# MEMORANDUM



environmental management, inc.

#### From: Deni Chambers, Principal-in-Charge

Date: November 5, 2010

- To: Shannon Harbour, PE Nevada Division of Environmental Protection (NDEP)
- RE: Environmental Conditions Assessment, Groundwater Treatment and Capture Zone Evaluation Monthly Status Memorandum and Schedule Update, October 2010, Tronox Facility, Henderson, Nevada

## **Activities Completed During Last Period** October 2010

# PHASE B ECA PROGRAM

## **Deliverables**

- Status Update Regarding the Identification of Proposed Environmental Covenant Areas, dated and submitted October 1, 2010
- Setback Update (email), dated and submitted October 4, 2010
- CCC/ECA Schedule Update and Monthly Summary Report, dated and submitted October 5, 2010
- Errata to Figure 1 RZ-B Excavation Areas and Nature and Extent of Contamination, dated and submitted October 6. 2010
- Environmental Covenants, Institutional and Engineering Control Plan, dated and submitted October 6, 2010
- Errata to Data Validation Summary Report, Pre-Confirmation Sampling RZ-E, dated and submitted October 11, 2010
- Status of Revised Excavation Plan for Phase B Soil Remediation of RZ-E, dated and submitted October 11, 2010
- Revised RZ-C Figures 2a, 2b, 2c, dated and submitted October 12, 2010
- ECA Quarterly Activity Report Third Quarter 2010, dated and submitted October 15, 2010
- Response to NDEP Response to: TRX Letter RE: Status of Excavation Plan for Phase B Soil Remediation of RZ-E, dated and submitted October 18, 2010
- Response to Comments on Revised RZ-D Excavation Plan & Errata, dated and submitted October 18, 2010
- Revised Engineering Evaluation of Slope Stability, WC and GW-11 Pond Embankments, • dated and submitted October 18, 2010
- Letter Response to Nevada Division of Environmental Protection (NDEP) Response to • Tronox Remediation Program Schedule, dated and submitted October 20, 2010

## Meetings

NDEP-TRX-NGEM WebEx - RZ-C Excavation Plan Figures, October 15, 2010

## **Field Activities**

- Final Phase of preconfirmation sampling
- Remediation Zone D Excavation, Transportation, and Disposal
- Remediation Zone B Excavation, Transportation, and Disposal



# LEACHING/GROUNDWATER PROGRAM

# Deliverables

- Interim Approach for Unsaturated Zone Soil Remediation and Revised Soil Flushing Report, dated and submitted October 8, 2010
- Work Plan to Conduct In-Situ Permeable Reactive Barrier Pilot Test For Perchlorate-Impacted Groundwater, dated and submitted October 25, 2010
- Technical Memorandum: Hydrogeologic Groundwater Model Inputs, dated and submitted October 29, 2010

# Meetings

 November 2<sup>nd</sup>: Conference call with Northgate, Tronox, NDEP to discuss comments on Revised Work Plan to Evaluate In Situ Soil Flushing of Perchlorate-Impacted Soil dated October 8, 2010

# **Field Activities**

- Connected pumping wells downgradient of barrier wall to GWETS and began extracting groundwater from "dead zone".
- Properly abandoned monitoring wells in conflict with soil excavation areas

# **GROUNDWATER SYSTEM OMM**

# Deliverables

- Submitted 3<sup>rd</sup> Quarter GW11 DMR NEV2001515, October 27, 2010
- Submitted 3<sup>rd</sup> Quarter NPDS DMR NV0023060, October 27, 2010

# **Field Activities**

• Monthly groundwater monitoring

## Activities to be Completed During Next Period November 2010 (and anticipated submittal dates)

## PHASE B ECA PROGRAM

## Deliverables

- RZ-E Excavation Plan (November 3)
- Monthly Report and Schedule Update (November 5)
- RZ-C Excavation Plan Response to Comments (November 6)
- Addendum to Slope Stability memo (November 9)
- Revised Indoor Air Quality report (November 15)
- Parcels A/B Soil Gas Risk Assessment (November 15)
- Revised Environmental Covenants (November 19)
- Site-Wide Soil Gas Risk Assessment (November 22)

#### Meetings

• NDEP-TRX-NGEM WebEx to discuss RZ-E Excavation Plan (scheduled for November 9)

## **Field Activities**

- Remediation Zone D Excavation, Transportation, and Disposal
- Remediation Zone B Excavation, Transportation, and Disposal
- Remediation Zone C Excavation, Transportation, and Disposal
- Remediation Zone E Excavation, Transportation, and Disposal

## LEACHING/GROUNDWATER PROGRAM

#### Deliverables

• Flushing Work Plan Addendum (November 10)

## Meetings

 November 2<sup>nd</sup>: Conference call with Northgate, Tronox, NDEP to discuss comments on Revised Work Plan to Evaluate In Situ Soil Flushing of Perchlorate-Impacted Soil

## **Field Activities**

- Soil sampling and laboratory bench-scale studies for In-Situ PRB work
- Monitoring and leachate well installation, drip line installation, and soil and groundwater sampling for soil flushing pilot test.

## **GROUNDWATER SYSTEM OMM**

- 4<sup>th</sup> quarter groundwater monitoring event
- Begin electrical and plumbing work to connect additional Interceptor wells to GWETS