GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

Land Protection Branch
2 Martin Luther King, Jr. Drive
Suite 1054, East Tower
Atlanta, Georgia 30334
404-657-8600

August 30, 2018

Trademark Metals Recycling, LLC
c/o Mr. Eric Logsdon, Director of Corporate Environmental
300 Pike Street
Cincinnati, Ohio 45202

Subject: VRP Submittals Dated June 29, 2017 and October 5, 2017
Rice Iron and Metals, Inc. (Former) HSI 10923
2000 West Savannah Avenue
Valdosta, GA (Tax Parcel 0121A 026)

Dear Mr. Logsdon:

The Georgia Environmental Protection Division (EPD) has reviewed the subject submittals prepared by Gannett Fleming, Inc. (GFI), on behalf of Trademark Metals Recycling, LLC (TMR) for the referenced property. On a recent conference call, GFI indicated that a draft compliance status report (CSR), due on or before May 22, 2019, has been prepared for the site. EPD understands that additional data, not previously submitted to EPD, will be included in the CSR to address past comments. EPD has the following comments concerning the historical submittals and the pending CSR submittal:

1. **Risk Reduction Standards (RRS):** EPD concurs with the use of Type 1 RRS as the criteria for delineating contamination in soil and groundwater at the site. EPD acknowledges TMRs efforts to address historical comments related to RRS. While the Type 1 RRS for soil and groundwater provided in Tables 1A, 1B, 2A, 2B, 3A, and 3B of the October 5, 2017 Progress Report addressed some of the outstanding issues, additional modifications are required. These modifications have been summarized in Attachment 1. Tables 1A, 1B, 2A, 2B, 3A, and 3B document the COC selection process and should be included as an attachment in the CSR once the revisions have been made. For simplicity, tables referenced in the text of the CSR should only focus on constituents of concern (COCs). Media-specific regulated substances that have been adequately investigated and not detected above applicable delineation standards (e.g., Type 1 RRS or Type 1/2 RRS dependent on the matrix) can generally be excluded as COCs and do not require additional analysis.
2. **Groundwater Impacts:** Based on discussions with GFI on July 12, 2018, TMR intends to apply a uniform environmental covenant (UEC) at the qualifying property to address groundwater impacts, as opposed to remediating impacts to Type 1 through 4 RRS remedial endpoints. Using this approach, TMR will need to certify to Type 5 RRS. Given the known proximity of the presumed source area to downgradient groundwater receptors, the approval of Type 5 RRS will require that the following are submitted with the CSR:
    a. Data from Additional Groundwater Monitoring Wells: Certification with Type 5 RRS for groundwater requires a robust understanding of groundwater flow. Currently, only

one monitoring well (MW-15) delineates impacts downgradient of MW-1R. Additional downgradient monitoring wells will be required to ensure that groundwater flow and contaminant migration pathways are adequately understood. The total number and locations of these wells can, at TMR's discretion, be discussed with EPD to ensure concurrence.

b. Receptor Demonstration: The additional groundwater data collected as a component of comment 2.a. should be accompanied by a fate and transport model simulating plume migration toward downgradient receptors.

c. Monitoring and Maintenance Plan: A draft long term monitoring and maintenance plan which includes annual groundwater monitoring at downgradient monitoring wells should be submitted with the CSR. The duration of annual groundwater monitoring will be a minimum of five years; however the exact duration will depend on the additional data collected to address Comment 2.a and the modeling results.

d. UEC: A draft UEC which references the monitoring and maintenance plan should be submitted as an attachment with the CSR. Additional information regarding UECs, including a model environmental covenant, can be found on the EPD website at https://epd.georgia.gov/uniform-environmental-covenants.

3. **Site Strategy for Soil Impacts:** Historical reports provided by TMR have only included Type 1 RRS. As such, EPD assumes that on-site excavation activities have been performed to meet Type 1 RRS remedial endpoints. Please note that certification to Type 5 RRS in soil will likely require the implementation of engineering controls, along with monitoring and maintenance and documentation in the UEC.

4. **Historical Investigation Activities:** Several of the historical submittals have referenced investigation activities without providing supporting information. EPD assumes that these investigations were ongoing and that TMR will provide these documents in the CSR. Please ensure that the CSR includes comprehensive data from all corrective action and monitoring activities. The CSR should include the following information:

   a. Soil Data: A boring log and laboratory report should accompany each soil sample.

   b. Groundwater Data: All recent groundwater data should be accompanied by a groundwater purge form and laboratory report.

   c. Excavation Activities: All historical excavations, including those performed by Stillwater, should be summarized on a comprehensive figure. Data for all compliance samples (e.g., side-wall, basal samples, etc.) should be highlighted.

   d. Monitoring Well Construction Data: A monitoring well construction log should be submitted for each monitoring well.

   While some of this information has been historically provided, EPD recommends resubmitting all of the above information in the CSR to demonstrate compliance.

5. **Property Ownership and Access:** Implementing a UEC and certifying to Type 5 RRS will require that TMR has continued access to the facility. Please provide documentation with the CSR confirming that TMR has access to the property for completion of all necessary investigation, monitoring, and maintenance activities.

For your reference, a CSR Checklist is included in Attachment 2. Additional information concerning CSR requirements can be found on the EPD website at https://epd.georgia.gov/compliance-status-report-391-3-19-063. Please provide EPD with your next VRP submittal on or before November 22, 2018. If you have any questions, please contact Michael Smilley at (404) 463-0530.

Sincerely,

David Hayes
Unit Coordinator
Response and Remediation Program

Attachments:

Attachment 1 – Risk Reduction Standards Comments

Attachment 2 – Compliance Status Report Checklist

c: Aaron Getchell, Gannett Fleming, Inc. (via email)

File: 254-0068, VRP

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ATTACHMENT 1

RISK REDUCTION STANDARDS COMMENTS

Risk Reduction Standards for Delineation and Certification: The following comments specifically address the contents of the October 5, 2017 submittal:

1. **Table 1A:**
    a. Cis-1,2-Dichloroethene (DCE) appears twice in the table with different proposed RRS values shown. The Type 1 RRS provided for the first cis-1,2-DCE entry in the table is incorrect and the entire row should be removed from the table.
    b. The data for the dioxins and dioxin-like PCBs are reported in pg/g; however, the proposed Type 1 RRS are reported in mg/kg. For comparison purposes, please report the analytical results and the proposed RRS in the same units.
2. **Table 1B:**
    a. The values proposed as the default residential Type 1 groundwater RRS were reported in mg/L; however, the groundwater analytical data are reported in µg/L.
    b. Some of the substances listed in the table are not regulated substances (not listed in Appendix I of the Rules) and have proposed Type 1 RRS denoted as "NC" (No Criteria). The most relevant and appropriate descriptor would be "NR" (Not Regulated) *in lieu* of the current NC descriptor for these substances. RRS do not apply to these substances.
    c. The purpose of including the default groundwater RRS in Table 1B is assumed to be for comparison of the groundwater data to delineation and cleanup standards. Therefore, all concentrations (including detection limits for non-detections) for regulated substances exceeding the proposed RRS should be noted by bolding and/or highlighting them.
3. **Global Changes to Proposed Numeric Type 1 RRS:** Please revise the media-specific RRS in all tables provided in the October 5, 2017 as follows:
    a. **Soil:** Some of the proposed Type 1 soil RRS are incorrect as follows:
        i. In some instances, the proposed RRS was based on cancer effects (RAGS, Part B Equation 6) even though no cancer toxicity values are available (e.g., dichlorodifluoromethane). For your convenience and to expedite the review, the correct Type 1 RRS for these substances in soil are as follows:

Regulated Substance	Proposed Value (mg/kg)	EPD Value (mg/kg)
Dichlorodifluoromethane	0.0803	24 (non-cancer effects)
Methyl chloride (chloromethane)	0.04	3 (App. III, Table 1 value x 100)
4-Methyl-2-pentanone (MIBK)	3.3	200 (App. III, Table 1 value x 100)
1,1-Dichloroethane	240	42 (cancer effects)
Bromodichloromethane	1.18	3.7 (cancer effects)
Dibromochloromethane	1.63	8 (App. III, Table 1 value x 100)
1,3-Dichloropropane	1000	0.5 (App. III, Table 1 value x 100)
Chlorobenzene	4.18	10 (App. III, Table 1 value x 100)
1,2,3-Trichloropropane	0.478	4 (App. III, Table 1 value x 100)
1,2-Dibromo-3-chloropropane	NC	0.02 (App. III, Table 1 value x 100)

i. The PCB congeners listed in the referenced table are dioxin-like compounds, yet the 2005 World Health Organization's (WHO) Human and Mammalian Toxicity Equivalency Factors (TEFs) were not applied. For your convenience, a table of the individual TEF-adjusted soil Type 1 RRS for these congeners relative to their toxicity to 2,3,7,8-TCDD are provided below:

PCB Congener	WHO 2005 TEF	Type 1 RRS for Soil (pg/g)
PCB-77	0.0001	800,000
PCB-81	0.0003	266,667
PCB-105	0.00003	2,666,667
PCB-114	0.00003	2,666,667
PCB-118	0.00003	2,666,667
PCB-123	0.00003	2,666,667
PCB-126	0.1	800
PCB-156	0.00003	2,666,667
PCB-157	0.00003	2,666,667
PCB-167	0.00003	2,666,667
PCB-169	0.03	2,667
PCB-189	0.00003	2,666,667

b. **Groundwater:** The proposed Type 1 groundwater RRS for some of the regulated substances are incorrect as follows:
   i. Some of the values reported as the Type 1 groundwater RRS are "a"-flagged and the footnotes associated said descriptor states, "*Field analysis is required, analyzed outside of holding time*". Based on this footnote, it appears the numeric values associated with this descriptor *are invalid* for use as the Type 1 groundwater RRS. Please note:
      1. All "a"-flagged values presented in Appendix III, Table 1 of the Rules denote the possibility that the regulated substance's analytical detection limit may be greater than the value shown before the "a" descriptor, and therefore, the Type 1 groundwater RRS should be set equal to the analytical detection limit [defined by the Rules as the standard method practical quantitation limit (PQL)].
      2. If the detection limit is less than the "a"-flagged value listed in Appendix III, Table 1 of the Rules, the "a"-flagged value should be applied as the Type 1 groundwater RRS. Please note that there is no need to attach the "a" descriptor to the value. For example: The Type 1 RRS for 1,1,2,2-Tetrachloroethane should be listed on the table as 0.0002 and not 0.0002(a).
   ii. The value proposed as the Type 1 groundwater RRS for Hexachlorobutadiene (3E-04 mg/L) is lower than the value posted on

Table 1, of Appendix III of the Rules (1E-03 mg/L) and may represent the analytical method detection limit.

iii. *All* regulated substances (those substances listed in Appendix I of the Rules) should have a numeric value assigned as a Type 1 RRS.

1. Some *regulated* substances that are not listed in Appendix III, Table 1 of the Rules were incorrectly assigned the NC (No Criteria) descriptor. If a regulated substance is not included in Appendix III, Table 1 of the Rules, the Type 1 groundwater RRS for compliance certification should default to the analytical detection limit posted as <X.XX, where the X.XX is the numeric value of the detection limit.
2. Several *regulated* substances were incorrectly assigned the NC designator although the Type 1 groundwater RRS are provided in Appendix III, Table 1 of the Rules *under the chemicals' synonym names*. For your convenience, the correct Type 1 groundwater RRS, with synonym names, for these substances are provided below:

Compounds	Type 1 RRS for GW (mg/L)
2-Butanone (Methyl Ethyl Ketone or MEK)	2
Chloromethane (Methyl chloride):	0.003
1,2-Dibromo-3-chloropropane (Dibromochloropropane):	0.0002
1,2-Dibromoethane (Ethylene dibromide or EDB):	0.00005
4-Methyl-2-pentanone (Methyl Isobutyl Ketone or MIBK):	2

iv. m-, p-Xylenes and o-Xylene, the Type 1 groundwater RRS were listed as "Xylene, Total" (to be compared to the summation of: 1) m-, p-Xylenes and 2) o-Xylene reported concentrations). However, the Type 1 groundwater RRS for total xylenes was not provided in the table and should be listed as 10 mg/L. In addition, the numeric Type 1 groundwater RRS should be listed as 10 mg/L for both: 1) m-, p-Xylenes and 2) o-Xylene.

ATTACHMENT 2

COMPLIANCE STATUS REPORT CHECKLIST

Compliance Status Report
Review Checklist

Site Name:				**HSI # :**	
City/County:				**CSR Date:**	
PRP:		**Revision No. (if applicable):**		**Consultant**	

Release to Soil?	YES	NO	**Release to Groundwater:**	YES	NO	
Soil RRS Certification:	Type 1	Type 2	Type 3	Type 4	Type 5	Cannot certify
GW RRS Certification:	Type 1	Type 2	Type 3	Type 4	Type 5	Cannot certify

RULE SECTION	DESCRIPTION OF REQUIREMENT	Y or Ξ	Location in CSR (i.e. pg.)
391- 3-19-.06(3)(b)(1)	A description of each known source which has contributed to or is contributing to a release at the site including:		
391- 3-19-.06(3)(b)(1)(i)	Source name, number, or other descriptor;		
391- 3-19-.06(3)(b)(1)(ii)	Location of source on a map (minimum scale of 1" = 200');		
391- 3-19-.06(3)(b)(1)(iii)	Name of each regulated substance released from each source;		
391- 3-19-.06(3)(b)(1)(iv)	Chronology of each source of a release; and		
391- 3-19-.06(3)(b)(1)(v)	If source is an engineered structure or waste management unit, a description of the function, design, dimensions, capacity and operation of the source, including as-built construction diagrams		

RULE SECTION	DESCRIPTION OF REQUIREMENT	Y or N	Location in CSR (i.e. pg.)
	where available.		
	Releases to Soil		
391- 3-19-.06(3)(b)(2)	Complete definition of horizontal and vertical extent of soil contamination to background. Background shall be determined using samples representative of soil conditions not affected by a release of a regulated substance. In support of the definition of the extent of contamination, the CSR shall include, at a minimum:		
391- 3-19-.06(3)(2)(b)(i)	General approach used;		
391- 3-19-.06(3)(b)(2)(ii)	Analytical parameters selected and the rationale for selection;		
391- 3-19-.06(3)(b)(2)(iii)	Map of minimum scale of 1" = 200' showing location of all sampling points by sample number, and vertical cross-sections where appropriate. Concentrations of constituents should be indicated by isoconcentration lines.		
391- 3-19-.06(3)(b)(2)(iv)	Sampling and analysis procedures including:		
391- 3-19-.06(3)(b)(2)(iv)(I)	Sampling equipment and collection techniques;		
391- 3-19-.06(3)(b)(2)(iv)(II)	Field analytical or measurement techniques including make and model of equipment and calibration schedule and type;		
391- 3-19-.06(3)(b)(2)(iv)(III)	Sample handling and preservation techniques;		
391- 3-19-.06(3)(b)(2)(iv)(IV)	Equipment decontamination procedures;		
391- 3-19-.06(3)(b)(2)(iv)(V)	Chain-of-custody procedures;		
391- 3-19-.06(3)(b)(2)(iv)(VI)	Lab techniques including references to analytical methods, including QA/QC procedures;		
391- 3-19-.06(3)(b)(2)(v)	A description of any statistical procedures used to evaluate the data;		
391- 3-19-.06(3)(b)(2)(vi)	Procedures used to establish background soil concentrations; and		

RULE SECTION	DESCRIPTION OF REQUIREMENT	Y or [Ξ]	Location in CSR (i.e. pg.)
391- 3-19-.06(3)(b)(2)(vii)	Narrative and tabular summary of all pertinent field data and the results of all final lab analyses that are supported by sufficient QA/QC control data to validate the results.		
	Releases to Groundwater		
391- 3-19-.06(3)(b)(3)	Complete definition of horizontal and vertical extent of groundwater contamination to background. Background shall be determined using samples representative of groundwater conditions not affected by a release of a regulated substance. In support of the definition of the extent of contamination, the CSR shall include, at a minimum:		
391- 3-19-.06(3)(b)(3)(i)	Analytical parameters selected and the rationale for selection;		
391- 3-19-.06(3)(b)(3)(ii)	A description of methods used to characterize sub-surface geology;		
391- 3-19-.06(3)(b)(3)(iii)	A description of methods used to characterize vertical and horizontal groundwater flow gradients, flow rates, and flow directions;		
391- 3-19-.06(3)(b)(3)(iv)	Methods used to determine hydraulic conductivities and other pertinent hydrogeological characteristics, including a description of any slug and/or aquifer tests;		
391- 3-19-.06(3)(b)(3)(v)	A description of groundwater monitoring well locations, and their installation and construction methods, including:		
391- 3-19-.06(3)(b)(3)(v)(I)	A map (minimum scale 1"= 200') depicting all existing well locations including a survey of each well=s surface reference point and the elevation of its top-of-casing;		
391- 3-19-.06(3)(b)(3)(v)(II)	Type of well casing material;		
391- 3-19-.06(3)(b)(3)(v)(III)	Description of well intake design including screen slot size and length, filter pack materials and length, and method of filter pack emplacement;		
391- 3-19-.06(3)(b)(3)(v)(IV)	Method used to seal the well from the surface and any other features designed to prevent or minimize downward migration of		

RULE SECTION	DESCRIPTION OF REQUIREMENT	Y or N	Location in CSR (i.e. pg.)
	contaminants along the well annulus; and		
391- 3-19-.06(3)(b)(3)(v)(V)	Description of methods and procedures used to develop the wells.		
391- 3-19-.06(3)(b)(3)(vi)	Description of all sampling and analysis procedures used including:		
391- 3-19-.06(3)(b)(3)(vi)(I)	Procedures and timing for measuring groundwater elevations for each sampling event;		
391- 3-19-.06(3)(b)(3)(vi)(II)	Well evacuation procedures including well volume evacuated prior to sampling;		
391- 3-19-.06(3)(b)(3)(vi)(III)	Sample withdrawal techniques, sampling equipment and materials;		
391- 3-19-.06(3)(b)(3)(vi)(IV)	Sample handling and preservation techniques;		
391- 3-19-.06(3)(b)(3)(vi)(V)	Equipment decontamination procedures;		
391- 3-19-.06(3)(b)(3)(vi)(VI)	Chain-of-custody procedures;		
391- 3-19-.06(3)(b)(3)(vi)(VII)	Lab techniques including references to analytical methods, including QA/QC procedures;		
391- 3-19-.06(3)(b)(3)(vii)	Description of procedures used to determine background groundwater concentrations;		
391- 3-19-.06(3)(b)(3)(viii)	Map (minimum scale of 1" = 200') or less depicting the horizontal extent of contamination. Concentrations should be indicated by isoconcentration lines.		
391- 3-19-.06(3)(b)(3)(ix)	Map (minimum scale of 1" = 200') or less depicting the potentiometric surface of groundwater;		
391- 3-19-.06(3)(b)(3)(x)	Maps and vertical cross-sections of appropriate scale depicting concentrations for all contaminants superimposed upon site stratigraphic features and monitoring wells; and		
391- 3-19-.06(3)(b)(3)(xi)	Narrative and tabular summary of all pertinent field data and the results of all final lab analyses that are supported by sufficient		

RULE SECTION	DESCRIPTION OF REQUIREMENT	Y or N	Location in CSR (i.e. pg.)
	QA/QC control data to validate the results.		
	ADDITIONAL REQUIREMENTS		
391- 3-19-.06(3)(b)(4)	A description of any human or environmental receptors who may have been or could potentially be exposed to a release at the site.		
391- 3-19-.06(3)(b)(5)	A description of all properties which are part of the site including the address and location of such property, its legal description, and the property owner=s name, address and telephone number.		
391- 3-19-.06(3)(b)(6)	The name, address, and telephone number of any other person who may be a responsible party for the site and a description of the type and amount of regulated substances such party may have contributed to a release.		
391- 3-19-.06(3)(b)(7)	A summary of previous actions taken to eliminate, control or minimize any potential risk at the site, including actions taken to comply with the risk reduction standards.		
391- 3-19-.06(3)(b)(10)	Attached to the front of the CSR, concise statement of the findings of the report presented in plain language, immediately followed by the certification required by 391-3-19-.06(4)(a).		
391-3-19-.06(4)(a)	The CSR shall include a compliance certification regarding the responsible party=s own determination as to the status of a site or any individual property at a site with regard to the applicable risk reduction standards for all regulated substances evaluated by the CSR.		
391-3-19-.06(4)(b)	The CSR certification shall be signed by the applicable person described in Items 1 - 4 of .03(6)(c). Where the CSR is submitted for two or more cooperating responsible parties, the certification may be signed by a duly authorized representative of said responsible parties.		
391-3-19-.06(4)(c)	Any person signing the certification of compliance shall make the certification specified in the Rules.		

RULE SECTION	DESCRIPTION OF REQUIREMENT	Y or N	Location in CSR (i.e. pg.)
391- 3-19-.06(5)(a)	Within 7 days of submitting the CSR, RP shall publish a notice in both a major local newspaper of general circulation and the legal organ of the local governments in whose jurisdiction the site is located, announcing that such a report is available for inspection by the general public, including:		
391- 3-19-.06(5)(a)(1)	The name, address, and location of the site as it appears on the HSI, and, if the plan applies to less that the full site, the street address and owner=s name of the applicable properties;		
391- 3-19-.06(5)(a)(2)	The statement provided in this section;		
391- 3-19-.06(5)(a)(3)	Announcement of a 30-day comment period and the name, address, and phone number of the EPD contact person to whom written or oral comments can be made;		
391- 3-19-.06(5)(a)(4)	Name, address, and phone number of the RP or its designated contact person; and		
391- 3-19-.06(5)(a)(5)	Location where the report may be viewed or copied.		
391- 3-19-.06(5)(e)	Within 7 days of submitting the CSR to EPD, the RP shall provide to the count government in the county in which the site is located and to the government of any city in whose jurisdiction the site is located the same information required above.		
391-3-19-.07(4)	For corrective action to be in compliance with these standards, the following common elements are required:		
391-3-19-.07(4)(a)	Removal of all free product to the extent practicable.		
391-3-19-.07(4)(b)	No soil remaining in place shall exhibit the hazardous waste characteristics of ignitability, corrosivity, or reactivity.		
391-3-19-.07(4)(c)	Shall not allow exposure to concentrations which would cause food chain contamination, damage to soils or to biota which could impair the use of the soils for agricultural or silvicultural purposed, adverse effects on vegetation or wildlife, or the accumulation of vapors in		

RULE SECTION	DESCRIPTION OF REQUIREMENT	Y or [Ξ]	Location in CSR (i.e. pg.)
	buildings or other structures which pose a threat to human health and the environment.		
391-3-19-.07(4)(d)	Shall protect the waters of the State from releases that would cause surface water to exceed the Georgia in-stream water quality standards.		
391-3-19-.07(4)(e)	If the detection limit and/or the background concentration for a regulated substance is greater than the concentration specified in any risk reduction standard, the greater of the detection limit or background shall be used for determining compliance with the risk reduction standards.		

_____ Groundwater work certified by a geologist, etc.

_____ Corrective Action Plan included.

Additional Notes:

CONSTITUENTS OF CONCERN - SOIL				
Constituent	CAS No.	Notification Concentration	RRS: Type _____	In compliance with RRS?
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no

CONSTITUENTS OF CONCERN - GROUNDWATER				
Constituent	CAS No.	MCL	RRS: Type _____	In compliance with RRS?
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no
				yes no