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To: Shannon Harbour, PE
Nevada Division of Environmental Protection

RE: Addendum to Hazardous Waste Landfill (LOU 10) Sampling Plan, Tronox Facility, Henderson Nevada, dated July 27, 2010

Based on discussions between Northgate, Tronox, and the Nevada Division of Environmental Protection (NDEP) during a conference call on August 11, 2010, Northgate has prepared this addendum to the Hazardous Waste Landfill (LOU 10) Sampling Plan dated July 27, 2010 regarding pre-confirmation soil sampling performed beneath the Hazardous Waste Landfill located in the northwest area of the site. The proposed sampling and analysis program is summarized below.

As discussed, exploratory borings will be advanced through the Hazardous Waste Landfill (HWLF) at three locations as shown on Figure 1. Continuous cores of the landfill materials will be collected during drilling to identify the depth of the landfill materials, anticipated at this time to be about 24 feet below the landfill surface. At each boring, samples of the native soil encountered within one foot below the base of the landfill will be collected for chemical analysis. These samples will serve as pre-confirmation samples. Each sample will be analyzed for dioxins/furans, HCB, metals including hexavalent chromium, perchlorate, and organochlorine pesticides (OCPs). Tronox proposes that the following suites of analytes not be analyzed: volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), organophosphorous pesticides (OPPs), radionuclides, and organic acids.

Attached to this addendum is a set of EXCEL spreadsheets to support analyzing the native soil samples only for constituents that were detected above the basic contamination levels (BCL) in previously advanced borings in this area, and omitting analyses for those constituents that were either not detected, or were detected below BCLs. The attached spreadsheets (provided as electronic files due to size of the dataset) summarize analytical results for samples collected from borings previously advanced in the vicinity of the landfill. The spreadsheets present a summary of boring identifications, sample depths, and analytical results. With the exception of dioxins/furans, HCB, arsenic, perchlorate, OCPs, and two samples from depths of 30 and 31 feet containing VOCs, all other chemicals are detected below their respective BCLs. The VOCs at depth are generally accepted to have originated off-site. Therefore, we plan to analyze the

new soil samples for the five suites listed above. The previous samples were collected from areas in close proximity to the landfill and are considered representative of conditions in the area.

The spreadsheets also contain a comparison of RZ-D radionuclide data to the TIMET background dataset. In accordance with NDEP's request, we are currently comparing radionuclide data against the R-A background dataset, but we do not expect any changes in our conclusion that the additional analyses not include radionuclides.

The borings shown on the attached Figure 1 evaluated for justification of the proposed sampling and analysis program are: RSAH3, RSAI2, RSAI3, RSAJ2, RSAK3, SSAI2-02, SSAI3-05, SSAJ2-01, SSAJ2-02, SSAJ2-03, SSAJ3-03, SSAK3-01, SA134, SA201, SA202, SA206, SA88, and SSAI3-06.

We trust this additional information and the attached electronic file provides sufficient justification for the proposed suite of analyses for the landfill area samples.

ENCLOSURES:

FIGURE 1 – Previous Landfill Area Sampling Results
DATA TABLES – PROVIDED ON CD

