Hudson School (Collegeville) Voluntary Cleanup Report, Walter Coke, Inc., Birmingham, Alabama

PREPARED FOR: Walter Coke, Inc.

PREPARED BY: CH2M HILL

DATE: June 17, 2011

Introduction

This memorandum documents for Walter Coke, Inc. (Walter Coke) the voluntary cleanup Walter Coke performed at the Hudson School in the Collegeville residential neighborhood in Birmingham, Alabama (Figure 1). Cleanup was performed at the school to remove and replace surface soils that were found to exceed the U.S. Environmental Protection Agency's (EPA's) cleanup level of 1.5 parts per million (ppm) for seven polycyclic aromatic hydrocarbons (PAHs) measured as benzo(a)pyrene toxic equivalents (BaP TEQ).

The initial sampling at the Hudson School was performed voluntarily by Walter Coke in 2009 and documented in the draft *Residential Sampling Report* (RSR) submitted to EPA in December 2009. After EPA's final comments on the RSR were received on April 13, 2011, the final RSR was submitted to EPA on May 13, 2011. Because Hudson School was under construction during the 2009 sampling event, Walter Coke elected to resample soil at the school property in 2010 after construction of the new school was completed. The cleanup described herein was based on the 2010 sampling and laboratory analyses, as detailed in the *2010 Surface Soil Sampling - Hudson School Technical Memorandum* (CH2M HILL, 2010; see Attachment A). Additional sampling was performed during the excavation activities, as documented in this report, to evaluate soil concentrations around existing trees and areas within the proposed excavation area where the School Board restricted the use of heavy earthwork equipment due to the presence of shallow underground structures.

There is no information to indicate that Walter Coke is the source of these constituents at the Hudson School. Indeed, evidence unearthed during soil excavation suggests an onsite source. Notwithstanding this fact, Walter Coke elected to perform these actions voluntarily and in an expedited manner as a good corporate citizen and to assist school officials. As a courtesy, EPA was notified of the planned work via e-mail correspondence dated January 14, 2011, and also was provided with a copy of the *Voluntary Cleanup Procedures Technical Memorandum* (CH2M HILL, 2011), included as Attachment B.

Work Performed

Following receipt of School Board approvals and access, work began on March 10, 2011, and site restoration was completed on June 8, 2011. The overall purpose of this project was to excavate, and dispose at an authorized landfill, surface soils with concentrations of BaP TEQ greater than 1.5 ppm at the Hudson School property (Figure 2), and replace those soils with imported backfill.

As shown in Figure 2, a portion of the originally proposed cleanup area was located over a shallow stormwater retention unit installed during construction of the new school facilities. When the School Board was notified of the proposed excavation area, it prohibited any heavy earthwork activities directly over this unit, despite the detection of a BaP TEQ concentration above the cleanup level. The highest concentrations detected in the soil near the retention unit were south of, and thus outside of, the limits of the unit and were excavated successfully with heavy equipment. However, as a result of the School Board's instruction, one small peripheral strip of soil, directly over the stormwater retention unit, could not be excavated using heavy earthwork equipment. To be conservative and cautious, Walter Coke conducted additional voluntary sampling and analyses (both composite and discrete) to assess the concentrations, if any, of BaP TEQ in surface soil within this peripheral strip. Sample results indicated that only the southern third of the area exceeded the cleanup level (Figure 2). Walter Coke took the additional step of voluntarily excavating this area by hand and replacing the soil, by hand, with imported backfill.

Pre-excavation Activities

In preparation for the excavation, Walter Coke performed the following activities:

- Obtained access agreements from the Birmingham Board of Education and Hudson School officials to excavate areas at the Hudson School property.
- Mailed a postcard on February 27, 2011, to addresses within a 0.5-mile radius of the Hudson School with information about the cleanup activities (Attachment C).
- Identified a disposal facility and obtained approval from the Alabama Department of Environmental Management (ADEM) (Certification # SW-022813-0070, March 3, 2011) to dispose of the excavated soils as nonhazardous waste.
- Identified a source of imported backfill and evaluated the condition of the source through laboratory analysis of the following:
    - Target compound list (TCL) volatile organic compounds (VOCs)
    - TCL semivolatile organic compounds (SVOCs)
    - Low-level PAHs
    - Target analyte list (TAL) metals
    - Pesticides
    - Herbicides
    - Polychlorinated biphenyls
- Performed utility clearance of the proposed excavation areas.
- Performed an initial property inspection, including photographing the following:
    - Proposed excavation areas
    - Parking lots, roads, and driveways along which trucks and equipment traveled
    - Staging areas
- Submitted a Construction Best Management Practices Plan for erosion and sediment control to the City of Birmingham.

- Erected temporary fencing around the work site and installed erosion control measures (including silt fencing and straw bales) around the areas to be excavated.
- Collected and analyzed soil samples for low-level PAHs around the stormwater retention drain system at the eastern edge of the southern excavation area.

Soil Excavation and Disposal

Approximately 52,000 cubic feet of soil were removed from the Hudson School property and replaced with imported backfill. Surface soil was removed to a depth of 2 feet, as shown in Figure 2, using trackhoes, mini-excavators, or hand digging, as needed. Two feet was determined to be a conservative removal depth based on EPA's hypothetical conceptual site model of airborne deposition of PAHs, the depth of surface soil as defined by EPA Region 4 (0 to 1 foot), and the maximum expected depth of exposure from non-invasive activities at the school.

In the two front (northern) areas, hand digging was used around utilities and a mini-excavator was used in the remaining areas to remove soils to a depth of 2 feet. After additional sampling was completed in the southern excavation area over the retention unit, hand digging was used to excavate the area to 2 feet in all but two small portions of the area, which were only excavated to 16 to 18 inches due to the presence of two concrete footings and bedrock (Photograph 5, Attachment D).

In the northwestern area of the larger southern excavation, approximately 200 cubic feet of asphalt debris were encountered during excavation and removed. Photographs of the asphalt were taken (Photograph 6, Attachment D). Because of the inherent nature and composition of asphalt (containing high levels of PAHs), it is possible that this asphalt is the source of the BaP TEQ detected in the soil samples at Hudson School that resulted in those soils exceeding EPA's cleanup level for BaP TEQ.

During excavation, an attempt was made to save two large older trees in the southern area from damage. To evaluate whether the soil beneath the tree canopy could be left in place, one composite soil sample was collected from around the base of each tree and analyzed for low-level PAHs. There was one exceedance of the cleanup level in soil around the western tree at 8 ppm. In addition to the soil concentrations, the western tree was diseased and deemed to be a potential hazard if left in place (such as limbs falling). Therefore, this tree was removed and the soil excavated with a trackhoe. Because the soil concentration beneath the canopy of the eastern tree, reported as 0.17 ppm, was less than the 1.5 ppm cleanup level, the eastern tree was left in place and excavation was stopped when the larger exposed roots of the tree were reached. Four trees in the northern excavation area were removed without concern, because they had been planted recently and were relatively small. The removal and replacement of trees within the excavation areas was approved by Hudson School officials.

In accordance with the ADEM-approved certification for disposal (Certification # SW-022813-0070), a soil sample was collected for every 500 cubic yards (yd^3) of soil removed by collecting one aliquot from every 50 yd^3 and homogenizing ten aliquots into one sample (per 500 yd^3). These waste characterization samples were analyzed for toxicity characteristic leaching procedure (TCLP) VOCs, TCLP SVOCs, and TCLP Resource Conservation and Recovery Act (RCRA) metals. The excavated soil was stockpiled onsite atop protective barrier fabric and covered with a tarp daily until the analytical results were obtained and the soil was approved for disposal.

ADEM approved the excavated soil for disposal as a nonhazardous waste. The soil was hauled offsite in U.S. Department of Transportation–approved dump trucks to the Green Mountain Management Subtitle D disposal facility in Jefferson County, Alabama. The asphalt debris was disposed as construction debris at the Green Mountain Management construction and demolition landfill.

During excavation activities and while stockpiles were maintained, dust abatement measures were implemented as needed. The abatement measures were performed to reduce the potential for physical transportation of the excavated media from the work area. Because of the density and nature of the PAH compounds present (the compounds are not a concern for volatilization), abatement measures against physical transportation only were needed. Dust abatement measures also were implemented during transportation to the disposal facility, both on the truck tires and on the tarp-covered wastes.

Post-excavation Sampling

After excavation was complete in an area, samples were collected from the floor of the excavation to document post-excavation soil conditions. Four post-excavation samples were collected at the Hudson School property. Two samples were collected from the larger area to the south of the school building, one sample was collected from the hand-excavated area over the retention unit, and one sample was collected from the smaller area to the north of the school building (Figure 3). To collect the samples, a five-point composite soil sample was collected from the excavation floor in a five-on-a-die pattern (see detail in Figure 3) to a depth of 6 inches.

The post-excavation floor samples were submitted to Test America Laboratory in Mobile, Alabama, for low-level PAH analysis. Three of the four post-excavation sample results were below EPA's cleanup level of 1.5 ppm for BaP TEQ; the one sample collected within the hand-excavated area over the retention unit exceeded the cleanup level, with a concentration of 1.6 ppm (versus the 1.5 ppm cleanup level). Because this one exceedance is under 2 feet of imported backfill and a geotextile barrier fabric (see "Site Restoration" section), there is no potential for exposure by non-invasive receptors and the potential for exposure by occasional invasive workers is insignificant. Residual concentrations of BaP TEQ within the 0- to 2-foot interval are now below EPA's cleanup level and the site cleanup goals have been met.

Documentation

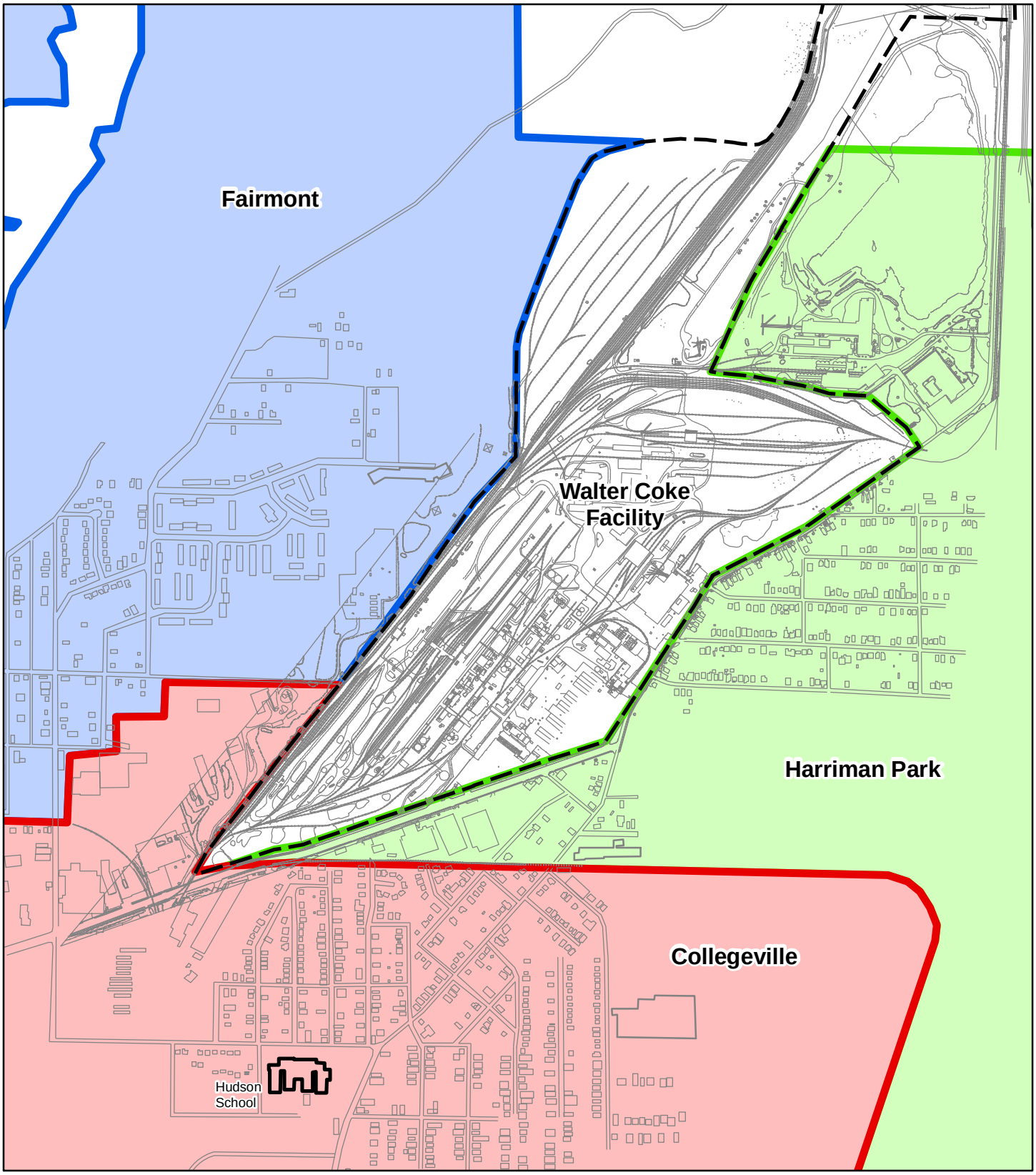
Photographs were taken during the different phases of work and after site restoration activities were completed. Attachment D contains photographs documenting the pre-excavation conditions and the restored excavation areas.

Site Restoration

Once excavation and post-excavation sampling were completed, the floor of the excavated area was covered with a high-visibility geotextile barrier fabric to indicate excavation limits and then backfilled with imported fill. After backfilling was complete, each area was restored to its original grade and condition using sod.

As part of the site restoration, one new tree was planted in the southern excavation area and four new trees (Photograph 3, Attachment D) were planted in the northern excavation area, with the approval of Hudson School officials. The school and/or School Board will be responsible for maintenance and upkeep of the newly installed landscaping.

Figures



Legend

Walter Coke Facility Boundary

Neighborhood

- Collegeville
- Harriman Park
- Fairmont

0 500 1,000 2,000 Feet

FIGURE 1
Walter Coke Facility and Surrounding Neighborhoods

Hudson School Cleanup Report
Walter Coke Inc.
Birmingham, Alabama

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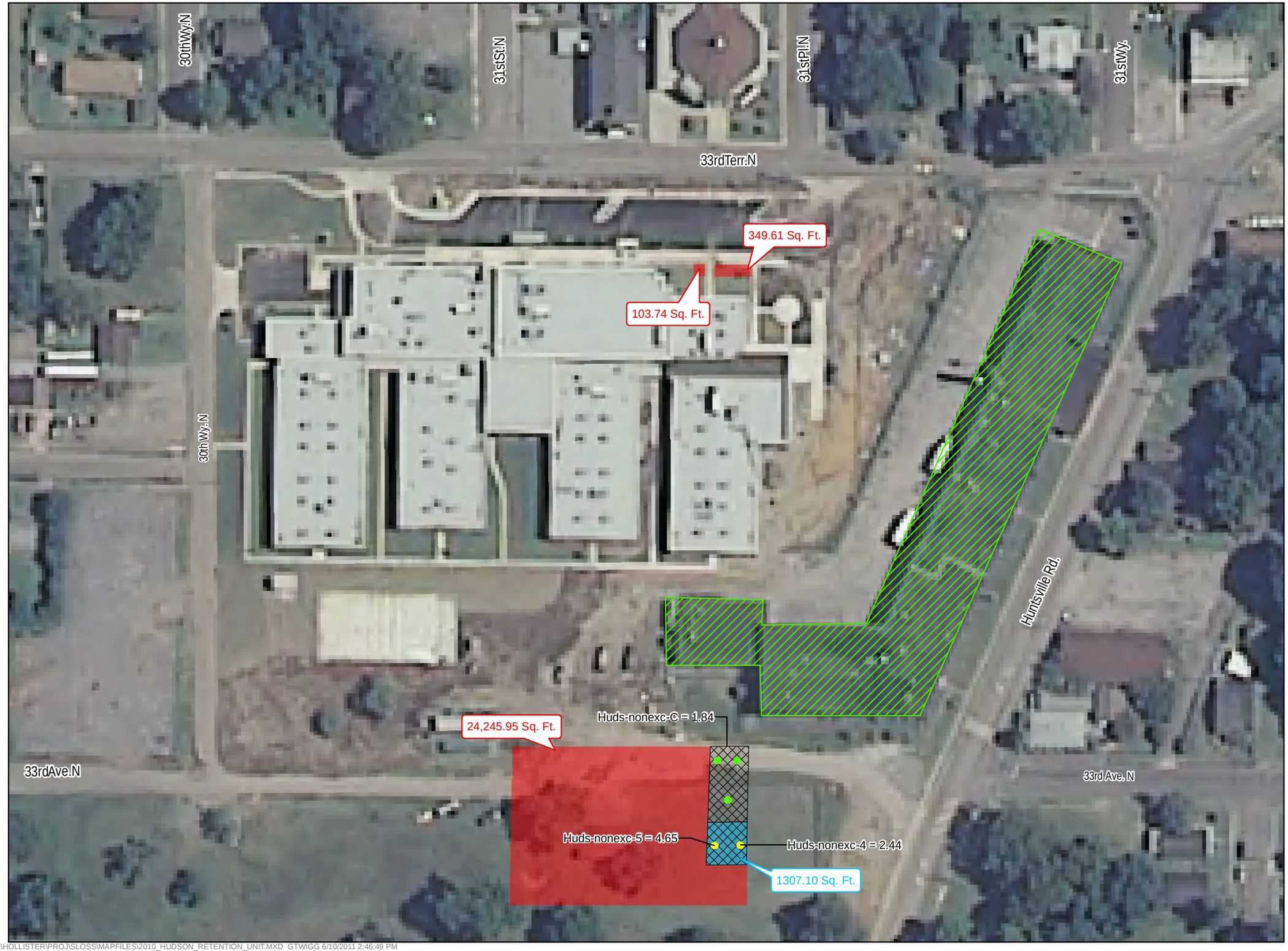

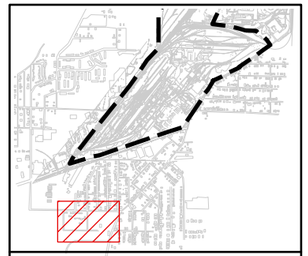

Legend

- Final cleanup level not exceeded
- BaP TEQ > 1.5 ppm
- School Board Prohibits Use of Heavy Earthwork Equipment
- Demolished Structure
- Excavation Area
- Excavation Area Over Stormwater Retention Unit

Notes:
1. Excavation depth = 2 ft bgs
2. ft bgs = feet below ground surface
3. Total volume removed = 52,012.80 cubic feet
4. BaP TEQ = Benzo(a)pyrene toxic equivalents
5. All concentrations are reported in parts per million (ppm).

N

0 40 80 Feet

FIGURE 2
Soil Removal Locations and Results From the Retention Unit Area

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Walter Coke, Inc.
Birmingham, AL

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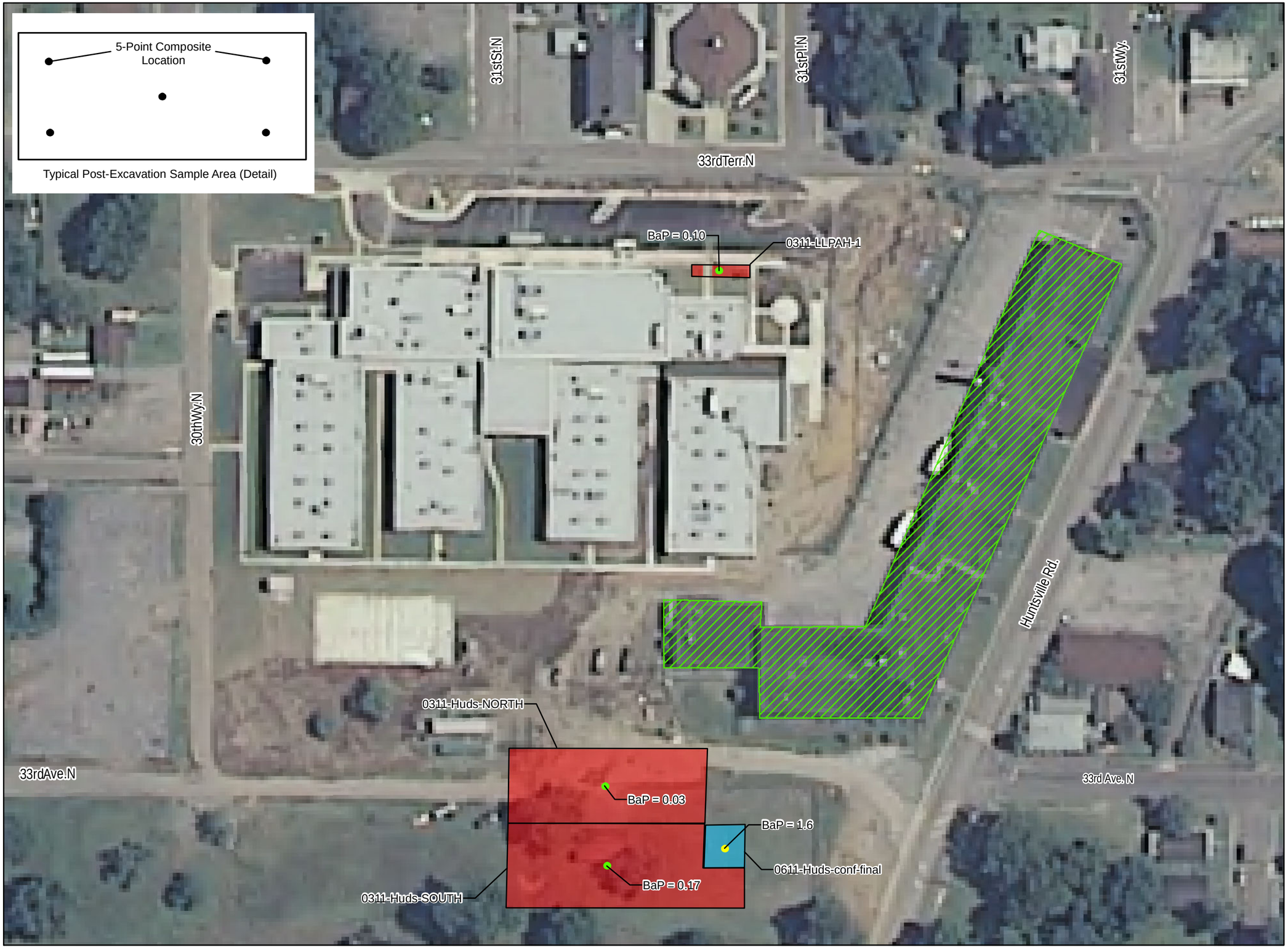

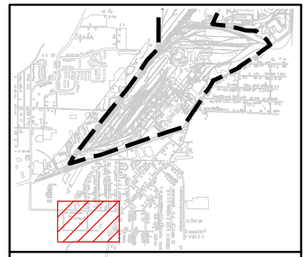

Legend

- Final cleanup level not exceeded
- BaP TEQ > 1.5 ppm
- Demolished Structure
- Post-Excavation Sampling Area
- Excavation Area
- Excavation Area Over Stormwater Retention Unit

Notes:
1. BaP TEQ = Benzo(a)pyrene toxic equivalents
2. All concentrations are reported in parts per million (ppm).
3. Detail shows five-point composite sample pattern used to collect each post-excavation soil sample.

N

0 40 80 Feet

FIGURE 3
Post-Excavation Sample Results

Hudson School Cleanup Report
Walter Coke, Inc.
Birmingham, AL

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ATTACHMENT A

2010 Surface Soil Sampling–Hudson School Technical Memorandum

2010 Surface Soil Sampling - Hudson School Walter Coke, Inc., Birmingham, AL

PREPARED FOR: Jim Henry/Walter Coke
Chuck Stewart/Walter Coke

PREPARED BY: Stephanie Park/CH2M HILL
Kelly Moody/CH2M HILL
Barrie Selcoe/CH2M HILL

COPIES: Jarry Taylor/Maynard, Cooper & Gale, PC
Lauri Gorton/CH2M HILL

DATE: September 28, 2010

This memorandum summarizes the field activities and results of a follow-up soil sampling event at the new Hudson School located within the Collegeville neighborhood adjacent to the Walter Coke, Inc. (Walter Coke), Birmingham, Alabama facility. The school property was initially sampled in 2009 as part of a residential sampling effort that Walter Coke completed in cooperation with EPA. Because the school was under construction at the time of the 2009 sampling and it was unknown whether the surface soil samples at that time represent current surface soil following property redevelopment, Walter Coke agreed to re-sample Hudson School.

This re-sampling effort was completed in accordance with the *Residential Sampling Work Plan* (CH2M HILL, March 2008; revised August 2008). The procedures for sample collection, preparation, chain-of-custody documentation, and shipping of the samples adhered to the *Field Branches Quality System and Technical Procedures* (EPA Region 4, November 2007). Sampling for arsenic was conducted using the *Superfund Lead-Contaminated Residential Sites Handbook* (EPA, 2003).

Field procedures and analytical results are summarized below, and will be incorporated into the final *Residential Sampling Report* pending resolution of EPA comments on the draft *Residential Sampling Report* (CH2M HILL, December 2009).

Field Procedures

Soil Sampling

On August 31 and September 1, 2010, surface soil samples were collected from 14 yards/areas on the new Hudson School property (Figure 1). As outlined in the work plan, the school property was divided into the 14 yards or subareas (each consisting of ¼ to ½ acre) based on similar use or similar visual appearance of the property. Several of the 2009 sample locations are now covered with asphalt, and were not accessible to be re-sampled during the 2010 event.

As was done in the 2009 sampling event, a 5-point composite soil sample was collected from each sizeable yard or subarea using a 5-on-dice composite pattern. To collect the discrete

sub-sample points that make up each composite sample, five sample locations were selected, taking into consideration the location of the school within the property boundary, physical barriers, presence of potentially pressure-treated lumber, roof drip lines, and other variables. The grass (if present) was lifted at each sub-sample location and a surface soil sample was collected from the 0- to 6-inch-depth interval using a stainless-steel scoop. Sufficient soil was collected to fill two 4-ounce (oz) glass jars plus a portion of the composite sample. The soil was placed into a dedicated stainless-steel bowl and thoroughly mixed. After the sub-sample jars were filled, one scoop from each sub-sample bowl was placed into a new stainless-steel bowl for the composite sample and the soils were mixed. The composite sample jars were then filled from the composited soil. Excess soil was returned to one or more of the sub-sample holes, which were additionally filled with top soil as needed. The grass was replaced on top of the sample location.

Before leaving the school, each discrete sub-sample location was surveyed using a Trimble Pro XRT global positioning system unit; each yard was also photographed. Table 1 lists the yards and sub-areas sampled and the quality assurance/quality control (QA/QC) samples collected during the sampling event.

Sample Handling and Analysis

After samples were collected, they were stored either in a refrigerator or iced cooler and shipped to Test America Laboratories, Mobile, Alabama, for sample analysis. Each composite sample was analyzed for arsenic (total) and sieved arsenic (250-micron mesh) by EPA SW-846 Method 6010B and for seven carcinogenic polycyclic aromatic hydrocarbons (cPAHs) using a low-level PAH method (EPA SW-846 Method 8270C).

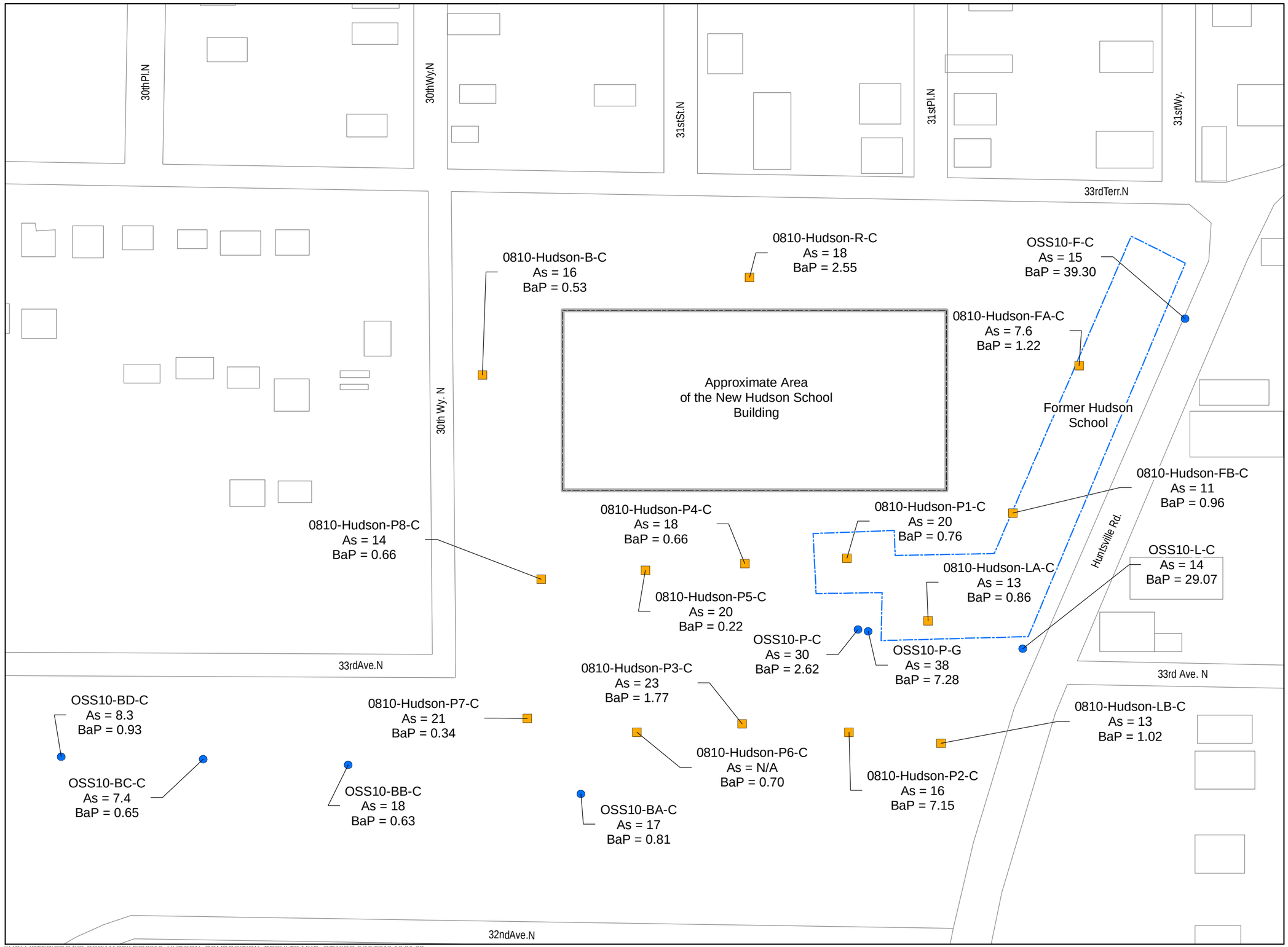
Summary of Analytical Results

Table 1 summarizes the reported concentrations of sieved arsenic and benzo(a)pyrene equivalents (BaP EQ) in the surface soil samples collected at the new Hudson School property in comparison to screening levels based on residential exposure. Complete laboratory reports that include both total and sieved arsenic and the individual cPAH compounds will be incorporated into the final *Residential Sampling Report*. The toxic equivalency factors used to calculate BaP EQ from the individual cPAH compounds are provided in Table 2.

Figure 1 shows the location of the former school, the approximate location of the new school, and the sample results for all samples collected on the property including the previous 2009 and recent 2010 sampling events.

As shown in Table 1 and Figure 1, the post-construction 2010 BaP EQ concentrations were above soil screening levels (1.5 mg/kg) for daily, long-term, residential exposure at three of the 14 sample locations, specifically locations R-C, P2-C, and P3-C. Arsenic did not exceed the short-term soil screening level (39 mg/kg) for daily residential exposure during the recent 2010 sampling event.

In comparison, BaP EQ concentrations detected in 2009 around the former Hudson School were considerably higher than those reported in 2010. Based on observations in the field during the 2009 sampling event, it is suspected that at least some of the soils located around the new school building, and perhaps elsewhere, were brought to the site by the contractor performing the work.



Legend

- 2010 Sample Location
- 2009 Sample Location
- Old Hudson School
- New Hudson School

Notes:
1. As = Arsenic (sieved)
2. BaP = Benzo(a)pyrene equivalents
3. All concentrations are reported in mg/kg.
4. mg/kg = milligrams per kilogram

N

0 50 100 Feet

Figure 1
Hudson School
Sampling Results

Walter Coke, Inc.
Birmingham, AL

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TABLE 1
Summary of Hudson School Sampling Results (August 31-September 1, 2010
Walter Coke Inc. - Birmingham, Alabama

Station ID	Seived Arsenic (mg/kg)	BaP Equivalents (mg/kg)
Screening Level	**39**	**1.5**
Front Yard		
0810-Hudson-FA-C	7.6	1.225
0810-Hudson-FB-C	11	0.970
Right Yard		
0810-Hudson-R-C	18	**2.559**
Back Yard		
0810-Hudson-B-C	16	0.537
Left Yard		
0810-Hudson-LA-C	13	0.863
0810-Hudson-LB-C	13	1.030
Playground		
0810-Hudson-P1-C	20	0.766
0810-Hudson-P2-C	16	**7.156**
0810-Hudson-P3-C	23	**1.776**
0810-Hudson-P4-C	18	0.668
0810-Hudson-P5-C	20	0.227
0810-Hudson-P6-C	18	0.707
0810-Hudson-P7-C	21	0.346
0810-Hudson-P8-C	14	0.666

Notes:
mg/kg = milligrams per kilogram

Benzo(a)pyrene Equivalents concentrations (BaP Equivalents) were calculated using Toxicity Equivalency Factor (TEF) methodology in accordance with EPA Region 4 Human Health Risk Assessment Bulletins (EPA Region 4, 2000).

Screening Levels – EPA Regional Screening Levels for Residential Soil based on excess life-time cancer risk of 1x10-4. (EPA, 05/2010)

Bold text indicates the sample exceeds the short-term action level for arsenic or long-term action level for cPAHs

cPAH = carcinogenic polycyclic aromatic hydrocarbons (refer to Table 2)

TABLE 2

Toxic Equivalency Factors Used to Calculate BaP Equivalents per Sample

Walter Coke Inc. - Birmingham, Alabama

Carcinogenic PAH	Toxic Equivalency Factor
Benzo[a]pyrene	1.0
Benzo[a]anthracene	0.1
Benzo[b]fluoranthene	0.1
Benzo[k]fluoranthene	0.01
Chrysene	0.001
Dibenz(a,h)anthracene	1.0
Indeno[1,2,3-cd]pyrene	0.1

Notes:

BaP = Benzo(a)pyrene

PAH = Polycyclic aromatic hydrocarbon

Toxicity Equivalency Factors (TEFs) were obtained from EPA Region 4 Human Health Risk Assessment Bulletins (EPA Region 4, 2000).

ATTACHMENT B

Voluntary Cleanup Procedures Technical Memorandum

Voluntary Cleanup Procedures for Riggins School (Fairmont) & Hudson School (Collegeville) Walter Coke, Birmingham, AL

PREPARED FOR: Walter Coke

PREPARED BY: CH2M HILL

DATE: January 13, 2011

In the early fall of 2009, Walter Coke proposed to the Environmental Protection Agency (EPA) that Walter Coke voluntarily excavate soils found to contain polycyclic aromatic hydrocarbons (measured as benzo[a]pyrene equivalents [BaP EQ]) greater than 1.5 milligrams per kilogram (mg/kg) and sieved arsenic greater than 37 mg/kg at two schoolyards measured during the Residential Sampling conducted in 2009 (Riggins School) and 2010 (Hudson School). Although the source of these constituents is likely not Walter Coke, Walter Coke wished to perform these actions in an expedited manner as a good corporate citizen and to help the schools involved.

To avoid any further delay of this work and in order to begin this work in January, 2011, Walter Coke is not submitting a detailed work plan for EPA's review and approval. The purpose of this document is to provide a general description of the approach and procedures to complete this work, both for EPA and for the owner of the two schools, the Birmingham Board of Education. Of course, CH2M HILL will be following all appropriate standards, procedures and protocols for work of this type, and will coordinate with the Board of Education and the schools on the timing of work performed in the field.

Excavation

Figures 1 and 2 show the anticipated excavation areas at the Riggins and Hudson School properties, respectively. The horizontal extent of the excavation area at Riggins School is currently identified as the entire area represented by each 5-point composite sample that exceeded BaP EQ concentrations of 1.5 mg/kg. Note that Walter Coke may elect to conduct grid sampling at Riggins School to refine the area of excavation prior to initiating cleanup. The horizontal extent of the excavation in the right-yard of Hudson school is defined by one of the five subsamples comprising the 5-point composite sample because it is the only subsample that exceeded 1.5 mg/kg of BaP EQ as shown in Figure 2. Because more than one subsample of each composite sample exceeded 1.5 mg/kg BaP EQ at the other sampling locations at Hudson School, the entire 5-point composite areas will be excavated at those sample locations. Excavation at the school yards will not be performed beyond the property boundaries.

Within the identified excavation areas, the surface soil will be removed in 1-foot increments to a maximum depth of 2 feet. After each 1-foot interval, a confirmatory sample (as described below) will be collected at the base of the excavation, analyzed for PAHs, and the results compared to the cleanup level of 1.5 mg/kg BaP TEQ. If the confirmatory concentration

exceeds the screening level at a depth of 1 foot, an additional foot of soil will be removed. If the concentration again exceeds the screening level at the 2-foot sample depth, a permeable and permanent high-visibility barrier fabric will be placed into the excavation to prevent contact with those soils below the 2-foot interval. The two-foot level of clean soil, along with the barrier, also will provide a sufficient barrier to eliminate exposure at the surface to any remaining contaminants.

As an alternative to excavation in 1-foot increments with confirmatory sampling at that initial depth, Walter Coke may opt to excavate all or portions of the soils directly to a depth of 2 feet and then proceed with sampling, placement of the barrier fabric, and backfilling. This will be decided following discussions with the excavation subcontractor, based on time and cost-effectiveness. The excavations will be covered on a daily basis and high-visibility fencing will be placed around each excavation area to provide a safety barrier for school children, personnel, and/or trespassers, until the area is ready to be backfilled.

Excavated soils will be transported daily to a secure staging and storage area located within the Walter Coke facility. All construction equipment and materials will be stored in this area as well. The permanent disposal location of the excavated soils has not been determined yet.

Confirmatory Sampling and Analysis

Confirmatory samples will be collected to document the concentrations remaining at the base of the excavation using the 5-point-on-die composite sampling technique per the *Superfund Lead-Contaminated Residential Sites Handbook* (EPA, 2003) and as collected during the 2009/sampling efforts.

Samples will be submitted to a contracted laboratory for analysis of low-level polycyclic aromatic hydrocarbons (PAHs) by SW-846 Method 8270C (Table 1). Quick (two-day) turnaround time for sample results will be requested, if needed, to expedite backfilling of the excavation. If the option is available and cost-effective, Walter Coke may elect to subcontract the laboratory work to a mobile laboratory for more immediate results. Quality control samples will be collected as outlined in the *Field Branches Quality System and Technical Procedures* (EPA Region 4, October 2010).

TABLE 1
Requirements for Containers, Preservation, Sample Volumes, and Holding Times

Parameter	Analytical Methods	Container	Preservation	Sample Volume/Weight Requirements	Maximum Holding Time
Surface Soil					
PAHs – Low Level	SW8270C-LL/ 8270-SIM	4-oz glass, Teflon-lined cap	4°C	(1) 4-oz jar	40 days

Soil Replacement

Once excavation is complete, i.e., 2-feet of soil removed or receipt of confirmation sample results indicating that 1-foot excavation was sufficient, Walter Coke will backfill each property with safe certified clean fill, and replace landscaping to return the property to

substantially the same condition as prior to excavation. If certified clean fill is not readily available in the project area, the fill will be tested prior to use by sampling at a frequency of 1 grab sample per 1,000 cubic yards (yd3) to confirm that no contamination is present at levels above background.

Following the backfill and sod replacement to pre-excavation conditions, it will be the responsibility of the Board of Education and the individual schools to care for and maintain any newly installed landscaping (for example, to perform watering).

Health & Safety

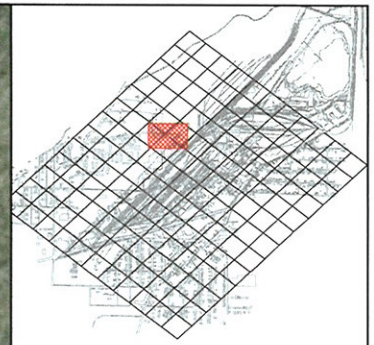
Field teams will follow a project-specific Health & Safety Plan developed in accordance with the Hazardous Waste Operations and Emergency Response, Title 29 *Code of Federal Regulations* Part 1910.120. The HSP will comply with Occupational Safety and Health Administration (OSHA); U.S. Environmental Protection Agency (EPA); and state and local health and safety regulations regarding the proposed work effort.

IDW Management

Excavated soil and any additional investigative derived waste (IDW) will be managed by Walter Coke to comply with local, state, and Federal regulations. Soil will be containerized in roll-off boxes and transported to the Walter Coke facility for analysis. One composite sample will be collected from each roll-off box for toxicity characteristic leaching procedure (TCLP) analysis before transport to an appropriate location for disposal.

Schedule

Walter Coke is in the process of obtaining permission from the Birmingham Board of Education for access and permission to perform this work at the two school locations. Assuming permission is timely obtained, Walter Coke hopes to begin remediation activities at the two schools by January 24, 2011. If Walter Coke elects to refine the excavation limits at Riggins School by conducting grid sampling, this work will be initiated prior to January 24, to allow time to obtain the results prior to excavation at the school. The remediation work, as described above, is expected to take approximately 3 weeks to complete, including documentation of confirmatory sample results.



LEGEND

Offsite Sample Locations

- Arsenic (sieved) > 37 mg/kg
- BaP Equivalents > 1.5 mg/kg
- Both Arsenic (sieved) and BaP Equivalents exceed screening value
- Screening value not exceeded
- Denotes Priority Sample Locations
- Site Boundary

(3.54) As or BaP Equivalents Concentration (mg/kg)

Notes:

1. mg/kg = milligrams per kilogram
2. BaP = Benzo(a)pyrene (as shown in Figure, BaP also represents BaP Equivalents)
3. As = Arsenic (sieved)

0 30 60 120 Feet

1 inch = 100 feet

N

FIGURE1
Proposed Excavation at Riggins School

Walter Coke Inc.
Birmingham, Alabama

CH2MHILL

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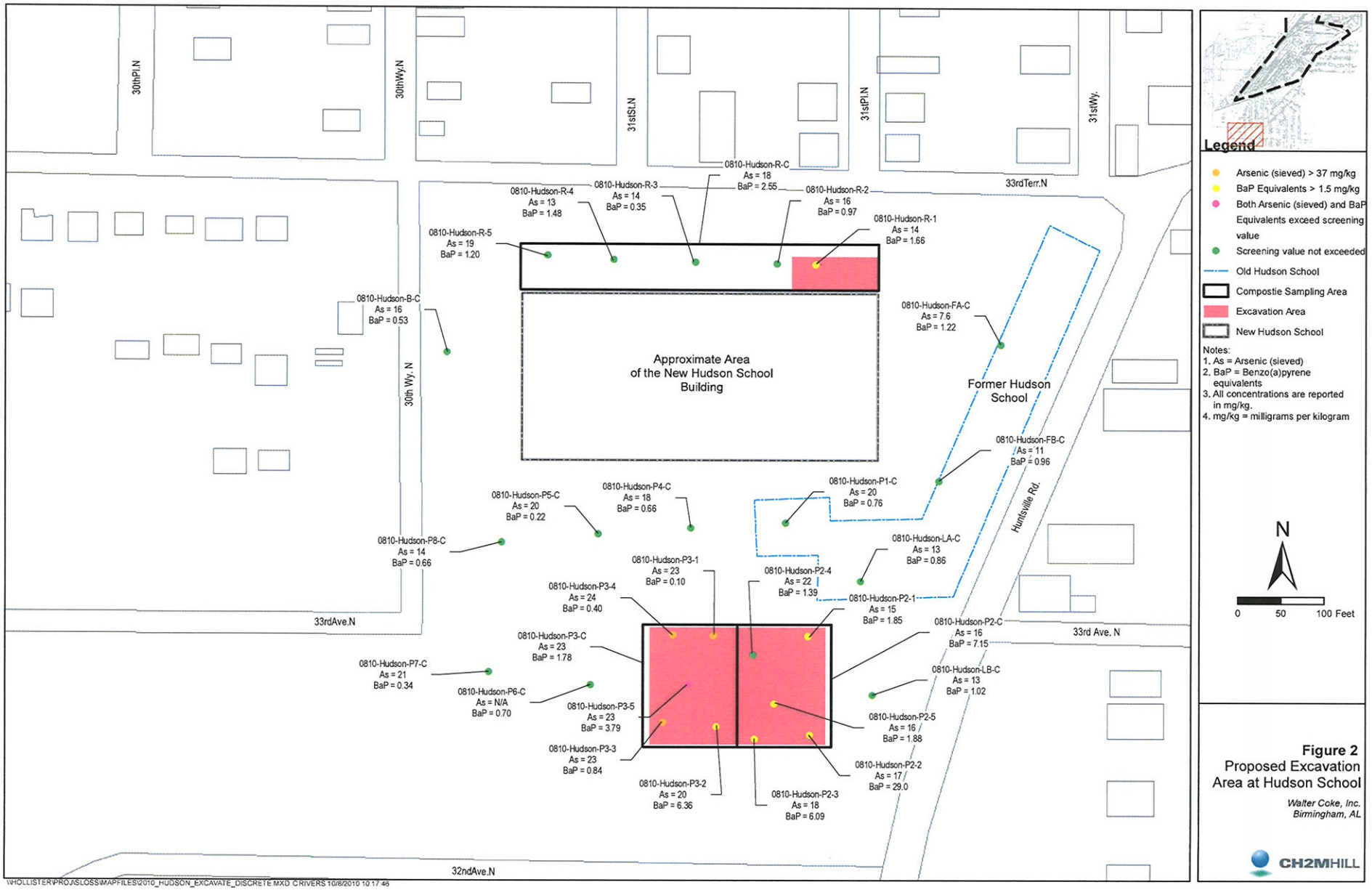

Figure 2
Proposed Excavation Area at Hudson School

Walter Coke, Inc.
Birmingham, AL

CH2MHILL

ATTACHMENT C

Direct Mail Postcard

Walter Energy DM ƒ.indd 1 4/1/11 12:00 PM

WALTER ENERGY™

WALTER COKE

600 University Park Place
Suite 200
Birmingham, AL 35209

PRSRT STD
US POSTAGE
PAID
BIRMINGHAM, AL
PERMIT# 2002

Dear Neighbor,

Walter Coke is voluntarily performing some soil removal and replacement in and around Hudson Elementary and Riggins Alternative School. You may see workers, bulldozers and trucks in these locations as they perform this work.

This is part of a process that led to the discovery of varying levels of arsenic and PAHs (polycyclic aromatic hydrocarbons) in the areas of Collegeville, Fairmont and Harriman Park. Walter Coke does not believe the arsenic and PAHs at these locations and the two school sites came from its operations; in fact, the process has not been to identify what the source or sources might be, but rather just to find out if these substances are in the soil and if they are at levels that require removal. Indeed, the PAHs at Riggins appear to have as their source tar from the roof of the school. However, Walter Coke wants to be proactive and to help the schools in question. In any event, this process has been a cooperative effort with the EPA to find both short- and long-term solutions to the presence of these substances.

At the school sites, we are removing soil that has certain levels of either substance, and replacing it with clean soil. We are transporting the excavated soil in an environmentally responsible way and delivering it to designated facilities for proper disposal. Measures to ensure the safety of the children will be taken at all steps of the work.

We anticipate this process at Riggins and Hudson to begin shortly, and to be completed in one to two months.

We care about you and our community, and we'll keep you apprised of any further developments. If you have questions, call Jim Henry at (205) 808-7920.

Walter Energy DM ƒ.indd 2 4/1/11 12:00 PM

ATTACHMENT D

Photographs

Northern Excavation Area Photographs

1. Pre-excavation at northern portion of the Hudson school (East facing).

2. Clean fill being placed above geotextile fabric barrier in the excavation at the northern portion of the school.

3. Post-excavation at the northern portion of Hudson school (East facing).

Southern Excavation Area Photographs

4. Pre-excavation at the southern area of Hudson school (north-east facing).

5. Concrete footing in area hand-excavated area over the retention unit.

6. Asphalt debris uncovered in the northwestern portion of the larger southern excavation area.

7. Clean fill being placed above geotextile fabric barrier in the southern area excavation.

8. Post-excavation at southern area of Hudson school (north-east facing).