CH \$190.00 183421

TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 ETAS ID: TM354251

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|-------------------|
| NATURE OF CONVEYANCE: | SECURITY INTEREST |

CONVEYING PARTY DATA

| Name | Formerly | Execution Date | Entity Type |
|-----------------------|----------|----------------|-----------------------|
| Horsehead Corporation | | 06/30/2015 | CORPORATION: DELAWARE |

RECEIVING PARTY DATA

| Name: | MACQUARIE BANK LIMITED | | | |
|-----------------|------------------------|--|--|--|
| Street Address: | 50 Martin Place | | | |
| City: | Sydney | | | |
| State/Country: | AUSTRALIA | | | |
| Postal Code: | NSW 2000 | | | |
| Entity Type: | CORPORATION: AUSTRALIA | | | |

PROPERTY NUMBERS Total: 7

| Property Type | Number | Word Mark | | |
|----------------------|---------|---|--|--|
| Registration Number: | 1834219 | ECOLOAM | | |
| Registration Number: | 3573990 | ECOTITE | | |
| Registration Number: | 3511090 | HORSEHEAD CORPORATION LEADING THE WORLD | | |
| Registration Number: | 0174809 | KADOX | | |
| Registration Number: | 1033496 | ZINSTABE | | |
| Registration Number: | 2798379 | ZINVISIBLE | | |
| Registration Number: | 4221389 | HORSEHEAD | | |

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Email: jennifer.tilley@hoganlovells.com

Correspondent Name: Hogan Lovells US LLP

Address Line 1: 700 Louisiana Street, Suite 4300

Address Line 4: Houston, TEXAS 77002

| ATTORNEY DOCKET NUMBER: | 083640.000030 |
|-------------------------|---------------|
| NAME OF SUBMITTER: | Polly Sims |
| SIGNATURE: | /Polly Sims/ |
| DATE SIGNED: | 09/08/2015 |

TRADEMARK REEL: 005618 FRAME: 0110

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Total Attachments: 10 source=Copyright, Patent, and Trademark Security Agreement#page1.tif source=Copyright, Patent, and Trademark Security Agreement#page2.tif source=Copyright, Patent, and Trademark Security Agreement#page3.tif source=Copyright, Patent, and Trademark Security Agreement#page4.tif source=Copyright, Patent, and Trademark Security Agreement#page5.tif source=Copyright, Patent, and Trademark Security Agreement#page6.tif source=Copyright, Patent, and Trademark Security Agreement#page7.tif source=Copyright, Patent, and Trademark Security Agreement#page8.tif source=Copyright, Patent, and Trademark Security Agreement#page9.tif source=Copyright, Patent, and Trademark Security Agreement#page9.tif

COPYRIGHT, PATENT, AND TRADEMARK SECURITY AGREEMENT

COPYRIGHT, PATENT, AND TRADEMARK SECURITY AGREEMENT ("Agreement"), dated as of June 30,2015, among HORSEHEAD HOLDING CORP., a Delaware corporation ("HHC"), HORSEHEAD CORPORATION, a Delaware corporation ("Horsehead"), CHESTNUT RIDGE RAILROAD CORP., a Delaware Corporation ("Chestnut"), THE INTERNATIONAL METALS RECLAMATION COMPANY, LLC, a limited liability company organized under the laws of the State of Delaware ("INMETCO"), and HORSEHEAD METAL PRODUCTS, LLC, a limited liability company organized under the laws of the State of North Carolina ("HMP", together with HHC, Horsehead, Chestnut, and INMETCO, each a "Grantor" and, collectively, the "Grantors"), in favor of MACQUARIE BANK LIMITED, as collateral agent under the CAA (as defined in the Security Agreement referred to below) (in such capacity and together with any permitted successors, the "Collateral Agent") for the Secured Parties (as defined in the Security Agreement referred to below).

WITNESSETH:

WHEREAS, each Grantor owns the Patents, Trademark registrations and applications, and Copyright registrations and applications listed as owned by such Grantor on Schedule 1 annexed hereto; and

WHEREAS, each Grantor is a party to that certain Security Agreement dated as of June 30, 2015 (as amended, amended and restated, supplemented or otherwise modified, the "Security Agreement"; unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meanings given to them in the Security Agreement) among Grantors and Collateral Agent;

WHEREAS, pursuant to the terms of the Security Agreement, each Grantor collaterally assigned and pledged to the Collateral Agent, and granted to the Collateral Agent, for the benefit of the Secured Parties, a security interest in, and lien on, all of the Collateral (as defined below), whether now owned or at any time hereafter acquired by such Grantor or in which such Grantor now has or at any time may acquire any right, title or interest, as security for the prompt and complete payment and performance when due (whether at the stated maturity, by acceleration or otherwise) of such Grantor's Obligations; and

WHEREAS, pursuant to the terms of the Security Agreement, the Grantors are required to execute and deliver this Agreement.

NOW, THEREFORE, in consideration of the premises and to induce the Collateral Agent, for the benefit of the Secured Parties, to enter into the Indenture and to induce the Secured Parties to purchase the Notes, each Grantor hereby agree as follows:

SECTION 1. Grant of Security Interest. Each Grantor hereby collaterally assigns and transfers to the Collateral Agent, and hereby grants to the Collateral Agent, for the benefit of the Secured Parties, a security interest in, and lien on, all of the following property now owned or at any time hereafter acquired by such Grantor or in which such Grantor now has or at any time in the future may acquire any right, title or interest (collectively, the "Collateral"), as collateral security for the prompt and complete payment and performance

when due (whether at the stated maturity, by acceleration or otherwise) of such Grantor's Obligations:

1.1 Copyright Collateral.

- (a) all copyrights arising under the laws of the United States, any other country or any political subdivision thereof, whether registered or unregistered and whether published or unpublished, all registrations and recording thereof, and all applications in connection therewith, including, without limitation, all registrations, recordings and applications in the United States Copyright Office (including, without limitation, those set forth on Schedule 1 annexed hereto;
 - (b) all renewals and extensions thereof and amendments thereto;
- (c) all income, fees, royalties, damages, claims and payments now or hereafter due and/or payable with respect thereto, including damages and payments for past, present or future infringements or other violations thereof;
- (d) all rights to sue for past, present or future infringements or other violations thereof; and
- (e) all rights corresponding thereto throughout the world (collectively, the "Copyright Collateral").

1.2 Patent Collateral.

limitation, those set forth on Schedule 1 annexed hereto);

- (a) all letters patent of the United States, any other country or any political subdivision thereof, all registrations and recordings thereof, and all applications for letters patent of the United States, any other country or any political subdivision thereof, including registrations, recordings and applications in the United States Patent and Trademark Office or in any similar office or agency of the United States, any other country or any political subdivision thereof (including, without
- (b) all reissues, divisions, continuations, continuations-in-part, extensions and supplementary protection certificates thereof;
- (c) all income, fees, royalties, damages, claims and payments now or hereafter due and/or payable thereunder or with respect thereto, including damages and payments for past, present or future infringements or other violations thereof;
- (d) all rights to sue for past, present or future infringements or other violations thereof; and
- (e) all rights corresponding thereto throughout the world (collectively, the "Patent Collateral").
 - 1.3 Trademark Collateral.

- (a) all trademarks, trade names, corporate names, company names, business names, fictitious business names, trade dress, service marks, logos, Internet domain names and other source or business identifiers;
- (b) all registrations and applications thereof, whether in the United States Patent and Trademark Office or in any similar office or agency of the United States, any State thereof or any other country or any political subdivision thereof (including, without limitation, those set forth on <u>Schedule 1</u> annexed hereto);
 - (c) all goodwill connected with the use thereof and symbolized thereby;
- (d) all rights and privileges arising under applicable Law with respect to the use of any of the foregoing;
 - (e) all reissues, extensions and renewals thereof;
- (f) all income, fees, royalties, damages, claims and payments now or hereafter due and/or payable thereunder or with respect thereto, including damages and payments for past, present or future infringements, dilutions or other violations thereof;
- (g) all rights to sue for past, present or future infringements, dilutions or other violations thereof; and
- (h) all rights corresponding thereto throughout the world (collectively, the "Trademark Collateral", together with the Copyright Collateral and Patent Collateral, the "Collateral").

SECTION 2. <u>Security Agreement</u>. The foregoing security interest is granted in conjunction with the security interests granted to the Collateral Agent pursuant to the Security Agreement. Each Grantor does hereby further acknowledge and affirm that the rights and remedies of Collateral Agent with respect to the security interest in the Collateral made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control.

SECTION 3. <u>Term.</u> This Agreement shall be coterminous with the Security Agreement, as such term is set forth therein.

SECTION 4. <u>GOVERNING LAW.</u> THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK, AS APPLIED TO CONTRACTS MADE AND PERFORMED WITHIN THE STATE OF NEW YORK.

SECTION 5. <u>Counterparts</u>. This Agreement may be executed in counterparts (including by telecopy or electronic transmission (e.g. "pdf")), each of which shall constitute an original but all of which when taken together shall constitute one and the same instrument. [Signature page follows]

IN WITNESS WHEREOF, each of the undersigned has caused this Agreement to be duly executed and delivered as of the date first above written.

HORSEHEAD CORPORATION

By: Robert D. Scherich

Vice President and Chief Financial Officer

THE INTERNATIONAL METALS RECLAMATION COMPANY, LLC

Ву:

Robert D. Scherich

Vice President and Chief Financial Officer

HORSEHEAD METAL PRODUCTS, LLC

By:

Robert D. Scherich

Vice President and Chief Financial Officer

HORSEHEAD HOLDING CORP.

By:

Robert D. Scherich

Vice President and Chief Financial Officer

CHESTNUT RIDGE RAILROAD CORP.

By: ____

Robert D. Scherich

Vice President and Chief Financial Officer

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| MACQUA | 1311 | DANK | TIR | ATTENTS. |
|-----------------|------|----------------|-----|---------------------------------|
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as Collateral Agent

By: V Constitution Name: LINDA EVANS

Title: Division Director

By: Name: Nathan Booker

Title: Division Director

(Macquarie POA Ref: #1721 dated 9 October 2014, signed in Sydney)

SCHEDULE 1

to

COPYRIGHT, PATENT, AND TRADEMARK SECURITY AGREEMENT

COPYRIGHT REGISTRATIONS AND APPLICATIONS

NONE

PATENT REGISTRATIONS AND APPLICATIONS

NONE

TRADEMARK REGISTRATIONS AND APPLICATIONS

Trademark Registrations

| Owner | Country | Mark | Reg. No. | Issued |
|-----------------------|------------|--|-----------|------------|
| Horsehead Corporation | U.S. | ECOLOAM | 1,834,219 | 05/03/1994 |
| Horsehead Corporation | U.S. | ECOTITE | 3,573,990 | 02/10/2009 |
| Horsehead Corporation | U.S. | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 3,511,090 | 10/07/2008 |
| Horsehead Corporation | U.S. | KADOX | 174,809 | 10/23/1923 |
| Horsehead Corporation | U.S. | ZINSTABE | 1,033,496 | 02/17/1976 |
| Horsehead Corporation | U.S. | ZINVISIBLE | 2,798,379 | 12/23/2003 |
| Horsehead Corporation | Canada | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | TMA756445 | 01/05/2010 |
| Horsehead Corporation | Costa Rica | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 180611 | 10/07/2008 |
| Horsehead Corporation | Costa Rica | HORSEHEAD CORPORATION AND | 180612 | 10/07/2008 |

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| NATION OF THE PROPERTY OF THE | | DESIGN Leading the World in Zinc Recycling | | |
|---|-----------------------|--|--|------------|
| Horsehead Corporation | Costa Rica | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 180613 | 10/07/2008 |
| Horsehead Corporation | El Salvador | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 00077, Book 158 (Serial No. 2008074015) | 10/25/2010 |
| Horsehead Corporation | El Salvador | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 00016, Book 142 (Serial No. 2008074013) | 11/25/2009 |
| Horsehead Corporation | El Salvador | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 00195, Book 160 (Serial No. 2008074014) | 12/10/2010 |
| Horsehead Corporation | European Community | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 006674469 | 01/29/2009 |
| Horsehead Corporation | Guatemala | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 173,712 | 01/12/2011 |
| Horsehead Corporation | Guatemala | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 173,713 | 01/12/2011 |
| Horsehead Corporation | Guatemala | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 180,410 | 02/03/2012 |
| Horsehead Corporation | Japan | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 5,313,135 | 04/02/2010 |
| Horsehead Corporation | Korea | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 45-0028551 | 08/10/2009 |
| Horsehead Corporation | Mexico | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 1043019 | 05/29/2008 |

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| Horsehead Corporation | Mexico | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 1043735 | 05/30/2008 |
|-----------------------|-----------------------|--|------------|------------|
| Horsehead Corporation | Mexico | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 1046166 | 06/24/2008 |
| Horsehead Corporation | Nicaragua | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 0900867 | 06/15/2009 |
| Horsehead Corporation | Nicaragua | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 0900865 | 06/15/2009 |
| Horsehead Corporation | Nicaragua | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 0900866 | 06/15/2009 |
| Horsehead Corporation | Saudi Arabia | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 1060/37 | 04/15/2009 |
| Horsehead Corporation | Saudi Arabia | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 1060/38 | 04/15/2009 |
| Horsehead Corporation | Saudi Arabia | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 1062/38 | 04/22/2009 |
| Horsehead Corporation | Canada | KADOX | TMDA041803 | 07/11/1927 |
| Horsehead Corporation | Canada | ZINVISIBLE | TMA631638 | 02/01/2005 |
| Horsehead Corporation | European Community | ZINVISIBLE | 2,377,836 | 07/27/2004 |
| Horsehead Corporation | Switzerland | ZINVISIBLE | 494,253 | 01/31/2002 |
| Horsehead Corporation | China | HORSEHEAD | 10535458 | 02/27/2012 |
| Horsehead Corporation | European Community | HORSEHEAD | 1167554 | 03/04/2013 |
| Horsehead Corporation | Japan | HORSEHEAD | 1167554 | 03/04/2013 |
| Horsehead Corporation | Korea | HORSEHEAD | 1167554 | 03/04/2013 |
| Horsehead Corporation | Russian Federation | HORSEHEAD | 488395 | 05/30/2013 |

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| Horsehead Corporation | Taiwan | HORSEHEAD | 102014976 | 03/21/2013 |
|---|--|-----------|-----------|------------|
| Horsehead Corporation | U.S. | HORSEHEAD | 4,221,389 | 10/09/2012 |
| Horsehead Corporation | International Reg. Madrid Protocol | HORSEHEAD | 1167554 | 03/04/2013 |
| The International Metals Reclamation Company, LLC | United States | INMETCO | 1,560,462 | 10/17/1989 |
| The International Metals Reclamation Company, LLC | United States | INMETCO | 1,562,636 | 10/24/1989 |

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Trademark Applications

| Owner | Country | aaemark Applications Mark | Serial No. | Filed |
|-----------------------|-------------|--|------------|------------|
| Horsehead Corporation | Canada | ECOTITE | 1,283,174 | 12/15/2005 |
| Horsehead Corporation | Brazil | HORSEHEAD CORPORATION AND DESIGN | 829605509 | 02/19/2008 |
| Horsehead Corporation | Brazil | HORSEHEAD CORPORATION AND DESIGN | 829605460 | 02/19/2008 |
| Horsehead Corporation | Brazil | HORSEHEAD CORPORATION AND DESIGN | 900745380 | 02/18/2008 |
| Horsehead Corporation | El Salvador | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 2008074015 | 02/15/2008 |
| Horsehead Corporation | El Salvador | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 2008074014 | 02/15/2008 |
| Horsehead Corporation | Guatemala | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 2599-2010 | 04/15/2010 |
| Horsehead Corporation | Guatemala | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 2598-2010 | 04/15/2010 |
| Horsehead Corporation | Guatemala | HORSEHEAD CORPORATION AND DESIGN Leading the World in Zinc Recycling | 1302-2007 | 02/15/2008 |

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RECORDED: 09/08/2015