US EPA RECORDS CENTER REGION 5
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Prepared for:
AK Steel Corporation
West Chester, Ohio

Baseline Human Health Risk Assessment for the Former Armco Hamilton Plant Site, 401 Augspurger Road, New Miami, Ohio

Revised

Volume IV of IV
Tables and Figures

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TABLES

TABLE 3-1
SURFACE SOIL AND SURFACE SLAG (BLOCK A) SAMPLES
AK STEEL FORMER ARMCO HAMILTON PLANT
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

Exposure Area	Location	Sample	Parent Sample for Duplicates	Sample Date	Depth (feet)
AOC 1	AOC1CA1	AOC1CA1CAA		1/3/06	
AOC 1	AOC1CA10	AOC1CA10CAA		1/12/06	
AOC 1	AOC1CA10SB3	AOC1CA10SB3AA		1/11/06	0 – 2
AOC 1	AOC1CA11	AOC1CA11CAA		1/25/06	
AOC 1	AOC1CA11SB2	AOC1CA11SB2AA		1/25/06	0 – 2
AOC 1	AOC1CA12	AOC1CA12CAA		1/11/06	
AOC 1	AOC1CA12SB4	AOC1CA12SB4AA		1/10/06	0 – 1.7
AOC 1	AOC1CA13	AOC1CA13CAA		1/11/06	
AOC 1	AOC1CA13	AOC1CA13CAB	AOC1CA13CAA	1/11/06	
AOC 1	AOC1CA13SB1	AOC1CA13SB1AA		1/11/06	0 – 1.3
AOC 1	AOC1CA13SB1	AOC1CA13SB1AB	AOC1CA13SB1AA	1/11/06	0 – 1.3
AOC 1	AOC1CA1SB2	AOC1CA1SB2AA		1/3/06	0 – 1.7
AOC 1	AOC1CA2	AOC1CA2CAA		1/5/06	
AOC 1	AOC1CA2SB1	AOC1CA2SB1AA		1/4/06	0 – 2
AOC 1	AOC1CA2SB5	AOC1CA2SB5AA		1/5/06	0 – 1.7
AOC 1	AOC1CA3	AOC1CA3CAA		12/21/05	
AOC 1	AOC1CA3SB7	AOC1CA3SB7AA		12/19/05	0 – 1.4
AOC 1	AOC1CA4	AOC1CA4CAA		1/6/06	
AOC 1	AOC1CA4SB3	AOC1CA4SB3AA		1/5/06	0 – 1.8
AOC 1	AOC1CA5	AOC1CA5CAA		1/16/06	
AOC 1	AOC1CA5SB2	AOC1CA5SB2AA		1/12/06	0 – 1
AOC 1	AOC1CA6	AOC1CA6CAA		1/16/06	
AOC 1	AOC1CA6SB1	AOC1CA6SB1AA		1/16/06	0 – 2
AOC 1	AOC1CA7	AOC1CA7CAA		1/10/06	
AOC 1	AOC1CA7SB1	AOC1CA7SB1AA		1/10/06	0 – 0.7
AOC 1	AOC1CA8	AOC1CA8CAA		1/6/06	
AOC 1	AOC1CA8SB3	AOC1CA8SB3AA		1/5/06	0 – 0.8
AOC 1	AOC1CA9	AOC1CA9CAA		1/9/06	
AOC 1	AOC1CA9SB3	AOC1CA9SB3AA		1/9/06	0 – 1.4
AOC 1	MW-11S	MW11SAA		11/30/05	0 – 2
AOC 1	MW-11S	MW11SAB	MW11SAA	11/30/05	0 – 2
AOC 1	MW-12S	MW12SAA		11/30/05	0 – 2
AOC 1	MW-16S	MW16SAA		12/5/05	0 – 2
AOC 1	MW-17S	MW17SAA		12/7/05	0 – 2
AOC 18 and AOC 21	AOC18SB1	AOC18SB1AA		1/17/06	0 – 1
AOC 18 and AOC 21	AOC18SB2	AOC18SB2AA		1/17/06	0 – 1
AOC 18 and AOC 21	AOC18SB3	AOC18SB3AA		1/17/06	0 – 0.5
AOC 18 and AOC 21	AOC18SB4	AOC18SB4AA		1/17/06	0 – 1
AOC 18 and AOC 21	AOC18SB5	AOC18SB5AA		1/25/06	0 – 1
AOC 18 and AOC 21	AOC18SB6	AOC18SB6AA		1/25/06	0 – 1
AOC 18 and AOC 21	AOC21SB1	AOC21SB1AA		1/12/06	0 – 1.6
AOC 18 and AOC 21	AOC21SB10	AOC21SB10AA		12/21/05	0 – 0.9
AOC 18 and AOC 21	AOC21SB11	AOC21SB11AA		12/20/05	0 – 1.3
AOC 18 and AOC 21	AOC21SB12	AOC21SB12AA		12/20/05	0 – 0.9
AOC 18 and AOC 21	AOC21SB13	AOC21SB13AA		12/21/05	0 – 1.2
AOC 18 and AOC 21	AOC21SB2	AOC21SB2AA		1/10/06	0 – 1.6
AOC 18 and AOC 21	AOC21SB3	AOC21SB3AA		1/10/06	0 – 2
AOC 18 and AOC 21	AOC21SB4	AOC21SB4AA		1/10/06	0 – 1.4
AOC 18 and AOC 21	AOC21SB5	AOC21SB5AA		1/11/06	0 – 1.4

TABLE 3-1
SURFACE SOIL AND SURFACE SLAG (BLOCK A) SAMPLES
AK STEEL FORMER ARMCO HAMILTON PLANT
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

Exposure Area	Location	Sample	Parent Sample for Duplicates	Sample Date	Depth (feet)
AOC 18 and AOC 21	AOC21SB6	AOC21SB6AA		1/10/06	0 – 2
AOC 18 and AOC 21	AOC21SB7	AOC21SB7AA		1/10/06	0 – 2
AOC 18 and AOC 21	AOC21SB8	AOC21SB8AA		1/11/06	0 – 1.6
AOC 18 and AOC 21	AOC21SB9	AOC21SB9AA		1/11/06	0 – 1.6
AOC 18 and AOC 21	MW-15S	MW15SAA		12/7/05	0 – 2
AOC 19	AOC19SB1	AOC19SB1AA		2/7/06	0 – 1
AOC 19	AOC19SB1	AOC19SB1AB	AOC19SB1AA	2/7/06	0 – 1
AOC 19	AOC19SB10	AOC19SB10AA		2/8/06	0 – 1
AOC 19	AOC19SB10	AOC19SB10AB	AOC19SB10AA	2/8/06	0 – 1
AOC 19	AOC19SB11	AOC19SB11AA		2/8/06	0 – 1
AOC 19	AOC19SB12	AOC19SB12AA		2/8/06	0 – 1
AOC 19	AOC19SB13	AOC19SB13AA		2/8/06	0 – 1
AOC 19	AOC19SB2	AOC19SB2AA		2/7/06	0 – 1
AOC 19	AOC19SB3	AOC19SB3AA		2/7/06	0 – 1
AOC 19	AOC19SB4	AOC19SB4AA		2/8/06	0 – 1
AOC 19	AOC19SB5	AOC19SB5AA		2/8/06	0 – 1
AOC 19	AOC19SB6	AOC19SB6AA		2/8/06	0 – 1
AOC 19	AOC19SB7	AOC19SB7AA		2/8/06	0 – 1
AOC 19	AOC19SB8	AOC19SB8AA		2/7/06	0 – 1
AOC 19	AOC19SB9	AOC19SB9AA		2/7/06	0 – 1
AOC 2	AOC2SB1	AOC2SB1AA		1/5/06	0 – 1.2
AOC 2	AOC2SB10	AOC2SB10AA		1/4/06	0 – 2
AOC 2	AOC2SB10	AOC2SB10AB	AOC2SB10AA	1/4/06	0 – 2
AOC 2	AOC2SB2	AOC2SB2AA		1/5/06	0 – 2
AOC 2	AOC2SB3	AOC2SB3AA		1/3/06	0 – 2
AOC 2	AOC2SB4	AOC2SB4AA		1/3/06	0 – 1.1
AOC 2	AOC2SB5	AOC2SB5AA		1/3/06	0 – 1.1
AOC 2	AOC2SB6	AOC2SB6AA		1/4/06	0 – 0.7
AOC 2	AOC2SB7	AOC2SB7AA		1/4/06	0 – 1.4
AOC 2	AOC2SB8	AOC2SB8AA		1/4/06	0 – 0.9
AOC 2	AOC2SB9	AOC2SB9AA		1/4/06	0 – 0.6
Block A	BACA1	BACA1CAA		11/16/05	
Block A	BACA10	BACA10CAA		12/14/05	
Block A	BACA10SB4	BACA10SB4AA		12/13/05	0 – 1.8
Block A	BACA11	BACA11CAA		12/13/05	
Block A	BACA11SB1	BACA11SB1AA		12/12/05	0 – 2
Block A	BACA12	BACA12CAA		12/19/05	
Block A	BACA12SB2	BACA12SB2AA		12/14/05	0 – 2
Block A	BACA13	BACA13CAA		12/21/05	
Block A	BACA13	BACA13CAB	BACA13CAA	12/21/05	
Block A	BACA13SB2	BACA13SB2AA		12/19/05	0 – 1.3
Block A	BACA13SB2	BACA13SB2AB	BACA13SB2AA	12/19/05	0 – 1.3
Block A	BACA1SB2	BACA1SB2AA		11/16/05	0 – 1.1
Block A	BACA2	BACA2CAA		11/17/05	
Block A	BACA2SB1	BACA2SB1AA		11/17/05	0 – 1.8
Block A	BACA3	BACA3CAA		11/29/05	
Block A	BACA3SB2	BACA3SB2AA		11/29/05	0 – 1.2
Block A	BACA4	BACA4CAA		11/29/05	
Block A	BACA4SB3	BACA4SB3AA		11/21/05	0 – 1.4

TABLE 3-1
SURFACE SOIL AND SURFACE SLAG (BLOCK A) SAMPLES
AK STEEL FORMER ARMCO HAMILTON PLANT
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

Exposure Area	Location	Sample	Parent Sample for Duplicates	Sample Date	Depth (feet)
Block A	BACA4SB4	BACA4SB4AA		11/28/05	0 – 0.8
Block A	BACA5	BACA5CAA		11/30/05	
Block A	BACA5SB1	BACA5SB1AA		11/30/05	0 – 1.7
Block A	BACA6	BACA6CAA		12/2/05	
Block A	BACA6SB5	BACA6SB5AA		12/1/05	0 – 1.3
Block A	BACA7	BACA7CAA		12/8/05	
Block A	BACA7SB2	BACA7SB2AA		12/7/05	0 – 0.6
Block A	BACA7SB4	BACA7SB4BA		12/8/05	1.7 – 2
Block A	BACA8	BACA8CAA		12/9/05	
Block A	BACA8SB1	BACA8SB1AA		12/8/05	0 – 1.4
Block A	BACA8SB2	BACA8SB2AA		12/9/05	0 – 1.4
Block A	BACA9	BACA9CAA		12/6/05	
Block A	BACA9SB1	BACA9SB1AA		12/5/05	0 – 2
Block A	BACA9SB4	BACA9SB4AA		12/2/05	0 – 1.3
Block A	MW-13S	MW13SAA		12/5/05	0 – 2
Block A	MW-18S	MW18SAA		12/6/05	0 – 2
Block A	MW-18S	MW18SAB	MW18SAA	12/6/05	0 – 2
Southern Parcel (a)	AOC10SB1	AOC10SB1AA		12/13/05	0 – 1.6
Southern Parcel (a)	AOC10SB2	AOC10SB2AA		10/31/05	0 – 0.9
Southern Parcel (a)	AOC10SB3	AOC10SB3AA		12/13/05	0 – 1.7
Southern Parcel (a)	AOC10SB4	AOC10SB4AA		10/31/05	0 – 1
Southern Parcel (a)	AOC10SB4	AOC10SB4AAR		12/13/05	0 – 1.9
Southern Parcel (a)	AOC12SB1	AOC12SB1AA		12/14/05	0 – 0.4
Southern Parcel (a)	AOC12SB2	AOC12SB2AA		12/14/05	0 – 1.3
Southern Parcel (a)	AOC12SB3	AOC12SB3AA		12/14/05	0 – 0.9
Southern Parcel (a)	AOC12SB4	AOC12SB4AA		12/13/05	0 – 1.9
Southern Parcel (a)	AOC12SB5	AOC12SB5AA		12/14/05	0 – 1.8
Southern Parcel (a)	AOC12SB6	AOC12SB6AA		12/14/05	0 – 1.6
Southern Parcel (a)	AOC14SB1	AOC14SB1AA		12/15/05	0 – 1.8
Southern Parcel (a)	AOC14SB2	AOC14SB2AA		12/15/05	0 – 1.5
Southern Parcel (a)	AOC14SB3	AOC14SB3AA		12/16/05	0 – 1.6
Southern Parcel (a)	AOC14SB4	AOC14SB4AA		12/15/05	0 – 1.4
Southern Parcel (a)	AOC15SB1	AOC15SB1AA		10/31/05	0 – 0.5
Southern Parcel (a)	AOC15SB1	AOC15SB1AAR		12/19/05	0 – 1.2
Southern Parcel (a)	AOC15SB2	AOC15SB2AA		10/31/05	0 – 0.8
Southern Parcel (a)	AOC15SB2	AOC15SB2AB	AOC15SB2AA	10/31/05	0 – 0.8
Southern Parcel (a)	AOC15SB3	AOC15SB3AA		10/31/05	0 – 0.5
Southern Parcel (a)	AOC15SB4	AOC15SB4AA		10/31/05	0 – 1
Southern Parcel (a)	AOC20CA1	AOC20A1CAA		12/8/05	
Southern Parcel (a)	AOC20CA10	AOC20CA10CAA		11/22/05	
Southern Parcel (a)	AOC20CA10SB2	AOC20CA10SB2AA		11/21/05	0 – 1.2
Southern Parcel (a)	AOC20CA11	AOC20CA11CAA		11/16/05	
Southern Parcel (a)	AOC20CA11SB2	AOC20CA11SB2AA		11/16/05	0 – 0.6
Southern Parcel (a)	AOC20CA12	AOC20CA12CAA		12/8/05	
Southern Parcel (a)	AOC20CA12SB1	AOC20CA12SB1AA		12/7/05	0 – 1.9
Southern Parcel (a)	AOC20CA12SB2	AOC20CA12SB2AA		12/8/05	0 – 1.7
Southern Parcel (a)	AOC20CA13	AOC20CA13CAA		12/2/05	
Southern Parcel (a)	AOC20CA13SB2	AOC20CA13SB2AA		12/2/05	0 – 2
Southern Parcel (a)	AOC20CA1SB1	AOC20CA1SB1AA		12/8/05	0 – 2

TABLE 3-1
SURFACE SOIL AND SURFACE SLAG (BLOCK A) SAMPLES
AK STEEL FORMER ARMCO HAMILTON PLANT
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

Exposure Area	Location	Sample	Parent Sample for Duplicates	Sample Date	Depth (feet)
Southern Parcel (a)	AOC20CA2	AOC20CA2CAA		11/18/05	
Southern Parcel (a)	AOC20CA2SB2	AOC20CA2SB2AA		11/18/05	0 – 1.5
Southern Parcel (a)	AOC20CA3	AOC20CA3CAA		11/17/05	
Southern Parcel (a)	AOC20CA3SB1	AOC20CA3SB1AA		11/17/05	0 – 1.3
Southern Parcel (a)	AOC20CA4	AOC20CA4CAA		12/7/05	
Southern Parcel (a)	AOC20CA4SB1	AOC20CA4SB1AA		12/7/05	0 – 1.5
Southern Parcel (a)	AOC20CA5	AOC20CA5CAA		12/7/05	
Southern Parcel (a)	AOC20CA5SB2	AOC20CA5SB2AA		12/6/05	0 – 1.4
Southern Parcel (a)	AOC20CA5SB3	AOC20CA5SB3AA		12/6/05	0 – 1.7
Southern Parcel (a)	AOC20CA5SB4	AOC20CA5SB4AA		12/6/05	0 – 2
Southern Parcel (a)	AOC20CA6	AOC20CA6CAA		12/1/05	
Southern Parcel (a)	AOC20CA6SB1	AOC20CA6SB1AA		11/30/05	0 – 0.9
Southern Parcel (a)	AOC20CA7	AOC20CA7CAA		11/30/05	
Southern Parcel (a)	AOC20CA7	AOC20CA7CAA RE		11/30/05	
Southern Parcel (a)	AOC20CA7SB4	AOC20CA7SB4AA		11/29/05	0 – 0.7
Southern Parcel (a)	AOC20CA8	AOC20CA8CAA		11/29/05	
Southern Parcel (a)	AOC20CA8SB2	AOC20CA8SB2AA		11/28/05	0 – 1.2
Southern Parcel (a)	AOC20CA9	AOC20CA9CAA		11/22/05	
Southern Parcel (a)	AOC20CA9SB2	AOC20CA9SB2AA		11/22/05	0 – 1.8
Southern Parcel (a)	AOC20SB39	AOC20SB39AA		1/4/06	0 – 1.5
Southern Parcel (a)	AOC20SB40	AOC20SB40AA		1/4/06	0 – 1.2
Southern Parcel (a)	AOC8SB1	AOC8SB1AA		10/18/05	0 – 0.5
Southern Parcel (a)	AOC8SB2	AOC8SB2AA		10/19/05	0 – 1.5
Southern Parcel (a)	AOC8SB3	AOC8SB3AA		10/20/05	0 – 1
Southern Parcel (a)	AOC8SB4	AOC8SB4AA		10/20/05	0 – 1.5
Southern Parcel (a)	AOC8SB5	AOC8SB5AA		10/20/05	0 – 1.5
Southern Parcel (a)	AOC9SB1	AOC9SB1AA		12/12/05	0 – 1.5
Southern Parcel (a)	AOC9SB2	AOC9SB2AA		12/12/05	0 – 1.8
Southern Parcel (a)	AOC9SB3	AOC9SB3AA		12/12/05	0 – 1.8
Southern Parcel (a)	AOC9SB4	AOC9SB4AA		12/12/05	0 – 1.4
Southern Parcel (a)	BBSB1	BBSB1AA		12/15/05	0 – 2
Southern Parcel (a)	BBSB2	BBSB2AA		12/16/05	0 – 1.9
Southern Parcel (a)	BBSB3	BBSB3AA		12/16/05	0 – 1.7
Southern Parcel (a)	BBSB4	BBSB4AA		12/16/05	0 – 1.6
Southern Parcel (a)	BBSB5	BBSB5AA		12/15/05	0 – 2
Southern Parcel (a)	BBSB6	BBSB6AA		12/15/05	0 – 1.4
Southern Parcel (a)	BBSB7	BBSB7AA		12/15/05	0 – 1.6
Southern Parcel (a)	BBSB8	BBSB8AA		12/15/05	0 – 1.4
Southern Parcel (a)	BCSB1	BCSB1AA		12/8/05	0 – 1.9
Southern Parcel (a)	BCSB10	BCSB10AA		1/3/06	0 – 2
Southern Parcel (a)	BCSB11	BCSB11AA		12/21/05	0 – 1.2
Southern Parcel (a)	BCSB12	BCSB12AA		1/3/06	0 – 1.8
Southern Parcel (a)	BCSB13	BCSB13AA		12/21/05	0 – 1.6
Southern Parcel (a)	BCSB2	BCSB2AA		12/9/05	0 – 2
Southern Parcel (a)	BCSB2R	BCSB2RAA		1/24/06	0 – 1
Southern Parcel (a)	BCSB3	BCSB3AA		12/9/05	0 – 2
Southern Parcel (a)	BCSB3R	BCSB3RAA		1/24/06	0 – 1
Southern Parcel (a)	BCSB4	BCSB4AA		1/20/06	0 – 0.5
Southern Parcel (a)	BCSB5	BCSB5AA		1/24/06	0 – 2

TABLE 3-1
SURFACE SOIL AND SURFACE SLAG (BLOCK A) SAMPLES
AK STEEL FORMER ARMCO HAMILTON PLANT
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

Exposure Area	Location	Sample	Parent Sample for Duplicates	Sample Date	Depth (feet)
Southern Parcel (a)	BCSB6	BCSB6AA		1/4/06	0 – 1.5
Southern Parcel (a)	BCSB7	BCSB7AA		1/4/06	0 – 1.5
Southern Parcel (a)	BCSB8	BCSB8AA		1/4/06	0 – 2
Southern Parcel (a)	BCSB9	BCSB9AA		1/3/06	0 – 2
Southern Parcel (a)	BDSB1	BDSB1AA		10/31/05	0 – 0.4
Southern Parcel (a)	BDSB1	BDSB1AB	BDSB1AA	10/31/05	0 – 0.4
Southern Parcel (a)	BDSB2	BDSB2AA		10/28/05	0 – 0.8
Southern Parcel (a)	BDSB2	BDSB2AAR		12/21/05	0 – 1.5
Southern Parcel (a)	BDSB3	BDSB3AA		12/21/05	0 – 1
Southern Parcel (a)	BDSB5	BDSB5AA		10/28/05	0 – 1
Southern Parcel (a)	BDSB6	BDSB6AA		10/28/05	0 – 0.6
Southern Parcel (a)	BDSB7	BDSB7AA		10/28/05	0 – 0.8
Southern Parcel (a)	BDSB8	BDSB8AA		10/28/05	0 – 0.8
Southern Parcel (a)	BDSB8	BDSB8AAR		12/20/05	0 – 1.1
Southern Parcel (a)	BESB1	BESB1AA		10/28/05	0 – 2
Southern Parcel (a)	BESB2	BESB2AA		10/26/05	0 – 2
Southern Parcel (a)	BESB3	BESB3AA		10/28/05	0 – 2
Southern Parcel (a)	BESB3	BESB3AB	BESB3AA	10/28/05	0 – 2
Southern Parcel (a)	BESB4	BESB4AA		10/28/05	0 – 2
Southern Parcel (a)	BESB5	BESB5AA		10/28/05	0 – 2
Southern Parcel (a)	BESB6	BESB6AA		10/25/05	0 – 1.6
Southern Parcel (a)	BESB7	BESB7AA		10/28/05	0 – 1
Southern Parcel (a)	BESB8	BESB8AA		10/26/05	0 – 1
Southern Parcel (a)	BESB9	BESB9AA		11/15/05	0 – 1.4
Southern Parcel (a)	BFSB1	BFSB1AA		10/21/05	0 – 0.8
Southern Parcel (a)	BFSB2	BFSB2AA		10/21/05	0 – 0.9
Southern Parcel (a)	BFSB3	BFSB3AA		10/21/05	0 – 1
Southern Parcel (a)	BFSB4	BFSB4AA		10/24/05	0 – 1.4
Southern Parcel (a)	BFSB5	BFSB5AA		10/24/05	0 – 1.2
Southern Parcel (a)	BFSB6	BFSB6AA		10/24/05	0 – 0.9
Southern Parcel (a)	BFSB7	BFSB7AA		10/24/05	0 – 0.6
Southern Parcel (a)	BFSB8	BFSB8AA		10/24/05	0 – 0.7
Southern Parcel (a)	BGSB1	BGSB1AA		10/25/05	0 – 1.1
Southern Parcel (a)	BGSB10	BGSB10AA		10/24/05	0 – 1.2
Southern Parcel (a)	BGSB11	BGSB11AA		10/24/05	0 – 1.1
Southern Parcel (a)	BGSB12	BGSB12AA		10/24/05	0 – 1
Southern Parcel (a)	BGSB13	BGSB13AA		10/24/05	0 – 1.2
Southern Parcel (a)	BGSB2	BGSB2AA		10/25/05	0 – 1
Southern Parcel (a)	BGSB3	BGSB3AA		10/25/05	0 – 1.4
Southern Parcel (a)	BGSB4	BGSB4AA		10/26/05	0 – 1.5
Southern Parcel (a)	BGSB5	BGSB5AA		10/25/05	0 – 1.4
Southern Parcel (a)	BGSB6	BGSB6AA		10/25/05	0 – 0.9
Southern Parcel (a)	BGSB7	BGSB7AA		10/25/05	0 – 1.2
Southern Parcel (a)	BGSB8	BGSB8AA		10/25/05	0 – 1.6
Southern Parcel (a)	BGSB9	BGSB9AA		10/25/05	0 – 1.2
Southern Parcel (a)	MW-19S	MW19SAA		11/21/05	0 – 1.3
Southern Parcel (a)	MW-1S	MW1SAA		11/15/05	0 – 2
Southern Parcel (a)	MW-22S	MW22SAA		1/26/06	0 – 1
Southern Parcel (a)	MW-2S	MW2SAA		11/16/05	0 – 2

TABLE 3-1
SURFACE SOIL AND SURFACE SLAG (BLOCK A) SAMPLES
AK STEEL FORMER ARMCO HAMILTON PLANT
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

Exposure Area	Location	Sample	Parent Sample for Duplicates	Sample Date	Depth (feet)
Southern Parcel (a)	MW-3S	MW3SAA		11/18/05	0 – 2
Southern Parcel (a)	MW-4S	MW4SAA		11/16/05	0 – 2
Southern Parcel (a)	MW-4S	MW4SAB	MW4SAA	11/16/05	0 – 2
Southern Parcel (a)	MW-5S	MW5SAA		11/22/05	0 – 2
Southern Parcel (a)	MW-6S	MW6SAA		11/22/05	0 – 2
Southern Parcel (a)	MW-6S	MW6SAB	MW6SAA	11/22/05	0 – 2
Southern Parcel (a)	MW-7S	MW7SAA		11/22/05	0 – 2
Southern Parcel (a)	AOC20CA12SB3	AOC20CA12SB3D02		6/10/08	2 – 2
Southern Parcel (a)	AOC20CA12SB4	AOC20CA12SB4D02		6/10/08	2 – 2
Southern Parcel (a)	AOC20CA4SB3A	AOC20CA4SB3AD02		6/10/08	2 – 2
Southern Parcel (a)	AOC20CA4SB3A	AOC20CA4SB3AD02	AOC20CA4SB3AD0	6/10/08	2 – 2
Southern Parcel (a)	AOC20CA4SB3B	AOC20CA4SB3BD02		6/9/08	2 – 2
Southern Parcel (a)	AOC20CA4SB4	AOC20CA4SB4D02A		6/6/08	2 – 2
Southern Parcel (a)	MW-24S	MW24SD02A		6/3/08	2 – 2
Southern Parcel (a)	MW-26S	MW26SD02A		6/2/08	2 – 2
Southern Parcel (a)	MW-30S	MW30AD01A		5/29/08	1 – 1
AOC 13	AOC13SB1	AOC13SB1AA		1/5/06	0 – 2
AOC 13	AOC13SB1	AOC13SB1AB	AOC13SB1AA	1/5/06	0 – 2
AOC 13	AOC13SB10	AOC13SB10AA		1/12/06	0 – 1.9
AOC 13	AOC13SB11	AOC13SB11AA		1/18/06	0 – 1.5
AOC 13	AOC13SB12	AOC13SB12AA		1/19/06	0 – 2
AOC 13	AOC13SB13	AOC13SB13AA		1/19/06	0 – 1
AOC 13	AOC13SB2	AOC13SB2AA		1/12/06	0 – 0.6
AOC 13	AOC13SB3	AOC13SB3AA		1/12/06	0 – 1
AOC 13	AOC13SB4	AOC13SB4AA		1/12/06	0 – 1.5
AOC 13	AOC13SB5	AOC13SB5AA		1/10/06	0 – 0.9
AOC 13	AOC13SB52	AOC13SB52AA		1/11/06	0 – 2
AOC 13	AOC13SB53	AOC13SB53AA		1/12/06	0 – 1.7
AOC 13	AOC13SB54	AOC13SB54AA		1/17/06	0 – 1.6
AOC 13	AOC13SB55	AOC13SB55AA		1/18/06	0 – 2
AOC 13	AOC13SB56	AOC13SB56AA		1/18/06	0 – 2
AOC 13	AOC13SB6	AOC13SB6AA		1/18/06	0 – 1.1
AOC 13	AOC13SB7	AOC13SB7AA		1/5/06	0 – 1
AOC 13	AOC13SB8	AOC13SB8AA		1/5/06	0 – 1.4
AOC 13	AOC13SB9	AOC13SB9AA		1/12/06	0 – 1.4
AOC 13	MW-20S	MW20SAA		11/28/05	0 – 1.6
AOC 13	MW-20S	MW20SAB	MW20SAA	11/28/05	0 – 1.6
AOC 13	MW-21S	MW21SAA		11/29/05	0 – 2
AOC 13	MW-8S	MW8SAA		11/29/05	0 – 2
AOC 13	MW-9S	MW9SAA		11/29/05	0 – 2
AOC 13	MW-25S	MW25SD02A		6/2/08	2 – 2
AOC 13	MW-25S	MW25SD02B	MW25SD02A	6/2/08	2 – 2
AOC 13	MW-27S	MW27AD01A		5/30/08	1 – 1
AOC 13	MW-28S	MW28AD01A		5/29/08	1 – 1
AOC 13	MW-29S	MW29AD01A		5/28/08	1 – 1
AOC 13	MW-31S	MW31AD01A		5/28/08	1 – 1

Notes:
(a) - Excluding AOC 13.

TABLE 3-2
SUBSURFACE SOIL AND SUBSURFACE SLAG (BLOCK A) SAMPLES
AK STEEL FORMER ARMCO HAMILTON PLANT
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

Exposure Area	Location	Sample	Parent Sample for Duplicates	Sample Date	Depth (feet)
AOC 1	AOC1CA1	AOC1CA1CBA		1/3/06	
AOC 1	AOC1CA10	AOC1CA10CBA		1/12/06	
AOC 1	AOC1CA10SB2	AOC1CA10SB2BA		1/12/06	4 – 6
AOC 1	AOC1CA10SB3	AOC1CA10SB3BA		1/11/06	4 – 6
AOC 1	AOC1CA11	AOC1CA11CBA		1/25/06	
AOC 1	AOC1CA11SB2	AOC1CA11SB2BA		1/25/06	4 – 6
AOC 1	AOC1CA12	AOC1CA12CBA		1/11/06	
AOC 1	AOC1CA12SB4	AOC1CA12SB4BA		1/10/06	4 – 5.4
AOC 1	AOC1CA13	AOC1CA13CBA		1/11/06	
AOC 1	AOC1CA13SB1	AOC1CA13SB1BA		1/11/06	6 – 8
AOC 1	AOC1CA1SB1	AOC1CA1SB1BA		1/4/06	2 – 4
AOC 1	AOC1CA1SB2	AOC1CA1SB2BA		1/3/06	4 – 5.8
AOC 1	AOC1CA2	AOC1CA2CBA		1/5/06	
AOC 1	AOC1CA2SB1	AOC1CA2SB1BA		1/4/06	4 – 6
AOC 1	AOC1CA2SB3	AOC1CA2SB3BA		1/5/06	4 – 5
AOC 1	AOC1CA3	AOC1CA3CBA		12/21/05	
AOC 1	AOC1CA3SB7	AOC1CA3SB7BA		12/19/05	4 – 5.3
AOC 1	AOC1CA4	AOC1CA4CBA		1/6/06	
AOC 1	AOC1CA4SB3	AOC1CA4SB3BA		1/5/06	4 – 5.6
AOC 1	AOC1CA4SB3	AOC1CA4SB3BB	AOC1CA4SB3BA	1/5/06	4 – 5.6
AOC 1	AOC1CA5	AOC1CA5CBA		1/16/06	
AOC 1	AOC1CA5SB3	AOC1CA5SB3BA		1/12/06	2 – 3.8
AOC 1	AOC1CA5SB3	AOC1CA5SB3CA		1/12/06	4 – 5.7
AOC 1	AOC1CA6	AOC1CA6CBA		1/16/06	
AOC 1	AOC1CA6SB1	AOC1CA6SB1BA		1/16/06	2 – 4
AOC 1	AOC1CA6SB1	AOC1CA6SB1CA		1/16/06	4 – 6
AOC 1	AOC1CA7	AOC1CA7CBA		1/10/06	
AOC 1	AOC1CA7SB2	AOC1CA7SB2BA		1/9/06	6 – 6.9
AOC 1	AOC1CA8	AOC1CA8CBA		1/6/06	
AOC 1	AOC1CA8SB3	AOC1CA8SB3BA		1/5/06	6 – 7.3
AOC 1	AOC1CA9	AOC1CA9CBA		1/10/06	
AOC 1	AOC1CA9SB1	AOC1CA9SB1AA		1/10/06	4 – 6
AOC 1	AOC1CA9SB1	AOC1CA9SB1BA		1/10/06	8 – 10
AOC 1	AOC1CA9SB3	AOC1CA9SB3BA		1/9/06	4 – 5.6
AOC 1	MW-11S	MW11SBA		11/30/05	6 – 8
AOC 1	MW-12S	MW12SBA		11/30/05	4 – 6
AOC 1	MW-16S	MW16SBA		12/5/05	4 – 6
AOC 1	MW-17S	MW17SBA		12/7/05	6 – 8
AOC 18 and AOC 21	AOC18SB1	AOC18SB1BA		1/17/06	2 – 3.6
AOC 18 and AOC 21	AOC18SB1	AOC18SB1CA		1/17/06	4 – 5.2
AOC 18 and AOC 21	AOC18SB3	AOC18SB3BA		1/17/06	4 – 6
AOC 18 and AOC 21	AOC18SB3	AOC18SB3BB	AOC18SB3BA	1/17/06	4 – 6
AOC 18 and AOC 21	AOC18SB4	AOC18SB4BA		1/17/06	4 – 6
AOC 18 and AOC 21	AOC18SB5	AOC18SB5BA		1/25/06	6 – 8
AOC 18 and AOC 21	AOC18SB6	AOC18SB6BA		1/25/06	6 – 8
AOC 18 and AOC 21	AOC21SB1	AOC21SB1BA		1/12/06	4 – 5.1
AOC 18 and AOC 21	AOC21SB10	AOC21SB10BA		12/21/05	4 – 5.8
AOC 18 and AOC 21	AOC21SB11	AOC21SB11BA		12/20/05	4 – 4.9
AOC 18 and AOC 21	AOC21SB12	AOC21SB12BA		12/20/05	4 – 5.2

TABLE 3-2
SUBSURFACE SOIL AND SUBSURFACE SLAG (BLOCK A) SAMPLES
AK STEEL FORMER ARMCO HAMILTON PLANT
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

Exposure Area	Location	Sample	Parent Sample for Duplicates	Sample Date	Depth (feet)
AOC 18 and AOC 21	AOC21SB13	AOC21SB13BA		12/21/05	4 – 6
AOC 18 and AOC 21	AOC21SB13	AOC21SB13BB	AOC21SB13BA	12/21/05	4 – 6
AOC 18 and AOC 21	AOC21SB2	AOC21SB2BA		1/10/06	4 – 5.2
AOC 18 and AOC 21	AOC21SB3	AOC21SB3BA		1/10/06	4 – 5.3
AOC 18 and AOC 21	AOC21SB4	AOC21SB4BA		1/10/06	4 – 6
AOC 18 and AOC 21	AOC21SB5	AOC21SB5BA		1/11/06	4 – 6
AOC 18 and AOC 21	AOC21SB6	AOC21SB6BA		1/10/06	4 – 6
AOC 18 and AOC 21	AOC21SB7	AOC21SB7BA		1/10/06	4 – 6
AOC 18 and AOC 21	AOC21SB8	AOC21SB8BA		1/11/06	4 – 6
AOC 18 and AOC 21	AOC21SB8	AOC21SB8CA		1/11/06	8 – 8.6
AOC 18 and AOC 21	AOC21SB9	AOC21SB9BA		1/11/06	4 – 6
AOC 18 and AOC 21	AOC21SB9	AOC21SB9CA		1/11/06	8 – 10
AOC 18 and AOC 21	MW-15S	MW15SBA		12/7/05	4 – 6
AOC 19	AOC19SB1	AOC19SB1BA		2/7/06	6 – 6.6
AOC 19	AOC19SB10	AOC19SB10BA		2/8/06	4 – 5.7
AOC 19	AOC19SB10	AOC19SB10CA		2/8/06	5.7 – 8
AOC 19	AOC19SB11	AOC19SB11BA		2/8/06	6 – 8
AOC 19	AOC19SB12	AOC19SB12CA		2/8/06	4 – 5.4
AOC 19	AOC19SB13	AOC19SB13BA		2/8/06	4 – 5.4
AOC 19	AOC19SB13	AOC19SB13CA		2/8/06	8 – 9
AOC 19	AOC19SB2	AOC19SB2BA		2/7/06	2 – 3.5
AOC 19	AOC19SB2	AOC19SB2CA		2/7/06	6 – 7.4
AOC 19	AOC19SB3	AOC19SB3BA		2/7/06	6 – 7.1
AOC 19	AOC19SB4	AOC19SB4BA		2/8/06	4 – 5.3
AOC 19	AOC19SB4	AOC19SB4CA		2/8/06	5.3 – 8
AOC 19	AOC19SB5	AOC19SB5BA		2/8/06	4 – 5.5
AOC 19	AOC19SB5	AOC19SB5CA		2/8/06	5.5 – 7
AOC 19	AOC19SB6	AOC19SB6BA		2/8/06	7.5 – 8
AOC 19	AOC19SB7	AOC19SB7BA		2/8/06	6.9 – 7.5
AOC 19	AOC19SB8	AOC19SB8BA		2/7/06	4 – 6
AOC 19	AOC19SB8	AOC19SB8CA		2/7/06	6 – 8
AOC 2	AOC2SB1	AOC2SB1BA		1/5/06	4 – 5.2
AOC 2	AOC2SB10	AOC2SB10BA		1/4/06	4 – 5.4
AOC 2	AOC2SB2	AOC2SB2BA		1/5/06	4 – 4.6
AOC 2	AOC2SB3	AOC2SB3BA		1/3/06	4 – 6
AOC 2	AOC2SB3	AOC2SB3BB	AOC2SB3BA	1/3/06	4 – 6
AOC 2	AOC2SB4	AOC2SB4BA		1/3/06	4 – 6
AOC 2	AOC2SB5	AOC2SB5BA		1/3/06	4 – 6
AOC 2	AOC2SB6	AOC2SB6BA		1/4/06	4 – 5.8
AOC 2	AOC2SB7	AOC2SB7BA		1/4/06	4 – 5.6
AOC 2	AOC2SB8	AOC2SB8BA		1/4/06	4 – 6
AOC 2	AOC2SB9	AOC2SB9BA		1/4/06	4 – 6
Block A	BACA1	BACA1CBA		11/16/05	
Block A	BACA10	BACA10CBA		12/14/05	
Block A	BACA10SB1	BACA10SB1BA		12/14/05	4 – 4.9
Block A	BACA11	BACA11CBA		12/13/05	
Block A	BACA11SB2	BACA11SB2BA		12/12/05	4 – 6
Block A	BACA12	BACA12CBA		12/19/05	
Block A	BACA12SB4	BACA12SB4BA		12/14/05	4 – 6

TABLE 3-2
SUBSURFACE SOIL AND SUBSURFACE SLAG (BLOCK A) SAMPLES
AK STEEL FORMER ARMCO HAMILTON PLANT
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

Exposure Area	Location	Sample	Parent Sample for Duplicates	Sample Date	Depth (feet)
Block A	BACA13	BACA13CBA		12/21/05	
Block A	BACA13	BACA13CCA		12/21/05	
Block A	BACA13SB5	BACA13SB5BA		12/21/05	4 – 4.5
Block A	BACA13SB5	BACA13SB5CA		12/21/05	8 – 8.9
Block A	BACA1SB4	BACA1SB4BA		11/16/05	4 – 5.6
Block A	BACA2	BACA2CBA		11/17/05	
Block A	BACA2SB1	BACA2SB1BA		11/17/05	2 – 3.8
Block A	BACA2SB3	BACA2SB3BA		11/17/05	4 – 6
Block A	BACA3	BACA3CBA		11/29/05	
Block A	BACA3	BACA3CBB	BACA3CBA	11/30/05	
Block A	BACA3SB2	BACA3SB2BA		11/29/05	4 – 5.5
Block A	BACA3SB2	BACA3SB2BB	BACA3SB2BA	11/29/05	4 – 5.5
Block A	BACA4	BACA4CBA		11/29/05	
Block A	BACA4SB3	BACA4SB3BA		11/21/05	4 – 5.3
Block A	BACA4SB4	BACA4SB4BA		11/28/05	4 – 5
Block A	BACA5	BACA5CBA		11/30/05	
Block A	BACA5SB1	BACA5SB1BA		11/30/05	4 – 5.1
Block A	BACA6	BACA6CBA		12/2/05	
Block A	BACA6SB2	BACA6SB2BA		12/1/05	4 – 5.2
Block A	BACA6SB3	BACA6SB3BA		12/2/05	4 – 5.1
Block A	BACA7	BACA7CBA		12/8/05	
Block A	BACA7SB2	BACA7SB2BA		12/7/05	4 – 5.6
Block A	BACA8	BACA8CBA		12/9/05	
Block A	BACA8SB1	BACA8SB1BA		12/8/05	4 – 5.6
Block A	BACA9	BACA9CBA		12/6/05	
Block A	BACA9SB4	BACA9SB4BA		12/2/05	4 – 6
Block A	MW-13S	MW13SBA		12/5/05	6 – 8
Block A	MW-18S	MW18SBA		12/6/05	6 – 7
Southern Parcel (a)	AOC10SB4	AOC10SB4BA		12/13/05	4 – 5.2
Southern Parcel (a)	AOC11TP1BN	AOC11BNAA		1/25/06	8 – 8
Southern Parcel (a)	AOC11TP1BS	AOC11BSAA		1/25/06	8 – 8
Southern Parcel (a)	AOC11TP1EWN	AOC11EWNAA		1/25/06	4 – 4
Southern Parcel (a)	AOC11TP1EWN	AOC11EWNAB	AOC11EWNAA	1/25/06	4 – 4
Southern Parcel (a)	AOC11TP1NW	AOC11NWAA		1/25/06	3 – 3
Southern Parcel (a)	AOC11TP1SW	AOC11SWAA		1/25/06	5 – 5
Southern Parcel (a)	AOC11TP1WW	AOC11WWSAA		1/25/06	4 – 4
Southern Parcel (a)	AOC12SB2	AOC12SB2BA		12/14/05	4 – 5.2
Southern Parcel (a)	AOC12SB3	AOC12SB3BA		12/14/05	4 – 5.1
Southern Parcel (a)	AOC12SB4	AOC12SB4BA		12/13/05	4 – 5.1
Southern Parcel (a)	AOC12SB6	AOC12SB6BA		12/14/05	4 – 5.3
Southern Parcel (a)	AOC14SB1	AOC14SB1BA		12/15/05	4 – 5.6
Southern Parcel (a)	AOC14SB2	AOC14SB2BA		12/15/05	2 – 3.4
Southern Parcel (a)	AOC14SB3	AOC14SB3BA		12/16/05	4 – 5.3
Southern Parcel (a)	AOC14SB4	AOC14SB4BA		12/15/05	4 – 5.5
Southern Parcel (a)	AOC15SB1	AOC15SB1BA		12/19/05	4 – 5
Southern Parcel (a)	AOC15SB2	AOC15SB2BA		12/19/05	4 – 5
Southern Parcel (a)	AOC20CA1	AOC20CA1CBA		12/8/05	
Southern Parcel (a)	AOC20CA10	AOC20CA10CBA		11/22/05	
Southern Parcel (a)	AOC20CA10SB3	AOC20CA10SB3BA		11/21/05	4 – 5

TABLE 3-2
SUBSURFACE SOIL AND SUBSURFACE SLAG (BLOCK A) SAMPLES
AK STEEL FORMER ARMCO HAMILTON PLANT
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

Exposure Area	Location	Sample	Parent Sample for Duplicates	Sample Date	Depth (feet)
Southern Parcel (a)	AOC20CA11	AOC20CA11CBA		11/16/05	
Southern Parcel (a)	AOC20CA11SB2	AOC20CA11SB2BA		11/16/05	2 – 3.3
Southern Parcel (a)	AOC20CA11SB2	AOC20CA11SB2CA		11/16/05	4 – 5.4
Southern Parcel (a)	AOC20CA12	AOC20CA12CBA		12/8/05	
Southern Parcel (a)	AOC20CA12SB1	AOC20CA12SB1BA		12/7/05	4 – 4.8
Southern Parcel (a)	AOC20CA13	AOC20CA13CAB	AOC20CA13CBA	12/2/05	
Southern Parcel (a)	AOC20CA13	AOC20CA13CBA		12/2/05	
Southern Parcel (a)	AOC20CA13SB1	AOC20CA13SB1AB	AOC20CA13SB1BA	12/1/05	4 – 5
Southern Parcel (a)	AOC20CA13SB1	AOC20CA13SB1BA		12/1/05	4 – 5
Southern Parcel (a)	AOC20CA1SB1	AOC20CA1SB1BA		12/8/05	4 – 6
Southern Parcel (a)	AOC20CA2	AOC20CA2CBA		11/18/05	
Southern Parcel (a)	AOC20CA2SB2	AOC20CA2SB2BA		11/18/05	8 – 9.5
Southern Parcel (a)	AOC20CA3SB1	AOC20CA3SB1BA		11/17/05	6 – 7.6
Southern Parcel (a)	AOC20CA4	AOC20CA4CBA		12/7/05	
Southern Parcel (a)	AOC20CA4SB1	AOC20CA4SB1BA		12/7/05	6 – 7
Southern Parcel (a)	AOC20CA5	AOC20CA5CBA		12/7/05	
Southern Parcel (a)	AOC20CA5SB1	AOC20CA5SB1BA		12/7/05	2 – 3.4
Southern Parcel (a)	AOC20CA5SB2	AOC20CA5SB2BA		12/6/05	4 – 5.1
Southern Parcel (a)	AOC20CA5SB3	AOC20CA5SB3BA		12/6/05	4 – 4.7
Southern Parcel (a)	AOC20CA5SB4	AOC20CA5SB4BA		12/6/05	4 – 5.4
Southern Parcel (a)	AOC20CA6	AOC20CA6CBA		12/1/05	
Southern Parcel (a)	AOC20CA6SB1	AOC20CA6SB1BA		11/30/05	6 – 6.6
Southern Parcel (a)	AOC20CA7	AOC20CA7CBA		11/30/05	
Southern Parcel (a)	AOC20CA7SB3	AOC20CA7SB3BA		11/29/05	4 – 5
Southern Parcel (a)	AOC20CA8	AOC20CA8CBA		11/29/05	
Southern Parcel (a)	AOC20CA8SB1	AOC20CA8SB1BA		11/28/05	4 – 6
Southern Parcel (a)	AOC20SB14	AOC20SB14AA		12/16/05	6 – 6.8
Southern Parcel (a)	AOC20SB15	AOC20SB15AA		12/16/05	8 – 10
Southern Parcel (a)	AOC20SB18	AOC20SB18AA		12/19/05	6 – 7.2
Southern Parcel (a)	AOC20SB19	AOC20SB19AA		12/20/05	6 – 7.1
Southern Parcel (a)	AOC20SB20	AOC20SB20AA		12/20/05	6 – 7.1
Southern Parcel (a)	AOC20SB21	AOC20SB21AA		12/20/05	6 – 7.2
Southern Parcel (a)	AOC20SB22	AOC20SB22AA		12/20/05	6 – 6.6
Southern Parcel (a)	AOC20SB23	AOC20SB23AA		12/20/05	6 – 7.1
Southern Parcel (a)	AOC20SB24	AOC20SB24AA		1/4/06	6 – 6.9
Southern Parcel (a)	AOC20SB25	AOC20SB25AA		1/5/06	6 – 7.8
Southern Parcel (a)	AOC20SB26	AOC20SB26AA		12/20/05	6 – 7.6
Southern Parcel (a)	AOC20SB27	AOC20SB27AA		12/20/05	6 – 7.2
Southern Parcel (a)	AOC20SB28	AOC20SB28AA		12/21/05	6 – 7.4
Southern Parcel (a)	AOC20SB29	AOC20SB29AA		12/21/05	6 – 7.3
Southern Parcel (a)	AOC20SB30	AOC20SB30AA		12/21/05	6 – 6.9
Southern Parcel (a)	AOC20SB32	AOC20SB32AA		1/4/06	6 – 7.5
Southern Parcel (a)	AOC20SB33	AOC20SB33AA		1/4/06	2 – 3.4
Southern Parcel (a)	AOC20SB33	AOC20SB33AB	AOC20SB33AA	1/4/06	2 – 3.4
Southern Parcel (a)	AOC20SB34	AOC20SB34AA		1/3/06	6 – 7
Southern Parcel (a)	AOC20SB35	AOC20SB35AA		1/3/06	6 – 7.5
Southern Parcel (a)	AOC20SB36	AOC20SB36AA		1/3/06	6 – 8
Southern Parcel (a)	AOC20SB41	AOC20SB41AA		1/4/06	6 – 7.3
Southern Parcel (a)	AOC8SB1	AOC8SB1BA		10/18/05	4 – 5

TABLE 3-2
SUBSURFACE SOIL AND SUBSURFACE SLAG (BLOCK A) SAMPLES
AK STEEL FORMER ARMCO HAMILTON PLANT
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

Exposure Area	Location	Sample	Parent Sample for Duplicates	Sample Date	Depth (feet)
Southern Parcel (a)	AOC8SB10	AOC8SB10AA		11/1/05	6 – 7.6
Southern Parcel (a)	AOC8SB10	AOC8SB10AA-10		11/1/05	6 – 7.6
Southern Parcel (a)	AOC8SB10	AOC8SB10AA-11		11/1/05	6 – 7.6
Southern Parcel (a)	AOC8SB10	AOC8SB10AA-7		11/1/05	6 – 7.6
Southern Parcel (a)	AOC8SB10	AOC8SB10AA-8		11/1/05	6 – 7.6
Southern Parcel (a)	AOC8SB10	AOC8SB10AA-9		11/1/05	6 – 7.6
Southern Parcel (a)	AOC8SB11	AOC8SB11AA		11/1/05	6 – 7.1
Southern Parcel (a)	AOC8SB12	AOC8SB12AA		11/2/05	6 – 8
Southern Parcel (a)	AOC8SB13	AOC8SB13AA		11/3/05	6 – 7.7
Southern Parcel (a)	AOC8SB13	AOC8SB13AB	AOC8SB13AA	11/3/05	6 – 7.7
Southern Parcel (a)	AOC8SB3	AOC8SB3BA		11/2/05	6 – 7.5
Southern Parcel (a)	AOC8SB5	AOC8SB5BA		11/2/05	4 – 5.8
Southern Parcel (a)	AOC8SB6	AOC8SB6AA		10/18/05	3 – 3.8
Southern Parcel (a)	AOC8SB7	AOC8SB7AA		11/1/05	6 – 7.6
Southern Parcel (a)	AOC8SB7	AOC8SB7AA-1		11/1/05	6 – 7.6
Southern Parcel (a)	AOC8SB7	AOC8SB7AA-2		11/1/05	6 – 7.6
Southern Parcel (a)	AOC8SB7	AOC8SB7AA-3		11/1/05	6 – 7.6
Southern Parcel (a)	AOC8SB8	AOC8SB8AA		10/19/05	7 – 8.2
Southern Parcel (a)	AOC8SB9	AOC8SB9AA		11/1/05	6 – 7.3
Southern Parcel (a)	AOC8SB9	AOC8SB9AA-4		11/1/05	6 – 7.3
Southern Parcel (a)	AOC8SB9	AOC8SB9AA-5		11/1/05	6 – 7.3
Southern Parcel (a)	AOC8SB9	AOC8SB9AA-6		11/1/05	6 – 7.3
Southern Parcel (a)	AOC9SB1	AOC9SB1BA		12/12/05	4 – 5.3
Southern Parcel (a)	AOC9SB2	AOC9SB2BA		12/12/05	4 – 5.1
Southern Parcel (a)	AOC9SB3	AOC9SB3BA		12/12/05	8 – 9.5
Southern Parcel (a)	AOC9SB4	AOC9SB4BA		12/12/05	6 – 7
Southern Parcel (a)	BBSB1	BBSB1BA		12/15/05	4 – 5.2
Southern Parcel (a)	BBSB2	BBSB2BA		12/16/05	4 – 5.4
Southern Parcel (a)	BBSB3	BBSB3BA		12/16/05	4 – 5.6
Southern Parcel (a)	BBSB4	BBSB4BA		12/16/05	8 – 8.9
Southern Parcel (a)	BBSB5	BBSB5BA		12/15/05	6 – 6.5
Southern Parcel (a)	BBSB6	BBSB6BA		12/15/05	4 – 4.6
Southern Parcel (a)	BBSB7	BBSB7BA		12/15/05	4 – 4.6
Southern Parcel (a)	BBSB8	BBSB8BA		12/15/05	8 – 9.1
Southern Parcel (a)	BCSB11	BCSB11BA		12/21/05	4 – 5.4
Southern Parcel (a)	BCSB12	BCSB12BA		1/3/06	4 – 4.8
Southern Parcel (a)	BCSB12	BCSB12BB	BCSB12BA	1/3/06	4 – 4.8
Southern Parcel (a)	BCSB13	BCSB13BA		12/21/05	6 – 7.4
Southern Parcel (a)	BCSB3	BCSB3BA		12/9/05	4 – 6
Southern Parcel (a)	BCSB5	BCSB5BA		1/24/06	4 – 6
Southern Parcel (a)	BCSB5	BCSB5BB	BCSB5BA	1/24/06	4 – 6
Southern Parcel (a)	BCSB6	BCSB6BA		1/4/06	4 – 4.8
Southern Parcel (a)	BCSB7	BCSB7BA		1/4/06	4 – 5
Southern Parcel (a)	BCSB8	BCSB8BA		1/4/06	4 – 5.1
Southern Parcel (a)	BCSB9	BCSB9BA		1/3/06	4 – 5.1
Southern Parcel (a)	BDSB1	BDSB1BA		12/21/05	4 – 5.5
Southern Parcel (a)	BDSB2	BDSB2BA		12/21/05	4 – 5.2
Southern Parcel (a)	BDSB3	BDSB3BA		12/21/05	4 – 5.2
Southern Parcel (a)	BDSB4	BDSB4AA		12/20/05	2 – 3.9

TABLE 3-2
SUBSURFACE SOIL AND SUBSURFACE SLAG (BLOCK A) SAMPLES
AK STEEL FORMER ARMCO HAMILTON PLANT
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

Exposure Area	Location	Sample	Parent Sample for Duplicates	Sample Date	Depth (feet)
Southern Parcel (a)	BDSB4	BDSB4BA		12/20/05	4 – 5
Southern Parcel (a)	BDSB6	BDSB6BA		12/20/05	2 – 4
Southern Parcel (a)	BDSB7	BDSB7BA		12/20/05	4 – 5.1
Southern Parcel (a)	BDSB8	BDSB8BA		12/20/05	4 – 5.3
Southern Parcel (a)	BESB2	BESB2BA		11/5/05	2 – 3.6
Southern Parcel (a)	BESB4	BESB4BA		1/18/06	5 – 6
Southern Parcel (a)	BESB5	BESB5BA		11/14/05	4 – 5.7
Southern Parcel (a)	BESB6	BESB6BA		11/14/05	4 – 5.8
Southern Parcel (a)	BFSB1	BFSB1BA		11/3/05	6 – 8
Southern Parcel (a)	BFSB2	BFSB2BA		11/3/05	4 – 5.6
Southern Parcel (a)	BFSB3	BFSB3BA		11/3/05	8 – 9.6
Southern Parcel (a)	BFSB4	BFSB4BA		11/4/05	4 – 5.6
Southern Parcel (a)	BFSB6	BFSB6BA		11/4/05	4 – 5.2
Southern Parcel (a)	BGSB1	BGSB1BA		1/18/06	2 – 4
Southern Parcel (a)	BGSB14	BGSB14AA		11/10/05	6 – 7.4
Southern Parcel (a)	BGSB15	BGSB15AA		11/9/05	6 – 7.3
Southern Parcel (a)	BGSB16	BGSB16AA		11/9/05	4 – 5.5
Southern Parcel (a)	BGSB2	BGSB2BA		1/17/06	2 – 4
Southern Parcel (a)	BGSB3	BGSB3BA		1/17/06	4 – 6
Southern Parcel (a)	BGSB4	BGSB4BA		1/17/06	6 – 8
Southern Parcel (a)	BGSB5	BGSB5BA		1/17/06	4 – 6
Southern Parcel (a)	BGSB5	BGSB5BB	BGSB5BA	1/17/06	4 – 6
Southern Parcel (a)	BGSB6	BGSB6BA		1/17/06	6 – 8
Southern Parcel (a)	BGSB7	BGSB7BA		11/10/05	4 – 6
Southern Parcel (a)	MW-1S	MW1SBA		11/15/05	8 – 10
Southern Parcel (a)	MW-3S	MW3SBA		11/18/05	8 – 10
Southern Parcel (a)	MW-6S	MW6SBA		11/22/05	6 – 8
Southern Parcel (a)	AOC20CA4SB3B	AOC20CA4SB3BD10		6/9/08	10 – 10
Southern Parcel (a)	MW-23S	MW23SBD05A		6/5/08	5 – 5
Southern Parcel (a)	MW-23S	MW23SD04A		6/5/08	4 – 4
Southern Parcel (a)	MW-24S	MW24SD07A		6/3/08	7 – 7
Southern Parcel (a)	MW-24S	MW24SD07B	MW24SD07A	6/3/08	7 – 7
Southern Parcel (a)	MW-26S	MW26SD05A		6/2/08	5 – 5
Southern Parcel (a)	MW-32S	MW32SD03A		6/3/08	3 – 3
AOC 13	AOC13SB1	AOC13SB1BA		1/5/06	4 – 5.4
AOC 13	AOC13SB10	AOC13SB10BA		1/12/06	4 – 5
AOC 13	AOC13SB15	AOC13SB15AA		1/5/06	8 – 9.2
AOC 13	AOC13SB16	AOC13SB16AA		1/5/06	4 – 5
AOC 13	AOC13SB16	AOC13SB16AB	AOC13SB16AA	1/5/06	4 – 5
AOC 13	AOC13SB17	AOC13SB17AA		1/6/06	4 – 4.9
AOC 13	AOC13SB18	AOC13SB18AA		1/6/06	6 – 7.4
AOC 13	AOC13SB19	AOC13SB19AA		1/6/06	8 – 9.6
AOC 13	AOC13SB2	AOC13SB2BA		1/12/06	4 – 4.6
AOC 13	AOC13SB21	AOC13SB21AA		1/6/06	6 – 7.8
AOC 13	AOC13SB22	AOC13SB22AA		1/10/06	8 – 8.9
AOC 13	AOC13SB23	AOC13SB23AA		1/10/06	6 – 6.8
AOC 13	AOC13SB24	AOC13SB24AA		1/9/06	8 – 9.2
AOC 13	AOC13SB25	AOC13SB25AA		1/9/06	4 – 5.8
AOC 13	AOC13SB26	AOC13SB26AA		1/9/06	8 – 9.2

TABLE 3-2
SUBSURFACE SOIL AND SUBSURFACE SLAG (BLOCK A) SAMPLES
AK STEEL FORMER ARMCO HAMILTON PLANT
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

Exposure Area	Location	Sample	Parent Sample for Duplicates	Sample Date	Depth (feet)
AOC 13	AOC13SB27	AOC13SB27AA		1/9/06	4 – 5.2
AOC 13	AOC13SB28	AOC13SB28AA		1/9/06	8 – 9.6
AOC 13	AOC13SB3	AOC13SB3BA		1/12/06	4 – 5.2
AOC 13	AOC13SB30	AOC13SB30AA		1/9/06	4 – 5.9
AOC 13	AOC13SB31	AOC13SB31AA		1/11/06	8 – 9
AOC 13	AOC13SB33	AOC13SB33AA		1/10/06	4 – 5.5
AOC 13	AOC13SB34	AOC13SB34AA		1/10/06	4 – 5.2
AOC 13	AOC13SB35	AOC13SB35AA		1/10/06	4 – 4.7
AOC 13	AOC13SB35	AOC13SB35AB	AOC13SB35AA	1/10/06	4 – 6
AOC 13	AOC13SB36	AOC13SB36AA		1/10/06	8 – 9.8
AOC 13	AOC13SB38	AOC13SB38AA		1/18/06	6 – 7.6
AOC 13	AOC13SB39	AOC13SB39AA		1/11/06	4 – 6
AOC 13	AOC13SB4	AOC13SB4BA		1/12/06	4 – 4.8
AOC 13	AOC13SB41	AOC13SB41AA		1/11/06	6 – 7.2
AOC 13	AOC13SB42	AOC13SB42AA		1/11/06	8 – 9.4
AOC 13	AOC13SB43	AOC13SB43AA		1/16/06	6 – 7.3
AOC 13	AOC13SB44	AOC13SB44AA		1/18/06	8 – 9.4
AOC 13	AOC13SB45	AOC13SB45AA		1/11/06	4 – 5.2
AOC 13	AOC13SB48	AOC13SB48AA		1/19/06	5 – 7
AOC 13	AOC13SB49	AOC13SB49AA		1/19/06	2 – 4
AOC 13	AOC13SB50	AOC13SB50AA		1/16/06	8 – 9.6
AOC 13	AOC13SB51	AOC13SB51AA		1/19/06	9 – 10
AOC 13	AOC13SB52	AOC13SB52BA		1/11/06	2 – 4
AOC 13	AOC13SB52	AOC13SB52CA		1/11/06	8 – 9.8
AOC 13	AOC13SB53	AOC13SB53BA		1/12/06	4 – 5.3
AOC 13	AOC13SB54	AOC13SB54BA		1/17/06	8 – 10
AOC 13	AOC13SB54	AOC13SB54BB	AOC13SB54BA	1/17/06	8 – 10
AOC 13	AOC13SB55	AOC13SB55BA		1/18/06	5 – 6
AOC 13	AOC13SB6	AOC13SB6BA		1/18/06	4 – 5.3
AOC 13	AOC13SB7	AOC13SB7BA		1/5/06	4 – 5.1
AOC 13	AOC13SB8	AOC13SB8BA		1/5/06	4 – 5.6
AOC 13	AOC13SB9	AOC13SB9BA		1/12/06	4 – 5.4
AOC 13	MW-20S	MW20SBA		11/28/05	8 – 9.2
AOC 13	MW-21S	MW21SBA		11/29/05	6 – 8
AOC 13	MW-8S	MW8SBA		11/29/05	6 – 8
AOC 13	MW-9S	MW9SBA		11/29/05	6 – 8
AOC 13	AOC13SB57	AOC13JB57AD09A		5/30/08	9 9
AOC 13	MW-29S	MW29AD07A		5/28/08	7 7
AOC 13	MW-31S	MW31AD03A		5/28/08	3 3
AOC 13	MW-31S	MW31AD07A		5/28/08	7 7

Notes:
(a) - Excluding AOC 13.

TABLE 3-3
GROUNDWATER SAMPLES
AK STEEL FORMER ARMCO HAMILTON PLANT
NEW MIAMI, BUTLER COUNTY, OHIO
HUMAN HEALTH RISK BASELINE ASSESSMENT

Exposure Area	Location	Date	Parent Sample for Duplicates
AOC 1	MW-11S	12/14/05	MW11SGWA
AOC 1	MW-11S	6/18/08	MW-11S
AOC 1	MW-12S	12/14/05	MW12SGWA
AOC 1	MW-12S	6/18/08	MW-12S
AOC 1	MW-16S	12/14/05	MW16SGWA
AOC 1	MW-16S	12/14/05	SMW16GWA
AOC 1	MW-16S	6/18/08	MW-16S
AOC 1	MW-17M	7/8/08	MW-17M
AOC 1	MW-17S	12/14/05	MW17SGWA
AOC 1	MW-17S	12/14/05	SMW17GWA
AOC 1	MW-17S	6/19/08	MW-17S
AOC 18 and AOC 21	MW-15S	12/15/05	SMW15GWA
AOC 18 and AOC 21	MW-15S	6/16/08	MW-15S
Block A	MW-13M	4/3/06	MW13MGWA
Block A	MW-13M	6/17/08	MW-13M
Block A	MW-13S	4/3/06	MW13SGWA
Block A	MW-13S	6/17/08	MW-13S
Block A	MW-18S	12/14/05	MW18SGWA
Block A	MW-18S	12/14/05	SMW18GWA
Block A	MW-18S	6/17/08	MW-18S
Block A	MW-18S	6/17/08	MW-18S/D
Southern Parcel (a)	MW-19S	12/8/05	MW19SGWA
Southern Parcel (a)	MW-19S	6/13/08	MW-19S
Southern Parcel (a)	MW-1D	4/8/06	MW1DGWA
Southern Parcel (a)	MW-1D	6/11/08	MW-1D
Southern Parcel (a)	MW-1S	12/6/05	MW1SGWA
Southern Parcel (a)	MW-1S	6/11/08	MW-1S
Southern Parcel (a)	MW-22S	4/10/06	MW22SGWA
Southern Parcel (a)	MW-22S	6/11/08	MW-22S
Southern Parcel (a)	MW-23S	6/20/08	MW-23S
Southern Parcel (a)	MW-24S	6/20/08	MW-24S
Southern Parcel (a)	MW-26S	6/20/08	MW-26S
Southern Parcel (a)	MW-2D	4/13/06	MW2DGWA
Southern Parcel (a)	MW-2D	6/12/08	MW-2D
Southern Parcel (a)	MW-2S	12/7/05	MW2SGWA
Southern Parcel (a)	MW-2S	6/12/08	MW-2S
Southern Parcel (a)	MW-30S	6/19/08	MW-30S
Southern Parcel (a)	MW-32S	6/20/08	MW-32S
Southern Parcel (a)	MW-3D	4/12/06	MW3DGWA
Southern Parcel (a)	MW-3D	6/12/08	MW-3D
Southern Parcel (a)	MW-3S	12/7/05	MW3SGWA
Southern Parcel (a)	MW-3S	6/12/08	MW-3S
Southern Parcel (a)	MW-4M	4/11/06	MW4MGWA
Southern Parcel (a)	MW-4M	6/11/08	MW-4M
Southern Parcel (a)	MW-4S	12/7/05	MW4SGWA
Southern Parcel (a)	MW-4S	12/7/05	MW4SGWB
Southern Parcel (a)	MW-4S	6/11/08	MW-4S
Southern Parcel (a)	MW-5S	12/8/05	MW5SGWA
Southern Parcel (a)	MW-5S	6/12/08	MW-5S

TABLE 3-3
GROUNDWATER SAMPLES
AK STEEL FORMER ARMCO HAMILTON PLANT
NEW MIAMI, BUTLER COUNTY, OHIO
HUMAN HEALTH RISK BASELINE ASSESSMENT

Exposure Area	Location	Date	Parent Sample for Duplicates
Southern Parcel (a)	MW-7M	4/6/06	MW7MGWA
Southern Parcel (a)	MW-7M	6/12/08	MW-7M
Southern Parcel (a)	MW-7S	12/8/05	MW7SGWA
Southern Parcel (a)	MW-7S	6/12/08	MW-7S
AOC 13	MW-20M	4/6/06	MW20MGWA
AOC 13	MW-20M	6/13/08	MW-20M
AOC 13	MW-20S	12/15/05	MW20SGWA
AOC 13	MW-20S	6/13/08	MW-20S
AOC 13	MW-20S	6/13/08	MW-20S/D
AOC 13	MW-21M	4/11/06	MW21MGWA
AOC 13	MW-21M	6/16/08	MW-21M
AOC 13	MW-21S	12/15/05	MW21SGWA
AOC 13	MW-21S	6/19/08	MW-21S
AOC 13	MW-25S	6/19/08	MW-25S
AOC 13	MW-27M	7/8/08	MW-27M
AOC 13	MW-27M	7/8/08	MW-27M/D
AOC 13	MW-27S	6/20/08	MW-27S
AOC 13	MW-28S	6/19/08	MW-28S
AOC 13	MW-29S	6/19/08	MW-29S
AOC 13	MW-31S	6/19/08	MW-31S
AOC 13	MW-8M	3/31/06	MW8MGWA
AOC 13	MW-8M	6/13/08	MW-8M
AOC 13	MW-8S	12/16/05	MW8SGWA
AOC 13	MW-8S	6/19/08	MW-8S
AOC 13	MW-9M	4/7/06	MW9MGWA
AOC 13	MW-9M	6/19/08	MW-9M
AOC 13	MW-9S	12/13/05	MW9SGWA
AOC 13	MW-9S	6/19/08	MW-9S
AOC 13	MW-9S	6/19/08	MW-9S/D

Notes:
(a) - Excluding AOC 13.

TABLE 3-4
SEDIMENT/HYDRIC SOIL SAMPLES
AK STEEL FORMER ARMCO HAMILTON PLANT
NEW MIAMI, BUTLER COUNTY, OHIO
HUMAN HEALTH RISK BASELINE ASSESSMENT

Exposure Area	Location	Sample	Parent Sample for Duplicates	Sample Date	Depth (feet)
AOC 7	AOC7SD10	AOC7SD10AA		11/14/05	0.083 – 0.5
AOC 7	AOC7SD10	AOC7SD10AASEM		11/14/05	0.083 – 0.5
AOC 7	AOC7SD10	AOC7SD10AB	AOC7SD10AA	11/14/05	0.083 – 0.5
AOC 7	AOC7SD10	AOC7SD10ABSEM	AOC7SD10AASEM	11/14/05	0.083 – 0.5
AOC 7	AOC7SD11	AOC7SD11AA		11/14/05	0.083 – 0.5
AOC 7	AOC7SD12	AOC7SD12AA		11/14/05	0.083 – 0.5
AOC 7	AOC7SD13	AOC7SD13AA		11/14/05	0.167 – 0.5
AOC 7	AOC7SD13	AOC7SD13AB	AOC7SD13AA	11/14/05	0.167 – 0.5
Great Miami River (a)	GMRSD16	GMRSD16AA		11/11/05	0.083 – 0.167
Great Miami River (a)	GMRSD16	GMRSD16AB	GMRSD16AA	11/11/05	0.083 – 0.167
Great Miami River (a)	GMRSD17	GMRSD17AA		11/11/05	0.333 – 0.333
Great Miami River (a)	GMRSD17	GMRSD17AASEM		11/11/05	0.333 – 0.333
Great Miami River (a)	GMRSD18	GMRSD18AA		11/11/05	0.333 – 0.333
Great Miami River	GMRSD1	GMRSD1AA		11/8/05	0.167 – 0.167
Great Miami River	GMRSD14	GMRSD14AA		11/10/05	0.167 – 0.167
Great Miami River	GMRSD2	GMRSD2AA		11/9/05	0.167 – 0.167
Great Miami River	GMRSD3	GMRSD3AA		11/9/05	0.167 – 0.167
Great Miami River	GMRSD3	GMRSD3AASEM		11/9/05	0.167 – 0.167
Great Miami River	GMRSD4	GMRSD4AA		11/9/05	0.042 – 0.042
Great Miami River	GMRSD5	GMRSD5AA		11/9/05	0.066 – 0.066
Great Miami River	GMRSD5	GMRSD5AASEM		11/9/05	0.066 – 0.066
Great Miami River	GMRSD6	GMRSD6AA		11/9/05	0.167 – 0.167
Great Miami River	GMRSD7	GMRSD7AA		11/9/05	0.167 – 0.167
Great Miami River	GMRSD8	GMRSD8AA		11/8/05	0.25 – 0.25
Great Miami River	GMRSD8	GMRSD8AASEM		11/8/05	0.25 – 0.25
Great Miami River	GMRSD9	GMRSD9AA		11/10/05	0.083 – 0.083
AOC 22 (Riparian Area) b)	AOC22RA1	AOC22RA1		5/27/08	0 – 0
AOC 22 (Riparian Area) b)	AOC22RA10	AOC22RA10		5/28/08	0 – 0
AOC 22 (Riparian Area) b)	AOC22RA11	AOC22RA11		5/29/08	0 – 0
AOC 22 (Riparian Area) b)	AOC22RA12	AOC22RA12		5/29/08	0 – 0
AOC 22 (Riparian Area) b)	AOC22RA13	AOC22RA13		5/29/08	0 – 0
AOC 22 (Riparian Area) b)	AOC22RA14	AOC22RA14		5/29/08	0 – 0
AOC 22 (Riparian Area) b)	AOC22RA15	AOC22RA15		5/29/08	0 – 0
AOC 22 (Riparian Area) b)	AOC22RA16	AOC22RA16		5/29/08	0 – 0
AOC 22 (Riparian Area) b)	AOC22RA17	AOC22RA17		5/29/08	0 – 0
AOC 22 (Riparian Area) b)	AOC22RA18	AOC22RA18		5/27/08	0 – 0
AOC 22 (Riparian Area) b)	AOC22RA2	AOC22RA2		5/27/08	0 – 0
AOC 22 (Riparian Area) b)	AOC22RA3	AOC22RA3		5/28/08	0 – 0
AOC 22 (Riparian Area) b)	AOC22RA4	AOC22RA4		5/28/08	0 – 0
AOC 22 (Riparian Area) b)	AOC22RA5	AOC22RA5		5/28/08	0 – 0
AOC 22 (Riparian Area) b)	AOC22RA6	AOC22RA6		5/28/08	0 – 0
AOC 22 (Riparian Area) b)	AOC22RA7	AOC22RA7		5/28/08	0 – 0
AOC 22 (Riparian Area) b)	AOC22RA8	AOC22RA8		5/28/08	0 – 0
AOC 22 (Riparian Area) b)	AOC22RA9	AOC22RA9		5/28/08	0 – 0

Notes:
(a) - Location where former COG pipeline passed beneath the Great Miami River.
(b) Hydric soil in the Riparian area adjacent to the river.

TABLE 3-5
SURFACE WATER SAMPLES
AK STEEL FORMER ARMCO HAMILTON PLANT
NEW MIAMI, BUTLER COUNTY, OHIO
HUMAN HEALTH RISK BASELINE ASSESSMENT

Exposure Area	Location	Sample	Parent Sample for Duplicates	Sample Date	Depth (feet)
AOC 7	AOC7SW6	AOC7SW6AA		1/24/06	0.098 – 0.197
AOC 7	AOC7SW6	AOC7SW6AB	AOC7SW6AA	1/24/06	0.098 – 0.197
AOC 7	AOC7SW7	AOC7SW7AA		1/23/06	0.098 – 0.197
AOC 7	AOC7SW8	AOC7SW8AA		11/10/05	0.333 – 0.333
AOC 7	AOC7SW9	AOC7SW9AA		1/24/06	0.098 – 0.197
Great Miami River (a)	GMRSW10	GMRSW10AA		11/11/05	0.333 – 0.333
Great Miami River	GMRSD1	GMRSW1AA		11/8/05	2.5 – 2.5
Great Miami River	GMRSD2	GMRSW2AA		11/9/05	0.5 – 0.5
Great Miami River	GMRSD3	GMRSW3AA		11/9/05	0.5 – 0.5
Great Miami River	GMRSD4	GMRSW4AA		11/10/05	0.333 – 0.333
Great Miami River	GMRSD8	GMRSW5AA		11/8/05	6.5 – 6.5

Notes:
(a) - Location where former COG pipeline passed beneath the Great Miami River.

TABLE 3-6
BACKGROUND SAMPLES
AK STEEL FORMER ARMCO HAMILTON PLANT
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

Media	Location	Sample	Parent Sample for Duplicates	Sample Date	Depth (feet)
Surface Soil	BG-1	BG-1AA		3/28/06	0 -- 1
Surface Soil	BGCOG1	BGCOG1AA		3/30/06	0 -- 1
Surface Soil	BGCOG2	BGCOG2AA		3/30/06	0 -- 1
Surface Soil	BGCOG3	BGCOG3AA		3/30/06	0 -- 1
Surface Soil	BGPRK5	BGPRK5AA		3/29/06	0 -- 1
Surface Soil	BGRR2	BGRR2AA		3/29/06	0 -- 1
Surface Soil	BGRR3	BGRR3AA		3/29/06	0 -- 1
Surface Soil	BGRR3	BGRR3BA		3/29/06	1.2 -- 1.5
Surface Soil	BGRR4	BGRR4AA		3/30/06	0 -- 1
Surface Soil	BGRR4	BGRR4AB	BGRR4AA	3/30/06	0 -- 1
Surface Soil	BGVNW6	BGVNW6AA		3/29/06	0 -- 1
Surface Soil	BGVNW7	BGVNW7AA		3/29/06	0 -- 1
Subsurface Soil	BG-1	BG-1BA		3/28/06	3 -- 3.7
Subsurface Soil	BGCOG1	BGCOG1BA		3/30/06	3 -- 3.5
Subsurface Soil	BGCOG2	BGCOG2BA		3/30/06	3 -- 3.5
Subsurface Soil	BGCOG3	BGCOG3BA		3/30/06	3 -- 3.5
Subsurface Soil	BGPRK5	BGPRK5BA		3/29/06	3 -- 3.5
Subsurface Soil	BGRR2	BGRR2BA		3/29/06	3 -- 3.5
Subsurface Soil	BGRR4	BGRR4BA		3/30/06	3 -- 3.6
Subsurface Soil	BGVNW6	BGVNW6BA		3/29/06	3 -- 3.3
Subsurface Soil	BGVNW7	BGVNW7BA		3/29/06	2.2 -- 2.5
Groundwater	MW-10M	MW10MGWA		4/5/06	
Groundwater	MW-10M	MW10MGWB	MW10MGWA	4/5/06	
Groundwater	MW-10S	MW10SGWA		12/13/05	
Groundwater	MW-14M	MW14MGWA		4/4/06	
Groundwater	MW-14S	MW14SGWA		12/15/05	
Groundwater	MW-6M	MW6MGWA		4/5/06	
Groundwater	MW-6S	MW6SGWA		12/13/05	
Groundwater	MW-10M	MW-10M		6/18/08	
Groundwater	MW-10S	MW-10S		6/18/08	
Groundwater	MW-14M	MW-14M		6/17/08	
Groundwater	MW-14S	MW-14S		6/17/08	
Groundwater	MW-6M	MW-6M		6/16/08	
Groundwater	MW-6S	MW-6S		6/16/08	
Sediment	GMRSD15	GMRSD15AA		11/10/05	0.25 -- 0.25
Sediment	GMRSD19	GMRSD19AA		11/11/05	0.167 -- 0.167
Sediment	GMRSD28		GMRSD28AA	9/26/07	
Sediment	GMRSD29		GMRSD29AA	9/26/07	
Sediment	GMRSD30		GMRSD30AA	9/26/07	
Sediment	GMRSD33		GMRSD33AA	9/26/07	
Sediment	GMRSD34		GMRSD34AA	9/26/07	
Surface Water	GMRSW11	GMRSW11AA		11/11/05	0.333 -- 0.333
Surface Water	GMRSW9	GMRSW9AA		11/10/05	0.333 -- 0.333
Surface Water	GMRSW9	GMRSW9AB	GMRSW9AA	11/10/05	0.333 -- 0.333

TABLE 3-7
SURFACE SOIL COPCs
AK STEEL FORMER ARMCO HAMILTON PLANT
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

	Northern Parcel					Southern Parcel	
Constituent	AOC 1	AOC 2	AOC 18 and AOC 21	AOC 19	Block A	Southern Parcel (a)	AOC 13
2,3,7-8 TCDD TEQ	X	X		X	X	X	
2-Methylnaphthalene							X
Aluminum	X	X	X	X	X	X	X
Antimony		X				X	
Arsenic	X	X	X	X	X	X	X
Barium						X	
Benzene					X		
Benzo(a)anthracene	X	X	X	X	X	X	X
Benzo(a)pyrene	X	X	X	X	X	X	X
Benzo(b)fluoranthene	X	X	X	X	X	X	X
Benzo(k)fluoranthene			X		X	X	X
Cadmium	X	X		X	X	X	X
Chromium (total)	X	X	X	X	X	X	X
Copper				X		X	
Dibenz(a,h)anthracene	X	X	X	X	X	X	X
Indeno(1,2,3-cd)pyrene	X	X	X	X	X	X	X
Iron	X	X	X	X	X	X	X
Lead	X			X		X	X
Manganese	X	X	X	X	X	X	X
Mercury				X		X	X
Naphthalene							X
Thallium		X	X				
Toluene					X		
Total PCBs	X	X	X	X	X	X	X
Total Xylenes					X		
Vanadium	X	X	X	X	X	X	X
Zinc	X					X	

Notes:
AOC - Area of Concern.
COPC - Constituent of Potential Concern
X - COPC in this area.
(a) - All of Southern Parcel except AOC 13.

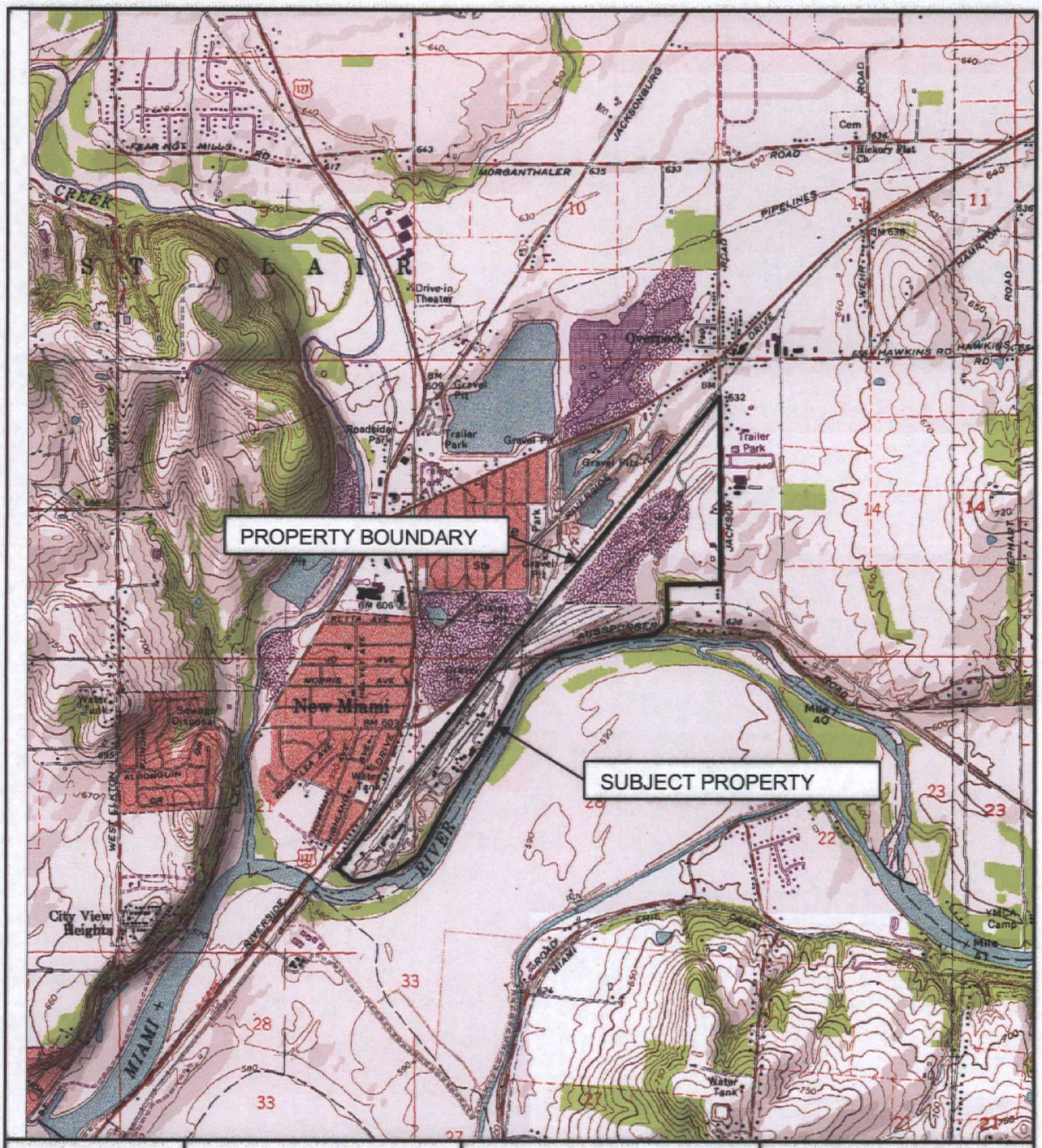
TABLE 3-8
COMBINED SURFACE AND SUBSURFACE SOIL COPCs
AK STEEL FORMER ARMCO HAMILTON PLANT
NEW MIAMI, BUTLER COUNTY, OHIO
BASELINE HUMAN HEALTH RISK ASSESSMENT

	Northern Parcel					Southern Parcel	
Constituent	AOC 1	AOC 2	AOC 18 and AOC 21	AOC 19	Block A	Southern Parcel (a)	AOC 13
1,1-Biphenyl							X
2,3,7-8 TCDD TEQ	X	X		X	X	X	X
2-Methylnaphthalene	X					X	X
Acenaphthene							X
Acenaphthylene						X	X
Aluminum	X	X	X	X	X	X	X
Anthracene							X
Antimony		X				X	
Arsenic	X	X	X	X	X	X	X
Barium						X	
Benzene	X				X	X	X
Benzo(a)anthracene	X	X	X	X	X	X	X
Benzo(a)pyrene	X	X	X	X	X	X	X
Benzo(b)fluoranthene	X	X	X	X	X	X	X
Benzo(g,h,i)perylene						X	X
Benzo(k)fluoranthene	X		X		X	X	X
Cadmium	X	X		X	X	X	X
Carbazole	X					X	X
Chromium (total)	X	X	X	X	X	X	X
Chrysene	X					X	X
Copper				X		X	
Dibenz(a,h)anthracene	X	X	X	X	X	X	X
Dibenzofuran	X					X	X
Fluoranthene	X					X	X
Fluorene						X	X
Indeno(1,2,3-cd)pyrene	X	X	X	X	X	X	X
Iron	X	X	X	X	X	X	X
Lead	X			X		X	X
Manganese	X	X	X	X	X	X	X
Mercury				X		X	X
Naphthalene	X					X	X
p-Cresol (4-Methylphenol)							X
Phenanthrene						X	X
Phenol							X
Pyrene	X					X	X
Thallium	X	X	X	X			X
Toluene					X		X
Total PCBs	X	X	X	X	X	X	X
Total Xylenes	X				X		X
Trichloroethene					X		
Vanadium	X	X	X	X	X	X	X
Zinc	X					X	

Notes:
AOC - Area of Concern.
COPC - Constituent of Potential Concern
X - COPC in this area.
(a) - All of Southern Parcel except AOC 13.

FIGURES

FIGURES



Scale: 1:25,000

AK Steel Former Armco
Hamilton Plant

Hamilton, Ohio Quadrangle 1988

Site Locus Map

Hamilton, Ohio

July 2007 Project #: MR0507

Figure 1-1

KEMRON ENVIRONMENTAL SERVICES

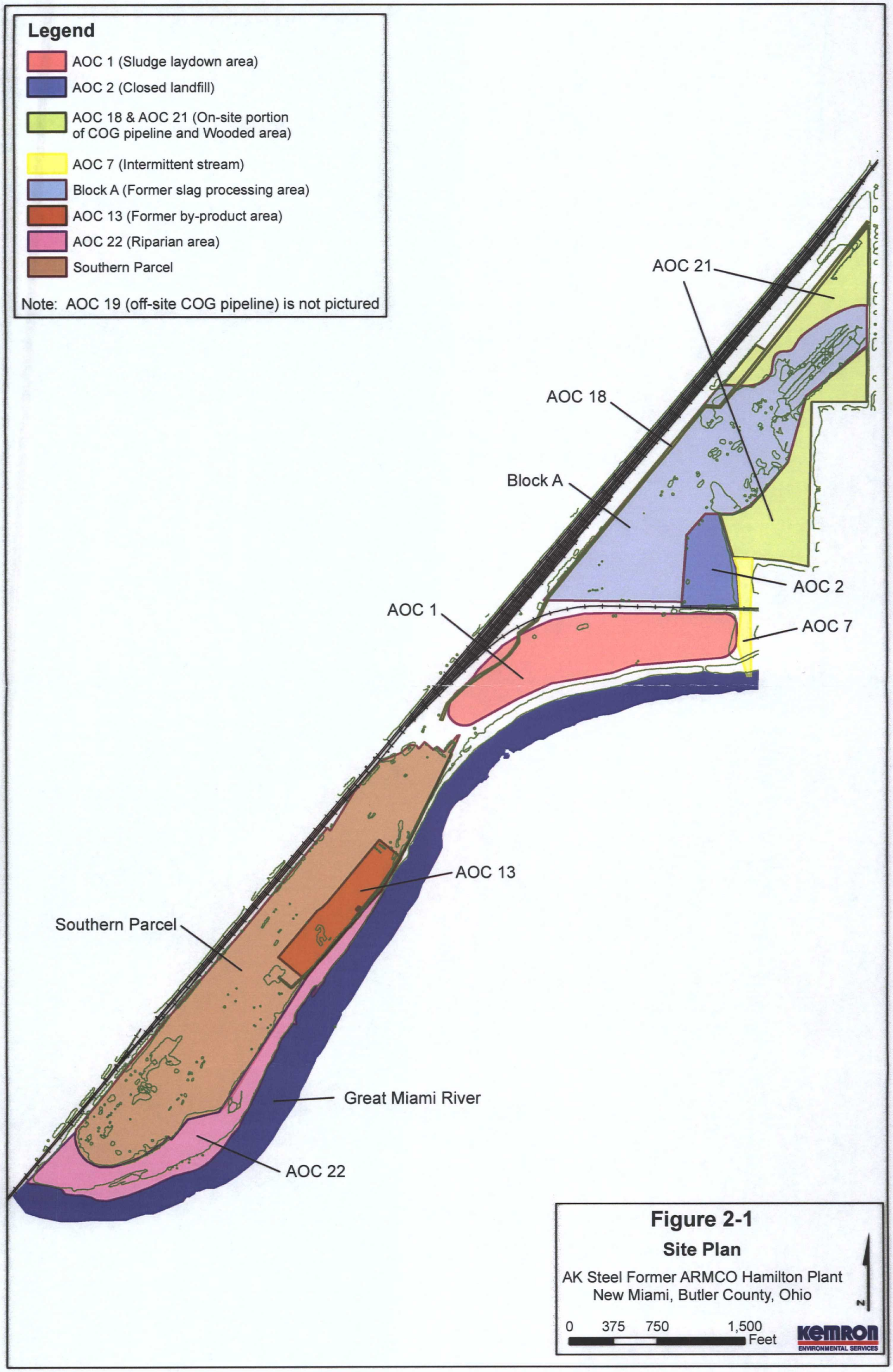


Figure 2-1

Site Plan

AK Steel Former ARMCO Hamilton Plant
New Miami, Butler County, Ohio

KEMRON ENVIRONMENTAL SERVICES

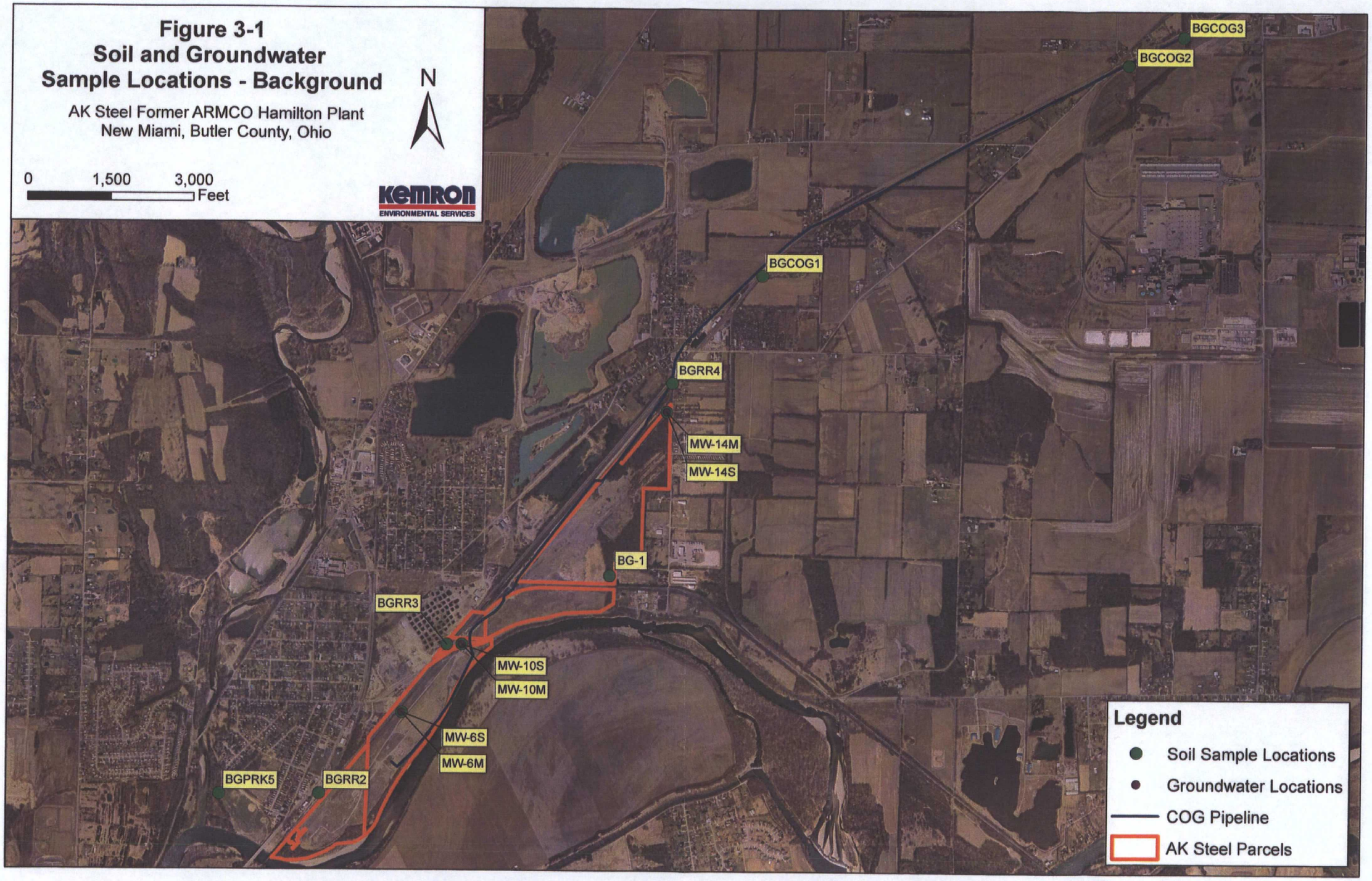


Figure 3-1
Soil and Groundwater
Sample Locations - Background
AK Steel Former ARMCO Hamilton Plant
New Miami, Butler County, Ohio
N
0
1,500
3,000
Feet
KEMRON
ENVIRONMENTAL SERVICES
BGCOG3
BGCOG2
BGCOG1
BGRR4
MW-14M
MW-14S
BG-1
BGRR3
MW-10S
MW-10M
MW-6S
MW-6M
BGPRK5
BGRR2
Legend
Soil Sample Locations
Groundwater Locations
COG Pipeline
AK Steel Parcels

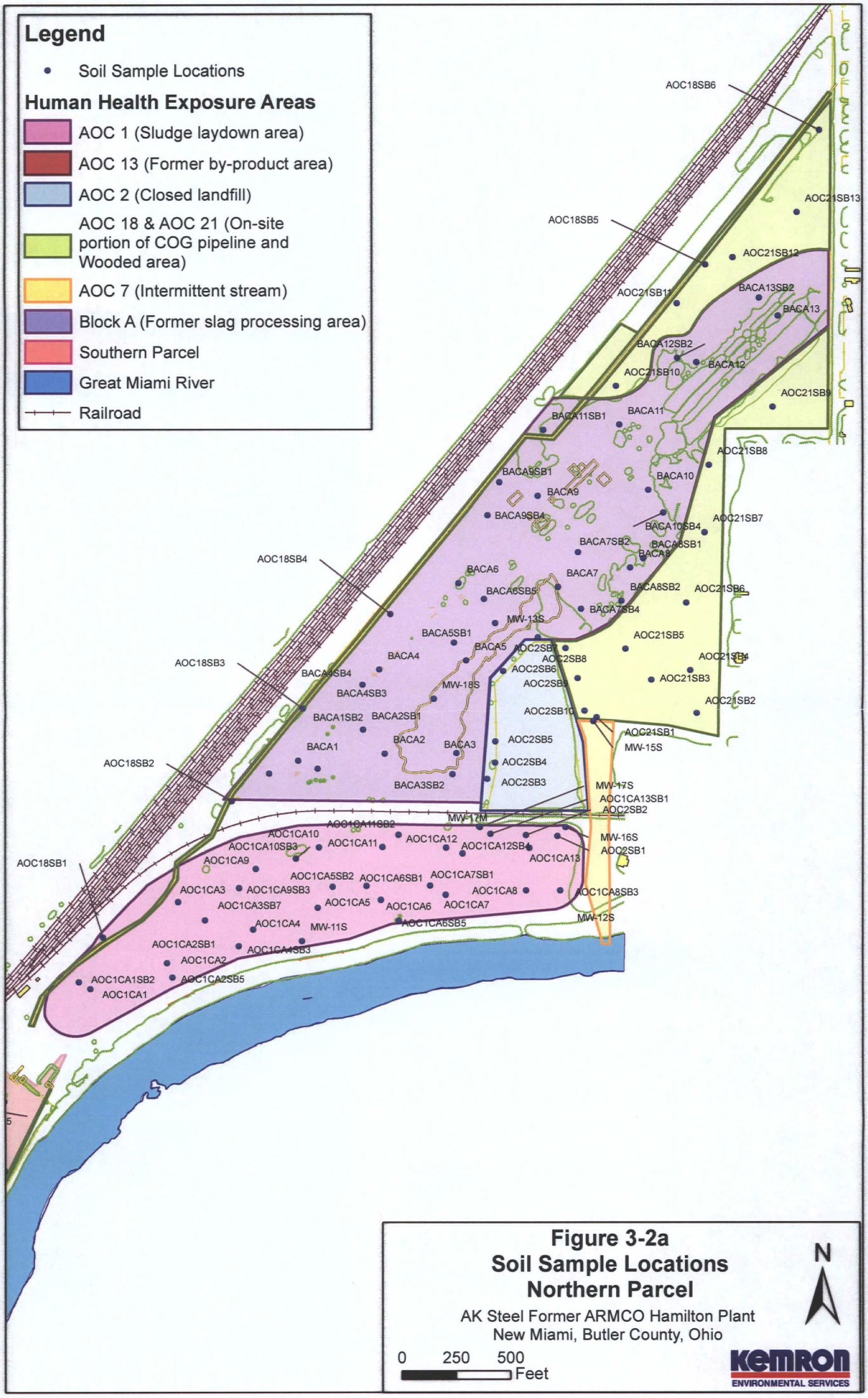


Figure 3-2a
Soil Sample Locations
Northern Parcel

AK Steel Former ARMCO Hamilton Plant
New Miami, Butler County, Ohio

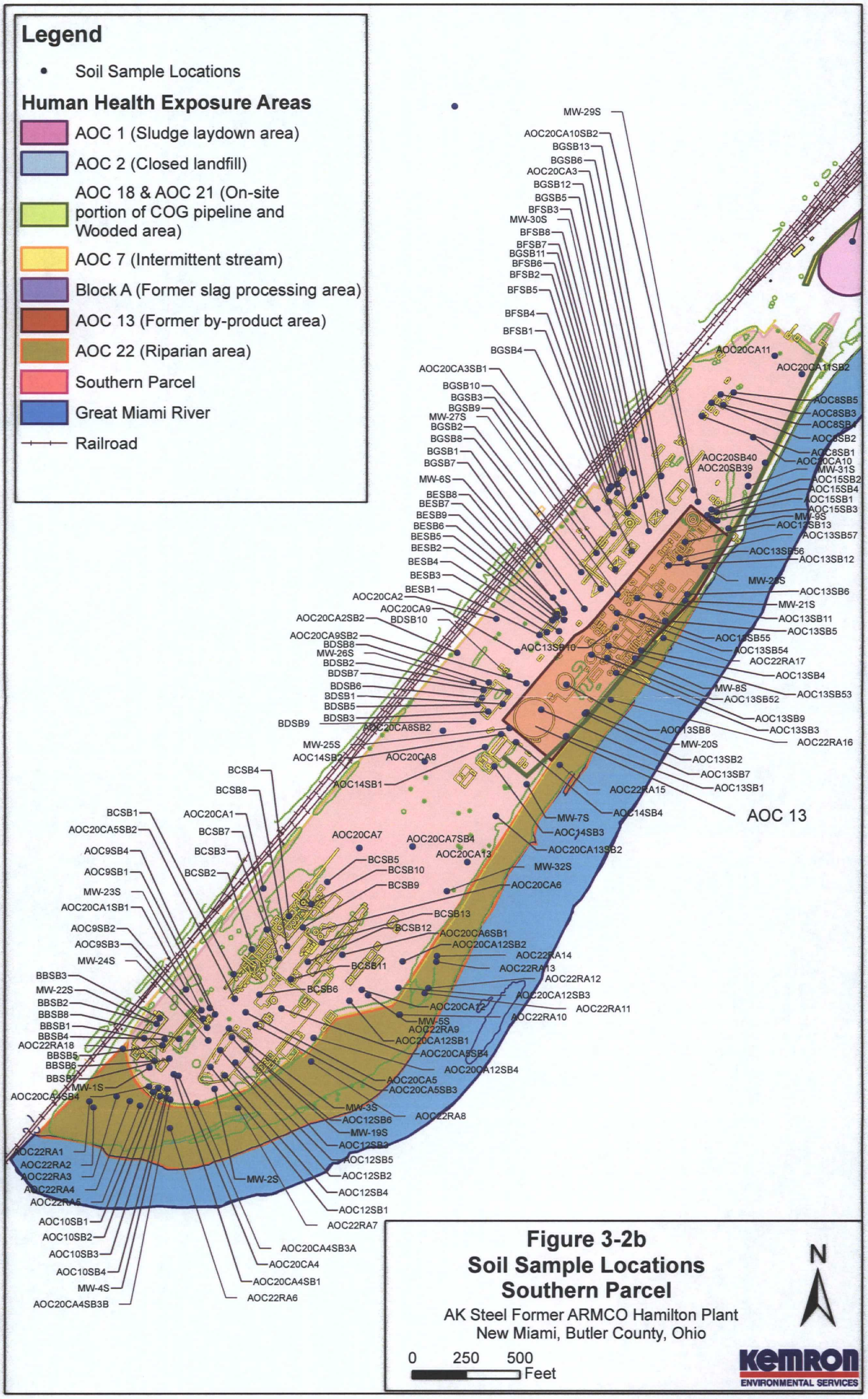


Figure 3-2b
Soil Sample Locations
Southern Parcel
AK Steel Former ARMCO Hamilton Plant
New Miami, Butler County, Ohio

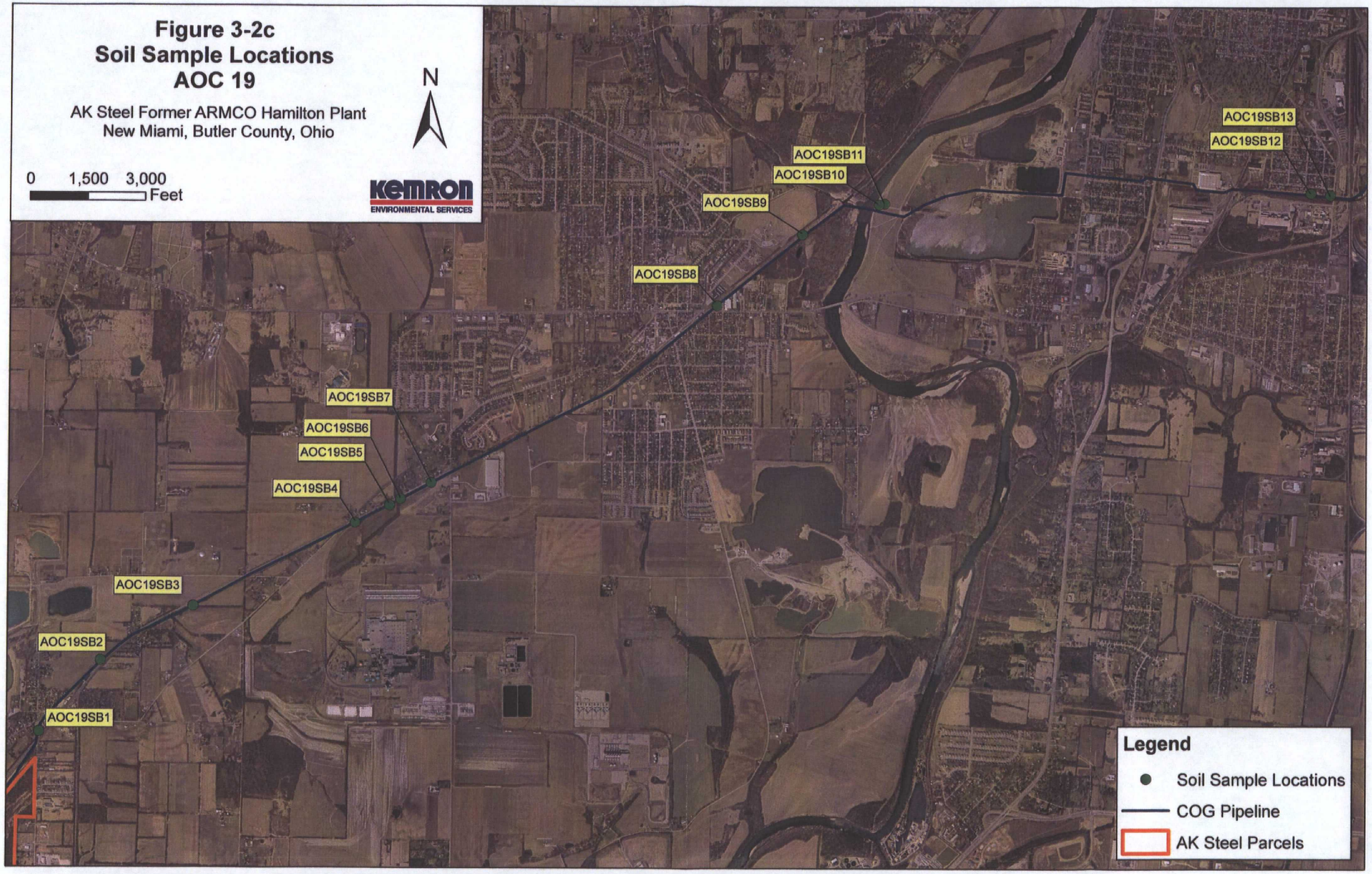
Figure 3-2c
Soil Sample Locations
AOC 19

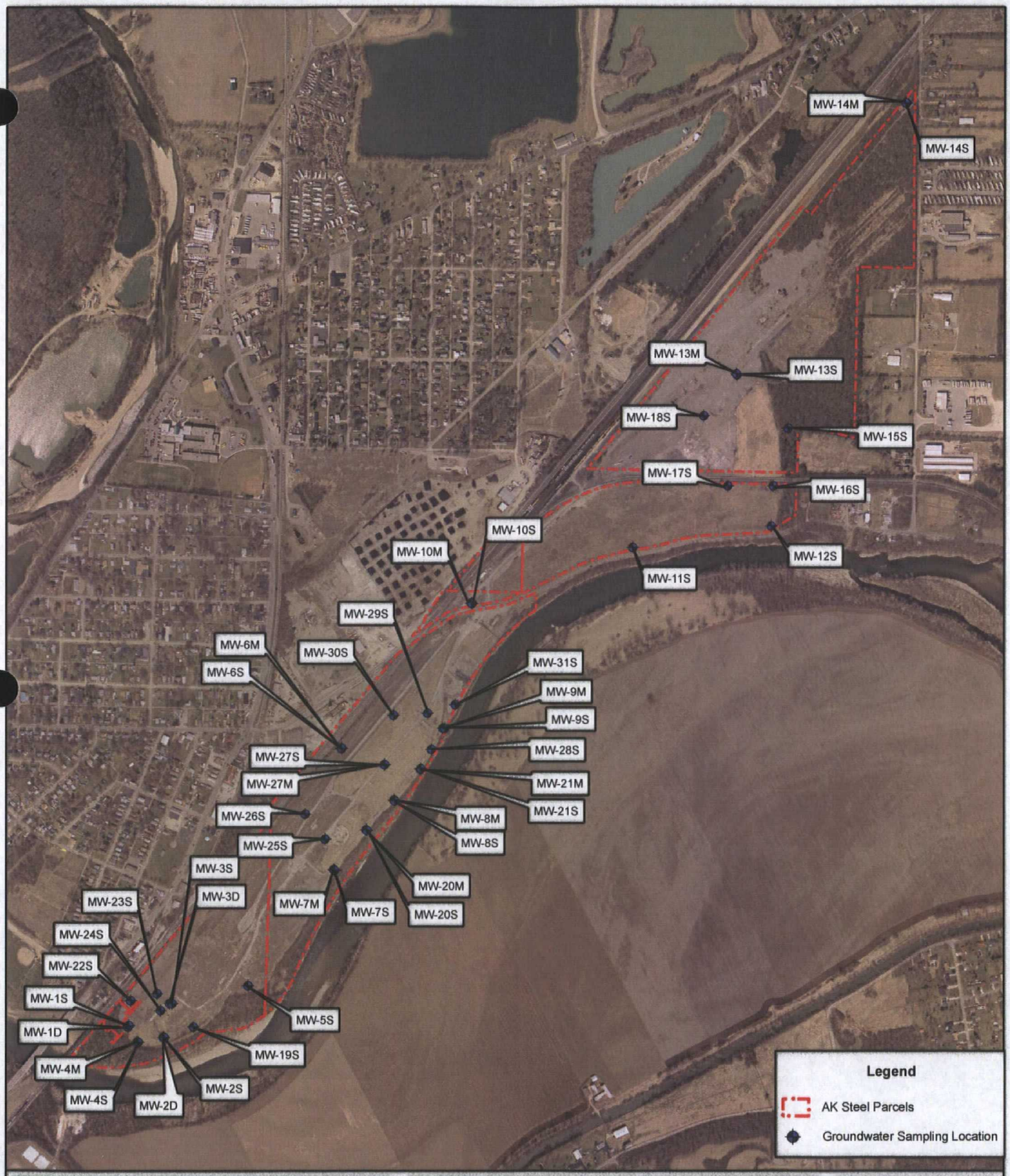
AK Steel Former ARMCO Hamilton Plant
New Miami, Butler County, Ohio

N

0 1,500 3,000
Feet

KEMRON
ENVIRONMENTAL SERVICES





Source: USGS Topographic Quadrangles for Butler County

N

0 325 650 1,300 1,950 2,600 Feet

Groundwater Sampling Locations

AK Steel Former ARMCO Hamilton Plant
New Miami, Butler County, Ohio

SCALE	DATE	PROJECT NO.
1 : 13,000	11/03/08	MR0507

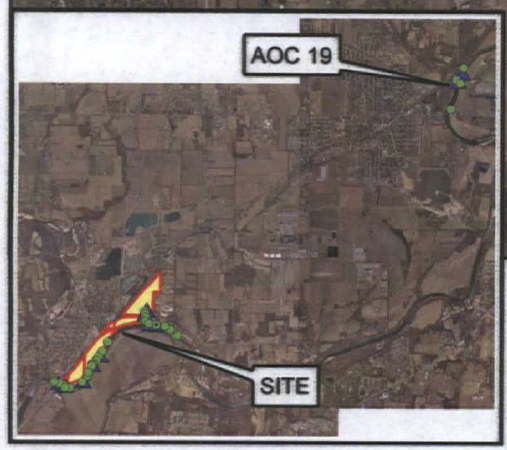
AK Steel

KEMRON ENVIRONMENTAL SERVICES

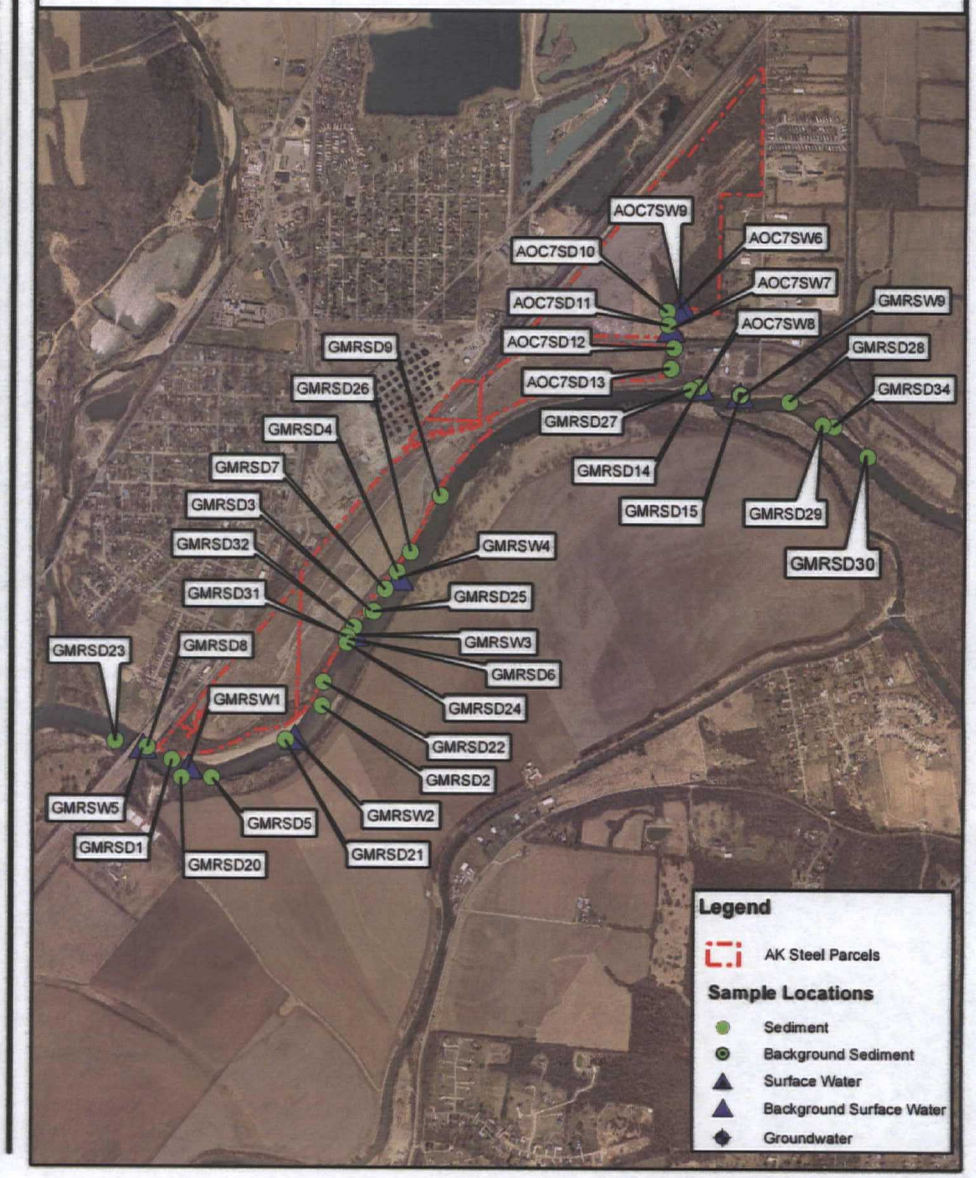
Figure Number

3-3

AOC 19



SITE



Source: USGS Topographic Quadrangles for Butler County

0 500 1,000 2,000 3,000 4,000 Feet

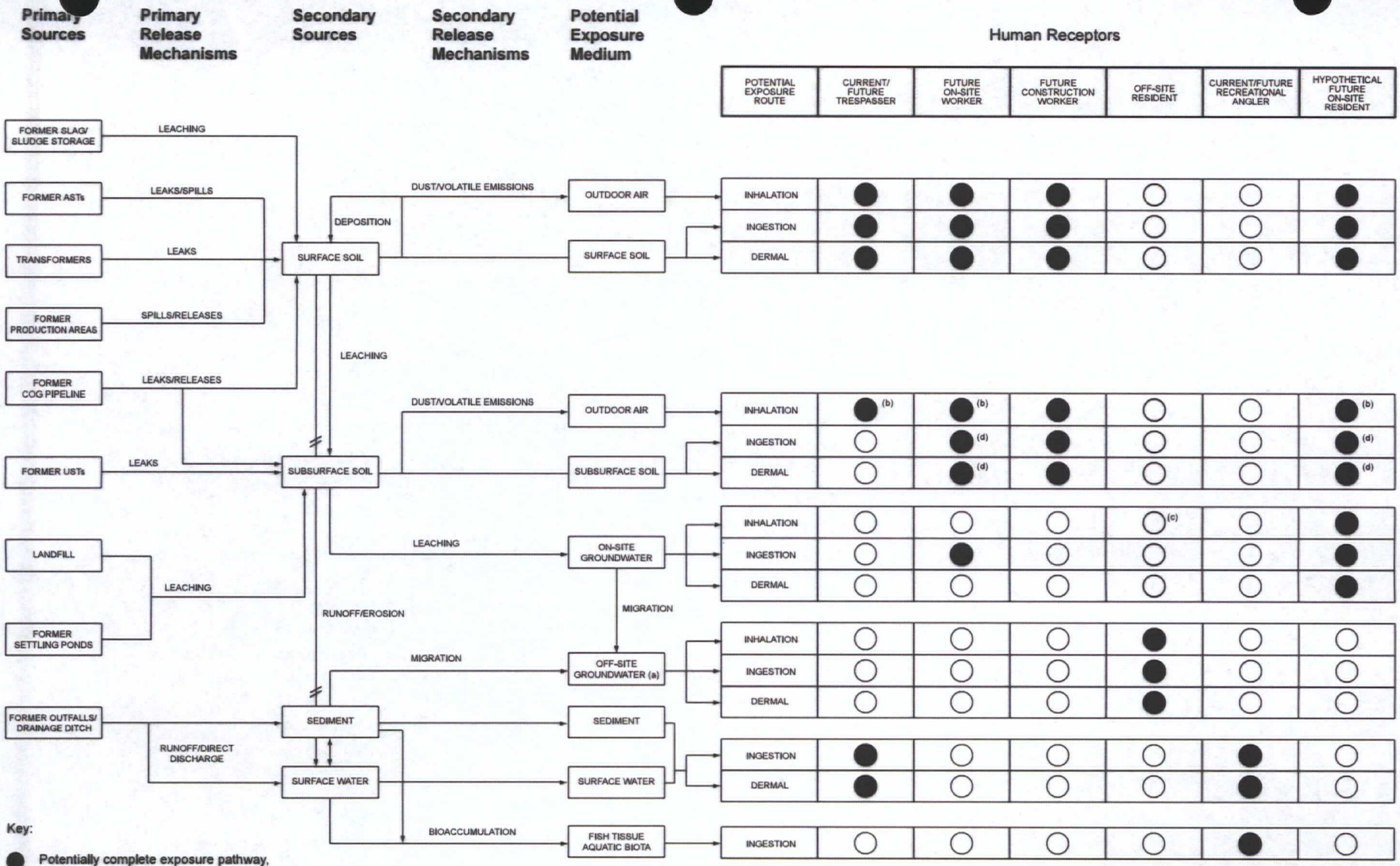
Surface Water and Sediment Sampling Locations

AK Steel Former ARMCO Hamilton Plant
New Miami, Butler County, Ohio

SCALE	DATE	PROJECT NO.
1 : 26,000	11/03/08	MR0507

AK Steel
Kemron Environmental Services

Figure Number
3-4



Key:

● Potentially complete exposure pathway, evaluated in HHRA.

○ Pathway incomplete or insignificant, no further evaluation performed.

(a) Hamilton North wellfield.

(b) Volatile emissions only.

(c) Volatilization from groundwater through vadose zone to excavation trench is an insignificant exposure pathway for the future construction worker.

(d) The potential for subsurface soil to be brought to the surface as a result of excavation/construction activities is evaluated for the future on-site worker (quantitatively) and hypothetical future on-site resident (qualitatively).

Figure 5-1
Conceptual Site Model
Human Health Risk Assessment
AK Steel, Former ARMCO Hamilton Plant/Site
New Miami, Ohio

ENSR | AECOM

M08135

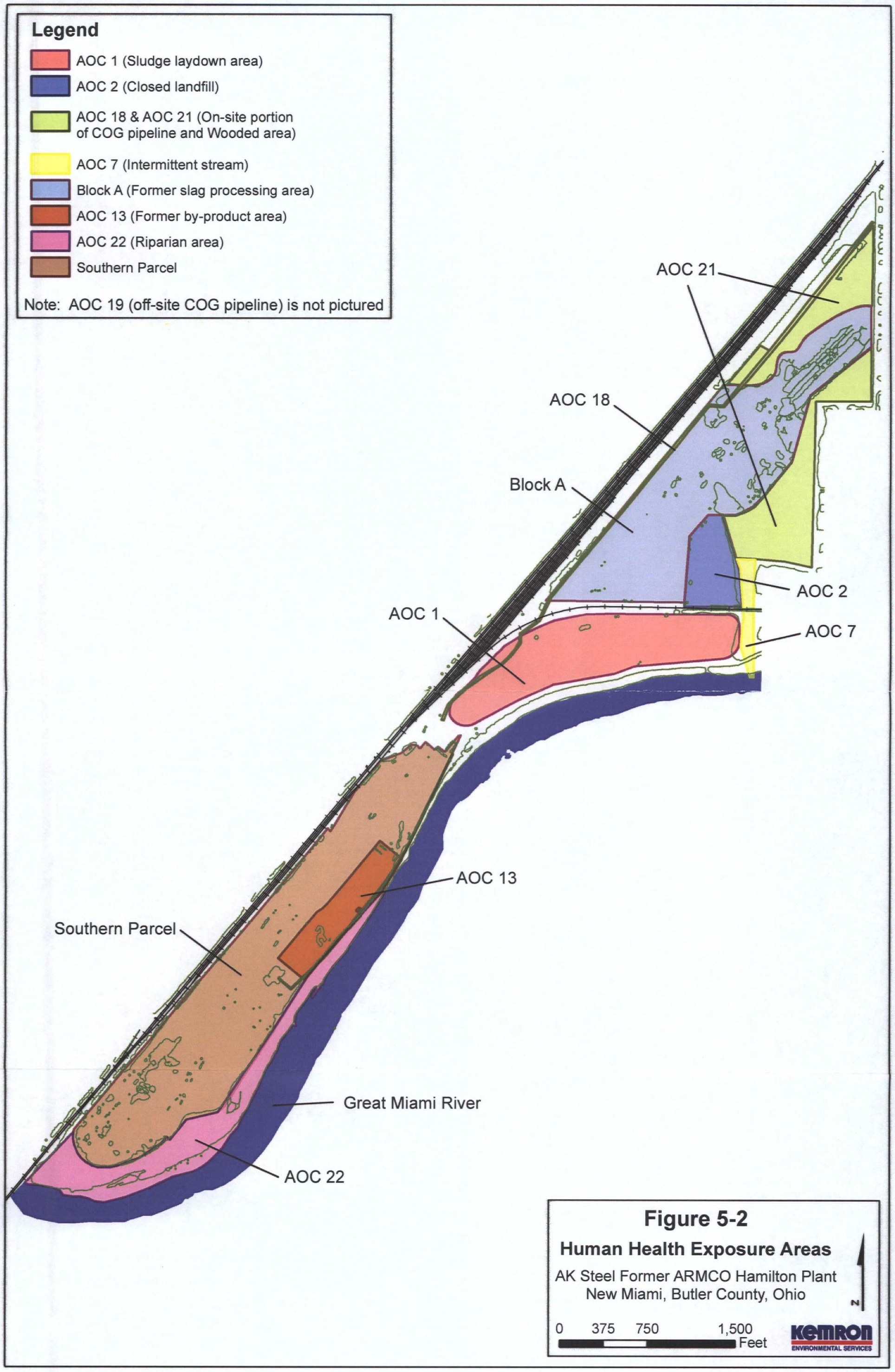


Figure 5-2

Human Health Exposure Areas

AK Steel Former ARMCO Hamilton Plant
New Miami, Butler County, Ohio