

Summary: 5015 Spectrum Drive Environmental Reports

The following information is a summary of the environmental reports related to the property located at 5015 Spectrum Drive. The property at 5015 Spectrum Drive was recently rezoned by the Town of Addison from Commercial to a Planned Development to allow a Multi-Family Residential project by AMLI. The document is structured in a way to help the “layperson” understand the following:

- The types and purpose of Environmental Site Assessments (explained in the section entitled, *Environmental Reports*);
- The purpose and process of the TCEQ Volunteer Cleanup Program (explained in the section entitled, *TCEQ Voluntary Cleanup Program (VCP)*);
- The history related to the property located at 5015 Spectrum Drive and related environmental reports, as well as the history related to relevant properties adjacent to 5015 Spectrum Drive and related environmental reports (explained in the section entitled, *Background – 5015 Spectrum Drive*); and
- The conclusion that was reached by the TCEQ on the acceptability of residential land uses on the property located at 5015 Spectrum Drive (explained in the section entitled, *Conclusion*).

Environmental Reports

An Environmental Site Assessment (ESA) is a report prepared for a real estate holding that identifies potential or existing environmental contamination liabilities. There are different levels of environmental site assessments that are pursued to ensure properties are environmentally acceptable for various types of uses. The standard environmental site assessments include:

- Phase I
- Phase II – Limited
- Phase II – Comprehensive

Phase I

The goal of the Phase I ESA is to determine if there are any situations on the site that meet the definition of a Recognized Environmental Condition (REC). A REC is defined as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property.

A REC doesn't necessarily mean that there is contamination, just that it is possible. The finding of a REC often requires further investigation of the REC to determine if there has been any environmental impact.

Each Phase I Environmental Site Assessment follows the same four-stage process:

1. Records Review
2. Site Reconnaissance
3. Interviews
4. Report Preparation

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Phase II – Limited

Once a Phase I ESA is complete, typically a “limited” Phase II environmental study is performed to confirm the presence of a pollutant. If a pollutant is detected, then a property owner (or potential buyer) will have to decide whether or not to conduct a comprehensive phase II study.

A common procedure in a land transaction is for an owner/buyer to conduct a Limited Phase II ESA to determine:

1. If the Recognized Environmental Condition (REC) is minor or inconsequential
2. If the REC is confirmed and may pose more of a risk than the buyer is willing to accept
3. If the REC is confirmed and more study is needed to quantify the extent of pollutants discovered in order to make an appropriate decision

If decision 3 is selected, a follow-up Comprehensive Phase II ESA would be conducted.

Phase II – Comprehensive

A comprehensive Phase II ESA includes extensive sampling to fully characterize the extent of contamination, analysis of potential migration pathways and potential receptors so that cleanup costs can be estimated.

TCEQ Voluntary Cleanup Program (VCP)

The TCEQ Voluntary Cleanup Program (VCP) provides administrative, technical, and legal incentives to encourage the cleanup of contaminated sites in Texas. The VCP is a brownfields program designed to address sites that are burdened by real or reasonably perceived environmental issues that may hamper real estate transactions or redevelopment. Since all non-responsible parties, including future lenders and landowners, receive protection from liability to the state of Texas for cleanup of sites under the VCP, most of the constraints for completing real estate transactions at those sites are eliminated once a VCP certificate of completion is issued. As a result, many unused or under used properties may be restored to economically productive or community beneficial use.

The VCP provides certification of acceptable land uses of various types, the highest certification is for residential uses. In other words, if a site is certified as acceptable for residential uses, all environmental concerns have been appropriately addressed and/or remediated to the satisfaction of the Texas Commission on Environmental Quality (TCEQ).

After a property owner applies to participate in the Voluntary Cleanup Program, the applicant typically submits a Phase II Environmental Site Assessment to TCEQ to communicate what is found on the property from an environmental stand point. All VCP participants are required by law to complete an Affected Property Assessment Report (APAR) which is considered to be more extensive than a Comprehensive Phase II ESA. The APAR is a comprehensive report that documents the horizontal and vertical extent of contamination, and evaluates the applicable exposure pathways (i.e., groundwater ingestion, human health exposure to surface soil

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contamination, surface water exposure, etc.) to further define if and how the contamination needs to be cleaned up (i.e., soil removal, groundwater treatment, etc.). Most Phase II ESAs document whether there has been an impact to soil or groundwater from the limited sample set collected in areas of concern, but do not go as far as delineating the source(s) of contamination.

Once the APAR is completed to the satisfaction of TCEQ, the information is reviewed, a determination is made by TCEQ, and the outcome communicated to the applicant.

The resulting determination can be one of three outcomes:

1. Issuance of a *Conditional Certificate of Completion* – This certifies an applicant has demonstrated that long-term response actions (e.g. engineering controls, remediation systems, etc.) meet performance standards and are being implemented under requirements established in the Texas Voluntary Cleanup Program.
2. Issuance of a *Final Certificate of Completion* – This certifies an applicant has implemented or completed all requirements of the Texas Voluntary Cleanup Agreement.
3. Issuance of a *Final Certificate of Completion with a Municipal Setting Designation* – The Municipal Settings Designation certifies that designated groundwater at the property is not used as potable water, and is prohibited from future use as potable water because the groundwater is contaminated in excess of the applicable potable-water protective concentration level.

Background – 5015 Spectrum Drive

Ashland Chemical Company operated in Addison as a chemical products and storage operation for many years (approximately the 1960s – 1983). Their facility was located at the southwest corner of the intersection of what is now Arapaho Road and Quorum Drive. The Ashland facility had an on-site tank farm with tank capacities of 500,000 gallons, drum storage totaling 55,000 gallons, and approximately 10,000 square feet of warehouse storage space for flammable, corrosive, and various non-hazardous materials. The chemicals in the tank farm included petroleum hydrocarbons and chemicals such as tetrachloroethene (PCE), trichloroethene (TCE), dichlorobenzene isomers, toluene, and xylenes.

A remedial action report was completed by Woodward-Clyde (dated May 1998), which indicated that remedial action was conducted on the Ashland property in late 1997 and early 1998. The remedial action consisted of the removal and disposal of impacted soil from an area 40 feet x 40 feet to a maximum depth of 12 feet with 1,300 cubic yards of soil removed.

The Ashland property (Tract 1) and two additional tracts (5015 Spectrum Drive [Tract 2] and Town of Addison Right-of-Way Property [Tract 3]) were entered into the Voluntary Cleanup Program (VCP No. 204) administered by the Texas Natural Resource Conservation Commission [TNRCC, predecessor to the current Texas Commission on Environmental Quality (TCEQ)]. The additional tracts were presumably included in the VCP closure because potentially affected groundwater had migrated from the Ashland facility. Ownership of Tract 2 was identified as

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Dallas Investment Corporation (DIC), which corresponds to the property at 5015 Spectrum Drive. Tract 3 was identified as the ROW property owned by the Town of Addison. Review of the VCP files indicates that the closure was based upon a prohibition on "the exposure to and use of groundwater from the site for residential, agricultural, recreational, industrial or commercial purposes without the express written pre-approval of the TNRCC or the State of Texas". The VCP case was closed as non-residential use (final Certificate of Completion letter was dated December 2001).

A Phase I Environmental Site Assessment (ESA) was performed by ESA Environmental Services, Inc. (ESA Environmental) on Tract 2 in November 1991. The Phase I ESA documented that 5015 Spectrum Drive was historically used as farmland. In the 1980s, a ready mix concrete plant was erected on the site for the development of the surrounding area. One concrete slab and patches of gravel remained on the property. 5015 Spectrum Drive has remained vacant since the 1991 Phase I ESA report, but the surrounding area has been developed with commercial office buildings and hotel properties.

In 2014, the property owner (Dallas Investment Corporation) planned to sell the property located at 5015 Spectrum Drive and requested that the property be changed from non-residential to residential usage through the TCEQ Voluntary Cleanup Program (VCP). Since the property was closed through the TCEQ VCP as non-residential, W&M Environmental Group (W&M) conducted a Limited Phase II ESA to collect additional sampling to address potential data gaps for the new VCP case and the resulting Affected Property Assessment Report (APAR). The Limited Phase II ESA Investigation was performed by W&M in January and February of 2014 and included shallow soil borings, installation of groundwater monitoring wells, yield testing, and collection of soil and groundwater samples at 5015 Spectrum Drive for analysis of potential Contaminates of Concern (COCs) that included Resource Conservation and Recovery Act (RCRA) 8 metals, Total Petroleum Hydrocarbons (TPH), and Volatile Organic Compounds (VOCs). W&M's Phase II ESA was submitted to TCEQ as part of the VCP review process.

Conclusion

As a result of the comprehensive review conducted through the Affected Property Assessment Report, TCEQ issued a Final Certificate of Completion for the property located at 5015 Spectrum Drive that certifies that the property is acceptable for residential land use; the highest standard allowable under the TCEQ Voluntary Cleanup Program.

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The following table provides a chronology of events related to the environmental studies of 5015 Spectrum Drive and surrounding properties:

Date	Activity/Report Description
10/31/2014	Charles Goff received a copy of the Certificate of Completion from Taylor Bowen via email.
9/4/2014	W&M Environmental Group (W&M) prepares and submits an Affected Property Assessment Report (APAR) for 5015 Spectrum Drive to the Texas Commission on Environmental Quality (TCEQ) Voluntary Cleanup Program (VCP). The APAR documents that all concentrations of contaminants of concern (COCs) are below residential protective concentration levels (PCLs) for properties with a Class 3 aquifer.
8/26/2014	W&M and the project representative meet with TCEQ to discuss the progress of 5015 Spectrum Drive and document submittals.
6/24/2014	An updated TCEQ acceptance letter for the 5015 Spectrum Drive's entry into the (VCP 2660) is received.
6/20/2014	Per the Request of the TCEQ historical documentation and reports prepared for the adjacent Ashland Chemical Corporation and the 5015 Spectrum Drive were sent to the TCEQ.
5/9/2014	The VCP application previously submitted by W&M to the TCEQ. 5015 Spectrum Drive is approved and the Site is entered into the VCP with VCP ID No. 2660
3/19/2014	W&M completed and submitted a VCP application to the TCEQ requesting that 5015 Spectrum Drive be entered into the VCP.
Jan – Feb, 2014	W&M advanced ten shallow soil borings (SB-01 thru SB-10) and installed three permanent monitoring wells (MW-1 thru MW-3). W&M collected soil and groundwater samples with analysis for Volatile Organic Compounds (VOCs), Total Petroleum Hydrocarbons (TPH), and RCRA 8 metals. In February 2014, W&M performed a groundwater yield test to demonstrate that groundwater at 5015 Spectrum Drive is Class 3. Soil and groundwater results were below the Texas Risk Reduction Program (TRRP) protective concentrations levels for Class 3 groundwater.
October, 2001	5015 Spectrum Drive received a certificate of completion as part of a VCP Application (VCP 204) filed by the Ashland Chemical Company for their former property and two cross to down-gradient properties, one of which was 5015 Spectrum Drive. In the final Certificate of Completion (COC) 5015 Spectrum Drive was identified as Tract 2 with a restrictive covenant on the use of groundwater for Tract 2.
July, 1998	Ashland Chemical Company communicates with Dallas Investment Corporation regarding a COC for 5015 Spectrum Drive which is east and adjacent to the Ashland Chemical Corporation property.
Mar & May, 1998	Woodward-Clyde complete a Remedial Action Report and a Site Closure for the Ashland Addison Site. The reports documented groundwater

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	<p>monitoring wells installed on the Ashland property and the adjacent property at 5015 Spectrum Drive (VCP 2660), removal of soil on the Ashland site, and aquifer testing. Well yield testing utilizing wells on the Ashland property and 5015 Spectrum Drive were used to determine the range between 0.15 gallons per day (GPD) and 4.90 GPD which is less than the TRRP required 150 gallons per day (GPD). Chlorinated solvents detected by Woodward-Clyde were slightly above and at the Class 3 groundwater residential protective concentration levels (PCL).</p>
April, 1994	<p>Trinity Engineering Testing Corporation conducted a Phase II Environmental Site Assessment at 5015 Spectrum Drive. Two boreholes were advance for the collection of soil and groundwater samples and four composite soil samples were collected. Only one borehole yielded groundwater. The sampling identified TPH and metals in the soil and groundwater.</p>
November, 1991	<p>A Phase I Environmental Site Assessment (ESA) was conducted for 5015 Spectrum Drive. The Phase I ESA identified three recognized environmental concerns (RECs) located off-Site; the Ashland Chemical Company west of the Site, a sheet metal fabricating facility west of the Site, and a scrap metal aluminum recycling facility located northwest of the 5015 Spectrum Drive. The Phase I ESA also stated, the property was used as a Ready Mix Concrete batch facility in the 1980s for development occurring in the area.</p>