West Lake Landfill Operable Unit 1 Status Update

U.S. Environmental Protection Agency Region 7

January 2013

WLLFOIA4312 - 001 - 0058549

Agenda

- History of site decisions
- Recent groundwater results
- Recent radiation screening results
- Next steps
- Q & A

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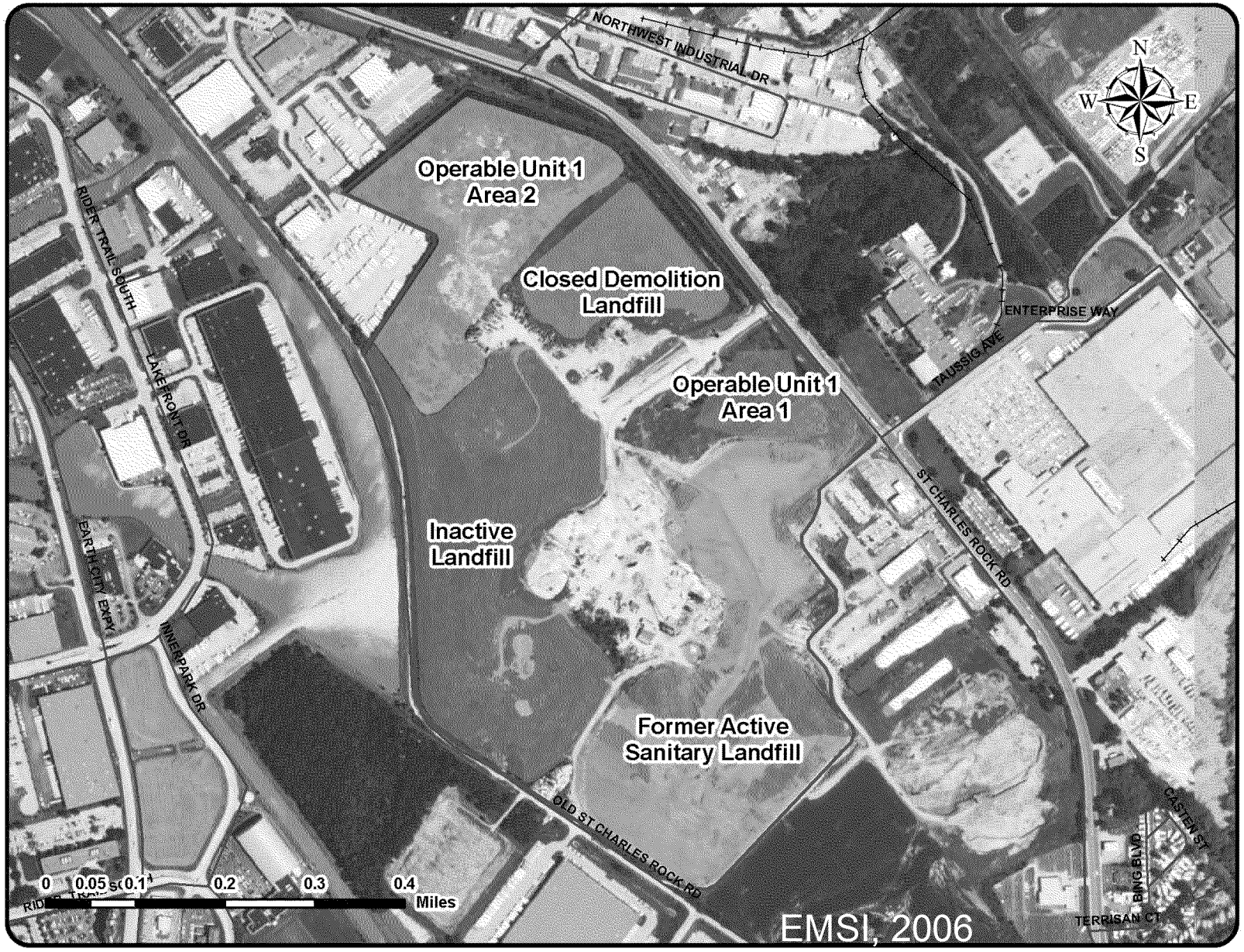
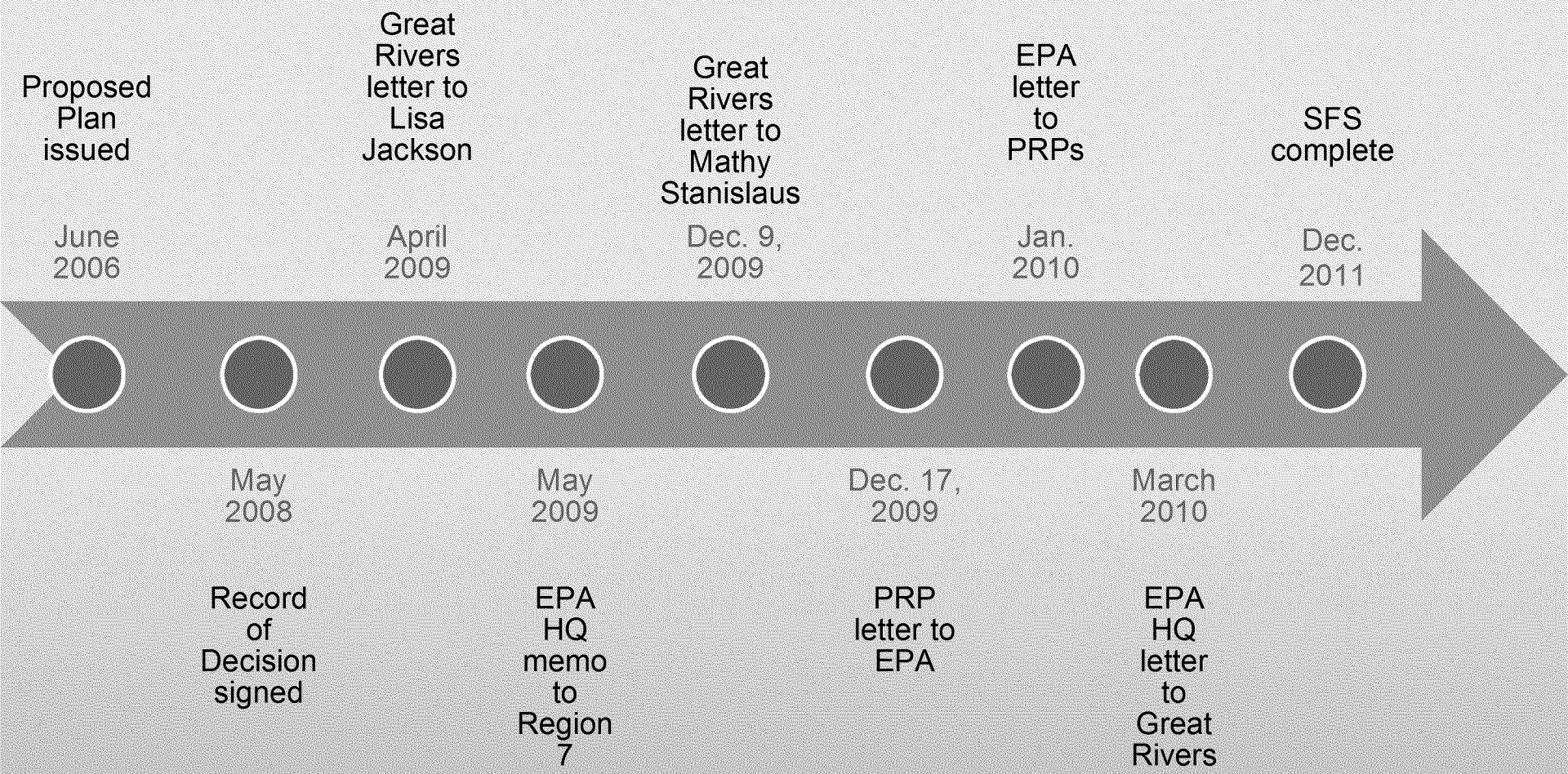
Missouri River
N 3rd St
94
Aubuchon Rd
Howdershell Rd
Lynn Haven Ln
63042
370
Dunn Rd
Brown Rd
Taussig Rd
Gist Rd
Missouri Bottom Rd
James S McDonnell Blvd
Hazelwood
63045
63044
SITE
Bridgeton
Airport
N Lindbergh Blvd
Banshee Rd
180
270
63145
Earth City Expy
Railroad Farm Rd
70
Champ
Cypress Rd
Creve Coeur Mill Rd
St Charles Rock Rd
Edmun
67
McKelvey Rd
Doddridge Ave
© 2012 Europa Technologies
© 2012 Google
Google earth
63043
St Ann
63074
Imagery Date: 9/1/2011
1990
38°45'53.28" N 90°25'04.65" W elev 512 ft
Eye alt 30968 ft

3

Site Boundaries



Timeline



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National Remedy Review Board (NRRB)

- EPA Region 7 held early consultation on the Supplemental Feasibility Study (SFS) with the NRRB in February-March 2012.
- NRRB recommended additional technical evaluations.
- The PRPs agreed to do the additional evaluations requested by the NRRB. Work began in July 2012 and is ongoing.

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2012 Groundwater Sampling

- 75 monitoring wells sampled across the site
- Radium detected in 25 wells at levels above its maximum contaminant level (MCL)
- Uranium did not exceed its MCL in any wells
- Dissolved thorium less than 2.1 pCi/L in all wells; there is no MCL for thorium
- Recent USGS studies suggest that radium may be naturally elevated in the area groundwater

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EPA radiation screening results

- EPA screened 68 monitoring wells in October
- Four wells inside OU-1 cells did show elevated gamma levels indicating radiologically-impacted material (RIM)
- Background gamma emissions from shale layers in bedrock observed at low levels

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Depth, Ft	PZ-113-SS Counts Per Minute	S-5 CPM	I-4 CPM	D-3 CPM	S-10 CPM	I-11 CPM	D-12 CPM	PZ-109-SS CPM
0	470	960	670	930	1370	1560	1160	940
	400	620	620	670	610	910	520	580
	800	1180	520	540	610	560	580	510
	680	1590	430	910	520	950	630	640
	770	3490	790	2590	1060	1500	770	480
5	760	9370	1760	4880	1240	2870	1990	770
	980	14100	2810	3710	1590	5620	2360	1020
	980	71890	4120	3450	1380	4390	2300	960
	850	36190	9000	4970	1420	1600	1360	1690
	730	7150	34750	11120	1180	1310	1240	1920
10	810	2090	33630	15460	1000	1160	1090	1910
	870	2110	8600	27820	1110	1020	1260	1590
	640	1400	2900	15630	1140	1370	1180	1220
	760	980	1460	2200	900	1120	940	1670
	760	1030	1130	1190	1050	1100	1240	1670
15	780	790	930	1170	1050	1160	1360	1920
	820	930	1050	1000	1360	790	1050	1920
	710	1040	1210	990	1390	900	1020	1810
	700	810	820	1270	1160	930	1190	1770
	770	820	740	920	1440	1040	1170	1650
20	850	880	820	730	1230	1190	1090	1430
	1020	940	950	660	1530	1140	1100	1390
	730	1210	1040	560	1910	1160	1150	1290
	970	1400	870	790	1950	1220	1480	1240
	650	1020	1040	1030	2090	1220	1930	1460
25	830	1160	1160	1050	2060	1380	1880	1420
	780	1320	920	760	1810	1710	1640	1630
	780	1340	860	680	1570	2170	1610	1420
	900	1660	860	1200	1860	2070	1560	1580
	790	820	820	1410	1630	2100	1530	1380
30	660	1470	670	1580	1420	2190	1450	1410
	680	460	880	1640	1670	1770	1820	1100
	680	820	990	1740	1190	1260	1420	800
	530	590	1070	1380	1220	1730	1590	790
	510	550	1010	1620	1190	1700	1580	1070
35	600	710	820	1240	1120	1600	1580	1170
	450	1050	740	1160	1200	1780	1580	1110
	480	680	1130	1110	1120	1340	1560	1710
	620	480	1480	1140	1350	1440	2040	1560
	520	580	1110	910	1100	1800	1670	1750
40	440	740	850	980	1170	1740	1580	1870
	520	600	990	1330	1210	1560	1760	2010
	650	630	1050	1160	1210	1650	1530	1770
	480	430	1080	1060	1040	1760	1590	1790
	580	630	960	1070	1000	1590	1600	1710
45	420		890	1000	1040	1470	1610	1740
	500		1110	890	970	1960	1200	1280
	590		1000	850	740	1460	1370	1080
	380		850	1040	1080	1420	1720	1000
	530		1000	980	1350	1620	1650	1080
50	550		840	920	1220	1220	1570	1240
	390		910	900	1090	1180	1480	1100
	530		1040	820	950	1510	1260	1150
	580		1160	980	960	1440	1110	1730
	630		910	960	850	1100	880	1480
55	440		950	1000	700	930	930	1120
	560		1050	1220	720	860	890	1070
	580		940	1150	690	900	1120	670
	540		930	1030	750	1020	1190	480

EPA surface radiation screening

- Surface gamma scans are planned for 2013
- Aerial survey method may be used due to very heavy vegetation cover
- Results may help confirm extent of RIM

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Next Steps

- PRPs are conducting additional evaluations.
- SFS will be amended to include additional evaluations.
- EPA Region 7 will formally present amended SFS to the NRRB.
- New proposed plan for ROD amendment will be released for public comment.

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Community Assistance

- Community advisory group
- Technical assistance grants
- Technical Assistance for Superfund Communities (TASC)

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