

STATE OF NEVADA  
Department of Conservation & Natural Resources  
DIVISION OF ENVIRONMENTAL PROTECTION

Brian Sandoval, Governor  
Leo M. Drozdoff, P.E., Director  
Colleen Cripps, Ph.D., Administrator

December 14, 2012

Kevin Lombardozzi  
Director, Environmental Management  
Titanium Metals Corporation  
Three Lincoln Centre, Suite 1700  
5430 LBJ Freeway  
Dallas, TX 75240-2697

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**  
# 9171 9690 0935 0011 8665 93

RE: Enforcement Action Requiring Site Remediation Activities and Show Cause Meeting, TIMET Corp. (TIMET) Henderson, Nevada

NDEP Facility ID Number H-000537

Dear Mr. Lombardozzi:

Enclosed please find a Finding of Alleged Violation, Order, and State Environmental Commission Form #3. This enforcement action requires Titanium Metals Corporation ("TIMET") its predecessors in interest, and affiliates to complete approved remediation activities for the known contamination in the shallow groundwater at the TIMET facility located within the Black Mountain Industrial ("BMI") Complex, 181 North Water Street Gate 3, Henderson, Nevada also known as Nevada Division of Environmental Protection (the "Division") facility ID Number H-000537. The enforcement action seeks injunctive relief to ensure compliance with TIMET's remediation obligations going forward.

The enclosed Order requires a representative of TIMET to appear before the Division to show cause why the Division should not proceed with an action for injunctive or other relief in District Court. Any violation of the terms of this Order could subject TIMET to an action for appropriate relief pursuant to NRS 445A.695, 445A.700, and 445A.705.

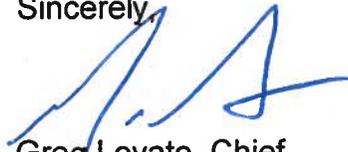
Pursuant to NRS 445A.690, this Order is final and not subject to review unless, within thirty (30) days after the date the Order is served, a request by written petition for a hearing is received by the State Environmental Commission, John Walker, Executive Secretary, via mail to 901 South Stewart Street, Suite 4001, Carson City, Nevada 89701, or via facsimile to (775) 687-5856. I have included the appropriate form for an appeal hearing (Form #3) for your convenience. Please provide me with a copy of any correspondence you have with the Commission.

If you have any questions regarding this matter, please call me at (775) 687-9373.



IN THE MATTER OF )  
TITANIUM METALS CORP. )  
December 14, 2012 )  
Page 2 of 10 )

Sincerely,



Greg Lovato, Chief  
Bureau of Corrective Actions

Enclosures (3)  
Finding of Alleged Violation  
Order  
SEC Form #3

ec: w/Enclosures  
Colleen Cripps PhD., Administrator, NDEP  
Dave Emme, Deputy Administrator, NDEP  
Shannon Harbour, P.E., Special Projects Branch Supervisor, BCA, NDEP  
Michael Friend P.E., Staff Engineer III, BCA, NDEP  
John Walker, Secretary Nevada State Environmental Commission  
Carolyn Tanner, Senior Deputy Attorney General, Nevada Office of the Attorney General  
Jasmine Mehta, Deputy Attorney General, Nevada Office of the Attorney General

Stephen Tyahla, U.S. Environmental Protection Agency, Region 9  
Steve Armann, U.S. Environmental Protection Agency, Region 9  
Brenda Pohlmann, City of Henderson  
Josh Reid, City of Henderson  
Ebrahim Juma, Clean Water Team  
Dennis Campbell, Southern Nevada Health District  
Kirk Stowers, Broadbent & Associates  
Victoria Tyson, Tyson Contracting  
Mark Paris, BRC, 875 West Warm Springs, Henderson, NV 89011  
George Crouse, Syngenta Crop Protection, Inc.  
Jay Gear, Olin Corporation  
Curt Richards, Olin Corporation  
Joe Kelly, Montrose Chemical Corporation of CA  
Chuck Elmendorf, Stauffer Management Company, LLC  
Jay Steinberg, NERT  
Jeff Gibson, AMPAC

Cc: w/ Enclosures  
Registered Agent of Titanium Metals Corporation, CSC Services of Nevada, Inc.,  
2215 Renaissance Dr, Suite B, Las Vegas, NV 89119, Certified Mail Return Receipt  
Requested # 9171 9690 0935 0011 8665 79  
Bobby D. O'Brien, President, Titanium Metals Corporation, 5430 LBJ Freeway Suite  
1700, Dallas, TX 75240, Certified Mail Return Receipt  
Requested # 9171 9690 0935 0011 8665 86

**FINDING OF ALLEGED VIOLATION**

I. This Finding of Alleged Violation is based upon the following:

**A. RELEVANT STATUTORY AND REGULATORY AUTHORITY UNDER THE NEVADA WATER POLLUTION CONTROL LAW:**

1. It is the policy of the State of Nevada and the purpose of the Nevada Water Pollution Control Law, codified at Nevada Revised Statutes (NRS) 445A.300 to 445A.730, inclusive (the "NWPCL"), "(a) to maintain the quality of the waters of the State consistent with the public health and enjoyment, the propagation and protection of terrestrial and aquatic life, the operation of existing industries, the pursuit of agriculture, and the economic development of the State, and (b) to encourage and promote the use of methods of waste collection and pollution control for all significant sources of water pollution (including point and diffuse sources)." NRS 445A.305(2).
2. The State of Nevada, Department of Conservation and Natural Resources, Division of Environmental Protection (the "Division"), under the authority of NRS 445A.445(1) has the power and the duty to administer and enforce the provisions of the NWPCL.
3. The Division is authorized by NRS 445A.675 and 445A.690 to make findings and issue orders to address violations of the NWPCL.
4. NRS 445A.465(1) states:
  1. Except as authorized by a permit issued by the department pursuant to the provisions of NRS 445A.300 to 445A.730, inclusive, and regulations adopted by the commission, it is unlawful for any person to:
    - (a) Discharge from any point source any pollutant into any waters of the state or any treatment works.
    - (c) Discharge from a point source a pollutant or inject fluids through a well that could be carried into the waters of the state by any means.
    - (d) Allow a pollutant discharged from a point source or fluids injected through a well to remain in place where the pollutant or fluids could be carried into waters of the state by any means.
5. NRS 445A.575 states: It is unlawful to discharge any radiological, chemical or biological warfare agent or high-level radioactive waste into any waters of the State.

6. The Division may issue an Order requiring the owner or operator of a property whereon hazardous waste, hazardous substances and/or regulated substances are released to take corrective action to address soil contamination pursuant to NRS 445A.675, NRS 445A.690, and NAC 445A.227, and to provide a plan and schedule for completing corrective action pursuant to NAC 445A.2271.
7. The Division may issue an Order requiring the owner or operator of a property whereon hazardous waste, hazardous substances and/or regulated substances are released to take corrective action to address groundwater contamination pursuant NAC 445A.22725, and to provide a plan and schedule for completing corrective action pursuant to NAC 445A.2273.

## **B. RELEVANT BACKGROUND**

1. Titanium Metals Corporation (TIMET), its affiliates, and successors-in-interest have owned and operated an industrial facility at the BMI Complex in Henderson, Nevada (the "Site") for approximately fifty-five (55) years. These entities are collectively referred to herein as the "Parties."
2. TIMET continues to and has in the past primarily produced titanium ingots, titanium tetrachloride, titanium sponge, and titanium fines at the Site. As a result of releases from operations at or near the Site, contaminants are found in the groundwater at or near the Site in concentrations above the limits set by the NWPCCL or groundwater action levels at Nevada Administrative Code 445A.22605 and 445A.22735. These contaminants include, but are not limited to: uranium, total dissolved solids, tetrachloroethene (PCE), trichloroethene (TCE), and various semi-volatile organic compounds. This information is documented in the October 18, 2004 TIMET document entitled "Technical Memorandum – Site Related Chemicals," the April 25, 2007 TIMET document entitled "Conceptual Site Model" and the February 17, 2009 Record of Decision issued by NDEP for the Remediation of Groundwater in the First Water Bearing Zone.
3. From approximately 1951 to 1977, liquids were conveyed through the Beta and Northwest Ditch System on TIMET's property that would have then leached contaminants into the surrounding soils on TIMET's property. This information is documented in the April 25, 2007 TIMET report titled "Conceptual Site Model" and the August 17, 2012 TIMET report titled "Calculation of Leaching-Based Site-Specific Levels: BMI Beta Ditch / Former Northwestern Ditch Area."
4. On April 25, 1991, the Division entered an Administrative Order on Consent (the "Phase 1 Consent Order") with land and facility owners within the BMI Complex, which set the first phase of a three phase

process to investigate, characterize, and, if necessary, remediate the hazardous waste releases in the common areas, as well as individually owned sites, within the BMI Complex and surrounding lands and waters.

5. Based upon the reports received pursuant to the Phase 1 Consent Order, the Division issued an Administrative Order on Consent on June 28, 1996 to Titanium Metals Corporation (the Phase 2 Order) to require additional investigation, characterization, and, if necessary, remediation of waste releases at or associated with the Site which may pose a threat to human health, welfare, or the environment.
6. On February 17, 2009 a Record of Decision was issued which selected the remedial alternative remedy for groundwater in the first water-bearing zone (shallow groundwater) at TIMET. TIMET has failed to construct the groundwater remedy since that time.

**II. FINDINGS OF ALLEGED VIOLATIONS: The Division finds and alleges as follows:**

- A. **FINDING:** Without waiving any claim against TIMET, its affiliates, predecessors-in-interest, successors-in-interest, lessors, lessees, or any other party, the Division finds that TIMET is an owner and operator of the Site subject to all laws, rules, regulations and standards promulgated by the State Environmental Commission ("SEC"), and all orders and permits promulgated by the Department, as delegated to the Division.
- B. **FINDING:** TIMET is required to implement corrective action for groundwater as required by NAC 445A.22725 and 445A.2273.
  1. Pursuant to its authority under NRS 445A.445(1), NAC 445A.227, 445A.2271, 445A.22725, and 445A.2273 of the NWPCL, the Division issued administrative orders on consent to TIMET requiring the investigation, characterization, and remediation of releases at or associated with the Site which may pose a threat to human health, welfare, or the environment.
  2. On July 15, 2009, TIMET submitted a Quarterly Status Report that included a schedule which stated that on September 22, 2009, TIMET was going to "Procure Slurry Wall Contractor."
  3. On October 22, 2009, in a letter to TIMET, the Division accepted the Remedial Design and asked TIMET to "please proceed with construction of the Remedial Design as soon as possible. It is expected that the construction schedule will be discussed with

TIMET in the near future and a mutually agreeable schedule will be confirmed.”

4. On December 14, 2009, TIMET began drilling the extraction wells for the remedy and such drilling was completed by March 3, 2010.
5. On July 15, 2010, TIMET submitted a Quarterly Status Report that stated the procurement of remediation contractors was conducted in three bid packages / phases. The bid package for the earthwork and slurry wall contract was released on April 12, 2010. The pre-bid meeting was scheduled for May 11, 2010 with a bid receipt date of June 7, 2010. The second bid package containing the utilities work was released on June 10, 2010. The pre-bid meeting was scheduled for June 29, 2010 with a bid receipt date of July 30, 2010. The third bid package containing the equipment requirements was released on July 8, 2010. The pre-bid meeting was scheduled for July 20, 2010 with a bid receipt date of August 4, 2010.
6. On October 28, 2010, TIMET submitted a Quarterly Status Report that stated that the remediation of the BMI Siphon and Ditch System Area needed to occur prior to the installation of the slurry wall. The projected contract award date for the slurry wall was delayed to late November with subsequent award for the utilities and equipment in mid-December.
7. The projected contract award dates for the slurry wall, utilities, and equipment have been continually delayed. In the July 16, 2012, Quarterly Status Report, TIMET scheduled the contract award dates for January 1, 2013.
8. On September 14, 2012, a schedule for monitored natural attenuation (MNA) was submitted to the Division by TIMET. This schedule included the contract award dates for the slurry wall, utilities, and equipment. The contract award dates had been delayed to January 29, 2016 for the slurry wall and May 5, 2016 for the utilities and equipment.
9. On November 29, 2012, in a meeting between the Division and TIMET, TIMET confirmed that the contract awards for the remedy had been postponed until 2016, which subsequently delays the implementation of the remedy until early 2017. At the November 29, 2012 meeting, Division representatives stated that the proposed schedule for the remedy was not acceptable.
10. TIMET has failed to timely implement the approved remedy from the ROD. Without the implementation of the remedy, TIMET is

allowing pollutants to remain in the groundwater and to migrate from TIMET's Site to contaminate the downgradient groundwater and waters of the State.

11. As of the date of this FOAV, TIMET has failed to implement the approved remedy stated in the ROD.

**C. FINDING:** TIMET is in violation of NRS 445A.465 for allowing pollutants discharged from a point source or fluids injected through a well to remain in place where the pollutants or fluids could be carried into the waters of the State by any means.

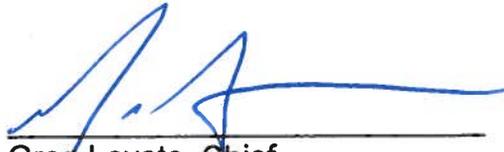
1. The delays caused by TIMET as outlined herein have caused undue delay of source control at or around the Site.

**III. CONCLUSION: Based upon the information set forth herein, the Nevada Division of Environmental Protection has determined that:**

1. TIMET is in violation of NRS 445A.465. Allowing pollutants discharged from a point source or fluids injected through a well to remain in place where the pollutants or fluids could be carried into the waters of the State by any means.
2. TIMET is in violation of NRS 445A.575. It is unlawful to discharge any radiological, chemical or biological warfare agent or high-level radioactive waste into any waters of the State.
3. In accordance with NAC 445A.227, 445A.2271, 445A.22725, and 445A.2273, TIMET is required to complete excavation of the Beta and Northwest Ditch System and complete installation of the groundwater remedy in accordance with the Remedial Design.

*December 14, 2012*

Date

  
\_\_\_\_\_  
Greg Lovato, Chief  
Bureau of Corrective Actions

**ORDER**

This Order is issued under the authority vested in the Director of the Department of Conservation and Natural Resources ("Department") by Nevada Revised Statutes (NRS) 445A.445(1) and 445A.450(8)-(9), delegated to the Division of Environmental Protection ("Division") pursuant to NRS 445A.450(10), and in accordance with NRS 445A.675, and 445A.690.

On the basis of the attached Finding of Alleged Violation ("FOAV"), which is a part of this Order, the Administrator of the Division, pursuant to authority delegated to her by the Director of the Department of Conservation and Natural Resources, has determined that Titanium Metals Corporation (TIMET) is in violation of Nevada Water Pollution Control Law (NWPCL) as outlined in the Finding of Alleged Violation and that, among other remedies, corrective action is required to ensure TIMET's compliance with its remediation obligations going forward.

**IT IS HEREBY ORDERED:**

TIMET shall complete the following acts at/or with respect to the TIMET Facility located within the Black Mountain Industrial ("BMI") Complex, 181 North Water Street in Henderson, Nevada (hereinafter "the Site") by the dates specified:

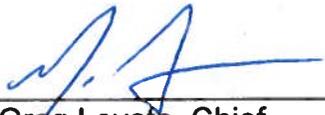
1. Within ten (10) days of the date of this Order: Submit to the Division a written reply which states TIMET's intention to comply with the Order including its obligation to maintain the Site in compliance with all federal, state, and local environmental laws to protect human health and the environment. "Days" as used in this Order shall mean calendar days, excluding state and federal holidays.
2. Within sixty (60) days of the date of this Order: TIMET must provide documentation of financial assurance evidencing the existence of the funds necessary to conduct the corrective action required by this Order.
3. Within thirty (30) days of the date of this Order: TIMET must provide a schedule for the submission of the excavation plan for the Beta and Northwest Ditch System.
4. Within forty-five (45) days of Division approval of the excavation plan for the Beta and Northwest Ditch System, the excavation of the Beta and Northwest Ditch System shall be completed. Completion of this task requires that all the soil be excavated to the limits specified in the approved excavation plan. TIMET must perform confirmation sampling and analysis on an accelerated turn-around basis while the installation of the slurry wall work begins at the same time. Any additional excavation and sampling shall be completed while the installation of the slurry wall work can start on the east side of the property. Completion as used here

does not require confirmation sampling and analysis, final grading, or completion reporting.

5. Within sixty (60) days of the date of this order, TIMET must provide a groundwater monitoring plan for the performance of the Remedial Design, as defined in Paragraph 6 below. The groundwater monitoring plan shall incorporate the Monitored Natural Attenuation (MNA) plan that TIMET is currently developing. Until the Division approves a groundwater monitoring plan for the performance of the Remedial Design, TIMET will continue to implement the existing groundwater monitoring plan and submit groundwater monitoring reports in accordance with the schedule submitted to the Division on February 22, 2010.
6. Complete the following in accordance with the October 14, 2009 *Revised Remedial Design for the First Water Bearing Zone* ("Remedial Design") approved by NDEP correspondence dated October 22, 2009:
  - a. Within ninety (90) days of the date of this Order, TIMET shall provide an Operation and Maintenance Manual for the Remedial Design.
  - b. Within eighty-five (85) days of the physical completion of the Beta and Northwest Ditch System excavation required in item 4, the installation of the Remedial Design slurry wall shall be completed.
  - c. Within thirty-five (35) days of the completion of the installation of the slurry wall, the installation of the Remedial Design utilities shall be completed.
  - d. Within sixty-five (65) days of the completion of the installation of the utilities, the Remedial Design aboveground groundwater remediation equipment and building shall be completed.
7. Within thirty (30) days of the completion of the aboveground remediation equipment and building, the entire Remedial Design system for the approved remedy shall commence start-up operations at a continuous average groundwater extraction rate of 11 gallons per minute or another rate as approved by the Division to achieve hydraulic capture in the First Water Bearing Zone. The First Water Bearing Zone is defined in the Remedial Design.
8. Within forty-five (45) days of the completion of start-up operations, but no later than ninety (90) days after completion of the aboveground remediation equipment and building, submit a construction quality assurance and engineering as-built report stamped by a Nevada licensed professional engineer documenting construction of the slurry wall, groundwater extraction and recovery system, utilities, and above groundwater remediation equipment and building.

9. Within ninety (90) days of the completion of start-up operations, but no later than one hundred twenty (120) days after completion of the aboveground remediation equipment and building, submit a revised Operation and Maintenance Manual for the Remedial Design.
10. Within one hundred eighty (180) days of completion of the above ground remediation equipment and building, and every ninety (90) days thereafter until NDEP approves shutdown of the First Water Bearing Zone groundwater extraction system, provide an Operation and Maintenance and Performance Report in accordance with EPA April 2005 guidance OSWER 9283.1-22FS O&M Report Template for Ground Water Remedies and EPA January 2008 guidance EPA 600/R-08/003 A Systematic Approach for Evaluation of Capture Zones at Pump and Treat Systems.
11. The performance criteria for the remedy will be based on achieving hydraulic capture required by the Remedial Design and continuing operation until achievement of the Maximum Contaminant Levels (MCLs) for drinking water established by the United States Environmental Protection Agency (EPA) or, in the event that no MCLs exist, the drinking water Basic Contaminant Levels (BCLs) established by the Division. The Division acknowledges that TIMET is currently working on establishing site specific performance standards for the approved shallow groundwater remedy. After the Division's approval of these site specific performance standards, the approved site specific performance standards may then be substituted for the MCLs and/or BCLs as appropriate, upon approval by the Division.
12. Within ten (10) days of the date of this Order: Contact Greg Lovato, Chief of the Bureau of Corrective Actions of the Division to arrange a meeting within forty-five (45) days of the date of this Order at the Division's Carson City office to show cause why the Division should not seek civil penalties for the violations cited in the FOAV.
13. Nothing herein waives or limits the right of the Division to seek recovery of its costs for any enforcement action or response action to remove hazardous waste or materials or a regulated substance.

December 14, 2012  
Date

  
\_\_\_\_\_  
Greg Lovato, Chief  
Bureau of Corrective Actions



State of Nevada

Dept. of Conservation & Natural Resources

State Environmental Commission [SEC.nv.gov](http://SEC.nv.gov)

901 South Stewart Street, Suite 4001, Carson City, Nevada 89701

**FORM 3: FORM FOR REQUESTING AN APPEAL HEARING**  
(Provide attachments as needed)

**1. Name, address, telephone number, and signature of appellant:**

Name: \_\_\_\_\_

Physical Address: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Signature: \_\_\_\_\_

Representative capacity (if applicable): \_\_\_\_\_

**2. Attach copy of Nevada Division of Environmental Protection final decision, such as permit or notice of alleged violation, being appealed.**

**3. Specify grounds of appeal: (check all that apply)**

- Final decision in violation of constitutional or statutory provision;
- Final decision made upon unlawful procedure;
- Final decision was affected by other error of law;
- Final decision was clearly erroneous in view of the reliable, probative and substantial evidence on the whole record;
- Final decision was arbitrary or capricious or characterized by abuse of discretion;

**4. For each ground of appeal checked above, please list the constitutional, Nevada Revised Statute (NRS), and/or Nevada Administrative Code (NAC) provision allegedly violated. Also list the statutes and/or or regulations that give the State Environmental Commission jurisdiction to hear the appeal.**

\_\_\_\_\_  
\_\_\_\_\_  
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**5. For each ground of appeal checked above, provide a brief and concise statement of the facts which provide the basis for the appeal.**

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**Date of Request:** \_\_\_\_\_.

Send Form to: Executive Secretary, State Environmental Commission, 901 South Stewart Street, Suite 4001, Carson City, NV 89701