0.00
L-223	1041.522100	1041.522100	0.00
L-224	1041.522100	1041.522100	0.00
L-225	1041.522100	1041.522100	0.00
L-226	1041.522100	1041.522100	0.00
L-227	1041.522100	1041.522100	0.00
L-228	1041.522100	1041.522100	0.00
L-229	1041.522100	1041.522100	0.00
L-230	1041.522100	1041.522100	0.00
L-231	1041.522100	1041.522100	0.00
L-232	1041.522100	1041.522100	0.00
L-233	1041.522100	1041.522100	0.00
L-234	1041.522100	1041.522100	0.00
L-235	1041.522100	1041.522100	0.00
L-236	1041		

DESCRIPTION OF SURVEY
FOR AREA 1 – BOTTOM LANDS
6.87 ACRES

A tract of land situate along the waters of the Ohio River, on the north side of County Route 20, Union District, Jackson County West Virginia more particularly described as follows:

Commencing at a brass disk found in a concrete monument, stamped (S 3680.57, E5064.19 El. 629.31), and is shown as Disk A, on that certain plat of survey by Potesta & Associates entitled "PLAT OF SURVEY SHOWING SIX AREAS TO BE RESERVED ON THE CENTURY ALUMINUM PLANT SITE SITUATE ALONG COUNTY ROUTE 20 UNION DISTRICT, TAX MAPS 1, 2 & 4 JACKSON COUNTY, WEST VIRGINIA SCALE: 1"=200' DATE: NOVEMBER 10, 2015", thence

N58°32'40"W, 2318.64 feet to THE POINT OF BEGINNING, of the 6.87 acre tract, said point being in the northern right of way line of the Baltimore and Ohio Railroad, thence running with the northern right of way line of the railroad in a western direction the following courses and distances

Around a curve to the left, having an arc length of 860.58 feet, a radius of 2368.75 feet, and a chord bearing and distance of S60°06'30"W, 855.86 feet to a point, thence

S49°42'00"W, 440.81 feet to a point, thence leaving the railroad right of way

N72°20'20"W, 93.08 feet to a point, thence

N18°58'10"E, 279.67 feet to a point, thence

N38°16'00"E, 307.44 feet to a point, thence

N67°36'40"E, 298.01 feet to a point, thence

N56°01'20"E, 300.46 feet to a point, thence

N77°42'20"E, 299.07 feet to a point, thence

S22°16'40"E, 181.11 feet to THE POINT OF BEGINNING, containing 6.87 acres more or less.

DESCRIPTION OF SURVEY
FOR AREA 2 – POTLINER LOADOUT AREA
0.96 ACRES

A tract of land situate along the waters of the Ohio River, on the north side of County Route 20, Union District, Jackson County West Virginia more particularly described as follows:

Commencing at a brass disk found in a concrete monument, stamped (S 3680.57, E5064.19 El. 629.31), and is shown as Disk A, on that certain plat of survey by Potesta & Associates entitled "PLAT OF SURVEY SHOWING SIX AREAS TO BE RESERVED ON THE CENTURY ALUMINUM PLANT SITE SITUATE ALONG COUNTY ROUTE 20 UNION DISTRICT, TAX MAPS 1, 2 & 4 JACKSON COUNTY, WEST VIRGINIA SCALE: 1"=200' DATE: NOVEMBER 10, 2015", thence

N86°19'20"W, 3387.26 feet to THE POINT OF BEGINNING, of the 0.96 acre tract, said point being in the northern right of way line of the Baltimore and Ohio Railroad, thence running with the northern right of way line of the railroad in a western direction the following course and distance

Around a curve to the left, having an arc length of 199.98 feet, a radius of 2894.93 feet, and a chord bearing and distance of S44°08'30"W, 199.94 feet to a point, thence leaving the railroad right of way

N46°12'50"W, 205.52 feet to a point at the edge of the Ohio River, thence up the river with the meanders thereof

N39°51'50"E, 196.63 feet to a point, thence leaving the river

S47°11'30"E, 220.24 feet to THE POINT OF BEGINNING, containing 0.96 acres more or less.

DESCRIPTION OF SURVEY
FOR AREA 3 – SPL PILE AREA
11.42 ACRES

A tract of land situate along the waters of the Ohio River, on the north side of County Route 20, Union District, Jackson County West Virginia more particularly described as follows:

Commencing at a brass disk found in a concrete monument, stamped (S 3680.57, E5064.19 El. 629.31), and is shown as Disk A, on that certain plat of survey by Potesta & Associates entitled "PLAT OF SURVEY SHOWING SIX AREAS TO BE RESERVED ON THE CENTURY ALUMINUM PLANT SITE SITUATE ALONG COUNTY ROUTE 20 UNION DISTRICT, TAX MAPS 1, 2 & 4 JACKSON COUNTY, WEST VIRGINIA SCALE: 1"=200' DATE: NOVEMBER 10, 2015", thence

S70°54'10"W, 3699.61 feet to THE POINT OF BEGINNING, of the 11.42 acre tract, thence continuing with the boundary of the 11.42 acre tract for the following courses and distances

N27°50'30"E, 514.37 feet to a point, thence

N56°52'20"W, 858.84 feet to a point, thence

N31°50'40"E, 200.86 feet to a point, thence

S56°46'00"E, 844.75 feet to a point, thence

S81°46'30"E, 391.90 feet to a point, thence

S19°45'50"W, 210.87 feet to a point, thence

S03°36'10"W, 248.37 feet to a point, thence

S26°20'50"W, 259.82 feet to a point, thence

N78°44'10"W, 529.38 feet to THE POINT OF BEGINNING, containing 11.42 acres more or less.

DESCRIPTION OF SURVEY
FOR AREA 5A – FORMER ANODE BURNOFF PILE
3.84 ACRES

A tract of land situate along the waters of the Ohio River, on the north side of County Route 20, Union District, Jackson County West Virginia more particularly described as follows:

Commencing at a brass disk found in a concrete monument, stamped (S 3680.57, E5064.19 El. 629.31), and is shown as Disk A, on that certain plat of survey by Potesta & Associates entitled "PLAT OF SURVEY SHOWING SIX AREAS TO BE RESERVED ON THE CENTURY ALUMINUM PLANT SITE SITUATE ALONG COUNTY ROUTE 20 UNION DISTRICT, TAX MAPS 1, 2 & 4 JACKSON COUNTY, WEST VIRGINIA SCALE: 1"=200' DATE: NOVEMBER 10, 2015", thence

S76°45'00"W, 2280.81 feet to THE POINT OF BEGINNING, of the 3.84 acre tract, thence continuing with the boundary of the 3.84 acre tract for the following courses and distances

S30°41'40"W, 570.22 feet to a point, thence

N34°24'00"W, 139.91 feet to a point, thence

N18°20'40"W, 313.07 feet to a point, thence

N48°41'10"E, 132.57 feet to a point, thence

N62°19'00"E, 97.59 feet to a point, thence

N81°03'30"E, 77.18 feet to a point, thence

S79°47'40"E, 114.40 feet to a point, thence

S72°23'10"E, 55.55 feet to a point, thence

N53°40'40"E, 50.72 feet to THE POINT OF BEGINNING, containing 3.84 acres more or less.

DESCRIPTION OF SURVEY
FOR AREA 7 – 001 OUTFALL CONVEYANCE
0.35 ACRES

A tract of land situate along the waters of the Ohio River, on the north side of County Route 20, Union District, Jackson County West Virginia more particularly described as follows:

Commencing at a brass disk found in a concrete monument, stamped (S 3680.57, E5064.19 El. 629.31), and is shown as Disk A, on that certain plat of survey by Potesta & Associates entitled "PLAT OF SURVEY SHOWING SIX AREAS TO BE RESERVED ON THE CENTURY ALUMINUM PLANT SITE SITUATE ALONG COUNTY ROUTE 20 UNION DISTRICT, TAX MAPS 1, 2 & 4 JACKSON COUNTY, WEST VIRGINIA SCALE: 1"=200' DATE: NOVEMBER 10, 2015", thence

S55°13'00"W, 6067.45 feet to THE POINT OF BEGINNING, of the 0.35 acre tract, thence continuing with the boundary of the 0.35 acre tract for the following courses and distances

S26°46'50"W, 15.42 feet to a point, thence

N58°26'40"W, 107.27 feet to a point, thence

N60°03'50"W, 625.12 feet to a point, thence

N18°42'10"E, 24.93 feet to a point, thence

S59°31'20"E, 627.08 feet to a point, thence

S56°49'40"E, 109.47 feet to THE POINT OF BEGINNING, containing 0.35 acres more or less.

DESCRIPTION OF SURVEY
FOR AREA 13 – CARBON PLANT AND SOLID PITCH
UNLOADING/STORMWATER DRAINAGE AREA
53.84 ACRES

A tract of land situate along the waters of the Ohio River, on the north side of County Route 20, Union District, Jackson County West Virginia more particularly described as follows:

Commencing at a brass disk found in a concrete monument, stamped (S 3680.57, E5064.19 El. 629.31), and is shown as Disk A, on that certain plat of survey by Potesta & Associates entitled "PLAT OF SURVEY SHOWING SIX AREAS TO BE RESERVED ON THE CENTURY ALUMINUM PLANT SITE SITUATE ALONG COUNTY ROUTE 20 UNION DISTRICT, TAX MAPS 1, 2 & 4 JACKSON COUNTY, WEST VIRGINIA SCALE: 1"=200' DATE: NOVEMBER 10, 2015", thence

S58°34'30"E, 581.59 feet to THE POINT OF BEGINNING, of the 53.84 acre tract, thence running with the boundary of the 53.84 acre tract

N59°36'00"W, 434.97 feet to a point, thence

Around a curve to the left, having an arc length of 218.26 feet, a radius of 178.34 feet, and a chord bearing and distance of S75°48'00"W, 204.89 feet to a point, thence

N59°31'10"W, 696.56 feet to a point, thence

N11°09'30"W, 143.75 feet to a point, thence

N59°49'10"W, 217.16 feet to a point, thence

S30°17'40"W, 201.54 feet to a point, thence

N59°32'00"W, 373.89 feet to a point, thence

Around a curve to the left, having an arc length of 176.82 feet, a radius of 147.97 feet, and a chord bearing and distance of S78°20'50"W, 166.49 feet to a point, thence

N58°49'00"W, 77.45 feet to a point, thence

N32°42'30"E, 280.62 feet to a point, thence

N30°33'40"E, 282.59 feet to a point, thence

N51°40'00"E, 303.40 feet to a point, thence

S88°06'30"E, 277.64 feet to a point, thence
N88°39'30"E, 237.22 feet to a point, thence

S80°21'20"E, 275.17 feet to a point, thence

S80°02'10"E, 283.36 feet to a point, thence

S83°07'40"E, 279.84 feet to a point, thence

S85°29'40"E, 288.09 feet to a point, thence

S89°44'00"E, 291.98 feet to a point, thence

N82°49'00"E, 258.42 feet to a point, thence

S86°03'40"E, 114.29 feet to a point, thence

S30°27'30"W, 1544.42 feet to THE POINT OF BEGINNING, containing 53.84 acres
more or less.

Environmental Covenant – Attachment D

- Material Management Plan (Section 3.3 of CMI Plan dated September 2013, Revised October 2013).

312 Acre Century Industrial Plant Site Survey Description

the inspection. A quarterly inspection form is provided in Appendix A. The inspection form includes an indication of how and when deficiencies identified during the inspection were addressed. Copies of the quarterly inspection forms will be maintained in a log at the facility.

Recordkeeping and reporting are discussed in Section 6 of this CMI Plan.

3.2 Monitored Natural Attenuation

Site-wide MNA is addressed in Section 5 of this CMI Plan.

3.3 Materials Management Plan

During the RFI, locations where solid and hazardous wastes had been managed were sampled to identify whether hazardous constituents were present above levels of acceptable risk. The locations where contaminants were observed above acceptable levels for industrial land use were addressed via removal (Area 5a and Area 13) or covering (Area 7). ICs will be used to prevent excessive exposures in locations where contaminants are present at levels below industrial land use values but above residential land use values (see Table 3). Groundwater in some areas of the site also exceeded drinking water standards and require ICs to prevent consumptive use of the groundwater. Table 4 lists the monitoring wells and the constituents that exceed drinking water standards. Locations subject to ICs and the MMP are shown on Figure 4.

Should land disturbance or drilling activities be conducted in the areas listed in Table 3 or Table 4, the following measures will be taken to control human and environmental exposure to the hazardous constituents that potentially remain in the soil and groundwater within these areas. CAWV will provide this MMP to managers in the maintenance department, grounds department, utilities department, and other departments of the facility that may be affected by its provisions. The MMP will also be addressed in routine health and safety orientations provided by CAWV for site work. Site and contract personnel will be required to follow the provisions of the plan during land disturbing activities in the designated areas of the site.

Soil

The MMP applies to soil the following areas within the CAWV parcel:

- Area 1 – Bottomlands
- Area 2 – Potliner Loadout
- Area 3 – SPL Pile Perimeter
- Area 5a – Anode Burnoff Pile

- Area 7 - 001 Outfall Conveyance
- Area 13 - Solid Pitch Unloading and Carbon Plant Storage Drainage Area

Prior to the implementation of land disturbing activities, an appropriate number of both surface (0- to 0.5 feet below land surface [bls]) and subsurface soil samples will be collected from the area of the proposed activity and analyzed, using USEPA SW-846 methods, by a West Virginia approved laboratory for the previously identified constituents of concern (COC) for the area (see Table 3). The number of samples to be collected will be determined based on the anticipated area and depth of the proposed land disturbing activity. The recommended number of samples is one per 500 cubic yards of disturbed material. Sample collection will be conducted in accordance with the USEPA-approved methods described in Volume II of the *1995 RFI Workplan* (Malcolm Pirnie, Inc. 1995, Revised by RMT, Inc. 1995) and Volume II of the *1997 RFI Workplan* (RMT, 1997).

Laboratory results will be compared to USEPA Region 3's RBCs for industrial land use. For soil demonstrating COC concentrations at or below their respective industrial RBCs, no special management procedures will be required. The soil may be re-used on site or disposed of off-site as project requirements dictate.

In the event that soils are encountered that demonstrate COC concentrations above their respective industrial RBCs, the soils will be managed as follows:

- Personnel that may potentially come into contact with these soils will wear appropriate personal protective equipment (PPE) as outlined in the HSP (Appendix B) for collection of soil samples.
- Excavated soils will be placed in a covered roll off container, 55-gallon drum, or stockpiled on plastic sheeting. If soils are stockpiled, the pile will be covered with plastic and bermed to prevent the material from impacting storm water runoff.
- Stockpiling of soils in low lying areas (such as Area 1 - Bottomlands) should be avoided. If soils are stockpiled in a low lying area, sumps, pumps, and berms may be necessary for storm water management.
- Composite soil samples will be collected from the stockpiled materials and analyzed for the parameters necessary for characterization and proper off-site disposal. Samples will be collected and managed consistent with the methods described in Appendix C - Sampling and Analysis Quality Assurance Plan.
- If additional soil is needed to replace the excavated materials for the construction project, clean fill will be obtained from another location.

Groundwater

The MMP applies to groundwater the following areas within the CAWV parcel:

- Closed Landfill area
- MW-9 area
- SPL Pile area

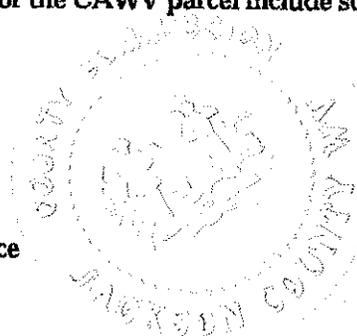
Table 4 lists the areas of the site where COCs were previously detected in groundwater at concentrations above the drinking water standards. ICs include water use restrictions to prevent human exposure to the remaining contaminants. However, should any well construction, dewatering, or other activities be conducted in these areas where exposure to groundwater could occur, groundwater will be managed as follows:

- Proper PPE will be worn as outlined in the HSP (Appendix B) for collection of groundwater samples.
- A sample of the water will be obtained and analyzed for the appropriate COCs (see Table-4). Sampling and analysis methods will be consistent with procedures described in the SAP (Subsection 5.2) and following procedures described in Appendix C – Sampling and Analysis Quality Assurance Plan.
- Any water removed from a well or excavation will be contained until the laboratory analyses are complete.
- Groundwater that meets applicable drinking water standards may be discharged to ground surface or to other on-site water management facilities (*i.e.*, storm sewer, sanitary sewer, etc.).
- Groundwater that exceeds applicable drinking water standards will be contained and the water will be discharged to the on-site wastewater treatment system. The Maintenance Manager will be notified to coordinate proper handling and disposal procedures.

3.4 Institutional Controls

The locations for which ICs apply for the CAWV parcel include soil in the following areas:

- Area 1 – Bottomlands
- Area 2 – Potliner Loadout
- Area 3 – SPL Pile Perimeter
- Area 5a – Anode Burnoff Pile
- Area 7 – 001 Outfall Conveyance



I, CHERYL BRIGHT, DO HEREBY CERTIFY THAT THE DOCUMENT TO WHICH THIS STAMP IS AFFIXED IS A TRUE COPY OF MISC RECORDED IN THIS OFFICE IN Deed BOOK 24 PAGE 32 DATE 12-2-16
Cheryl Bright CLERK/DEPUTY
CHERYL BRIGHT, JACKSON COUNTY CLERK