



environmental management, inc.

February 7, 2011

Allan J. DeLorme
Environ International Corporation
6001 Shellmound Street, Suite 700
Emeryville, California 94608

RE: Scope of Work and Estimated Costs for Soil and Groundwater Remediation
Mid-February through Mid-March, 2011
Tronox Henderson Remediation Project

Dear Mr. DeLorme:

Northgate Environmental Management, Inc. (Northgate) has prepared this scope of work and estimated budget for remediation activities at the Tronox Henderson Site for a one month period after the effective date for Tronox reorganization. We recommend a meeting with you to plan further and ensure that this scope of work is aligned with the Trust's goals and objectives.

Remediation activities during this period include both soil (Environmental Conditions Assessments; ECA) and groundwater monitoring and remediation tasks, as described below and in the attached tables. The soil remediation tasks and estimated costs are generally consistent with the cost tables submitted to the Trust on January 14, 2011 (Attachment A). The groundwater-related tasks are consistent with the proposed scope of work described in the December 26, 2010 letter (Attachment B). Priority tasks identified by NDEP and the Trust are included in this scope.

A. SOIL REMEDIATION (ECA)

A1. Chartis-TRX Policy – Coverage A – RZ-B, C & D Non-Perchlorate Polygons

Work included under this task includes the following:

- Soil Excavation, transport and disposal of impacted soil in Remediation Zones (RZ) B, C and D as described below:
 - Construction management, field monitoring, and soil sampling – This task includes laboratory coordination and data validation; however, it is anticipated that preparation of the Data Validation Summary Report (DVSR) will be completed in March.
 - Monitor and document excavation and backfill of all areas in RZ-D with the exception of the polygons overlying the perchlorate remediation process (PRP) lines and RZ-D-28, which should be removed subsequent to AP-5 pond removal.



- Reporting – this task includes finalization of the Environmental Covenants Institutional and Engineering report, preparation of the Vadose Zone Evaluation, preparation of the draft Human Health Risk assessments (HRAs) and preparation of the Closure Reports.
- Project Coordination/Management – this task includes meetings, correspondence, agency/client coordination and contractor management and budget tracking.

With regard to the HRA reports, RZ-B and RZ-D are approximately 50% complete with scheduled delivery dates of early March 2011. The Environmental Covenant task includes development of costs for implementing institutional and engineering controls in Environmental Covenant areas, and quality assurance procedures with regard to implementing institutional and engineering controls in the Environmental Covenant areas. This task is currently underway. In addition, the Phase B Investigation and Pre-Confirmation Sampling components of the closure reports are currently underway.

The total estimated costs for this task are \$1,028,242. A cost summary is provided in Table 1, Task A1. Costs do not include Las Vegas Paving (LVP), Republic, or Portable Aggregate.

A2. Chartis-BMI Policy – RZ-E

Work included under this task includes the following:

- Construction management, field monitoring, and soil sampling – soil excavation, transport and disposal, including removal of approximately 13,500 cubic yards of asbestos-impacted soil identified during grubbing operations in the Beta ditch.
- Reporting and Project Management. The Reporting task includes initiation of the HRA for RZ-E. Project Management includes meetings, correspondence and agency/client coordination, and contractor management and budget tracking.

The total estimated costs for this task are \$311,779. A cost summary is provided in Table 1, Task A2. Costs do not include LVP, Republic, or Portable Aggregate.

A3. Abatement, Demolition, Utilities

This task includes contracting, permitting, and construction management to relocate a 15 KV electrical service line from the northern portion of RZ-C (in excavation polygons RZ-C 28, 28E, 28D, 29, and 33A) in order to retain electrical service to the perchlorate treatment system and facilitate remediation of RZ-C North.

Total estimated costs are \$87,206 (Table 1, Task A3).

A4. Perchlorate Remediation – RZ-B, C, & D – Perchlorate Polygons

Work under this task includes contracting and construction management to complete the underpinning supports in RZ-B-20 and -21, and soil excavation, transport, and disposal of

impacted soil. RZ-B-20/21 will be excavated to 5 to 6 feet below ground surface to facilitate the installation of a soil flushing system discussed below.

Total estimated costs are \$58,200 (Table 1, Task A4). LVP and Republic costs are not included.

A5. Well Replacement

This task includes the following:

- Replacing up to 13 monitoring wells that were destroyed in preparation of soil excavation activities in RZ-B, C, and D due to conflicts with the excavation plans.
- Installing three monitoring wells, previously approved by NDEP, to monitor the middle water-bearing zone on the eastern edge of the Site adjacent to TIMET that have not been installed due to conflicts with soil removal activities associated with the Manganese Tailings area. Wells will be replaced following the completion of remedial activities in the area and NDEP approval.

NDEP has requested that these wells be replaced within 30 days following completion of remedial activities in the affected areas. Northgate has recommended reducing costs by not replacing wells that are not essential for monitoring remedial progress and recommends meeting with NDEP to discuss reducing the scope of work. Backfill activities for many of the well replacement polygons are expected to be completed in late February with well installation in those areas beginning in mid to late March. Drilling costs are therefore not included in the current estimate, which includes permitting and planning the well installations and communications with NDEP. Total costs for the upcoming four-week period are estimated to be \$7,303 (Table 1, Task A5).

A6. Soil Flushing

Work included under this task includes the installation of a soil flushing system in RZ-B polygons 20 and 21, as approved by NDEP, immediately following the completion of soil excavation activities and prior to backfill and surface grading. The design work for the flushing system and laboratory studies to confirm the efficacy of the treatment method have been completed. This task also includes: underground injection control (UIC) permit modifications to allow the operation of the flushing system in RZ-B and planning a soil flushing pilot test at the Site following completion of excavation and backfill activities in RZ-C, as requested by NDEP in their letter dated December 10, 2010.

Total estimated costs are \$34,814 (Table 1, Task A6). Costs for LVP to install the drip irrigation lines for the soil flushing system are not included in this estimate.

B. GROUNDWATER REMEDIATION

Essential groundwater remediation tasks for the next four weeks include on-going compliance monitoring and reporting related to the operation of the groundwater extraction and treatment system (Task B1), GWETS improvements (Task B2), in situ groundwater bioremediation bench testing (Task B3), and potential revisions to and finalization of the Capture Zone Evaluation Report (CZE) previously submitted to NDEP (Task B4). In addition, there are several tasks related to remedial system optimization and evaluations that Northgate would like to discuss with the Trust, as summarized under the “Additional Tasks” header below. These are tasks that are not currently required by NDEP, but which represent a potential to streamline the remedial activities at the Site and realize significant technical advantages and cost-savings over the life of the project.

B1. Groundwater Extraction and Treatment System (GWETS) Compliance Monitoring and Reporting

Work under this task includes on-going compliance monitoring and operations/maintenance of the GWETS, production of the Semi-Annual Remedial Performance Monitoring Report (due March 1, 2011), as well as providing support for the National Pollutant Discharge Elimination (NPDES) permit and the Underground Injection Control (UIC) permit. Subcontractors for these tasks include Montgomery Watson (laboratory), LDC (data validation), Verdant Solutions, Inc. (database and web portal management), and Earthsoft (database hosting).

Total estimated costs are \$83,475, as shown in Table 1, Task B1.

B2. GWETS Upgrades

Work included under this task includes completion of electrical and plumbing work required to add seven additional extraction wells to the Interceptor well field (IWF) and two additional extraction wells to the Athens Road well field (AWF). LVP began the expansion work at the IWF in December 2010 and is expected to complete the work in mid to late-February. Extraction wells at the AWF have been installed, but electrical and plumbing work has not been initiated.

Total estimated costs for field oversight and documentation of IWF improvements and design of AWF improvements are \$17,791 (Table 1, Task B2). Costs do not include charges from LVP.

B3. In Situ Groundwater Bioremediation Bench Testing

Work included under this task includes completion of a report by PRIMA Environmental regarding metals mobilization bench and a report by Shaw Environmental (Shaw) regarding oil retention bench testing. As specified in the approved work plan, a technical memorandum will be prepared that presents and evaluates these bench test results and provides

recommendations for conducting the planned field pilot test. This technical memorandum is scheduled for submittal to NDEP on March 2, 2011.

Total estimated costs are \$25,830 (Table 1, Task B3).

B4. Finalize Capture Zone Evaluation Report

Work included under this task includes responding to NDEP comments and revising the CZE report as necessary. The scope and schedule for this task is contingent on the receipt and content of NDEP comments on the report submitted to NDEP December 10, 2010. Subcontractors include Verdant Solutions, Inc. (modeling and database support).

Total costs are estimated not to exceed \$32,333 (Table 1, Task B4).

Additional Tasks

Northgate proposes to meet with the Trust to discuss the following tasks. These are not currently required by NDEP but are focused on optimization of the existing treatment system and monitoring program to improve the remedial performance and reduce both short-term and life-cycle costs.

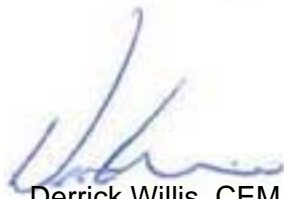
- Recommendations for GWETS treatment plant and extraction system optimization based on our knowledge of the design, operation, and costs of the system.
- Proposal for reducing and streamlining the compliance monitoring and reporting based on our experience with this program and knowledge of the regulatory requirements.
- Development of an overall groundwater strategy and remedial goals based on regulatory requirements and information from key stakeholders.
- Data management streamlining and improvement.

In order to align ongoing and future remedial activities with the objectives of the Trust, we propose several meetings with Environ and possibly NDEP during February. An approximate budget for these meetings is \$10,000 (Table 1, Task C1). We look forward to working with you. Please let us know if you have any questions regarding the work as scoped for this time period.

Sincerely,



Deni Chambers, CEM
Principal-in-Charge



Derrick Willis, CEM
Soil Remediation
Project Manager



Josh Otis, CEM
Groundwater
Remediation
Project Manager

Enclosures:

TABLES

- 1 Summary of Estimated Costs for Remedial Activities, February 12 through March 12, 2011

ATTACHMENTS

- A Henderson ECA Budget Estimate and Cost Tracking Summary, January 14, 2011
- B Draft Work Scope and Schedule dated December 26, 2010

TABLE

**Summary of Estimated Costs for Remedial Activities,
February 12 through March 12, 2011**

TABLE 1
Summary of Estimated Costs for Remedial Activities,
February 12 through March 12, 2011
Tronox Henderson Remediation Project

A1. Chartis-TRX Policy - {RZ-B, -C & -D - Non-Perchlorate Polygons}								
	PM/Agency Coordination	Soil Remediation	RZ-B - RA/CR	RZ-C RA/CR	RZ-D-RA/CR	Vadose Zone Evaluations	EC Finalization /Support	Total Cost
Labor Amounts	\$ 146,408	\$ 241,606	\$ 134,964	\$ 66,740	\$ 202,264	\$ 34,276	\$ 46,220	\$ 872,478
Reimbursable Expenses	\$ -	\$ 62,370	\$ 6,195	\$ 3,885	\$ 9,345	\$ 998	\$ -	\$ 82,793
Subcontractor	\$ -	\$ 32,054	\$ -	\$ -	\$ -	\$ 8,200	\$ -	\$ 40,254
Incidental Expenses (3.75% of labor)	\$ 5,490	\$ 9,060	\$ 5,061	\$ 2,503	\$ 7,585	\$ 1,285	\$ 1,733	\$ 32,718
TOTAL TASK COST	\$ 151,898	\$ 345,090	\$ 146,220	\$ 73,128	\$ 219,194	\$ 44,759	\$ 47,953	\$ 1,028,242

Note: subcontractor charges do not include LVP, Republic, or Portable Aggregate

A2. Chartis-BMI Policy - {RZ-E}				
	PM/Agency Coordination	Soil Remediation	RZ-E RA/CR	Total Cost
Labor Amounts	\$ 35,152	\$ 132,902	\$ 59,836	\$ 227,890
Reimbursable Expenses	\$ -	\$ 61,950	\$ 525	\$ 62,475
Subcontractor	\$ -	\$ 12,868	\$ -	\$ 12,868
Incidental Expenses (3.75% of labor)	\$ 1,318	\$ 4,984	\$ 2,244	\$ 8,546
TOTAL TASK COST	\$ 36,470	\$ 212,704	\$ 62,605	\$ 311,779

Note: subcontractor charges do not include LVP, Republic, or Portable Aggregate

TABLE 1
Summary of Estimated Costs for Remedial Activities,
February 12 through March 12, 2011
Tronox Henderson Remediation Project

	A3. Abatement /Demo/Utilities	A4. Perchlorate Remediation	A5. Well Replacement	A6. Soil Flushing		
	Abatement/Demo /Utilities	RZ-B-20/21 Excavation	Well Replacement	RZ-B-20/21 Installation	RZ-C Soil Flushing	Total Cost
Labor Amounts	\$ 10,652	\$ 4,988	\$ 7,039	\$ 19,100	\$ 12,432	\$ 54,211
Reimbursable Expenses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subcontractor	\$ 76,154	\$ 53,025	\$ -	\$ 2,100	\$ -	\$ 131,279
Incidental Expenses (3.75% of labor)	\$ 399	\$ 187	\$ 264	\$ 716	\$ 466	\$ 2,033
TOTAL TASK COST	\$ 87,206	\$ 58,200	\$ 7,303	\$ 21,916	\$ 12,898	\$ 187,523

Note: subcontractor charges do not include LVP, Republic, or Portable Aggregate

TABLE 1
Summary of Estimated Costs for Remedial Activities,
February 12 through March 12, 2011
Tronox Henderson Remediation Project

B1. GWETS Compliance Monitoring and Reporting						
	GWETS O&M	Groundwater Monitoring	Annual Report	Semiannual Report	Compliance Reporting	Total Cost
Labor Amounts	\$ 2,200	\$ 4,200	\$ -	\$ 18,900	\$ 700	\$ 26,000
Reimbursable Expenses			\$ -	\$ 1,600	\$ 900	\$ 2,500
Subcontractor	\$ 800	\$ 49,100	\$ -	\$ 2,800	\$ 1,300	\$ 54,000
Incidental Expenses (3.75% of labor)	\$ 83	\$ 158	\$ -	\$ 709	\$ 26	\$ 975
TOTAL TASK COST	\$ 3,083	\$ 53,458	\$ -	\$ 24,009	\$ 2,926	\$ 83,475

	B2. GWETS Upgrades	B3. In Situ Groundwater Bioremediation Bench Testing	B4. Finalize Capture Zone Evaluation Report (CZE)	
	Well Hook-ups at Interceptor and Athens Road Well Fields	In Situ Bioremediation Bench Testing	Finalize 2010 CZE Report	Total Cost
Labor Amounts	\$ 17,148	\$ 16,222	\$ 16,972	\$ 50,342
Reimbursable Expenses	\$ -	\$ 600	\$ 4,725	\$ 5,325
Subcontractor	\$ -	\$ 8,400	\$ 10,000	\$ 18,400
Incidental Expenses (3.75% of labor)	\$ 643	\$ 608	\$ 636	\$ 1,888
TOTAL TASK COST	\$ 17,791	\$ 25,830	\$ 32,333	\$ 75,954

C1. Environ/Northgate Meetings	
TOTAL TASK COST	\$ 10,000

Assumes two full day meetings with technical staff in Oakland

ATTACHMENT A

**Henderson ECA Budget Estimate and Cost
Tracking Summary, January 14, 2011**

HENDERSON ECA BUDGET ESTIMATE AND COST TRACKING SUMMARY, January 14, 2011

Projected Effective Date of January 26, 2011

COST CATEGORY

Expected Reimbursable Costs

Chartis-TRX Policy - Cvg A - (RZ B, C & D - Non-Perchlorate Polygons):

Soil Excavation, Transportation and Disposal (a)

EC, VZE, RA, Rpt, PM, agency/client coordination

Chartis-BMI Policy - (RZE):

Soil Excavation, Transportation and Disposal (a)

RA, Rpt, PM, agency/client coordination

Chartis-BMI Policy - parcels:

Closure, agency discussions (d)

Perchlorate Remediation (21% in Navy Reimbursements)

Total Expected Reimbursable Costs

Expected Chartis Non-Reimbursables

Chartis-TRX Policy - Cvg A Overages Beyond Coverage Maximum

Soil Excavation, Transportation and Disposal (a)

EC, VZE, RA, Rpt, PM, agency/client coordination (f)

Abatement/Demo/Utilities

Rough Grading

Perchlorate Remediation (Navy Settlement Eligible)(b):

Soil Excavation, Transportation and Disposal (a)

(RZ B, C & D - Perchlorate Polygons):

Well Replacement

Soil Flushing (c)

AP-5 Pond Closure (e)

less: 21% Navy Reimbursement

Total Expected Non-Reimbursables

TOTAL ESTIMATED HENDERSON ECA COSTS

COST CATEGORY	2011 Henderson ECA Cost Forecast (Accruals)						
	Pre-Effective Date Estimates	Post-Effective Date Estimates				Post Effective Date	Total Estimated ECA Costs
	January 1-26, 2011	January 27-31, 2011	February 2011	March 2011	April 2011	Totals	Jan 2011 - Apr 2011
Expected Reimbursable Costs							
Chartis-TRX Policy - Cvg A - (RZ B, C & D - Non-Perchlorate Polygons):							
Soil Excavation, Transportation and Disposal (a)	\$ 4,410,000	\$ 840,000	\$ 4,200,000	\$ 3,310,475	\$ 307,025	\$ 8,657,500	\$ 13,067,500
EC, VZE, RA, Rpt, PM, agency/client coordination	451,125	26,375	632,500	572,500	-	1,231,375	1,682,500
Chartis-BMI Policy - (RZE):							
Soil Excavation, Transportation and Disposal (a)	2,646,000	504,000	2,383,500	893,594	-	3,781,094	6,427,094
RA, Rpt, PM, agency/client coordination	22,313	3,938	26,250	157,500	20,755	208,443	230,755
Chartis-BMI Policy - parcels:							
Closure, agency discussions (d)	10,000		70,000	-	-	70,000	80,000
<i>Perchlorate Remediation (21% in Navy Reimbursements)</i>	640,500	-	46,549	156,330	89,250	292,130	932,630
Total Expected Reimbursable Costs	\$ 8,179,938	\$ 1,374,313	\$ 7,358,799	\$ 5,090,399	\$ 417,030	\$ 14,240,541	\$ 22,420,479
Expected Chartis Non-Reimbursables							
Chartis-TRX Policy - Cvg A Overages Beyond Coverage Maximum							
Soil Excavation, Transportation and Disposal (a)	\$ -	\$ -	\$ -	\$ -	\$ 571,131	\$ 571,131	\$ 571,131
EC, VZE, RA, Rpt, PM, agency/client coordination (f)	-	-	-	-	799,845	799,845	799,845
Abatement/Demo/Utilities	396,900	75,600	157,500	105,000	-	338,100	735,000
Rough Grading	-	-	-	-	350,000	350,000	350,000
<i>Perchlorate Remediation (Navy Settlement Eligible)(b):</i>							
Soil Excavation, Transportation and Disposal (a)	3,045,000	-	131,664	84,430	-	216,094	3,261,094
(RZ B, C & D - Perchlorate Polygons):							
Well Replacement	-	-	60,000	40,000	20,000	120,000	120,000
Soil Flushing (c)	5,000	-	30,000	20,000	105,000	155,000	160,000
AP-5 Pond Closure (e)	-	-	-	600,000	300,000	900,000	900,000
less: 21% Navy Reimbursement	(640,500)	-	(46,549)	(156,330)	(89,250)	(292,130)	(932,630)
Total Expected Non-Reimbursables	\$ 2,806,400	\$ 75,600	\$ 332,615	\$ 693,100	\$ 2,056,726	\$ 3,158,040	\$ 5,964,440
TOTAL ESTIMATED HENDERSON ECA COSTS	\$ 10,986,338	\$ 1,449,913	\$ 7,691,414	\$ 5,783,499	\$ 2,473,756	\$ 17,398,582	\$ 28,384,919

Notes:

General:

- The above estimated costs do not include contingencies (these numbers may increase based on unanticipated field conditions, as well as other factors). However, all identifiable remediation efforts to date are believed to be reasonably estimated and included in this summary.

- ECA Cost estimates are complete; however the schedule may extend beyond April.

- Projected Effective Date of January 26, 2011, assuming that financing agreements extend beyond their 1/21/11 maturity date and other factors; effective date could be a few days earlier

- The recovery rate for invoices submitted under the TRX Policy has been approximately 95%

- Approximately \$14,750,000 was remaining in the TRX Policy as of 1/01/11

- 2011 costs associated with NDEP Regulatory Oversight are not included

-Costs presented in this table are specific to ECA and do not include Groundwater Remediation Work, including GWETS Operation and Compliance Monitoring and Reporting, GWETS Optimization, Groundwater Remedial Options Evaluations, and Insitu Bio remedial activities.

a. Consistent with RZ Status Spreadsheet detailing soil excavation, transportation, disposal and backfill costs estimated as of 1/14/11.

b. 21% of these costs are estimated to be reimbursed under the Navy Settlement

c. Ongoing costs related to remediation of leachable chemicals; to be further discussed with NDEP

d. Parcel work projections will depend on agency comments.

e. AP-5 Pond Closure not specifically required under ECA, but included for informational purposes

f. Includes \$600K estimate for pond berm capping in April 2011

EC = Environmental Covenant

VZE = Vadose-Zone Evaluation

RZ = Risk Assessment

PM = Project Management

ATTACHMENT B

Draft Work Scope and Schedule dated December 26, 2010

NGE LLC

**P.O. Box 70374
Oakland, California 94612**

December 26, 2010

Allan DeLorme, P.E.
Managing Principal
Environ International Corporation
6001 Shellmound Street, Suite 700
Emeryville, California 94608

RE: Draft Work Scope and Schedule, February 1 through December 31, 2011
Tronox Henderson Remediation Project

Dear Mr. DeLorme:

NGE LLC (NGE) and Northgate Environmental Management, Inc. (Northgate) have prepared this summary of remediation activities at the Tronox-Henderson Site, including a description of services, a schedule with projected activities for 2011, and a list of remediation subcontractors, as requested in your December 16 email.

Tronox has authorized NGE to perform work through the Effective Date, which is anticipated to be sometime in January 2011. To meet regulatory deadlines and assure a smooth transition between Tronox and the Trust, we would like to execute a contract moving forward at your earliest convenience. We look forward to working with Environ, the Trust, and NDEP to finalize the scope of work for 2011.

Ongoing and future remedial activities are as follows:

A. Soil Remediation Work

This scope of work for February to December 2011 includes implementation of the soil removal work plan and evaluation of vadose zone remedial options. Soil removal work plan tasks include the following:

A1. Implementation of Removal Action Work Plan

- Completion of excavation and backfill in Remediation Zone C;
- Completion of excavation and backfill in Remediation Zone E;
- Completion of backfilling in Remediation Zones B and D;
- Grading of the site in accordance with the grading plan;

- Completion of post-closure risk assessments and closure reports for each remediation zone; and
- Finalizing the Environmental Risk Management Plan and implementing engineering and institutional controls for environmental covenant areas.

Please note that NGE will need to have contractual arrangements in place with the Trustee at least 15 days prior to the Effective Date, or will need to notify LVP of its intent to terminate its contract for remedial earthwork.

A2. Vadose-Zone Feasibility Study and Technology Evaluation

Northgate is currently preparing a focused feasibility study to evaluate remedial options for vadose zone soil containing residual leachable contaminants above levels that are determined to be of concern. Technology screening is expected to be completed by the end of January 2011, and further evaluations including bench testing and/or pilot testing of one or more technology will be performed during February through December 2011.

B. Groundwater Remediation Work

B1 Groundwater Extraction and Treatment System (GWETS) Compliance Monitoring and Reporting

Upcoming work included under this task includes:

- Laboratory analysis, data validation, and data management for compliance samples, including preparation of data validation summary reports (DVSRs) and electronic data deliverables (EDDs) for analytical data, submitted to NDEP on a semiannual basis.
- Finalization and submittal of a semiannual remedial performance report on March 1, 2011 (for the period of July to December 2010) and preparation and submittal of an annual report on August 29, 2011 (for the period of July 2010 to June 2011) in accordance with Consent Order requirements.
- Preparation and submittal of compliance reports in accordance with Consent Order and permit requirements: perchlorate removal reports to NDEP documenting mass removed by the GWETS (monthly); discharge monitoring reports (DMRs) for the GWETS and the GW-11 pond (submitted quarterly on or before the 28th of April, July, and October); and Underground Injection Control submittals (prepared quarterly, submitted semiannually on or before July 28th).

B2. GWETS Optimization

This task consists of the development of the strategy to optimize GWETS operation in terms of: 1) groundwater capture; 2) treatment system operation; and 3) monitoring and reporting.

Ongoing work associated with groundwater capture zone optimization includes: 1) addressing NDEP comments and finalizing the capture zone evaluation (CZE) report submitted on December 10, 2010; 2) completing an evaluation of the barrier wall integrity and the need for the currently operating recharge trenches using the recently-completed hydrogeologic model; and, 3) implementing the capture improvements and evaluating their success as recommended in

the CZE report. Item 1 is expected to be completed in January but may extend into February, item 2 is expected to be completed in February, and item 3 by August 2011.

The objective of the treatment system optimization study is to ensure that the GWETS is designed and operated most cost effectively, while remaining in compliance. The study will include the extraction systems, treatment plant, and discharge pipeline.

The groundwater monitoring and reporting program will be evaluated to identify potential opportunities for streamlining and reducing costs, including a review of regulatory requirements and monitoring objectives. The evaluation will examine: 1) reducing the number and/or frequency of wells sampled or chemicals analyzed on a quarterly basis, 2) reporting format and content, and 3) data management (e.g. validation, analysis, and output).

Northgate anticipates the results of an initial evaluation and recommendations for further work or improvements to the treatment system and monitoring/reporting will be completed by the end of January 2011, internal and NDEP review and approval are anticipated to be completed by the end of March 2011, and identified improvements could be implemented starting in the second quarter of 2011.

B3. Groundwater Remedial Options Evaluations

Remediation at the Site has focused on eliminating exposure pathways viewed as imminent threats to human health, i.e., impact to water in the Las Vegas Wash and direct exposure to shallow soil. Now that the interim goals of containing contaminated groundwater before it reaches the Las Vegas Wash and removing shallow soil above human health risk-based goals have been nearly reached, Northgate recommends that a long-term strategy now be developed. The scope of work for 2011 associated with developing an overall remedial strategy includes: 1) developing with NDEP a set of proposed remedial goals; 2) completing the planned *in-situ* bioremediation groundwater evaluation and using its results and other considerations to develop alternatives for ongoing groundwater remediation; and, 3) developing a long-term strategy plan (soil and groundwater) for the Tronox Site. Each of these is described further below.

Proposed Remedial Goals

Proposed work includes preparing a regulatory and stakeholder analysis of the Tronox Site. The analysis will identify key stakeholders (e.g. regulatory agencies, public groups, water supply agencies, and private landowners), their drivers (e.g. regulations, activities, protection from liability) and their issues or areas of interest (e.g. impacts to natural resources, permits, site closure requirements). The stakeholder analysis will be used to assess the current situation for each stakeholder, identify where interests overlap and coordination strategies, and to assist in developing a set of remedial goal(s) proposal for the Tronox Site and related areas of groundwater contamination. The remedial goals for groundwater will be used in conjunction with the evaluation of leachable chemicals in vadose zone soil (not yet approved by NDEP) to develop remedial goals for soil. Northgate expects the initial work for this task to be completed during the first quarter of 2011 with further stakeholder involvement during the second quarter of 2011.

Groundwater Remediation Strategy Development

Northgate anticipates that a plan for groundwater remediation will be developed during 2011. The optimization tasks and remedial goal development discussed above are key to these efforts. Additional work planned for February through December 2011 includes:

1. Completing the *in situ* bioremediation bench test that is currently underway and determine whether to go forward with the planned and approved pilot study based on the bench test results. Northgate anticipates completing a memorandum presenting the bench test results and a recommendation regarding the pilot study by February.
2. Assuming the bench test indicates a reasonable likelihood of success, implementing the approved pilot study starting in March with the installation of three injection and eight monitoring wells north of Galleria Drive (formerly Athens Road). Well installation and development will be followed by the injection of emulsified oil and six months of detailed monitoring. A report of results and findings would be submitted in September 2011.
3. Based on the remedial goals, the *in situ* results, and a groundwater assessment report that will be submitted in January 2011, develop and evaluate alternatives for groundwater remediation including present worth analyses of remedial alternatives. In evaluating alternatives, the impacts of chemicals originating off-site and the impacts of current and planned off-site remediation will be considered. The recently completed hydrogeologic model is expected to be used for these evaluations. Northgate also proposes refining the flow model to better simulate off-site flow and expanding the model to include chemical transport (this was partially completed as part of the 2010 CZE evaluation) for use in predictive simulations of various groundwater remedial scenarios. This work would be expected to start during the second quarter of 2011.

Long-Term Strategy Plan

This task will include preparing a report based on the above evaluations. This document will outline the remedial goals; comparatively evaluate the advantages/disadvantages of various alternatives; acceptability to stakeholders, costs, and, discuss uncertainties and any data needs. It is anticipated that a draft of this report could be completed by the end of 2011.

B4. Groundwater Data Management Improvements

The goal of this task is to ensure data integrity and accuracy for analysis and decision making. Considerable data has been collected by the BMI companies over several decades. This data has been integrated into the NDEP database. Data management associated with specific data collection activities is incorporated into those tasks and is not included here. Needed data management improvements for 2011 have been divided into process improvements and incorporation into the project database web portal.

C. Closure of Ammonium Perchlorate Pond #5 (AP-5 Pond)

The AP-5 pond is a former ammonium perchlorate process pond. This task involves completing the closure of the AP-5 pond by removing and disposing of the remaining pond solids and the primary and secondary containment liners. The contents of the pond include perchlorate-contaminated liquid, sludge, and cemented/ consolidated solids. The volume of solids is

estimated to be approximately 3,000 cubic yards. The cemented solids will be broken up by jetting with high pressure water. The solids will be rinsed to remove perchlorate, the washed solids will be filtered, and the resulting water will be returned to the AP-5 Pond or GW-11 Pond. After removing solids from the AP-5 Pond, the remaining liquids will be pumped to the GW-11 pond and/or the groundwater treatment plant. The upper pond liner will be rinsed, removed and disposed as non-hazardous waste at the Apex Landfill. The underlying sand layer will be removed and stockpiled adjacent to the AP-5 Pond. The lower pond liner will then be removed and disposed at the Apex Landfill as non-hazardous waste.

NGE has negotiated a contract with Veolia. This contract can be executed after NGE and the Trustee have finalized an agreement for continuing work after the Effective Date.

We look forward to working with the Trustee and Environ in 2011. We would like to meet with you soon to discuss the above scope of work, the project budget and contractual arrangements to assure a smooth transition after the Effective Date.

Sincerely,



Deni Chambers
Principal-in-Charge
Northgate



Alan Leavitt
Manager
NGE LLC

Attachments: Draft Project Schedule
List of Subcontractors

cc: Matt Paque
Roy Widmann

Tronox Project Schedule 2011 - Draft of 12/26/2010

Task	Task Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
A	Soil Remediation Work												
A1	Soil Remediation under Tronox Policy												
	RZ-C excavation												
	RZ-B and RZ-D backfill												
	RZ-C backfill												
	Risk Assessment and Closure Reporting												
	Soil remediation under BMI Policy (RZ-E)												
	RZ-E Excavation												
	RZ-E Backfill												
	Risk Assessment and Closure Reporting												
A2	Vadose Zone Remediation												
	Evaluate vadose zone remedial options												
	Conduct vadose zone bench tests												
B	Groundwater Remediation Work												
B1	GWETS Operation and Compliance Monitoring and Reporting												
1	GWETS O&M, Groundwater Monitoring												
2	UIC Submittals, GWETS & GW-11 DMRs												
3	Semiannual Remedial Performance Reporting												
4	NPDES permit response to comments												
5	Capture Zone Evaluation												
6	GWETs Improvement hydrogeologic modeling												
7	Barrier wall/trench evaluation												
B2	GWETS Optimization												
1	Review available documentation												
2	Conduct site visit												
3	Identify alternatives												
4	Perform evaluation												
5	Make recommendations												
6	Prepare report and presentation												
7	Evaluate groundwater monitoring and reporting program and prepare optimization plan and schedule												
B3	Groundwater Remedial Options Evaluations												
1	Regulatory analysis and stakeholder analysis												
2	Site Risk Identification												
3	Meetings to develop remedial goal(s) proposals												
4	Complete current study- Groundwater in-situ bioremediation (pilot test if bench results are promising)												
5	Groundwater remediation strategy development												
6	Long-term Strategy Plan												
B4	Groundwater Data Management Improvements												
1	Process improvements												
2	Project Web Portal and EQuIS and Query Integration												
3	Data corrections and communications (ongoing)												
C	AP 5 Pond												
1	Closure of AP 5 Pond												

TRONOX HENDERSON PROJECT - Major Contractors

Major Contractors w/ Northgate and NGE	Role
<p>SOIL EXCAVATORS/TRANSPORT: Las Vegas Paving</p> <p>DRILLERS: Boart Longyear Eagle</p> <p>LABS: EMS Test America</p> <p>CONSULTANTS: Exponent Veolia Environmental PBS&J Shaw Environmental & Infrastructure Group Camp Dresser McKee</p> <p>DATA VALIDATION: Laboratory Data Consultants, Inc. Verdant Solutions Inc.</p> <p>LANDFILL: Republic Environmental Technologies</p> <p>Tronox Contractors</p>	<p align="center">Soil removal and transport</p> <p align="center">Soil borings/groundwater wells Soil borings/groundwater wells</p> <p align="center">Asbestos analyses Laboratory</p> <p align="center">Health Risk Assessment AP-5 Pond Closure Surveying services technology screening insitu bio technology screening vadose-zone</p> <p align="center">Date validation data processing/management</p> <p align="center">RZ soil and debris disposal</p>
<p>GWETS: Veolia Water North America</p> <p>LABS: EMSL Analytical, Inc. Montgomery Watson (MWH)</p>	<p align="center">GWETS O&M</p> <p align="center">Asbestos Laboratory Groundwater Laboratory Analysis</p>