Georgia Department of Natural Resources

2 Martin Luther King, Jr. Drive, SE, Suite 1462 East, Atlanta, Georgia 30334 Mark Williams, Commissioner

Environmental Protection Division F. Allen Barnes, Director Land Protection Branch Mark Smith, Branch Chief

Reply To: Response and Remediation Program 2 Martin Luther King, Jr. Drive, S.E. Suite 1462, East Tower Atlanta, Georgia 30334-9000 Office 404/657-8600 Fax 404-657-0807

February 14, 2011

FILE COPY

Metalplate Galvanizing, L.P. c/o Mr. Adam T. Brown, Vice President Technical & Environmental Affairs 505 Selig Drive SW Atlanta, Georgia 30336

VIA E-MAIL AND REGULAR MAIL

RE: Voluntary Investigation and Remediation Plan and Application, August 9, 2010 Comment Letter

Metalplate Galvanizing Facility, HSI No. 10204
505 Selig Drive SW, Atlanta, Fulton County, Georgia
Tax Parcel 14F-0082-LL-0346

Dear Mr. Brown:

The Georgia Environmental Protection Division (EPD) has reviewed the August 9, 2010, Voluntary Investigation and Remediation Plan (VIRP) submitted pursuant to the Georgia Voluntary Remediation Program Act (the Act). EPD has noted the following:

Conceptual Site Model:

- 1. Figure 8, Conceptual Site Model (CSM), does not meet the intent of the Checklist and does not provide relevant information regarding the potential migration of contamination. Each progress report should include revisions to the CSM, which must address surface water, sediment, and groundwater interactions. The CSM might be more clearly depicted with a combination of plan views and cross sections rather than the three-dimensional view attempted in Figure 8. Specifically, please provide a cross-section figure through monitoring wells MW-1, MW-7, MW-5, MW-2, MW-13D, MW-3, MW-6, MW-6D, and MW-8 along with appropriate perpendicular cross-sections.
- 2. The March 2007 surface water data demonstrated elevated zinc concentrations in Utoy Creek and EPD is concerned that zinc may continue to migrate to Utoy Creek. The above cross section(s) should also incorporate stream elevation data from Utoy Creek and elevation data from the applicable ditches. Future surface water sampling events should include Utoy Creek.
- The VIRP proposes to evaluate the impact of contaminated groundwater on surface water concentrations. The CSM must also evaluate the contribution to surface water and groundwater contamination from elevated concentrations in sediments.

Soil:

4. EPD's March 18, 2010 letter concurred that soil on the site met Type 4 risk reduction standards (RRS). However, EPD has been advised in a letter dated November 19, 2010 by Aston Investment Corporation, the owner of impacted tax parcel ID 14-0059-LL-017 that Aston Investment Corporation does not agree to limit the use of their property to non-residential and Metalplate Galvanizing LP has not included this parcel in the voluntary remediation program application and plan. Therefore, Metalplate Galvanizing LP must continue with corrective action on impacted tax parcel ID 14-0059-LL-017 in accordance with the Rules for Hazardous Site Response.

Metalplate Galvanizing L.P. August 9, 2010 VIRP February 14, 2011 Page 2 of 2

- 5. Although soil remediation has been previously conducted, the soil exposure pathway cannot be eliminated. EPD has concurred that soil meets the Type 4 RRS. Therefore, provided the proposed uniform environmental covenant is implemented it should include a restriction on residential use of the property and require submittal of an annual non-residential use certification. Please include a figure showing all off-property areas that exceed residential RRS for soil in the first progress report.
- 6. Table 1 incorrectly attributes the zinc in soil delineation concentration criteria to Appendix III, Table 2 of the Rules. The value proposed is actually the previously approved background concentration for zinc in soil.

Groundwater:

- 7. In our December 15, 2008 Notice of Deficiency we noted that vertical delineation of the groundwater plume to background concentrations was not completed, as zinc was detected in MW-13D. The narrative notes that an additional monitoring well was not installed, but an existing deep process water well would be used (DW-1 location shown on Figure 1). However, this well is upgradient of the groundwater plume and an open bore well, and is therefore not suitable as a vertical delineation well. The most appropriate location for a vertical extent well is between MW-2 and MW-3. Please report the results for total zinc analysis from this well, once installed, as only the results for dissolved zinc were submitted for DW-1.
- 8. An additional monitoring well should be installed in the vicinity of the detention basin on the southeast corner of the Metalplate property. This well is necessary to demonstrate groundwater conditions and trends in the vicinity of the excavated ditches. The data should be used to enhance the CSM and for future modeling of groundwater migration and surface water impacts.
- 9. EPD's March 18, 2010 Notice of Deficiency provided several comments pertaining to proper monitoring well purging and sampling techniques. All sampling must be performed in accordance with appropriate Region 4 EPA Science and Ecosystem Support Division operating procedures, and adequate documentation must be included in the compliance status report.

Metalplate Galvanizing, L.P. (Metalplate) must address these comments to EPD's satisfaction in order to demonstrate compliance with the provisions, purposes, standards and policies of the Act. EPD may, at its sole discretion, review and comment on documents submitted by Metalplate. However, failure of EPD to respond to a submittal within any timeframe does not relieve Metalplate from complying with the provisions, purposes, standards and policies of the Act.

If you have any questions, please contact Montague M^cPherson of the Response and Remediation Program at (404) 657-8600.

Sincerely,

Alexandra Y Cleary

Alexandra Y. Cleary

Program Manager

Response and Remediation Program

c: Ernest M. Cain, Vice President, Metalplate Galvanizing, L.P. Gregory Wrenn, PE, MACTEC
James Levine, McKenna Long & Aldridge LLP

File: HSI No. 10204

S:\RDRIVE\MONTMC\HSI\METPLATE\VRP comment letter.doc

Georgia Department of Natural Resources

2 Martin Luther King, Jr. Drive, SE, Suite 1462 East, Atlanta, Georgia 30334

Mark Williams, Commissioner Environmental Protection Division F. Allen Barnes, Director Land Protection Branch Mark Smith, Branch Chief

Reply To:
Response and Remediation Program
2 Martin Luther King, Jr. Drive, S.E.
Suite 1462, East Tower
Atlanta, Georgia 30334-9000
Office 404/657-8600 Fax 404-657-0807

February 14, 2011

VIA E-MAIL AND REGULAR MAIL

FILE COPY

Metalplate Galvanizing, L.P. c/o Mr. Adam T. Brown, Vice President Technical & Environmental Affairs 505 Selig Drive SW Atlanta, Georgia 30336

RE: Notice of Deficiency

Screening Level Ecological Risk Assessment, August 9, 2010
Annual Groundwater Monitoring/Corrective Action Effectiveness Report, January 25, 2011
Metalplate Galvanizing Facility, HSI No. 10204
505 Selig Drive SW, Atlanta, Fulton County, Georgia

Dear Mr. Brown:

The Georgia Environmental Protection Division (EPD) has reviewed the Screening Level Ecological Risk Assessment (SLERA) dated August 9, 2010 and the Annual Groundwater Monitoring/Corrective Action Effectiveness Report (AGM) dated January 25, 2011. EPD has noted the following deficiencies:

- 1. **Table 2-2:** The minimum detected concentration of Lead in sediment for the Middle Ditch and upper half of the Lower West Ditch, should be 28.8 mg/kg, not 24 mg/kg, according to the table in Appendix A. Additionally, the minimum detected concentration of Zinc in sediment for the same exposure area should be 165 mg/kg, not 314 mg/kg, according to the table in Appendix A.
- 2. **Table 2-3:** The Georgia Instream Water Quality Standards (ISWQS) were revised in March 2010. Lead and zinc have ISWQS that are distinguished between acute and chronic criteria. For freshwater, they are as follows:

Lead: Acute-30 ug/L Chronic- 1.2 ug/L

Zinc: Acute-65 ug/L Chronic- 65 ug/L (same for both criteria).

- 3. **Table 3-7:** Sample et al¹ lists an Avian Test Species Zinc NOAEL TRV value of 14.5 mg/kg/day and an Avian Test Species Zinc LOAEL value of 131 mg/kg/day. Please explain why only the LOAEL value was used and why it was used instead as a NOAEL TRV for the American Woodcock.
- 4. **Table 3-10:** EPD was not able to reproduce the intake values listed in the table using the exposure parameters and the estimated ingestion equation found in Table 3-3. Please check the spreadsheet for calculation errors. A sample calculation would be helpful for review purposes.
- 5. Food Web Calculations: It is unclear how sediment concentrations are being used in the food web calculations, since the equations used to estimate ingestion do not include a sediment term. Please provide an explanation.

¹ Toxicological Benchmarks for Wildlife: 1996 Revision (ES/ER/TM-86/R3)

Metalplate Galvanizing L.P. February 14, 2011 Page 2 of 3

- 6. **LOAEL Risk Characterization:** When evaluating a more realistic exposure scenario, EPD prefers that the ecological Exposure Point Concentration (EPC) be the more conservative of the Maximum Detected Concentration (MDC) and the 95% Upper Confidence Limit (UCL), of the mean, rather than the mean concentration. Please note that when using ProUCL software to determine 95% UCLs, fewer than 10 samples per exposure area, provides poor estimates of mean concentrations (EPA, 1992)². In these cases, the guidance recommends that the MDC be used as the EPC. Please re-calculate the LOAEL Hazard Quotients (HQs) for each receptor and update tables as necessary.
- 7. **Soil Concentrations and Ecological Receptors:** Although site soils meet Type 4 RRS, additional corrective action for soil may be necessary if the revised ecological LOAEL HQs are greater than 1.0.
- 8. Non-Detects and Calculating Exposure Point Concentrations (EPCs): When calculating EPCs with datasets that contain non-detects, one-half the detection limits should be used as values for the non-detects.
- 9. **Zinc Soil Concentration and Invertebrates:** EPD is concerned that potential risk from exposure to zinc soil concentrations may still be an issue for soil invertebrates in all exposure areas, since mean concentrations, rather than MDCs or 95% UCLs, were used to eliminate zinc as a soil COPC. Please provide further information on this issue.
- 10. EPD agrees with the statement in the SLERA, "Based on LOAEL-based HIs and the qualitative assessment findings, further action is recommended for sediments and surface water associated with the drainage ditches." If the revised LOAEL HI values are greater than 1.0, EPD recommends that the risk assessment process should continue and Remedial Goal Options (RGOs) should be developed.
- 11. EPD agrees with the conclusion of the AGM that semi-annual groundwater monitoring at the site should continue. Although concentrations in certain wells on downgradient properties are increasing, MW-3 was the only monitoring well with zinc concentrations above the Type 4 RRS in December 2010. However, corresponding turbidity values were also elevated and have been historically. The text and boring logs indicate that the well may have been sampled prior to parameter stabilization because it was 'going dry'. For future sampling events please refer to Section 3.1.1 of the SESD Groundwater Operating Procedures, which specifies that the well should be fully evacuated and then sampled following sufficient recovery.

EPD acknowledges that Metalplate Galvanizing, LP has submitted a Voluntary Investigation and Remediation Plan (VIRP) pursuant to the Georgia Voluntary Remediation Program Act; however, the VIRP only applies to the facility's property (Tax Parcel 14F-0082-LL-0346). Therefore, Metalplate Galvanizing, LP must continue investigation and remediation of off-property contamination pursuant to the Hazardous Site Response Act (HSRA) and its associated Rules until those impacted properties are enrolled in the Voluntary Remediation Program. Furthermore, Metalplate Galvanizing, LP must remain in compliance with HSRA and its associated Rules; otherwise, Metalplate Galvanizing, LP may not be eligible as a participant in the Voluntary Remediation Program.

Please submit a revised SLERA, a Baseline Ecological Risk Assessment (BERA), Remedial Goal Options, and a schedule for submittal of a sediment corrective action plan by no later than May

² Supplemental Guidance to RAGS: Calculating the Concentration Term (EPA Publication 9285.7-081, May 1992)

Metalplate Galvanizing L.P. February 14, 2011 Page 3 of 3

16, 2011. Semi-annual groundwater and surface water sampling results should be submitted with the VIRP Progress Reports. Please include the results of the April 2011 event in the first Progress Report.

If you have any questions, please contact Montague M^cPherson of the Response and Remediation Program at (404) 657-8600.

Sincerely,

Jason Metzger

Acting Unit Coordinator

Response and Remediation Program

c: Ernest M. Cain, Vice President, Metalplate Galvanizing, L.P. Gregory Wrenn, PE, MACTEC
James Levine, McKenna Long & Aldridge LLP

File: HSI No. 10204

S:\RDRIVE\MONTMC\HSI\METPLATE\VRP incomplete letter.doc