WORK PLAN FOR
SOIL SITE CHARACTERIZATION

CIRCLE K STORE #2706035
(FORMER SUNMART #12)
2105 WEST 4TH AVENUE
KENNEWICK, WASHINGTON

PREPARED FOR:

CIRCLE K STORES INC.
255 EAST RINCON, STE. 100
CORONA, CALIFORNIA 92879

SUBMITTED TO:

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
15 WEST YAKIMA AVENUE, SUITE 200
YAKIMA, WASHINGTON 98902

PREPARED BY:

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BLAES PROJECT #202-06035-02

APRIL 8, 2013

This *Work Plan For Soil Site Characterization* has been prepared by Blaes Environmental Management, Inc. for the exclusive use of Circle K Stores Inc. as it pertains to Circle K Store #2706035 located at 2105 West 4th Avenue in Kennewick, Washington. Our professional services have been performed using that degree of care and skill ordinarily exercised under similar circumstances by other geologists, engineers, and environmental consultants practicing in this field. No other warranty, express or implied, is made as to the professional advice in this report. *Any use of or reliance on this report by a third party shall be at such a party's sole risk.*

Blaes Environmental Management, Inc. can offer no assurances and assumes no responsibility for site conditions or activities outside the scope of the inquiry requested by Circle K Stores Inc. as outlined in this document. It should be understood by all parties that Blaes Environmental Management, Inc. has relied on the accuracy of documents, oral information, and other materials, services, and information provided by Circle K Stores Inc., subcontractors, and other associated parties. Any subsequent modification, revision or verification of this report must be provided in writing by Blaes Environmental Management, Inc.

All work associated with this project will be performed under the supervision of a State of Washington Licensed Geologist.

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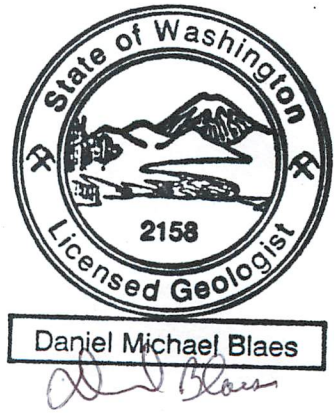

Blaes Project #202-06035-02

April 8, 2013

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1.0 INTRODUCTION

This workplan was prepared by Blaes Environmental Management, Inc. (Blaes Environmental), on behalf of Circle K Stores Inc. (Circle K) for Circle K Store #2706035 (formerly Sunmart #12) located at 2105 West 4th Avenue in Kennewick, Washington (Figure 1). The workplan is in response to detections of petroleum hydrocarbon concentrations in soil found during a real estate due diligence drilling program conducted at the former Sunmart #12 property in 2012.

In August 2012, Blaes Environmental conducted a subsurface Environmental Due Diligence Site Assessment Program at the former Sunmart #12 property prior to the purchase by Circle K. The Site Assessment Program involved; (1) drilling and collecting soil and groundwater samples from one soil boring adjacent to the underground storage tank (UST) basin; and (2) drilling two angled soil borings and collecting soil samples adjacent to the existing dispensers.

Based on the Site Assessment Program findings, Blaes Environmental confirmed through laboratory analysis the presence of gasoline and diesel range organic concentrations (GRO and DRO), as well as volatile organic compounds (VOCs) in the soil below the eastern dispenser island at the site.

A petroleum hydrocarbon release notification was filed with the Washington Department of Ecology (WDOE) by Sun Pacific Energy (owner of the Sunmart store at that time) based on the results of the investigation. Following a review of the release notification and the Site Assessment Report, the WDOE issued an Early Notice Letter to Circle K on March 29, 2013. The letter is presented in Appendix A.

In response to the WDOE notification, Circle K proposes to conduct a site characterization program at the property to determine the vertical and lateral extent of petroleum hydrocarbon concentrations in soil beneath Dispenser #3/4. The site characterization program will include: permitting, drilling, and sampling three soil borings triangulated around the eastern dispenser island, laboratory analysis of soil samples, and preparation of a site characterization report documenting the activities.

2.0 BACKGROUND INFORMATION

This section presents information regarding the site and provides a summary of the site background. The information was obtained from public records, the project files of Blaes Environmental, and the records of Circle K.

2.1 SITE LOCATION AND LAND USE

The property is located on the southwest corner of the intersection of 4th Avenue and Vancouver Street in Kennewick, Washington. The property is within Section 2, Township 8 North, Range 29 East of the Pasco Washington U.S. Geological Survey 7 ½ -minute Topographic Quadrangle. The property consists of a concrete and asphalt-paved lot with one existing single-story building (the Sunmart Store) and two product dispensers. The site features are shown on the Site Plan in Figure 2. Global Positioning System (GPS) readings locate the site at approximately latitude 46 degrees, 12 minutes, 20.10 seconds North and longitude 119 degrees, 08 minutes, 55.30 seconds West as measured on Google Earth 2013.

The area surrounding the site consists of a mixture of commercial businesses and residential developments. Commercial businesses are located south, west, and southwest (Midtown Plaza) of the site. Residential developments are located directly across 4th Avenue to the north, across Vancouver to the east, across the intersection to the northeast, and behind the strip mall (Midtown Plaza) west, south, and southwest of the site.

2.2 SITE PHYSIOGRAPHY

The property lies at an elevation of approximately 444 feet above Mean Sea Level (Google Earth 2013). Natural surface drainage in the area is towards the east-northeast (U.S. Geological Survey 7 ½ -minute Topographic Quadrangle). On-site drainage is predominantly towards the north and east away from the building structure and into the streets.

2.3 REGIONAL GEOLOGY AND HYDROGEOLOGY

The site is located within the Columbia Basin**,** also known as the Columbia Plateau, which is a vast area in eastern Washington, southwestern Idaho, and northern Oregon. The physiographic province is characterized by incised rivers, extensive plateaus, and anticlinal ridges rising to 4,000 feet above sea level. The region is underlain by Miocene Columbia River Basalt Group rocks and interbedded Neogene terrestrial sediments.

Data about what lies under the Columbia River basalts are sparse. Along the Idaho border south of Spokane, steptoes that once were mountain tops consist of Precambrian Belt Supergroup sedimentary rocks and metamorphosed Cretaceous granites. These mountains were enveloped by Miocene basalts so that only the summits remain above the lava flows. Deeply weathered granites support a clay mining industry, and a cassiterite deposit is known just south of Spokane.

Even less is known about the pre-Miocene basement in the central and western parts of the Columbia Basin. The only information available is from seven petroleum exploration wells that have penetrated the basalt and from projections of geology from the margins of the basin. Along the margins, Paleogene fault-bounded basins are filled with thick sequences of arkose, volcaniclastic rocks, and coal. Drilling has demonstrated that in a general way these sedimentary basins extend southward under the Columbia River basalts. The subsurface geology changes near the Snake River. A 1987 exploratory well drilled 20 miles northeast of Pasco penetrated a thin Paleogene crystal tuff section before encountering Triassic or Jurassic chloritic metamorphic rocks at an approximate depth of 8,000 feet.

The Columbia basin province is best defined by the areal extent of the Miocene Columbia River Basalt Group rocks. These basalts, which are present in the Blue Mountain uplift as well as in the Columbia Basin, cover 36 percent of the entire state. The group consists of four flood basalt formations, starting with the Imnaha Basalt at 17.5 Ma, followed by the Grande Ronde Basalt (16.5 to 15.6 Ma), the Wanapum Basalt (15.6 to 14.5 Ma), and lastly the Saddle Mountains Basalt (14.5 to 6 Ma). On the basis of geophysical evidence, the basalts are known to reach a maximum thickness of 16,000 feet in the Pasco Basin.

The greatest volume of basalts was erupted before 15.5 Ma. These flows have similar appearances; techniques have been developed, however, to fingerprint individual basalt units using whole-rock geochemistry and magnetic polarity. Within the Grande Ronde Basalt, individual flows exceed 480 cubic miles (2,000 km3) in volume. The flows were extruded from vents and northwest-trending fissures east of Pasco and in the southeast corner of the state. The flows were extremely fluid, and as a result a number of them reached the Pacific Ocean via the ancestral Columbia River drainage.

During the Pliocene and the Pleistocene, gravel, sand, silt, and clay were deposited in lakes or by aggrading streams and rivers in depressions such as the Pasco Basin, where 1,000 feet of sediment lies

on top of the basalt. Glacial outwash during the Pleistocene produced huge volumes of wind-blown silt called loess. It blankets much of the Columbia Basin and in places is up to 200 feet thick.

The Columbia Basin was the scene of the greatest catastrophic floods ever documented in the geologic record. The Pleistocene Cordilleran ice sheet advanced south into Idaho, damming the Clark Fork River at the Montana border. A huge impoundment, called Lake Missoula, formed. The lake had the volume of present-day Lake Michigan and was 2,000 feet deep at the dam. The ice dam repeatedly gave way between 12,700 and 15,300 years ago, releasing waters that caused unprecedented flooding. Water raced down the Spokane Valley and spread out over the Columbia Basin. The maximum flow rate was estimated at 15 cubic miles (62.5 km3) per hour--a rate 15 times the combined flow of all the rivers of the world. During the floods the surface of the land was greatly modified. Anastomosing channels were cut through the loess blanket and into basalt, leaving a jumbled topography of coulees, buttes, mesas, dry water falls, hanging valleys, and giant ripples. These geomorphic features are known collectively as the Channeled Scablands. The events are called the Great Spokane Floods.

2.4 SENSITIVE RECEPTORS

The Columbia River is approximately 6,600 feet northeast of the site. There are no surface water bodies or wetlands within one-mile of the site. Residential developments are located directly across 4th Avenue to the north, across Vancouver to the east, across the intersection to the northeast, and behind the strip mall (Midtown Plaza) west, south, and southwest of the site.

The Westgate Elementary school is located approximately 1,522 feet west-northwest of the site. The Heritage Pre-School-Kindergarten is located approximately 3,737 feet southeast of the site. The Saint Joseph School is located approximately 4,533 feet east of the site. The Amistad Elementary School is located approximately 4,500 feet east-northeast of the site. The Legacy High School is located approximately 4,450 feet east of the site. Jeanette's Day Care is located approximately 4,450 feet south-southwest of the site. The Bethlehem Lutheran School is located approximately 6,560 feet southeast of the site. The Park Middle School is located approximately 5,200 feet east-northeast of the site. The God Loving Day Care Center is located approximately 5,850 feet southwest of the site. The Vista Youth Center is located approximately 2,770 feet northwest of the site. The Beyond the Rainbow Day Care is located approximately 1,510 feet east of the site.

2.5 PREVIOUS INVESTIGATIONS

Previous investigations conducted at the site include an Environmental Due Diligence Site Assessment conducted in August 2012. The objectives of that Site Assessment Program were to gather geologic and hydrogeologic data from the site to evaluate whether or not petroleum hydrocarbon constituents exist at specific locations in the subsurface soil or groundwater. The Site Assessment Program involved; (1) drilling and collecting soil and groundwater samples from one soil boring adjacent to the east side of the UST basin (boring B-1) and (2) hand augering two angled soil borings and collecting soil samples adjacent to the existing dispenser islands (Borings D-1/2 and D-3/4).

Based on the Site Assessment Program findings, Blaes Environmental confirmed, through laboratory analysis, the presence of GRO, DRO, and VOC concentrations in the soil below the easternmost dispenser island at the site (Boring D-3/4).

2.6 SITE LITHOLOGY AND DEPTH TO GROUNDWATER

Based on soil samples collected from the soil borings drilled during the due diligence drilling program, subsurface soils consist of silt with a trace of fine sand from the ground surface to approximately 10 feet below ground surface (bgs). Cobbles, gravel and phaneritic, silty sand were found at approximately 14 feet bgs and continued through to approximately 25 feet bgs. From a depth of approximately 25 feet to the total depth of boring B-1 (approximately 57 feet bgs), site soils consisted of sandy silty clay to fine grained sand. Auger refusal was encountered at approximately 57 feet bgs in boring B-1 which was determined to likely be bedrock. Groundwater was not observed during the entire length of the soil boring.

3.0 PROPOSED SITE CHARACTERIZATION PROGRAM

Circle K is proposing to conduct a site characterization program to drill three soil borings around the eastern dispenser area to determine the vertical and lateral extent of petroleum hydrocarbons in soil beneath this area.

The site assessment program will include, but not be limited to: 1) regulatory permitting to drill the soil borings 2) drilling and soil sampling; 3) collection and laboratory analysis of soil samples from the borings; and 4) the preparation of a site characterization report documenting the activities. Details of the proposed site characterization program are provided in the following sections.

3.1 SOIL BORING PERMITTING

Blaes Environmental will prepare the required permits for drilling the proposed borings to greater than 10 feet bgs. The permits will be obtained from the appropriate agency, kept on site during all drilling operations, and a copy included in the site characterization report.

3.2 SITE-SPECIFIC HEALTH AND SAFETY PLAN

Prior to initiating field activities, Blaes Environmental will produce a site-specific health and safety plan (HASP) for the site. The HASP will include a list of potential chemical and physical hazards, health and safety policies and practices, and emergency contingencies, including contact information for police, medical, and fire. A copy of the HASP will be kept on-site during all field activities. Before initiating field activities, a health and safety meeting will be conducted and the HASP will be reviewed and signed by all Blaes Environmental personnel and subcontractors. The HASP will conform to OSHA HAZWOPER requirements (29 CFR 1910.120).

3.3 UNDERGROUND UTILITY LOCATION/CLEARING AND STORE NOTIFICATION

An underground utility locator service will be contracted to mark underground utilities at the site that may be present near the proposed drilling locations. The utility survey will be completed within one week prior to conducting field work. Prior to drilling, the drilling crew will clear the boring location with hand tools to a depth of approximately five feet bgs. This will be performed as a precautionary measure to minimize the possibility of accidental damage to existing underground utilities.

Concurrent with the utility line locating process, Blaes Environmental contacted the store manager a

minimum of 48 hours prior to drilling at the site. Blaes Environmental will describe the Site Characterization Program's scope of work to the store manager and will indicate that Blaes Environmental and the drilling contractor would work diligently to minimize the impact to the Sunmart business during the subsurface investigation. The store manager will be informed that Blaes Environmental intends on completing the assessment program within one day.

3.4 SOIL BORING DRILLING

The site characterization program will involve the drilling of three soil borings around dispenser D-3/4 to determine the vertical and lateral extent of petroleum hydrocarbons in soil beneath the eastern dispenser. The approximate soil boring locations are shown on Figure 2. The tasks to complete the site characterization are presented in the following sections.

3.4.1 Soil Boring Drilling and Sampling

A State of Washington-licensed drilling company will be contracted to drill three soil borings in the eastern dispenser area using a low clearance drill rig that can drill beneath a canopy. The soil borings will be drilled to a depth of approximately 55 feet bgs based on the depth of auger refusal during the due diligence site assessment program conducted at the site.

During drilling, soil samples will be collected at five-foot depth intervals beginning at a depth of approximately five feet. Soil samples will be collected using a modified California split-spoon soil sampler or equivalent. The soil samples will be logged using the Unified Soil Classification System (USCS) and will be screened using a calibrated photo-ionization detector (PID) to detect for the presence of VOCs. In addition to the PID measurements, Blaes Environmental will log the number of blow counts needed to sample at each sample horizon and prepare a lithologic log for each boring.

Upon sample collection, the sample sleeve will be removed from the split spoon sampler. A small quantity of soil will be subsequently removed from the sleeve using a Terra Core "T" sampler and added to a laboratory supplied vial containing methanol in accordance with sampling guidelines for Environmental Protection Agency (EPA) Method 5035. A second quantity of soil will be removed from the sleeve and placed into a laboratory-supplied glass sample jars. Both the methanol vials and glass jars will be labeled with pertinent project information, placed in sealable plastic bags, and placed on ice in a cooler. A written record of each sample will be entered onto a chain-of-custody record for transport to TestAmerica in Seattle, Washington for laboratory analysis. The drilling and soil sampling

equipment, procedures, and quality assurance methods used during the drilling program are included in Appendix B.

3.4.2 Laboratory Analysis of Soil Samples

Soil samples collected during the site characterization program will be delivered by Blaes Environmental, under proper chain-of-custody record, to TestAmerica in Seattle, Washington (with assistance from the Test America laboratory in Richland, Washington). Soil samples from the soil borings will be analyzed for NWTPH-GX volatile GRO, NWTPH-DX semi-volatile DRO, and for VOCs including Benzene, Toluene, Ethylbenzene, & Total Xylenes (BTEX) and fuel oxygenates including methyl-tert butyl ether (MTBE). Select soil samples may also be analyzed for ethylene dibromide (EDB) according to EPA Method 8260. The laboratory results and a copy of the laboratory report (including quality control/quality assurance documentation, and chain-of-custody record) will be included in the site characterization report.

3.5 DERIVED WASTE MANAGEMENT

Soil waste generated during the drilling program will be stored in a rolloff bin or DOT-approved 55-gallon drums pending profile analysis and disposal. Waste water generated during decontamination activities will be stored on-site in properly labeled DOT-approved 55 gallon steel drums, or a poly tank, pending removal and disposal. Composite samples will be collected and analyzed at Test America in Seattle, Washington to profile the waste for proper disposal. Following the successful completion of the profiling process, the waste will be removed from the site. Copies of the profile and disposal documentation will be included in the site characterization report.

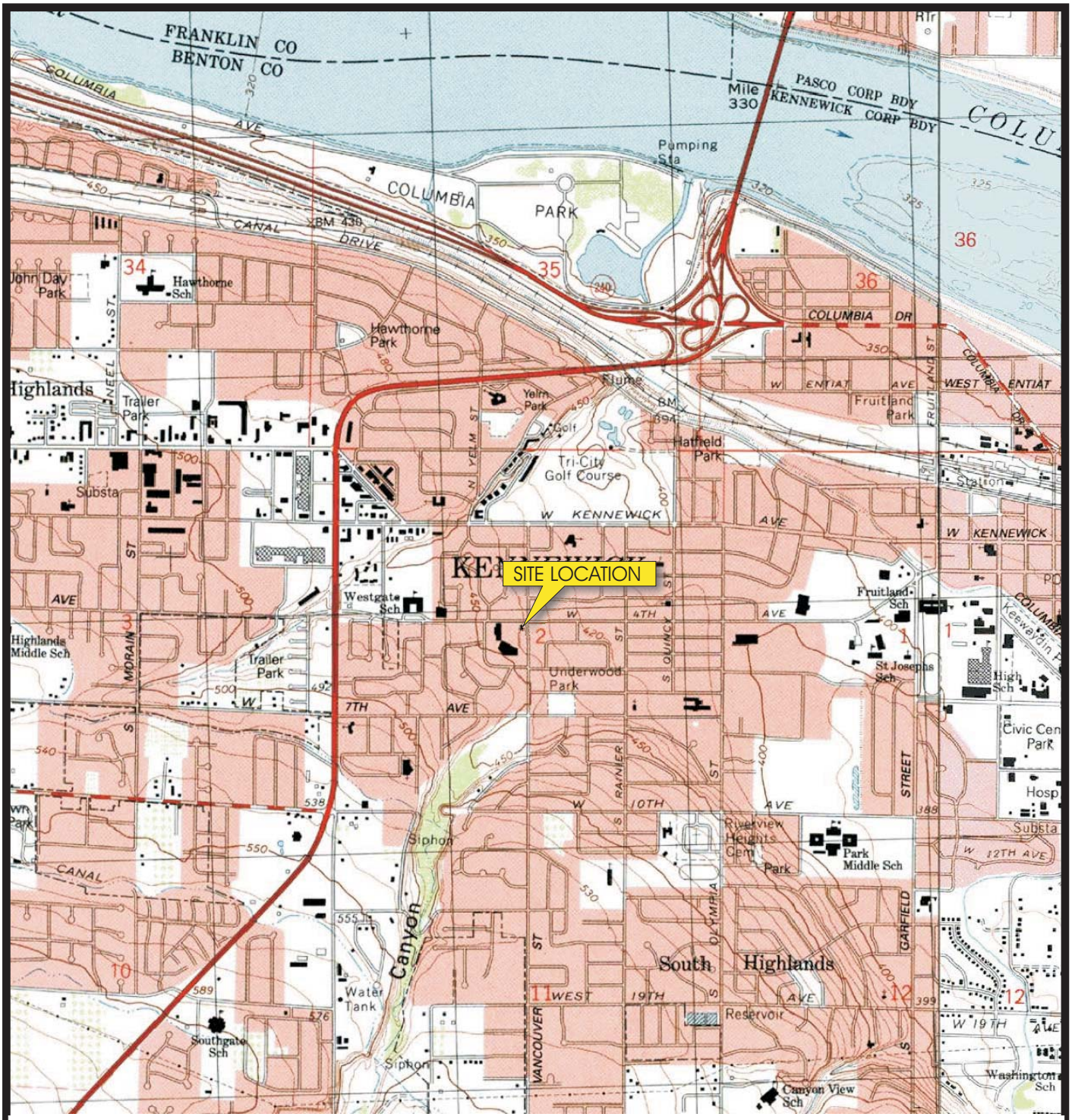
3.6 REPORT PREPARATION

Following completion of field activities, Blaes Environmental will evaluate the data and prepare a site characterization report that will document the activities conducted at the site and present the findings of the site characterization program. The site characterization report will be submitted to the State of Washington Department of Ecology following completion.

4.0 REFERENCES

Lasmanis, Raymond, 1991, The geology of Washington: Rocks and Minerals, v. 66, no. 4, p. 262-277. © Copyright Heldref Publications (Helen Dwight Reid Educational Foundation).

FIGURES



Source: MapTech Terrain Navigator Kennewick Quadrangle, 7.5 Minute Topographic Series, 1992

QUADRANGLE LOCATION

Approximate Scale
1:24,000
1 inch = 2000 feet

0 1000 2000 3000 4000

Contour Interval = 10 feet

SITE LOCATION: T8N, R29E, Section 2
46° 12′ 20.26″ North Latitude; 119° 08′ 55.44″ West Longitude

Blaes ENVIRONMENTAL

Couche-Tard
Circle K Stores, Inc.

Circle K Store #2706035
2105 W. 4th Avenue
Kennewick, WA

SITE LOCATION MAP

April 2013	Project #202-06035-02	Figure 1

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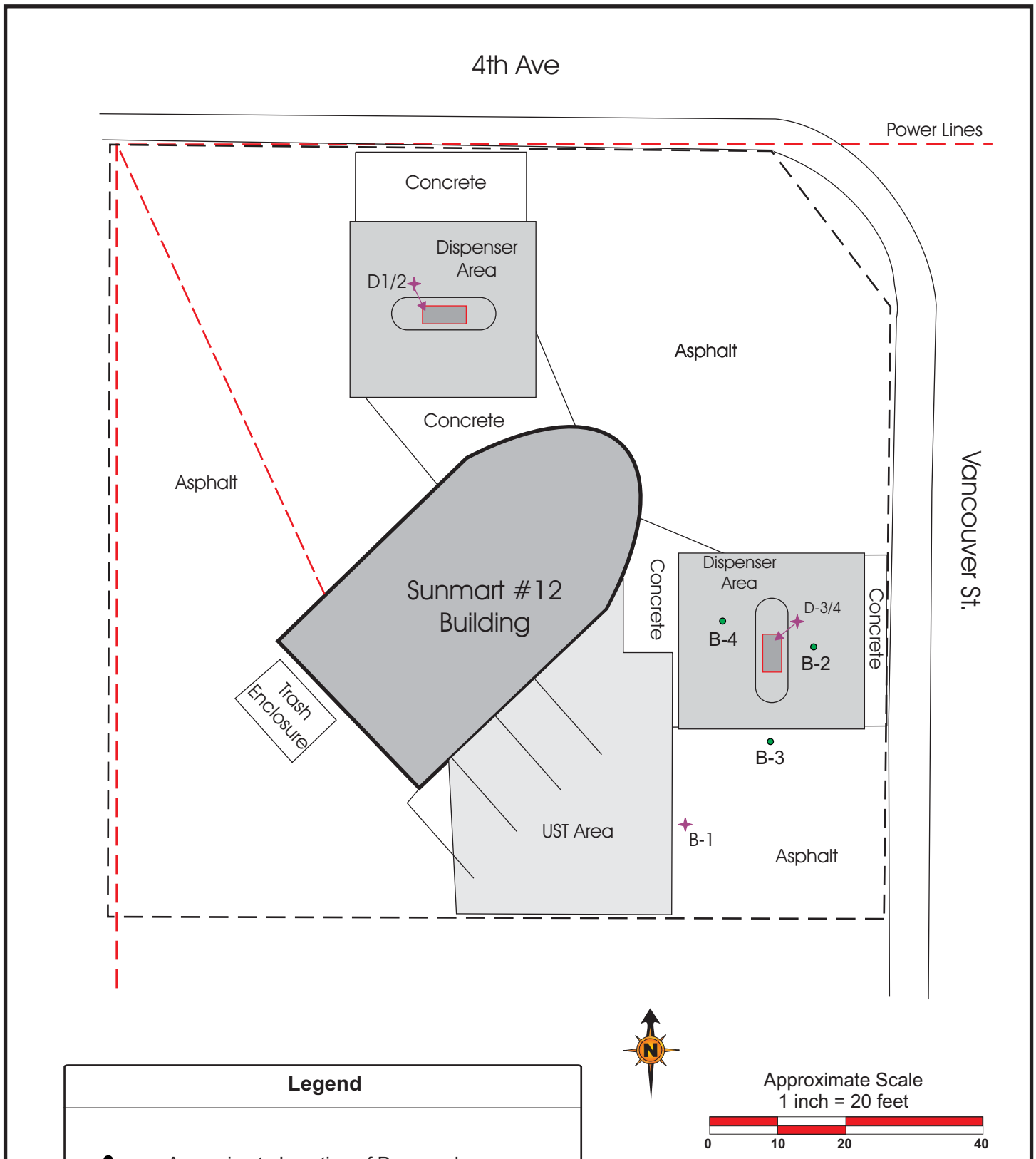

Legend

- B-1 — Approximate Location of Proposed Soil Boring & ID
- B-1 — Approximate location of Soil Boring & ID
- D-1/2 — Approximate location of Angled Soil Boring & ID

Blaes ENVIRONMENTAL

Couche-Tard Circle K Stores, Inc.

Circle K Store #2706035
(Former Sunmart #12)
2105 West 4th Avenue
Kennewick, Washington

SITE PLAN

April 2012 | Project #202-06035-02

P:\Technical\202CKWashington\202-06035-02\Site Characterization Work Plan\Site Location Map

Figure 2

APPENDICES

APPENDIX A

WDOE LETTER TO CIRCLE K

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
15 W Yakima Ave, Ste 200 • Yakima, WA 98902-3452 • (509) 575-2490

2706035

March 29, 2013

Circle K Stores, Inc.
Attn: Greg Grover
255 East Rincon, Suite 100
Corona, CA 92879

RE: Early Notice Letter Regarding the Release of Hazardous Substances

- Site Name: Sun Mart 12
- Site Address: 2105 West Fourth Avenue, Kennewick
- Assessor's Parcel No.: 102893000001000
- Facility/Site ID No.: 32581878
- Cleanup Site ID No.: 12052

Dear Mr. Grover:

Under Chapter 70.105D Revised Code of Washington (RCW), upon receiving a report of a release or threatened release of a hazardous substance that may pose a threat to human health or the environment, the Department of Ecology (Ecology) is required to conduct an Initial Investigation.

Ecology received a report on December 3, 2012 from Blaes Environmental Management, Inc. titled *Environmental Due Diligence Site Assessment Report SunMart #12 2105 West 4th Avenue Kennewick, Washington*. Soil samples collected exceeded Model Toxics Control Act (MTCA) Method A cleanup levels for gasoline, diesel, and napthalenes. Xylenes were also detected, but below cleanups levels.

Under the MTCA, Ecology maintains a statewide database of confirmed or suspected contaminated sites. This database is made available to the public upon request and online at http://www.ecy.wa.gov/programs/tcp/sites_brochure/SiteLists_CSCSinstr.htm. It is Ecology's decision that the above-referenced property will be added to this database because soil and potentially groundwater are contaminated at the site.

Please note that inclusion in the database does **not** mean that Ecology has made a determination regarding the identification of any potentially liable person(s) under the Model Toxics Control Act (administered under Chapter 173-340 WAC).

It is the policy of the Department of Ecology to work cooperatively with persons to accomplish prompt and effective site cleanups. Ecology prefers to achieve site cleanup cooperatively through independent cleanup actions (WAC 173-340-510). Cooperating with Ecology in planning or conducting remedial actions is not an admission of guilt or liability.

In proceeding with an independent cleanup, please be aware that there are requirements in state law which must be adhered to. In particular, WAC 173-340-300(4) requires a report of independent actions. To the extent known, the report shall include:

1. identification and location of the hazardous substance(s)
2. circumstances of the release and discovery
3. remedial actions planned, completed, or underway

More requirements of independent cleanup actions are discussed in WAC 173-340-120(8)(b). Ecology will use the appropriate requirements contained throughout this chapter in its evaluation of the adequacy of any independent remedial actions performed.

You are encouraged to contact Ecology for limited informal advice and assistance. For technical assistance you are advised to hire an environmental consultant with the appropriate expertise. For a description of the process for cleaning up a site under MTCA, please refer to the enclosed fact sheet.

If you would like Ecology to review the independent cleanup actions conducted and determine if the site warrants **no further action**, you are encouraged to participate in the Voluntary Cleanup Program (VCP). Information about the Voluntary Cleanup Program is available online at http://www.ecy.wa.gov/programs/tcp/vcp/Vcpmain.htm, or you may contact Frosti Smith, CRO VCP Coordinator, at (509) 454-7841.

If you have any questions regarding this letter, please feel free to contact me at (509) 454-7835.

Sincerely,

Matthew V. Durkee

Matthew Durkee
Site Manager
Toxics Cleanup Program

Enclosure

By certified mail: 7009 2250 0004 4950 5200

APPENDIX B

DRILLING, SOIL SAMPLING, AND BORING ABANDONMENT PROCEDURES

DRILLING, SOIL SAMPLING, AND BORING ABANDONMENT PROCEDURES

1.0 DRILLING PROCEDURES

1.1 Drilling Equipment

Soil borings drilled around the UST area will be drilled using a truck-mounted hollow-stem auger drilling rig (Model CME-75). The drilling rig will be outfitted with hollow-stem auger flights five feet in length. The drilling rig will be equipped with all additional tools and support equipment necessary to complete each soil boring to the desired depth.

1.2 Drilling Procedures

Prior to drilling, a utility search will be conducted for each boring. The utility search will involve hand augering to a depth of approximately five feet below the ground surface. After the utility search, the drilling rig will be positioned at the drilling location and stabilized using four hydraulic leveling pistons. After the drilling rig is seated and stable, the mast will be raised into position. The hollow-stem augers will be advanced until reaching each target sampling depth. When the target sampling depth is reached, the top auger flight will be disconnected from the drive assembly near the ground surface and the sampling equipment will be placed down the borehole using a wireline and a downhole drive hammer. Following soil sample collection, the auger flights will be reconnected and drilling proceeded to the next sampling depth. This process will continue until the total depth of the boring was reached and all of the desired soil samples were collected.

1.3 Drilling QA/QC

All drilling equipment, including the rig, hollow-stem auger flights, and hand-auger assembly, will be decontaminated prior to arriving at the site and after completing each boring to prevent cross-contamination. The equipment will be steam cleaned, rinsed with water, and allowed to air dry.

2.0 SOIL SAMPLE COLLECTION AND PRESERVATION PROCEDURES

2.1 Qualifications of Sampling Personnel

All soil samples will be handled by personnel from Blaes Environmental. Blaes Environmental personnel have drilled over 650 soil borings, collected over 1,400 soil samples, and have installed over 270 groundwater wells in the last 10 years. Further, Blaes Environmental maintains up to date information on regulatory requirements and standards relating to soil and groundwater sampling.

2.2 Soil Sampling Equipment

Soil samples collected by the drilling rig will be collected using the drilling drive hammer and accessories. Soil samples collected from any hand augered borings were collected directly from the bucket or using a Modified California split-spoon sampler consisting of an outer sampling barrel lined with three 6-inch long brass sample rings. When the drive hammer is used, the sample rings will be placed inside the split barrel halves, which will be held in place by a bottom drive shoe and an external top sub. Soil Samples collected from the hand-augered soil borings, if any, will be collected using a non-mechanized drive sampling equipment consisting of solid-stem rods attached to a 30-pound drive hammer and drive shoe (containing a six-inch brass sample ring).

2.3 Soil Sampling Procedures

Soil samples will be collected at approximate 5-foot depths within each boring, typically beginning at a depth of approximately 5 feet below the ground surface. After drilling to the desired sampling depth, the split-spoon or drive sampler will be attached to the wireline or rods and lowered through the

hollow-stem augers. The sampler will be driven approximately 12 to 18-inches into undisturbed soil by the drive hammer for the samples collected by the drilling rig and driven approximately six-inches into undisturbed soil by the drive hammer for the samples collected in any hand-augered borings. The number of hammer blow counts was recorded on the lithologic log sheets.

After the sampler is retrieved, the sample rings will be removed from the sample barrel/shoe. Blaes Environmental will submit the soil from the lead sample sleeve (some prepared with methanol) for laboratory analysis. Samples will be labeled, placed in sealable plastic bags, and placed on ice in a cooler. A written record of each sample will be entered on a Chain-of-Custody, a copy of which will remain with the samples until it arrives at the analytical laboratory. The lithologic characteristics of the soil from the upper sample rings will be described using the Unified Soil Classification System (USCS).

2.4 Decontamination Procedures During Soil Sampling

All sampling equipment will be decontaminated prior to arriving on site and between each sampling depth to prevent cross-contamination between samples. The sampling equipment will be washed with a laboratory soap solution, rinsed twice with tap water, and allowed to air dry.

2.5 Methods Used to Prevent Volatile Losses During Sampling Program

Following retrieval of the sampler, a member of the drilling crew will hand the sampler to the Blaes Environmental field personnel. Blaes Environmental will remove the sample sleeves from the sampler and immediately seal the ends of each ring with plastic end caps placing the samples into the ice chest. In some cases, the samples will be prepared using EPA Method 5035 with methanol.

2.6 Methods Used to Preserve the Samples Until Delivery to the Laboratory

All samples will be stored in the cooler or sample refrigerator (chilled to approximately 33 degrees Fahrenheit) by Blaes Environmental for pick up by the laboratory the following morning or will be directly delivered from the site to the laboratory. All samples will be stored on ice in a cooler during transport.

2.7 Chain-of-Custody Documentation

All soil samples will be logged onto a Chain-of-Custody record in the field. When the samples are picked up by the laboratory, each sample will be transferred directly to an ice chest for transport to the laboratory. The laboratory member that transfers the samples will also sign the Chain-of-Custody verifying that the samples were properly delivered in-tact and chilled.

3.0 SOIL BORING ABANDONMENT PROCEDURES

Soil cuttings from each soil boring will be used as backfill to abandon the soil boring if the boring is drilled to less than 10 feet below the ground surface. Soil borings that extend below 10 feet will be grouted and the soil cuttings properly disposed of offsite.