GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

Land Protection Branch
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Atlanta, Georgia 30334
404-656-7802

February 27, 2017

VIA U.S. MAIL AND E-MAIL
Trademark Metals Recycling, LLC
c/o Mr. Eric Logsdon, Director of Corporate Environmental
300 Pike Street
Cincinnati, Ohio 45202

Re: VRP Progress Reports 3, 4, 5, and 6 (dated December 2015, May 2016, September 2016, and December 2016, respectively)
Rice Iron and Metals, Inc. (Former), HSI #10923
2000 West Savannah Avenue, Valdosta, Lowndes County, Georgia 31603
Tax Parcel 0121A 026

Dear Mr. Logsdon:

The Georgia Environmental Protection Division (EPD) has reviewed the subject submittals for the subject VRP Property and noted several items of concern. A conference call was arranged between EPD personnel (David Hayes, Carolyn Daniels, P.G., and Shanna Alexander) and representatives (Aaron Getchell and Anthony Hoffman) of Gannett Fleming, Inc. (GFI), site environmental consultant for Trademark Metals Recycling, LLC (TMR), on February 7, 2017 in order to: 1) reduce the number of written EPD comments regarding the subject submittals, 2) ensure that requirements for a final Compliance Status Report (CSR) are understood by GFI personnel, and 3) expedite EPD evaluation of future submittals. Mr. Getchell was provided, via email from EPD, with: 1) a list of discussion topics, 2) a copy of the May 22, 2014 EPD comments regarding the originally submitted Voluntary Investigation and Remediation Plan (VIRP), and 3) several web links to various guidance on EPD's website for his and other GFI personnel's convenience prior to the scheduled conference call.

Several items of concern were discussed during the conference call, which are included in the following comments:

1. **Underground Storage Tanks (USTs) and Aboveground Storage Tank (AST):**
   a. Figure 2 and Appendix B Figure 5 of Progress Report #6 indicate the locations of two former USTs. Please confirm the number, locations, contents, and status (including any correspondence from the EPD UST Management Program) of the USTs and revise the narrative and figures as appropriate in future submittals. Online EPD UST Management Program records indicate there were three (3) USTs associated with Rice Iron and Metal (Facility ID 920172) in Valdosta.
   b. Please confirm the contents and status of the AST referenced in the narrative and in Figure 2 and Appendix B Figure 5. If the AST is no longer in use, it should be properly decommissioned.
2. **Constituents of Concern (COCs):** Comment #2 of the May 2014 EPD letter has not been adequately addressed to date. Ms. Daniels of EPD indicated that potential COCs (PCOCs)

may be eliminated based on whether or not maximum detected concentrations exceed applicable delineation standards. Ms. Daniels recommended submittal of tables similar to the attached example Table 1 and Table 2 as documentation justifying the determination of the final COCs for soil and groundwater at the Property.

3. **Risk Reduction Standards (RRS):** EPD recommended that values for Type 1 through Type 4 Risk Reduction Standards (RRS) be determined for soil and groundwater and proposed by GFI for EPD evaluation and concurrence since delineation and preliminary cleanup standards are dependent, at least in part, on said RRS (see Item #4). Ms. Alexander stated that the proposed RRS values should be summarized in tabular format and submitted along with other backup documentation for EPD evaluation. It was agreed that Ms. Claire Stapely of GFI will contact Ms. Alexander for further discussion regarding the determination of and necessary documentation for proposed RRS.

4. **Selection/Determination of Delineation and Cleanup Standards for Soil and Groundwater[1]:** Delineation and anticipated cleanup standards for soil and/or groundwater are not likely to be the same at the Property based on the information provided to EPD.

   a. The acceptable criteria for determining COC delineation standards for soil and groundwater are listed in §12-8-108.(1)(A-E) of the Voluntary Remediation Program Act. In addition, §391-3-19-.06(3)(b)2 of the Rules for Hazardous Site Response (Rules) allows the use of Type 2 RRS as acceptable soil delineation standards. Therefore, based on the referenced acceptable criteria:

      i. EPD *cannot* concur with the use of Type 3 RRS (see Table 2 of Progress Report #6) as delineation standards for soil contamination.

      ii. As Type 3 RRS values for groundwater should be the same as Type 1 RRS (an acceptable selection criterion), they may be used for contaminant delineation standards. However, EPD is deferring an evaluation of the proposed values until the table(s) and documentation supporting them, referred to in Item #3 of this letter, have been submitted for review.

      iii. Proposed delineation standards should be included on the tables referenced in Item #2 of this letter for EPD's review and concurrence or comment.

   b. **Cleanup Standards:** Comment #9 of the May 2014 EPD letter has not been adequately addressed. EPD recommended that Type 1, 2, and 4 RRS be determined for COCs in soil and groundwater at the Property in addition to Type 3 RRS since:

      i. Type 1 RRS are an acceptable selection criterion for selecting COC delineation standards for both soil and groundwater,

      ii. Type 2 RRS are an acceptable selection criterion for selecting COC delineation standards for soil.

      iii. Acceptable Type 4 RRS may be less conservative than the Type 3 RRS values, and it is possible that individual COCs exceeding Type 3 RRS in soil and/or groundwater could be in compliance with Type 4 RRS. Furthermore, Type 4 RRS may default to concentrations determined based on a site-specific evaluation of the leaching to

[1] Delineation and cleanup standards may need to be determined for sediment and surface water if it is determined that the surface water body on the Property is a receptor for the release of regulated substances from a potential source area in the future (see Item# 6.a).

groundwater pathway which is not included in the determination of the Type 3 RRS. The leaching to groundwater pathway is evaluated using: 1) Synthetic Precipitation Leaching Procedure (SPLP) or Toxicity Characteristic Leaching Procedure (TCLP) soil analytical results or 2) an appropriate vadose zone contaminant fate and transport model. Please note that there should be sufficient data currently available for the calculation of preliminary Type 4 RRS using the EPA Soil Screening Level Partitioning Equation for Migration to Ground Water [2] or another acceptable, peer-reviewed vadose zone contaminant fate and transport model. The default value for the dilution attenuation factor (DAF) in the referenced equation is assumed to be 1. A site-specific DAF may be determined as described in the references provided in footnote #2 if information clearly identifying the extent of the contaminant source area is provided as discussed during the February 7, 2017 conference call.

Proposed delineation and cleanup standards derived based on the above comments and results of the conversation between Ms. Stapely and Ms. Alexander should be summarized on separate tables for each impacted environmental media/matrix for EPD review. If Type 5 RRS are to be used as cleanup standards, the values may be summarized as "to be determined".

5. EPD requested that the term "site" be solely used as defined in §391-3-19-.02(2)(v) of the Rules in future submittals. If a future reference is specific to that area within the boundaries of the Property currently enrolled in the VRP, the reference should use the term "VRP Property" or "Property" as used by EPD in this letter.

6. Potential Receptors and Potential Source Area Investigations: Comment #4.b. and 7 of the May 2014 EPD letter have not been adequately addressed to date and were discussed during the conference call. Specifically:

   a. The forested area on the east side of the Property and the cleared area in the southeast portion of the Property have not been adequately investigated nor has sufficient documentation regarding past use of the referenced cleared area been provided to EPD. Additional investigation is necessary to eliminate said areas as potential contaminant sources and/or points of exposure.

   b. The surface water body on the Property cannot be eliminated as a potential point of exposure (POE) for ecological receptors until the above-referenced additional investigations are conducted.

   c. Descriptions of the Property and surrounding area in future submittals should be revised to accurately depict existing conditions in future submittals. Some examples include:

      i. There is no vacant property separating the Property and the residential properties to the east as stated in the subject progress reports, and

      ii. The progress reports also state that fencing completely surrounds the VRP Property. However, observations made by EPD personnel during their initial site inspection: 1) confirmed the presence of significant breaches in the fencing separating the subject

[2] Equation 10 in the *United States EPA Soil Screening Guidance: User's Guide (July 1996)*, which can be accessed on the worldwide web at: https://semspub.epa.gov/work/HQ/175238.pdf; or Equation 4-10 in the *United States EPA Soil, Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites (December 2002)*, which may be accessed on the worldwide web at: https://semspub.epa.gov/work/HQ/175237.pdf. Both of the referenced equations are the same.

VRP Property from the residential properties to the east, and 2) indicated that fencing may be absent along the southern Property boundary.

7. If the results of a groundwater contaminant fate and transport model are to be used to determine groundwater compliance with site-specific cleanup standards at the Property, every monitoring well used to calibrate and validate the model should be considered a Point of Demonstration (POD) well with specific not to be exceeded cleanup standards assigned to them. Please see Item #8.b below regarding specific aquifer matrix parameters described in Progress Report #6.

8. Field Investigation Procedures/Documentation:

   a. Groundwater Sampling:

      i. EPD cannot determine if purging/sampling methods implemented by field personnel is consistent with current EPA Region 4, Science and Ecosystem Support Division (SESD) standard operating procedures as: Groundwater field sampling logs provided in the appendices of the subject submittals do not include depth of purging/sampling pump intake or sample collection method (e.g., "straw method for VOC samples, inline vacuum jug sampler for SVOCs, etc.). Furthermore, several of the logs were not adequately completed by field personnel. Please ensure that: 1) the referenced missing information is added to the field sampling forms, and 2) field personnel are instructed to completely fill in the forms for each sample collected.

      ii. Volatile organic compound (VOC) analytical results for groundwater samples collected with polyethylene return tubing (or bladders, if used) will not be acceptable for demonstrating achievement of delineation or compliance with cleanup standards. Samples used for this purpose should be collected using dedicated, Teflon/Teflon-lined tubing (and bladders, if a bladder pump is used) as discussed in the conference call.

   b. Determination of Aquifer Parameters (Section 3.4 of Progress Report #6): Although not specifically discussed during the conference call, EPD has the following comments regarding the determination of aquifer parameters in anticipation of groundwater contaminant fate and transport modeling to be conducted for the Property in the future:

      i. Please provide a list of all input data, justification of the data, and calculations for the determination of hydraulic conductivity (K) at the site described in the last paragraph of page 11 of Progress Report #6. GFI should be able to supply EPD with the raw data recorded by the data loggers used during slug tests conducted on September 23, 2014 and paper copies of the input/output software calculation sheets for EPD's review.

      ii. Horizontal and vertical hydraulic gradients (i_h and i_v, respectively) should not be determined based solely on one set of groundwater elevation data acquired during a single day/monitoring event for use as input parameters for the modeling referenced above. EPD recommends that multiple groundwater elevation data sets representative of different seasons of the year over the lifetime of site characterization investigations be considered when determining the i_h and i_v values for use in the referenced modeling effort. Furthermore, EPD recommends that i_h values for specific groundwater elevation data sets be based on isopotential contours along the future modeled contaminant plume centerline flow path rather than based on a three-point calculation

using groundwater elevation data from three monitoring wells, which may not reflect the modeled contaminant plume pathway. Actual calculations should be provided as documentation in future submittals.

iii. EPD recommends that grain size analysis with hydrometer or Atterberg limits analysis (to distinguish silt and clay fractions) be used to estimate aquifer matrix bulk density and effective porosity, as groundwater contaminant fate and transport results can be relatively sensitive to these parameters.

EPD will expect Ms. Stapely of GFI to contact Ms. Alexander at (404) 657-8658 or shanna.alexander@dnr.ga.gov to schedule a telephone call to discuss: 1) the methodology for determining RRS values, 2) procedures for selection of delineation and cleanup standards, 3) necessary tables and other documentation for EPD's evaluation of proposed RRS and delineation and cleanup standards for soil and groundwater, and 4) determination of potential receptors and points of exposure as agreed to during the February 7, 2017 conference call. Please note, that the referenced conversation should occur as soon as feasible to allow items of concern in this letter to be addressed in the next scheduled semi-annual progress report (VRP Progress Report #7), which is due by May 22, 2017. EPD recommends that you submit your responses to Items #2 through #4 by March 31, 2017 to allow EPD an opportunity to provide feedback prior to submittal of VRP Progress Report #7.

Please do not hesitate to contact Ms. Daniels, the EPD site compliance officer, at (404) 657-8646 or carolyn.daniels@dnr.ga.gov if you have any questions regarding comments not directly related to Item #4 above.

Sincerely,

David Hayes
Unit Coordinator
Response and Remediation Program

Enclosures: Example Tables 1 and 2

c: Aaron Getchell, P.G., Anthony Hoffman, P.E., and Claire Stapely, Gannett Fleming, Inc. (*via* e-mail)

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Example Table 2 Regulated Substances Detected in Groundwater at the VRP Property

Detected Regulated Substance	CAS No.	Maximum Concentration Detected (mg/L)	Location (ID) & Depth (well screen interval in ft bgs) of Maximum Detection	Delineation Standard (mg/L)	Criteria for Delineation Standard [(A),(B), (C), (D), (E), or (F)]	Extent Delineated (laterally and vertically)? (yes or no)	Retained as Constituent of Concern (COC)? (yes or no)	Notes/Comments/Justification
Groundwater								

Delineation Criteria Options:

Pursuant to the Georgia Voluntary Remediation Act [§12-8-108.(1)]

(A): Concentrations from appropriate number of samples representative of of local ambient or anthropogenic background conditions not affected by the subject site release.

(B): For Soil Only, Notification Concentrations (NCs) - Cannot exceed (E).

(C): 2X Laboratory Lower Detection Limit (Standard PQL for EPA Analytical Method used) if less than all cleanup standards - Cannot exceed (E).

(D): For metals in soil, concentrations reported for GA undisturbed native soil samples as reported in USGS Open File Report 8 1-197 (Boerngen and Shacklette, 1981) or such later version as may be adopted by rule or regulation of the board.

(E): Default Residential Standards/Type 1 RRS:

Pursuant to the Georgia Hazardous Site Response Rules [§391-3-19-.06(3)(b)]

(F): For soil only: Highest value between Type 1 or Type 2 RRS

Example Table 1: Regulated Substances Detected in Soil at the VRP Property

Detected Regulated Substance	CAS No.	Maximum Concentration Detected (mg/kg)	Location (ID) & Depth (ft bgs) of Maximum Detection	Delineation Standard (mg/kg))	Criteria for Delineation Standard [(A),(B), (C), (D), (E), or (F)]	Extent Delineated (laterally and vertically)? (yes or no)	Retained as Constituent of Concern (COC)? (yes or no)	Notes/Comments/Justification
Soil (Only those samples collected above the saturated zone)								

Delineation Criteria Options:

Pursuant to the Georgia Voluntary Remediation Act [§12-8-108.(1)]

(A): Concentrations from appropriate number of samples representative of of local ambient or anthropogenic background conditions not affected by the subject site release.

(B): For Soil Only, Notification Concentrations (NCs) - Cannot exceed (E).

(C): 2X Laboratory Lower Detection Limit (Standard PQL for EPA Analytical Method used) if less than all cleanup standards - Cannot exceed (E).

(D): For metals in soil, concentrations reported for GA undisturbed native soil samples as reported in USGS Open File Report 8 1-197 (Boerngen and Shacklette, 1981) or such later version as may be adopted by rule or regulation of the board.

(E): Default Residential Standards/Type 1 RRS:

Pursuant to the Georgia Hazardous Site Response Rules [§391-3-19-.06(3)(b)]

(F): For soil only: Highest value between Type 1 or Type 2 RRS