

## **Appendix G**

### **Laboratory Analytical Results (on report DVD)**

**Upgradient Investigation Results**  
**Tronox Facility, Henderson, Nevada**  
September 2006

**Laboratory Certification**

*I hereby certify that all laboratory analytical data were generated by a laboratory certified by the NDEP for each constituent and media presented herein with the exceptions listed below.*

 10-24-06

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Staff Environmental Specialist

Methods not certified or in the application process are listed on the attached Tables G-1 (water analysis) and G-2 (soil analysis).

**Table G-1**  
**Laboratory Certification for Water Analysis**  
 Upgradient Investigation, Tronox Facility, Henderson, Nevada

Analyte	Method	SL?	SRC?	Nevada certification?	Comments
			Y or N		
Platinum	EPA 6020	Y	Y	NO	certification not offered by NV or CA
Tungsten	EPA 6020	Y	Y	NO	certification not offered by NV or CA
Methyl mercury	EPA 1630	N	Y	NO	PEs not available for NV cert but lab is FL certified by method
Alkalinity (total,CO <sub>3</sub> <sup>2-</sup> ,HCO <sub>3</sub> <sup>-</sup> )	SM 2320B	Y	Y	SDWA, CWA	no RCRA method available
Ammonia	EPA 350.1	N	Y	CWA	no RCRA method available
Phosphate (total)	EPA 365.2	N	Y	CWA	no RCRA method available
TDS	EPA 160.1	Y	Y	SDWA, CWA	no RCRA method available
TSS	EPA 160.2	N	Y	CWA	no RCRA method available
Surfactants (MBAS)	EPA 425.1	N	Y	SDWA(5540C)	no RCRA method available
Chlorine (residual)	SM 4500CLG	N	Y	SDWA	no RCRA method available
Flashpoint	EPA 1010	N	Y	NA	not applicable for water
Sulfite	EPA 377.1	N	Y	NO	chosen lab certified in CA for CWA
Asbestos	EPA 100.1	N	Y	SDWA	no RCRA method available
ORO (C28-C40)	EPA 8015B	Y	Y	RCRA	cert. covered in NV by method , not by parameter
Methanol	EPA 8015B	Y	Y	IN PROCESS	chosen lab NV certification in process
Ethanol	EPA 8015B	Y	Y	IN PROCESS	chosen lab NV certification in process
Ethylene glycol	EPA 8015B	Y	Y	IN PROCESS	chosen lab NV certification in process
PCDDs/PCDFs	EPA 1613B	N	Y	SDWA	chosen lab has no certified method in RCRA category, cert is only for 2,3,7,8-TCDD
Actinium 228	EPA 901.1	N	Y	SDWA	no RCRA certified method, covered by generic Gamma Emitters
Bismuth 212	EPA 901.1	N	Y	SDWA	no RCRA certified method, covered by generic Gamma Emitters
Gross alpha (adjusted) <sup>(3)</sup>	EPA 900	N	Y	SDWA	chosen lab has no certified method in RCRA category
Lead 210	EML HASL 300 Gas Flow	Y	Y	NO	chosen lab primary cert states do not offer certification
Lead 212	EPA 901.1	Y	Y	SDWA	chosen lab has no certified method in RCRA category
Polonium 210	EML HASL 300 Alpha Spec	N	Y	NO	chosen lab primary cert states do not offer certification
Proactinium 231	EPA901.1			SDWA	no RCRA certified method, covered by generic Gamma Emitters
Radium 226	EPA 903.1	Y	Y	SDWA	chosen lab has no certified method in RCRA category
Radium 228	EPA 904.0	Y	Y	SDWA	chosen lab has no certified method in RCRA category
Radon 222	SM7500-RN-B	N	Y	NO	no RCRA cert available, NV cert in process for chosen lab
Thorium (isotopic)	EML HASL 300 Alpha Spec	Y	Y	NO	could use generic Gamma Emitters cert, but cited method is better
Uranium (isotopic)	EML HASL 300 Alpha Spec	Y	Y	NO	could use generic Gamma Emitters cert, but cited method is better
Uranium (total)	ASTM D5174	Y	Y	SDWA	chosen lab has no certified method in RCRA category
Bolstar	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Coumaphos	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Dichlorvos	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
EPN	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Fensulfothion	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Fenthion	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Merphos	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Mevinphos	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Naled	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Phorate	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Ronnel	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Stirphos	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Sulfotepp	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Thionazin	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Tokuthion	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Trichloronate	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
4-Bromophenyl-phenylether	EPA 8270	N	N	RCRA	chosen lab is certified in CA; covered in NV by method, not by parameter
Benzo(a)pyrene	EPA 8270 SIM	N	Y	RCRA	chosen lab is certified in CA; covered in NV by method, not by parameter
Butylbenzylphthalate	EPA 8270	N	Y	RCRA	chosen lab is certified in CA; covered in NV by method, not by parameter
Pentachlorophenol	EPA 8270 SIM	N	N	RCRA	chosen lab is certified in CA; covered in NV by method, not by parameter
Octachlorostyrene	EPA 8270	N	Y	RCRA	not a standard analyte for this method, parameter specific certification not expected but covered by method in NV

PE is the performance evaluation provided by the state certifying the lab.  
 SL= Short List Analytes  
 SRC = Site Related Chemical

**Table G-2**  
**Laboratory Certification for Soil Analysis**  
 Upgradient Investigation, Tronox Facility, Henderson, Nevada

Analyte	Method	SL?	SRC?	Nevada certification?	Comments
		Y or N	Y or N		
Calcium	EPA 6020	Y	Y	RCRA water only	soil cert not offered by lab's primary state
Magnesium	EPA 6020	Y	Y	RCRA water only	soil cert not offered by lab's primary state
Platinum	EPA 6020	Y	Y	NO	certification not offered by NV or CA
Potassium	EPA 6020	Y	Y	RCRA water only	soil cert not offered by lab's primary state
Silicon	EPA 370.1	N	Y	CWA water only	chosen lab has no certified method in RCRA category
Sodium	EPA 6020	Y	Y	RCRA water only	soil cert not offered by lab's primary state
Tungsten	EPA 6020	Y	Y	NO	certification not offered by NV or CA
Uranium	EPA 6020	?	Y	NO	soil cert not offered by lab's primary state
Methyl mercury	EPA 1630	N	Y	NO	PEs not available for NV cert but lab is FL certified
Alkalinity (total CO <sub>3</sub> <sup>-</sup> , HCO <sub>3</sub> <sup>-</sup> )	SM 2320B	Y	Y	SDWA, CWA water only	no RCRA method available
Ammonia	EPA 350.2	N	Y	CWA water only	no RCRA method available
Chlorate	EPA 300.0	Y	Y	SDWA water only	chosen lab has no certified method in RCRA category
Conductivity	SM 2510B	Y	Y	SDWA, CWA water only	no RCRA method available
Phosphate (total)	EPA 365.2	N	Y	CWA water only	chosen lab has no certified method in RCRA category
Perchlorate	EPA 314.0	Y	Y	SDWA water only	no RCRA method available
Sulfide	EPA 376.2	N	Y	CWA water only	chosen lab has no certified method in RCRA category
Surfactants (MBAS)	EPA 425.1	N	Y	SDWA water only	no RCRA method available
Chlorine (residual)	EPA 330.3	N	Y	CWA water only	chosen lab has certification in CA but not NV
Total Organic Carbon	Walkley Black	N	Y	NO	certification not offered for WB in CA or NV
Sulfite	EPA 377.1	N	Y	NO	chosen lab has cert by primary state for CWA
ORO (C28-C40)	EPA 8015B	Y	Y	RCRA	cert. covered in NV by method, not by parameter
Methanol	EPA 8015B	Y	Y	IN PROCESS	chosen lab NV certification in process
Ethanol	EPA 8015B	Y	Y	IN PROCESS	chosen lab NV certification in process
Ethylene glycol	EPA 8015B	Y	Y	IN PROCESS	chosen lab NV certification in process
PCDD/PCDFs	EPA 8290	N	Y	RCRA	chosen lab has cert. only for 2,3,7,8-TCDD in NV
Actinium 228	EPA 901.1/ EML HASL 300	N	Y	SDWA water only	chosen lab has no certified method in RCRA category, NV soil cert in process
Bismuth 212	EPA 901.1/ EML HASL 300	N	Y	SDWA water only	chosen lab has no certified method in RCRA category, NV soil cert in process
Gross alpha (adjusted) <sup>(3)</sup>	EPA 900/ 9310	N	Y	SDWA water only	chosen lab has no certified method in RCRA category, NV soil cert in process
Lead 210	EML HASL 300 gas flow	Y	Y	NO	not available by best method gas flow
Lead 212	EPA 901.1/ EML HASL 300	Y	Y	SDWA water only	chosen lab has no certified method in RCRA category, NV soil cert in process
Polonium 210	EML HASL 300 alpha spec	N	Y	NO	chosen lab has no certified method in RCRA category
Proactinium 231	EPA 901.1/ EML HASL 300	Y	Y	NO	chosen lab has no certified method in RCRA category, NV soil cert in process
Radium 226	EPA 901.1/ EML HASL 300	Y	Y	SDWA water only	chosen lab has no certified method in RCRA category, NV soil cert in process
Radium 228	EPA 901.1/ EML HASL 300	Y	Y	SDWA water only	chosen lab has no certified method in RCRA category, NV soil cert in process
Radon 222	SM7500-RN-B	N	Y	NA for soil	no cert possible
Thorium (isotopic)	EML HASL 300 alpha spec	Y	Y	NO	applied for in primary state, NV cert months away
Uranium (isotopic)	EML HASL 300 alpha spec	Y	Y	NO	applied for in primary state, NV cert months away
Uranium (total)	ASTM D5174	Y	Y	SDWA water only	chosen lab has no certified method in RCRA category, NV soil cert in process
Azinphos-methyl	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Bolstar	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Chlorpyrifos	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Coumaphos	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Demeton-O	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Demeton-S	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Dimethoate	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Disulfoton	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
EPN	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state
Ethoprop	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Famphur	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Fensulfothion	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Fenthion	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Merphos	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Mevinphos	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Naled	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Parathion-ethyl	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Parathion-methyl	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Sulfotepp	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Thionazin	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Tokuthion	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
Trichloronate	EPA 8141	N	Y	RCRA	not in PE provided for primary cert state, so covered in NV by method, not by parameter
1-Chlorohexane	EPA 8260	Y	N	RCRA	covered in NV by method, not by parameter
4-Bromophenyl-phenylether	EPA 8270	N	N	RCRA	chosen lab is certified in CA; covered in NV by method, not by parameter
Benzo(a)pyrene	EPA 8270 SIM	N	Y	RCRA	chosen lab is certified in CA; covered in NV by method, not by parameter
Butylbenzylphthalate	EPA 8270	N	Y	RCRA	chosen lab is certified in CA; covered in NV by method, not by parameter
n-Nitrosodiphenylamine	EPA 8270	N	N	RCRA	chosen lab is certified in CA; covered in NV by method, not by parameter
Octachlorostyrene	EPA 8270	N	Y	RCRA	not a standard analyte for this method, parameter specific certification not expected, covered in NV by method

PE = the performance evaluation provided by the state certifying the lab.  
 SL= Short List Analytes that all soil and water were subject to.  
 SRC = Chemical that is included on the Site Related Chemical list