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April 13, 2015

2013-3007-07

Mr. Pete Ruttan
California Dept. of Toxic Substances Control
8800 Cal Center Drive
Sacramento, CA 95826-3200

RE: Trench at CL-14
Replacement Stormwater System
Exide Technologies, Vernon, California

Dear Pete:

As you know, Exide Technologies installed a replacement stormwater system at the Exide facility in Vernon, California in accordance with the Stormwater Management System Replacement Plan dated August 19, 2013. The system includes manholes and piping which have secondary containment and leak detection per CCR 66264.193(b) and (c). The system includes a trench drain on the east side of the Smelter Building with double layers of EPDM geomembrane and a geocomposite leak detection layer. The trench drain collects stormwater from a small drainage area between the Smelter Building and eastern perimeter fence and conveys the flow north to the leak detection zone at inlet CL-14. The trench drain is the most upstream extent of the stormwater system.

CL-14 has had liquid in the leak detection zone between the HDPE manhole and concrete vault. Exide has collected samples of the leak detection liquid at CL-14 over time. A summary of data from August 1, 2014 to November 11, 2014 is attached. The summary ends at November 11, 2014 as this is the date that the trench drain leak detection system was disconnected to allow for repairs at the trench drain pipe joint began. Therefore, liquids at the CL-14 leak detection zone after November 11, 2014 would not represent the flow through the leak detection layer of the trench drain. As shown on the summary, the liquids which traveled through the trench drain leak detection layer and collected at the CL-14 leak detection zone are non-hazardous for all compounds analyzed. Total lead results averaged 0.176 mg/L, which is approximately 3% of the STLC and RCRA hazardous level for lead (5 mg/L).

Exide's contractor has conducted several activities to address construction issues which were suspected to have caused the liquid entering the leak detection zone including replacing the electrical control box at CL-14, raising the access lid for the CL-14 leak detection zone, and replacing a pipe joint along the trench drain which had disconnected during installation. The excavation to replace the pipe joint remains open, but is within an enclosure.. Despite these

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activities, informal testing intended to replicate a runoff producing rain event performed in February using potable water indicate that liquids are continuing to enter the leak detection layer somewhere along the trench drain. The highest measured flow during any of the February test events was 162 ml/minute. The precise pathway that the liquid is taking to enter the trench drain leak detection layer is uncertain and cannot be pinpointed without destructive testing. Such testing would be a significant undertaking and would require preparation of a mitigation plan for AQMD and removal of a significant amount of concrete.

As the facility is entering closure and the results of analytical testing indicate that the liquid accumulating in CL-14 witness zone is significantly below hazardous waste levels, Exide proposes to backfill the open excavation and reconstruct the pavement at the pipe joint replacement excavation per the Stormwater Management System Replacement Plan dated August 19, 2013 and associated design modifications. Exide will continue to monitor liquid levels in CL-14, and collect and remove accumulating liquid pursuant to the operation and maintenance plan. Exide also proposes to analyze the liquid at CL-14 once per month to confirm that the liquids continue to be non-hazardous.

Exide wishes to proceed with restoring the existing excavation beginning April 20, 2015 and appreciates your prompt response. If you have any questions, please contact Jen DiJoseph at (610) 840 9189 or Paul Stratman at (610) 840 9122.

Sincerely,

ADVANCED GEOSERVICES

Jennifer W. DiJoseph
Associate Project Consultant

Paul G. Stratman, P.E.
Consultant

Cc: D. Henke
N. Serieys
J. Hogarth



Date	TSS mg/L	pH	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Cobalt mg/L	Copper mg/L	Lead mg/L	Mercury mg/L	Molybdenum mg/L	Nickel mg/L	Selenium mg/L	Silver mg/L	Thallium mg/L	Vanadium mg/L	Zinc mg/L	
RCRA Haz Limit (TCLP)	NA	NA	NA	5	100	NA	1	5	NA	NA	5	0.2	NA	NA	1	5	NA	NA	NA	
Cal Haz Limit (STLC)	NA	NA	15	5	100	0.75	1	5	80	25	5	0.2	350	20	1	5	7	24	250	
8/1/2014	ND	7.27	0.0167	ND	0.125	ND	ND	ND	ND	0.0402	0.184	ND	ND	ND	ND	ND	ND	ND	ND	0.135
8/2/2014	ND	7.37	ND	ND	0.11	ND	ND	ND	ND	ND	0.165	ND	ND	ND	ND	ND	ND	ND	ND	0.118
8/3/2014	16	7.29	ND	ND	0.102	ND	ND	ND	ND	0.0198	0.165	ND	ND	ND	ND	ND	ND	ND	ND	0.263
8/4/2014	1.6	7.28	0.0152	ND	0.108	ND	ND	ND	ND	0.0164	0.187	ND	ND	ND	ND	ND	ND	ND	ND	0.294
8/5/2014	ND	7.28	0.0154	ND	0.122	ND	ND	ND	ND	0.0223	0.174	ND	ND	ND	ND	ND	ND	ND	ND	0.201
8/6/2014	1.6	7.45	ND	ND	0.117	ND	ND	ND	ND	0.0243	0.168	ND	ND	ND	ND	ND	ND	ND	ND	0.201
8/7/2014	ND	7.12	ND	ND	0.115	ND	ND	ND	ND	0.015	0.156	ND	ND	ND	ND	ND	ND	ND	ND	0.279
8/8/2014	ND	7.3	ND	ND	0.111	ND	ND	ND	ND	0.0171	0.17	ND	ND	ND	ND	ND	ND	ND	ND	0.232
8/9/2014	ND	7.09	ND	ND	0.11	ND	ND	ND	ND	ND	0.171	ND	ND	ND	ND	ND	ND	ND	ND	0.212
8/10/2014	ND	7.37	ND	ND	0.108	ND	ND	ND	ND	ND	0.158	ND	ND	ND	ND	ND	ND	ND	ND	0.196
8/11/2014	ND	7.42	0.0163	ND	0.117	ND	ND	ND	ND	ND	0.178	ND	ND	ND	ND	ND	ND	ND	ND	0.204
8/12/2014	ND	7.34	ND	ND	0.107	ND	ND	ND	ND	ND	0.154	ND	ND	ND	ND	ND	ND	ND	ND	0.16
8/13/2014	1.1	7.38	ND	ND	0.107	ND	ND	ND	ND	ND	0.152	ND	ND	ND	ND	ND	ND	ND	ND	0.148
8/14/2014	1.1	7.41	ND	ND	0.112	ND	ND	ND	ND	ND	0.156	ND	ND	ND	ND	ND	ND	ND	ND	0.164
8/15/2014	ND	7.29	ND	ND	0.107	ND	ND	ND	ND	ND	0.149	ND	ND	ND	ND	ND	ND	ND	ND	0.162
8/16/2014	ND	7.53	ND	ND	0.107	ND	ND	ND	ND	ND	0.156	ND	ND	ND	ND	ND	ND	ND	ND	0.169
8/17/2014	ND	7.58	ND	ND	0.107	ND	ND	ND	ND	ND	0.146	ND	ND	ND	ND	ND	ND	ND	ND	0.163
8/18/2014	ND	7.62	ND	ND	0.108	ND	ND	ND	ND	ND	0.147	ND	ND	ND	ND	ND	ND	ND	ND	0.152
8/19/2014	ND	7.19	ND	ND	0.622	ND	ND	ND	ND	ND	0.977	ND	ND	ND	ND	ND	ND	ND	ND	0.874
8/20/2014	2.6	7.36	ND	ND	0.567	ND	ND	ND	ND	ND	0.91	ND	ND	ND	ND	ND	ND	ND	ND	1.12
8/21/2014	1.4	7.22	ND	ND	0.112	ND	ND	ND	ND	ND	0.177	ND	ND	ND	ND	ND	ND	ND	ND	0.192
8/22/2014	1.2	7.34	ND	ND	0.106	ND	ND	ND	ND	ND	0.171	ND	ND	ND	ND	ND	ND	ND	ND	0.171
8/23/2014	1.2	7.39	ND	ND	0.108	ND	ND	ND	ND	0.0102	0.158	ND	ND	ND	ND	ND	ND	ND	ND	0.172
8/24/2014	ND	7.47	0.0162	ND	0.113	ND	ND	ND	ND	0.0144	0.155	ND	ND	ND	ND	ND	ND	ND	ND	0.243
8/25/2014	ND	7.47	0.0167	ND	0.114	ND	ND	ND	ND	0.0103	0.142	ND	ND	ND	ND	ND	ND	ND	ND	0.157
8/26/2014	2	7.34	ND	ND	0.106	ND	ND	ND	ND	0.0196	0.145	ND	ND	ND	ND	ND	ND	ND	ND	0.189
8/27/2014	1.3	7.38	ND	ND	0.107	ND	ND	ND	ND	0.0137	0.162	ND	ND	ND	ND	ND	ND	ND	ND	0.201
8/28/2014	ND	7.46	ND	ND	0.105	ND	ND	ND	ND	0.0169	0.135	ND	ND	ND	ND	ND	ND	ND	ND	0.135
8/29/2014	2	7.26	ND	ND	0.111	ND	ND	ND	ND	0.0154	0.144	ND	ND	ND	ND	ND	ND	ND	ND	0.158
8/30/2014	1.8	7.35	ND	ND	0.107	ND	ND	ND	ND	0.0168	0.137	ND	ND	ND	ND	ND	ND	ND	ND	0.155
9/1/2014	ND	7.46	ND	ND	0.0972	ND	ND	ND	ND	0.0121	0.163	ND	ND	ND	ND	ND	ND	ND	ND	0.135
9/2/2014	ND	7.52	ND	ND	0.0992	ND	ND	ND	ND	0.0114	0.166	ND	ND	ND	ND	ND	ND	ND	ND	0.131
9/3/2014	ND	7.49	ND	ND	0.11	ND	ND	ND	ND	0.0189	0.139	ND	ND	ND	ND	ND	ND	ND	ND	0.163
9/4/2014	1	7.52	ND	ND	0.107	ND	ND	ND	ND	0.0499	0.135	ND	ND	ND	ND	ND	ND	ND	ND	0.165
9/5/2014	ND	7.54	ND	ND	0.106	ND	ND	ND	ND	0.0177	0.131	ND	ND	ND	ND	ND	ND	ND	ND	0.155
9/6/2014	ND	7.55	ND	ND	0.107	ND	ND	ND	ND	0.018	0.157	ND	ND	ND	ND	ND	ND	ND	ND	0.23
9/7/2014	1.2	7.41	ND	ND	0.104	ND	ND	ND	ND	0.0233	0.125	ND	ND	ND	ND	ND	ND	ND	ND	0.213
9/8/2014	1.2	7.5	ND	ND	0.106	ND	ND	ND	ND	0.0253	0.143	ND	ND	ND	ND	ND	ND	ND	ND	0.211
9/9/2014	ND	7.46	ND	ND	0.103	ND	ND	ND	ND	0.012	0.137	ND	ND	ND	ND	ND	ND	ND	ND	0.223
9/10/2014	1.9	7.08	ND	ND	0.0952	ND	ND	ND	ND	0.0297	0.12	ND	ND	ND	ND	ND	ND	ND	ND	0.194
9/11/2014	2.2	7.3	ND	ND	0.101	ND	ND	ND	ND	0.0153	0.122	ND	ND	ND	ND	ND	ND	ND	ND	0.195
9/12/2014	ND	7.55	ND	ND	0.105	ND	ND	ND	ND	0.0153	0.142	ND	ND	ND	ND	ND	ND	ND	ND	0.216
9/13/2014	ND	7.49	ND	ND	0.108	ND	ND	ND	ND	0.0101	0.155	ND	ND	ND	ND	ND	ND	ND	ND	0.206
9/14/2014	1.2	7.42	ND	ND	0.104	ND	ND	ND	ND	0.0101	0.14	ND	ND	ND	ND	ND	ND	ND	ND	0.206
9/15/2014	ND	7.58	ND	ND	0.097	ND	ND	ND	ND	0.0101	0.129	ND	ND	ND	ND	ND	ND	ND	ND	0.182
9/16/2014	1	7.55	ND	ND	0.0982	ND	ND	ND	ND	0.0101	0.131	ND	ND	ND	ND	ND	ND	ND	ND	0.19
9/17/2014	1.8	7.43	ND	ND	0.107	ND	ND	ND	ND	0.0153	0.166	ND	ND	ND	ND	ND	ND	ND	ND	0.198
9/18/2014	3.9	7.47	ND	ND	0.115	ND	ND	ND	ND	0.0228	0.156	ND	ND	ND	ND	ND	ND	ND	ND	0.2
9/19/2014	ND	7.56	ND	ND	0.106	ND	ND	ND	ND	0.0272	0.138	ND	ND	ND	ND	ND	ND	ND	ND	0.538
9/20/2014	ND	7.53	ND	ND	0.106	ND	ND	ND	ND	0.0201	0.132	ND	ND	ND	ND	ND	ND	ND	ND	0.196
9/21/2014	ND	7.16	ND	ND	0.105	ND	ND	ND	ND	0.0137	0.125	ND	ND	ND	ND	ND	ND	ND	ND	0.153
9/22/2014	ND	7.4	ND	ND	0.101	ND	ND	ND	ND	ND	0.124	ND	ND	ND	ND	ND	ND	ND	ND	0.255
9/23/2014	1	7.21	ND	ND	0.103	ND	ND	ND	ND	0.0134	0.129	ND	ND	ND	ND	ND	ND	ND	ND	0.148
9/24/2014	3.6	7.41	ND	ND	0.107	ND	ND	ND	ND	0.0123	0.135	ND	ND	ND	ND	ND	ND	ND	ND	0.162
9/25/2014	1.8	7.39	ND	ND	0.106	ND	ND	ND	ND	0.0103	0.127	ND	ND	ND	ND	ND	ND	ND	ND	0.172
9/26/2014	ND	7.41	ND	ND	0.106	ND	ND	ND	ND	ND	0.129	ND	ND	ND	ND	ND	ND	ND	ND	0.187
9/27/2014	5	7.23	0.0295	ND	0.114	ND	ND	ND	ND	0.0129	0.126	ND	0.0202	ND	ND	ND	ND	ND	ND	0.195
9/28/2014	ND	7.39	0.0201	ND	0.106	ND	ND	ND	ND	ND	0.117	ND	0.0106	ND	ND	ND	ND	ND	ND	0.199
9/29/2014	ND	7.46	0.0182	ND	0.112	ND	ND	ND	ND	0.0112	0.135	ND	ND	ND	ND	ND	ND	ND	ND	0.209
9/30/2014	1.2	7.21	0.0175	ND	0.109	ND	ND	ND	ND	0.011	0.131	ND	ND	ND	ND	ND	ND	ND	ND	0.21
10/1/2014	1.2	7.32	ND	ND	0.102	ND	ND	ND	ND	0.0111	0.126	ND	ND	ND	ND	ND	ND	ND	ND	0.177
10/2/2014	1.7	7.46	ND	ND	0.102	ND	ND	ND	ND	0.0108	0.135	ND	ND	ND	ND	ND	ND	ND	ND	0.197
10/3/2014	ND	7.47	ND	ND	0.104	ND	ND	ND	ND	0.0117	0.127	ND	ND	ND	ND	ND	ND	ND	ND	0.225
10/4/2014	4.3	7.49	ND	ND	0.111	ND	ND	ND	ND	0.0244	0.184	ND	ND	ND	ND	ND	ND	ND	ND	0.303
10/5/2014	1.5																			