

January 23, 2018

North Carolina Department of Environmental Quality  
Division of Waste Management – DSCA Program  
1646 Mail Services Center  
Raleigh, NC 27699-1646

Att: Mr. Jay King  
DSCA Project Manager

Re: **Risk Management Plan**  
Former Jordan Cleaners - DSCA Site ID DC140001  
220 Morganton Boulevard SW  
Lenoir, Caldwell County, North Carolina

Dear Mr. King:

AECOM Technical Services of North Carolina, Inc. (includes legacy URS and herein referred to as AECOM) is pleased to provide the attached Risk Management Plan (RMP) for the Former Jordan Cleaners site previously located at 220 Morganton Boulevard SW in Lenoir, North Carolina. A risk assessment conducted for the site indicates that contaminant concentrations at the site do not pose an unacceptable risk. The primary purpose of this RMP is to ensure that the assumptions made in the risk assessment remain valid in the future. Based on the documentation outlined in this report, AECOM recommends issuance of a No Further Action letter for the site.

If you have any questions or require additional information, please do not hesitate to contact either Rob MacWilliams or Jeffrey T. Hvozdk at 704.553.6150.

Sincerely,

**AECOM TECHNICAL SERVICES OF NORTH CAROLINA, INC.**



Jeffrey T. Hvozdk, PG  
Project Manager



Robert H. MacWilliams, PG  
Program Manager

**Risk Management Plan  
Former Jordan Cleaners - DSCA Site ID DC140001  
220 Morganton Boulevard SW  
Caldwell County  
Lenoir, North Carolina 28645**

**Submitted To:**  
**NC Department of Environmental Quality**  
Division of Waste Management – DSCA Program  
1646 Mail Services Center  
Raleigh, NC 27699-1646



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Jeffrey T. Hvozdek, PG  
Project Manager



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Robert H. MacWilliams, PG  
Program Manager

**AECOM**

AECOM Technical Services of North Carolina, Inc.  
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Appendix D Example Annual Certification of Land-Use Restrictions

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## 1.0 INTRODUCTION

AECOM Technical Services of North Carolina, Inc. (includes legacy URS and herein referred to as AECOM) has prepared this Risk Management Plan (RMP) to address dry-cleaning solvent contamination associated with the former Jordan Cleaners site (DSCA Site DC140001) on behalf of the North Carolina Department of Environmental Quality (NCDEQ) Dry-Cleaning Solvent Cleanup Act (DSCA) program. The former Jordan Cleaners facility was located at 220 Morganton Boulevard SW in Lenoir, Caldwell County, North Carolina. The site location is shown on the attached **Figure 1**. The former dry-cleaning building was razed and redeveloped in 2015. The site currently exists as a paved surface level parking lot for the Thrift Shopping Center. The Jordan Cleaners site (herein referred to as the “site”) includes the source property (where the dry-cleaning facility source was located). The site is as follows:

1. The source property – **Mountain Properties of Lenoir LLC, PIN 2759163876**, which encompasses the Thrift Shopping Center and the former Jordan Cleaners facility located at 220 Morganton Boulevard SW.

A map which identifies the above listed property is included as **Figure 2**. This RMP is intended to comply with the requirements of the DSCA (N.C.G.S. 143-215.104A et seqs) and promulgated rules and follows the outline provided in the DSCA program’s risk-based corrective action (RBCA) guidance.

## 2.0 OBJECTIVES OF RISK MANAGEMENT PLAN

URS has completed assessment activities at the site which identified the following:

- The presence of tetrachloroethylene (PCE) in groundwater beneath the source property at concentrations exceeding the Title 15A NCAC 2L .0202 Groundwater Standards (2L Standards);
- The presence of PCE in groundwater beneath the source property at concentrations above the Division of Waste Management (DWM) residential groundwater vapor intrusion screening levels;
- The presence of PCE, cis-1,2-dichloroethylene (cis-1,2-DCE) and vinyl chloride in soil beneath the source property at concentrations above the DWM health based and/or protection of groundwater Preliminary Soil Remediation Goals (PSRGs); and,
- DSCA currently does not utilize models to predict potential vapor intrusion from soil. However, given the magnitude of concentrations observed in soil, and in the absence of

empirical subsurface gaseous phase data or other defensible lines of evidence to evaluate future vapor intrusion from soil, the potential vapor intrusion exposure pathway from soil still exists at the site.

URS completed a risk assessment for the site in accordance with the DSCA program's risk assessment procedures in October 2016. The results of the risk assessment indicated that there are risks that exceed applicable target levels on the source property. These risks will be managed using site-specific land-use conditions that have been selected as part of the risk assessment evaluation and which require a RMP. Thus, the objective of the RMP is to ensure that those site-specific land-use conditions remain valid in the future.

### 3.0 SUMMARY OF RISK ASSESSMENT REPORT

URS performed a risk assessment to address the applicable exposure pathways based on the identified impacts summarized in Section 2.0. Comprehensive results of the risk assessment, which are summarized herein, are documented in the Risk Assessment Report, dated October 13, 2016.

The site is currently zoned as commercial; however, to be protective of unknown future zoning and mixed-use development in the future, both residential and commercial scenarios were considered as part of the risk assessment.

The risk assessment process consisted of evaluating exposure pathways for the exposure units shown on **Figure 2**. A summary of the groundwater quality data used in the risk assessment is included on **Figure 3**. A summary of the soil quality data used in the risk assessment is included on **Figures 4** and **5**. The exposure model evaluation indicated the following exposure pathways for each Exposure Unit:

#### **Exposure Unit #1**

Exposure Unit #1 encompasses the northwest portion of the current Thrift Shopping Center property which includes the former Jordan Cleaners dry-cleaning facility.

- **Indoor Inhalation of Vapor Emissions** – For the indoor inhalation of vapor emissions exposure pathway, groundwater quality data were used to evaluate current risk and future risk. The maximum groundwater contaminant concentrations detected within Exposure Unit #1 were conservatively used for the RCs. Indoor inhalation risk was evaluated using

the DSCA risk assessment toolkit and applicable calculators for current conditions (commercial), and future conditions (residential and commercial). The indoor air exposure pathway passed the risk evaluation for current commercial land-use conditions as well as future residential land-use conditions. However, DSCA currently does not utilize models to predict potential vapor intrusion from soil. Therefore, in the absence of empirical subsurface gaseous phase data, or other defensible lines of evidence to evaluate future vapor intrusion from soil, and given the magnitude of concentrations observed in soil, DSCA requires the future indoor air inhalation exposure pathway be addressed through the imposition of a vapor control land-use control that specifies that the land area (Area “A”) within Exposure Unit #1 where soil contaminant concentrations exceed applicable site-specific target levels (SSTLs) as defined herein.

- **Surface Soil Combined** – For the surface soil combined pathway, soil quality data were used to evaluate current and future risk. The maximum soil contaminant concentrations detected within Exposure Unit #1 were conservatively used for the RCs. Surface soil combined risk was evaluated using the DSCA risk assessment toolkit and applicable calculators for current conditions (commercial), future conditions (residential and commercial), and construction worker. Surface soil combined pathway risk levels did not exceed calculated allowable risk for current commercial land-use conditions or future commercial or construction user land-use conditions, but did exceed SSTLs for future residential land use. Therefore, the surface soil combined pathway should be addressed through the imposition of a land-use control that specifies that the land area (Area “A”) within Exposure Unit #1, where soil contaminant concentrations exceed applicable SSTLs, be restricted beneath an infiltrate cover to prevent residential exposure.

Since groundwater contaminant concentrations above the 2L Standards are present within Exposure Unit #1, land-use controls should be implemented preventing the installation of water supply wells within Exposure Unit #1.

### **Point of Exposure Modeling**

Site-specific Domenico groundwater modeling results indicate an exceedance of the SSTL for PCE, cis-1,2-DCE and vinyl chloride in source soil as modeled to be protective of the closest point of exposure (POE). The closest POE was selected to be the first property on which impacts have not been observed and is located approximately 680 feet southeast from what is considered to be the soil and groundwater source area. Site-specific Domenico groundwater modeling results indicate an exceedance of the SSTL for vinyl chloride in source soil as modeled to be

protective of the closest surface water POE. The closest surface water POE was selected to be the closest downgradient surface water body, Zacks Fork Creek, located approximately 790 feet southeast from what is considered to be the soil and groundwater source area. The locations of the groundwater and surface water POEs are indicated on **Figure 2**.

Evaluation of site groundwater quality indicates that the plume has not migrated as far as the modeling projects. The Domenico groundwater model utilized as part of this evaluation does not account for physical and/or biological mediated contaminant degradation that may be occurring naturally in the subsurface as the contaminant(s) migrate between the source area and the point of exposure. In addition to contaminant degradation, the rate of infiltration is a significant variable in the leaching of contaminants from contaminated soil to groundwater. Specifically, the concentration of dissolved phase contaminants in the groundwater beneath the site is proportional to the degree of partitioning of contaminants from affected source soils to groundwater. Since the rate of infiltration is a significant variable in the leaching of contaminants from contaminated soil to groundwater, it is reasonable to assume that plume expansion would occur in the event that infiltration rates increase in the area of source soil contaminations. In general, increased contaminant partitioning from soil to groundwater may result in a greater groundwater contaminant mass and ultimately a larger contaminant plume. Typically it is recommended that land-use controls be utilized to maintain infiltration conditions in areas where structures and/or paved surfaces may currently limit infiltration rates. In respect to the site, the limited area of impacted soils exceeding the calculated SSTLs, as depicted in **Figure 5**, are located beneath the existing pavement of the current site improvements (Area “A”). As such, infiltration land-use controls are recommended for Area “A” within Exposure Unit #1 where impacted soils exceed the calculated SSTLs.

## **4.0 REMEDIAL ACTION PLAN**

### **4.1 Assessment Activities and Interim Actions**

A site assessment prepared by IBS Environmental Services in 2015, identified PCE in the soil and groundwater above reportable action levels. At the time of the investigation, the former dry-cleaning building had been razed but the building’s foundation and footings remained in place. A receptor survey performed during the site assessment did not identify any water supply wells within a 1,000-foot radius of the site. Subsequently, the original petitioner/property owner, Gateway 4 Properties LLC, submitted a petition in September 2015 to request admittance of the

site into the DSCA program. The site (DC140001) was certified into the program in September 2015.

In December 2015, URS initiated prioritization assessment (PA) activities which included: 1) the installation of four monitoring wells (MW-1 through MW-4); 2) one quarter of groundwater sampling; 3) the advancement of fifteen soil borings (SB-1 through SB-15); 4) updated receptor survey activities; and 5) an ecological risk assessment. Pertinent groundwater and soil sample locations and analytical results are shown on **Figures 3** and **4**, respectively. Review of the soil and groundwater data generated as part of the PA activities appeared to have adequately defined the source groundwater impacts beneath the site. In addition, observed groundwater contamination during the groundwater sampling event did not warrant further evaluation of potential vapor intrusion pathways; however, additional soil assessment appeared to be warranted. No ecological receptors with the likelihood of impacts were identified within a one-half mile radius of the site. Results of the PA activities and ecological risk assessment were submitted to the DSCA program in February 2016.

In March 2016, two additional borings (SB-16 and SB-17) were advanced to further delineate the extent of subsurface soil impacts. Review of the soil data generated as part of the additional activities appeared to have adequately defined the source soil impacts beneath the site. An additional groundwater sampling event was also completed. Pertinent groundwater and soil sample locations and analytical results are shown on **Figures 3** and **4**, respectively. Results of the additional sampling activities were submitted to the DSCA program in March 2016.

On March 31, 2016, Gateway 4 Properties LLC sold the property to the current owner/petitioner, Mountain Properties of Lenoir LLC.

URS performed two additional groundwater monitoring events in June and September 2016. As documented in a groundwater monitoring report in September 2016, there are currently no groundwater contaminant concentrations at the site above 2L Standards. Subsequently, no increasing or decreasing trends in contaminant concentrations could be identified as part of plume stability monitoring pursuant to the DSCA program requirements. Pertinent groundwater analytical results for solvent contamination are shown on **Figure 3**.

When soil and groundwater assessment activities were completed at the site, URS submitted a risk assessment for the site to the DSCA program, which evaluated the risk to receptors via exposure pathways as compared to the SSTLs. Where SSTLs were exceeded, appropriate land-

use controls were recommended to reasonably manage future risk based on the current understanding of the science of contaminant assessment, migration, and toxicity. As recommended in the risk assessment for the site, future management of the risk associated with this site is contingent upon successful implementation and maintenance of the land-use controls for the source property, therefore, the risk assessment recommended risk-based closure for the site. The purpose of this RMP is to ensure that the assumptions made in the risk assessment remain valid in the future.

## **4.2 Remedial Action**

According to the DSCA program's RBCA guidance, no remedial action is necessary if the following four site conditions are met:

- (i) the dissolved plume is stable or decreasing;
- (ii) the maximum concentration within the exposure domain for every complete exposure pathway of any constituent of concern (COC) is less than ten times the RC of that COC;
- (iii) adequate assurance is provided that the land-use assumptions used in the DSCA program's RBCA process are not violated for current or future conditions; and,
- (iv) there are no ecological concerns at the site.

The site's compliance with the four above referenced conditions confirms that the contaminant concentrations are not likely to pose an unacceptable risk either at present or in the future and remedial action at the site is not required. Each of these conditions and their applicability to the subject site are summarized in the following sections.

### *4.2.1 Condition 1 – The dissolved plume is stable or decreasing*

A total of four groundwater monitoring events (December 2015, March 2016, June 2016 and September 2016) have been conducted using existing monitoring wells to document plume stability at the site. Constituents detected in groundwater samples from the site include: PCE, cis-1,2-DCE, chloroform and chloromethane. PCE was the only constituent detected at concentrations exceeding the 2L Standard. Therefore, URS focused on PCE as the COC for evaluation of plume stability.

The 2L Standard for PCE was exceeded in the first (December 2015) groundwater monitoring event in source monitoring well MW-1. However, PCE was not detected in any of the site wells

during subsequent groundwater monitoring events completed in March 2016, June 2016 and September 2016. There are currently no groundwater contaminant concentrations at the site above 2L Standards. Based on the only detection of PCE in groundwater as part of the first sampling event it can be concluded that the plume has exhibited a decreasing trend.

Documentation of the plume stability evaluation, including a figure showing monitoring well locations, is included in **Appendix A**.

*4.2.2 Condition 2 –The maximum concentration within the exposure domain for every complete exposure pathway of any COC is less than ten times the RC of that COC*

Representative concentrations were not calculated as part of the risk assessment for this site. Instead, a more conservative approach was utilized by using the maximum concentration for each COC within each exposure domain. Hence, this condition has been met for each COC and exposure pathway for the site.

*4.2.3 Condition 3 – Adequate assurance is provided that the land-use assumptions used in the DSCA program’s RBCA process are not violated for current or future conditions.*

The risk assessment completed for the source property was based on current land-use conditions being non-residential. However, using the most conservative approach, future conditions at the site were considered to be residential. As discussed in Section 6.0, land-use controls will be implemented for the site to ensure that these assumptions remain valid.

*4.2.4 Condition 4 – There are no ecological concerns at the site.*

URS completed an ecological risk assessment for the site in accordance with the DSCA program’s RBCA guidance. The results of the evaluation indicate that the release does not pose an unacceptable ecological risk. The completed ecological risk assessment checklists A and B are attached as **Appendix B**.

The site’s compliance with the four above referenced conditions confirms that the contaminant concentrations are not likely to pose an unacceptable risk either at present or in the future. The plume is expected to naturally attenuate over time and the appropriate remedial action is to implement appropriate land-use controls on the properties where soil and/or groundwater contamination is present.

## 5.0 DATA COLLECTED DURING RMP IMPLEMENTATION

No further sampling or other data collection activities are proposed for the site or adjacent properties, assuming the assumptions detailed in the Notice of Dry-Cleaning Solvent Remediation (NDCSR) remain valid. As such, this section is not applicable.

## 6.0 LAND-USE CONTROLS

As discussed in detail in Section 3.0, the recommendation for closure in the risk assessment for the site was based on the following land-use controls:

- No activities that encounter, expose, remove or use groundwater may occur on the source property without prior approval of NCDEQ;
- The source property shall not be used for child care centers or schools, or for mining or extraction of coal, oil, gas or any mineral or non-mineral substances without prior written approval from NCDEQ;
- No activities that cause or create an increase in infiltration may occur in Area “A” of the source property without prior approval of NCDEQ; and
- Except for routine maintenance, no construction activities or change in property use that cause or create an unacceptable human health risk from vapor intrusion may occur within Area “A” without prior approval of NCDEQ.

Institutional controls will also be implemented to ensure that land-use conditions are maintained and monitored until the land-use controls are no longer required for the site. A NDCSR was prepared for the source property to comply with the land-use control requirement. The NDCSR is included in **Appendix C**. Refer to the NDCSR for the specific language to be incorporated to address each of the risk assessment assumptions.

A plat showing the locations and types of dry-cleaning solvent impacts on the site is included as an exhibit to the NDCSR. The locations of dry-cleaning solvent impacts are where contaminants have been detected above unrestricted use standards.

## **7.0 LONG-TERM STEWARDSHIP PLAN**

The NDCSR contains a clause which requires the owner of the site to submit a notarized “Annual Certification of Land-Use Restrictions” to NCDEQ on an annual basis certifying that the NDCSR remains recorded with the Register of Deeds and that land-use restrictions (LURs) are being complied with. An example of such a certification is included in **Appendix D**.

## **8.0 RMP IMPLEMENTATION SCHEDULE**

Since the groundwater plume is stable and confined to the source property and possible exposure to the contamination is managed through the NDCSR, no additional site remediation activities are required to implement the RMP. A 30-day public comment period will be held to allow the community an opportunity to comment on this proposed strategy. **Appendix E** includes example documents used to announce the public comment period in the local newspaper and to inform local officials, nearby property owners, and interested parties. As such, upon completion of the public comment period and final approval of the RMP, the NDCSR will be filed with the Caldwell County Register of Deeds and will complete the RMP schedule.

## **9.0 CRITERIA FOR DEMONSTRATING RMP SUCCESS**

The RMP will be successfully implemented once the required NDCSR has been executed and recorded with the Caldwell County Register of Deeds. The NDCSR, at the request of the property owner, may be canceled by NCDEQ after the risk to public health and the environment associated with the dry-cleaning solvent contamination and any other contaminants included in the dry-cleaning solvent assessment and remediation agreement has been eliminated as a result of the remediation of the property. If NCDEQ is notified of a change in site conditions, per the notification requirements detailed in the NDCSR, the RMP will be reviewed to determine if the site conditions have impacted the requirements set forth in the NDCSR and if changes are required. Enforcement of the RMP will be maintained through receipt of the “Annual Certification of Land-Use Restrictions” from the property owner as part of the NDCSR requirements.

## **10.0 CONTINGENCY PLAN IF RMP FAILS**

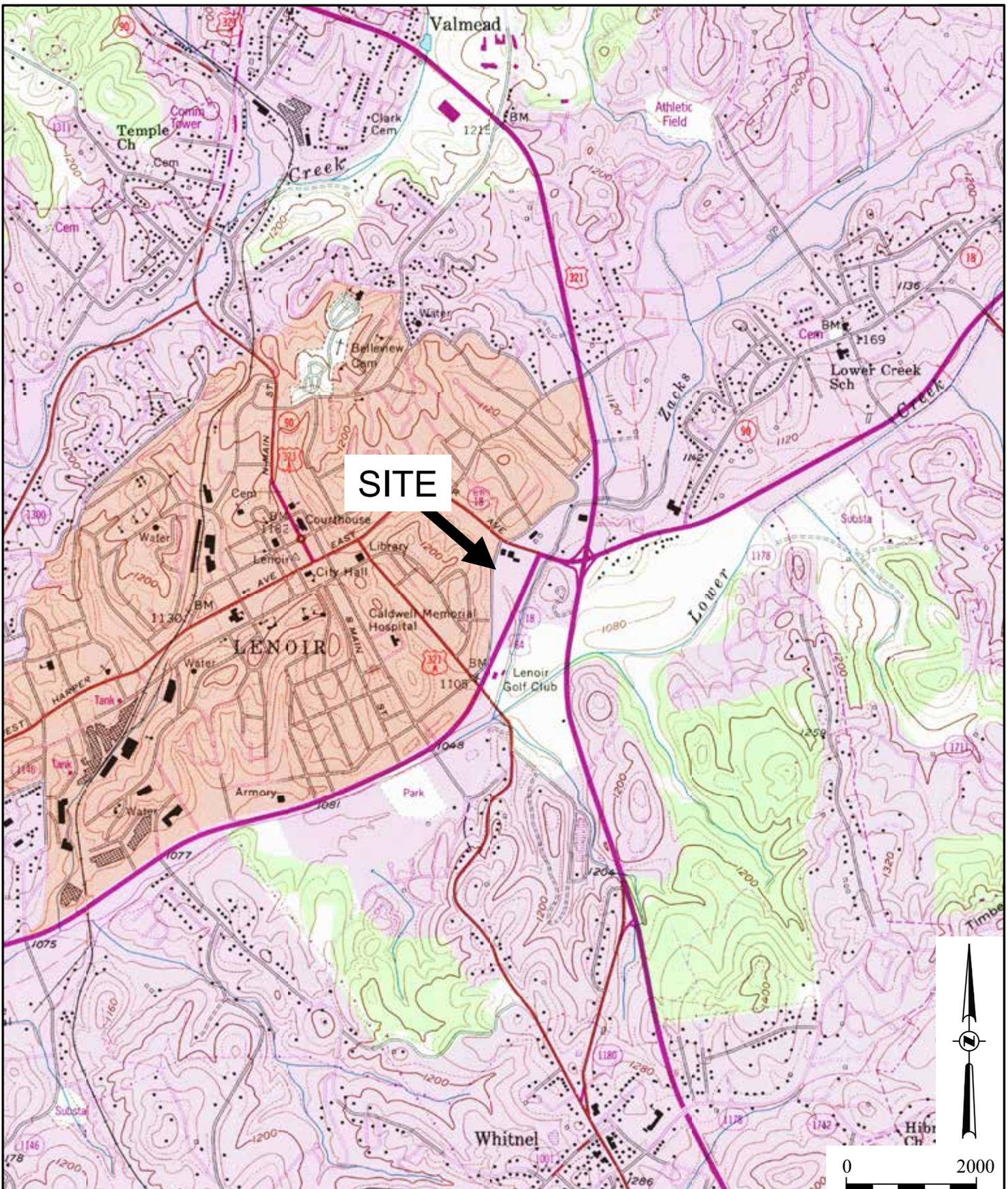
As discussed above, unless the DSCA program is notified of a change in land-use conditions at the subject site, per the notification requirements detailed in this plan, the RMP will remain in

effect until the RMP has met its objectives and is considered a success. Pursuant to N.C.G.S. 143-215.104K, if any of the LURs set out in the NDCSR are violated, the owners of the properties at the time the LURs are violated, the owner's successors and assigns, and the owner's agents who direct or contract for alteration of the site in violation of the LURs, shall be held liable for the remediation of all contaminants to unrestricted use standards.

## **11.0 CONCLUSIONS AND RECOMMENDATIONS**

AECOM has prepared this RMP for the former Jordan Cleaners (DC140001) site on behalf of the DSCA program. The results of the risk assessment completed for the site indicate that contaminant concentrations do not pose an unacceptable risk. The contaminant plume associated with the site is decreasing. This RMP specifies that the NDCSR requirements provide notification that land-use conditions observed during the risk assessment evaluation remain valid in the future. Based on the documentation contained in this report, AECOM recommends issuance of a "No Further Action" letter.

## FIGURES



Reference: 7.5 Minute USGS Topographic Map: Lenoir, North Carolina (1995)

APPROX. SCALE, ft.

**AECOM**

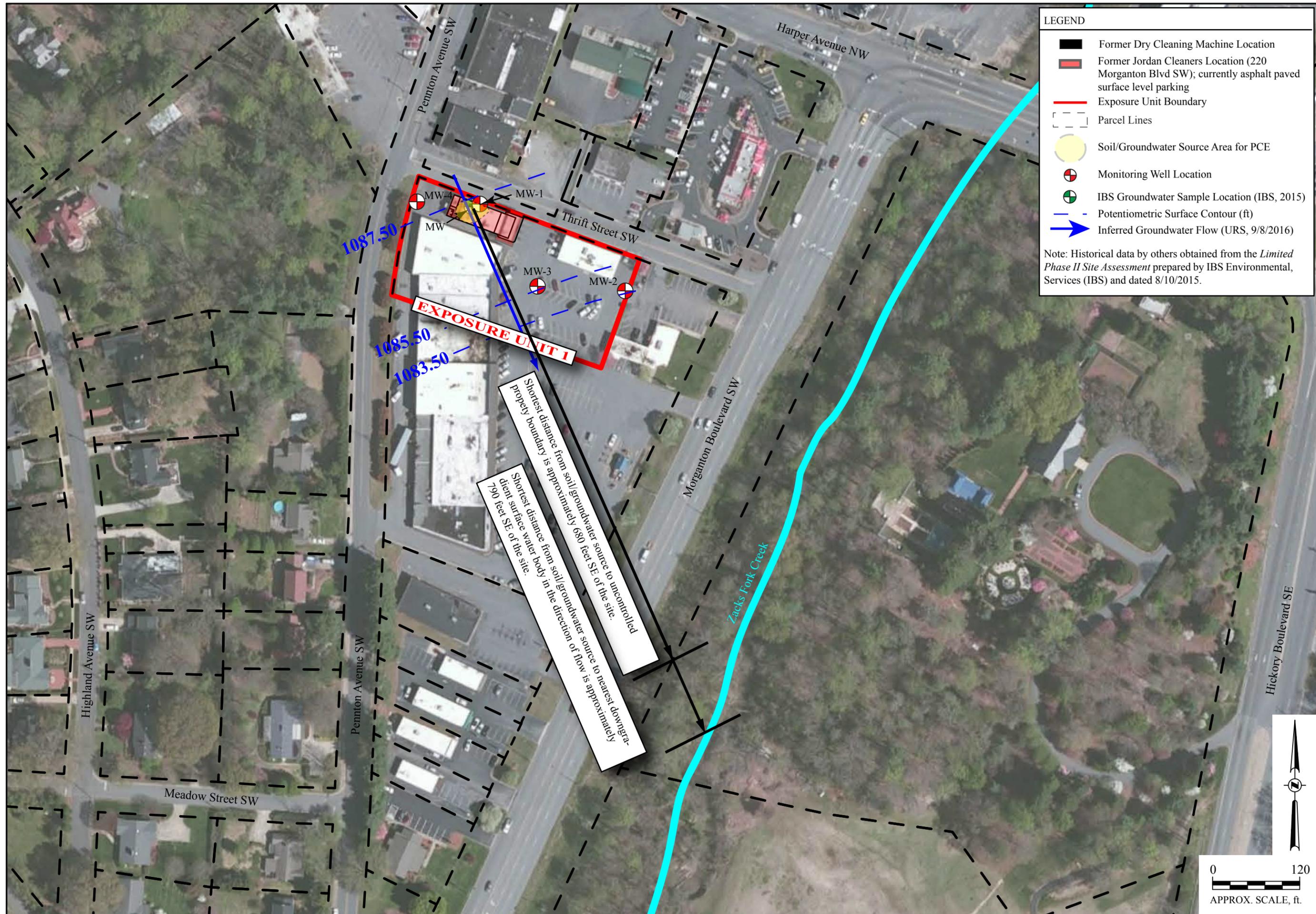
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Site Location Map  
Jordan Cleaners  
220 Morganton Boulevard SW  
Lenoir, NC  
DSCA Site DC140001

DRAWN BY: JTH - 10/16/15  
CHECKED BY: RHM - 10/16/15  
PROJECT NO.:  
SHEET

Figure 1



**LEGEND**

- Former Dry Cleaning Machine Location
- Former Jordan Cleaners Location (220 Morganton Blvd SW); currently asphalt paved surface level parking
- Exposure Unit Boundary
- Parcel Lines
- Soil/Groundwater Source Area for PCE
- Monitoring Well Location
- IBS Groundwater Sample Location (IBS, 2015)
- Potentiometric Surface Contour (ft)
- Inferred Groundwater Flow (URS, 9/8/2016)

Note: Historical data by others obtained from the *Limited Phase II Site Assessment* prepared by IBS Environmental, Services (IBS) and dated 8/10/2015.

Shortest distance from soil/groundwater source to uncontrolled property boundary is approximately 680 feet SE of the site.

Shortest distance from soil/groundwater source to nearest downgradient surface water body in the direction of flow is approximately 790 feet SE of the site.



Exposure Unit Map  
Jordan Cleaners  
220 Morganton Boulevard SW  
Lenoir, NC  
DSCA Site DC140001

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SHEET:		Figure 2



**MW-4**  
 Chloroform - 0.45 J ug/l  
 Chloromethane - 0.45 J ug/l

**MW\***  
 PCE - 56.8 ug/l

**MW-1**  
 PCE - 1.1 ug/l

**MW-3**  
 cis-1,2-DCE - 0.33 J ug/l

**MW-2**  
 cis-1,2-DCE - 0.48 J ug/l

**LEGEND**

- Former Dry Cleaning Machine Location
- Former Jordan Cleaners Location (220 Morganton Blvd SW); currently asphalt paved surface level parking
- Exposure Unit Boundary
- - - Parcel Lines
- Soil/Groundwater Source Area for PCE
- ⊕ Monitoring Well Location
- ⊕ IBS Groundwater Sample Location (IBS, 2015)
- - - Potentiometric Surface Contour (ft)
- ➔ Inferred Groundwater Flow (URS, 9/8/2016)
- J Estimate Value
- ug/l micrograms per liter

PCE - Tetrachloroethene  
 cis-1,2-DCE - cis-1,2-Dichloroethene

Contaminant concentrations shown are the highest observed at a particular location during the following sampling events: 12/9/2015, 3/9/2016, 6/9/2016 and 9/8/2016.

Red highlighted text indicates concentrations used in DSCA Risk Assessment Model.

\* As documented in the Groundwater Monitoring Report dated 9/26/2016, URS is of the opinion that groundwater sample MW is not reflective of groundwater quality at the site. Therefore, groundwater sample MW was not used in the model.

COCs used in Risk Assessment Model include:  
**Exposure Unit 1**  
 PCE, cis-1,2-DCE, Chloroform, and Chloromethane

If COC is not shown, it was not detected above the method detection limit (MDL) in a particular sample.

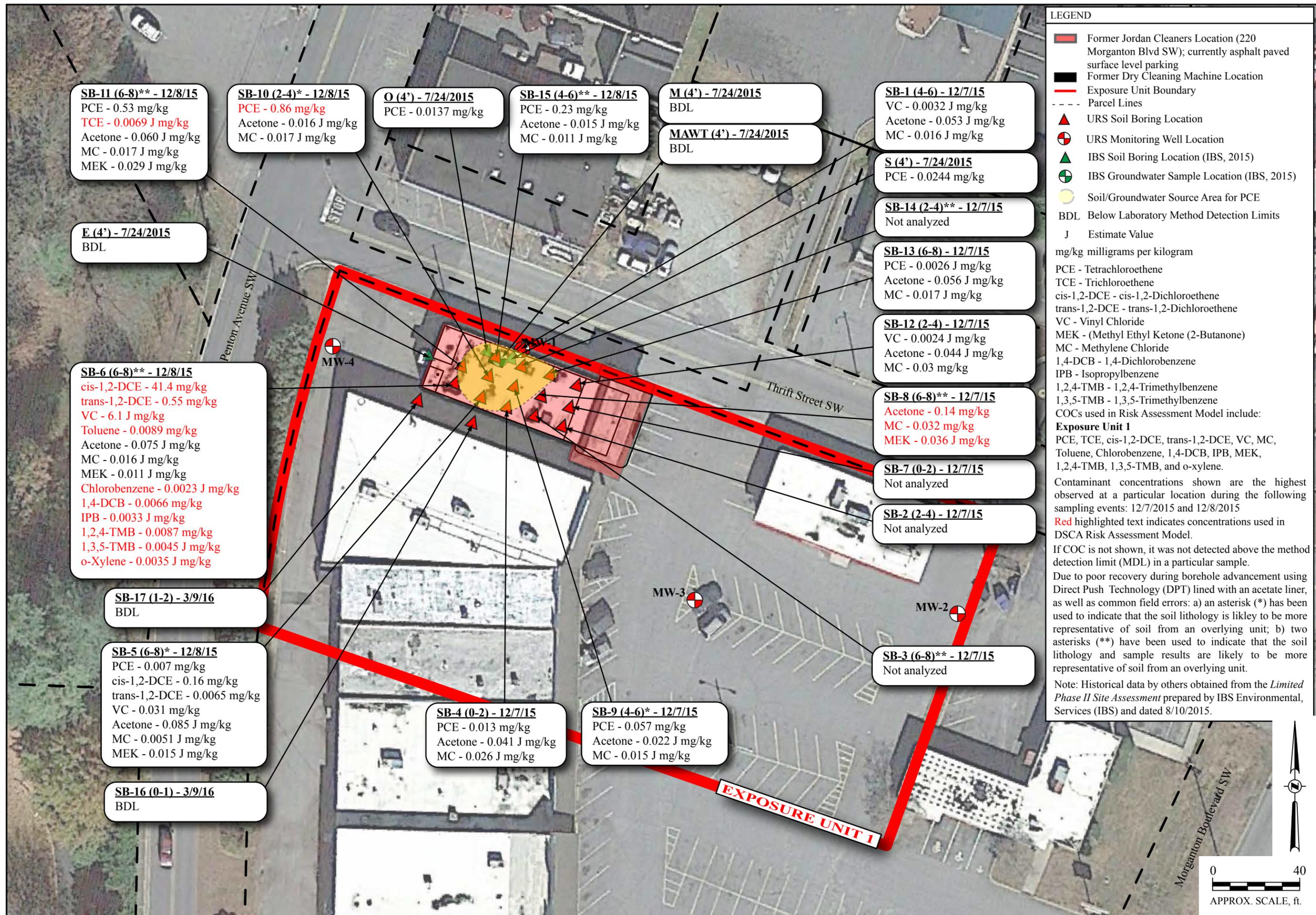
Note: Historical data by others obtained from the *Limited Phase II Site Assessment* prepared by IBS Environmental, Services (IBS) and dated 8/10/2015.

Groundwater Quality Summary Map  
 Jordan Cleaners  
 220 Morganton Boulevard SW  
 Lenoir, NC  
 DSCA Site DC140001

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 PROJECT NO.:  
 SHEET: Figure 3



- LEGEND**
- █ Former Jordan Cleaners Location (220 Morganton Blvd SW); currently asphalt paved surface level parking
  - █ Former Dry Cleaning Machine Location
  - Exposure Unit Boundary
  - Parcel Lines
  - ▲ URS Soil Boring Location
  - URS Monitoring Well Location
  - ▲ IBS Soil Boring Location (IBS, 2015)
  - IBS Groundwater Sample Location (IBS, 2015)
  - Soil/Groundwater Source Area for PCE
  - BDL Below Laboratory Method Detection Limits
  - J Estimate Value

mg/kg milligrams per kilogram

PCE - Tetrachloroethene  
TCE - Trichloroethene  
cis-1,2-DCE - cis-1,2-Dichloroethene  
trans-1,2-DCE - trans-1,2-Dichloroethene  
VC - Vinyl Chloride  
MEK - (Methyl Ethyl Ketone (2-Butanone))  
MC - Methylene Chloride  
1,4-DCB - 1,4-Dichlorobenzene  
IPB - Isopropylbenzene  
1,2,4-TMB - 1,2,4-Trimethylbenzene  
1,3,5-TMB - 1,3,5-Trimethylbenzene  
COCs used in Risk Assessment Model include:  
**Exposure Unit 1**  
PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, VC, MC, Toluene, Chlorobenzene, 1,4-DCB, IPB, MEK, 1,2,4-TMB, 1,3,5-TMB, and o-xylene.

Contaminant concentrations shown are the highest observed at a particular location during the following sampling events: 12/7/2015 and 12/8/2015

Red highlighted text indicates concentrations used in DSCA Risk Assessment Model.

If COC is not shown, it was not detected above the method detection limit (MDL) in a particular sample.

Due to poor recovery during borehole advancement using Direct Push Technology (DPT) lined with an acetate liner, as well as common field errors: a) an asterisk (\*) has been used to indicate that the soil lithology is likely to be more representative of soil from an overlying unit; b) two asterisks (\*\*) have been used to indicate that the soil lithology and sample results are likely to be more representative of soil from an overlying unit.

Note: Historical data by others obtained from the *Limited Phase II Site Assessment* prepared by IBS Environmental, Services (IBS) and dated 8/10/2015.



**Soil Quality Summary Map**  
Jordan Cleaners  
220 Morganton Boulevard SW  
Lenoir, NC  
DSCA Site DC140001

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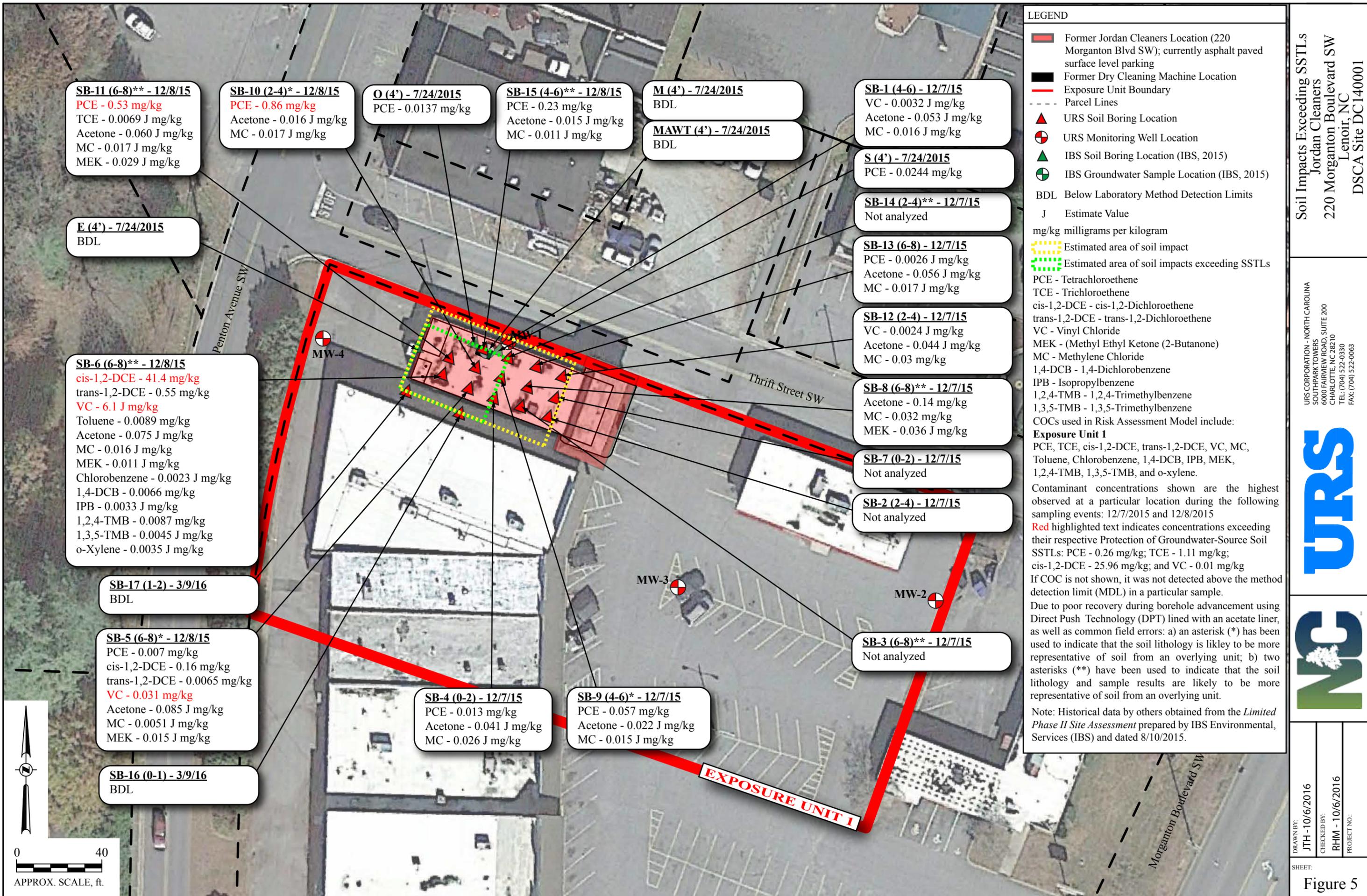
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CHECKED BY: RHM - 02/08/2017	SHEET:

Figure 4



**LEGEND**

- Former Jordan Cleaners Location (220 Morganton Blvd SW); currently asphalt paved surface level parking
- Former Dry Cleaning Machine Location
- Exposure Unit Boundary
- Parcel Lines
- URS Soil Boring Location
- URS Monitoring Well Location
- IBS Soil Boring Location (IBS, 2015)
- IBS Groundwater Sample Location (IBS, 2015)
- BDL Below Laboratory Method Detection Limits
- J Estimate Value

mg/kg milligrams per kilogram

Estimated area of soil impact

Estimated area of soil impacts exceeding SSTLs

PCE - Tetrachloroethene  
TCE - Trichloroethene  
cis-1,2-DCE - cis-1,2-Dichloroethene  
trans-1,2-DCE - trans-1,2-Dichloroethene  
VC - Vinyl Chloride  
MEK - (Methyl Ethyl Ketone (2-Butanone))  
MC - Methylene Chloride  
1,4-DCB - 1,4-Dichlorobenzene  
IPB - Isopropylbenzene  
1,2,4-TMB - 1,2,4-Trimethylbenzene  
1,3,5-TMB - 1,3,5-Trimethylbenzene

COCs used in Risk Assessment Model include:  
**Exposure Unit 1**  
PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, VC, MC, Toluene, Chlorobenzene, 1,4-DCB, IPB, MEK, 1,2,4-TMB, 1,3,5-TMB, and o-xylene.

Contaminant concentrations shown are the highest observed at a particular location during the following sampling events: 12/7/2015 and 12/8/2015

Red highlighted text indicates concentrations exceeding their respective Protection of Groundwater-Source Soil SSTLs: PCE - 0.26 mg/kg; TCE - 1.11 mg/kg; cis-1,2-DCE - 25.96 mg/kg; and VC - 0.01 mg/kg

If COC is not shown, it was not detected above the method detection limit (MDL) in a particular sample.

Due to poor recovery during borehole advancement using Direct Push Technology (DPT) lined with an acetate liner, as well as common field errors: a) an asterisk (\*) has been used to indicate that the soil lithology is likely to be more representative of soil from an overlying unit; b) two asterisks (\*\*) have been used to indicate that the soil lithology and sample results are likely to be more representative of soil from an overlying unit.

Note: Historical data by others obtained from the *Limited Phase II Site Assessment* prepared by IBS Environmental, Services (IBS) and dated 8/10/2015.

Soil Impacts Exceeding SSTLs  
Jordan Cleaners  
220 Morganton Boulevard SW  
Lenoir, NC  
DSCA Site DC140001

URS CORPORATION - NORTH CAROLINA  
SOUTH PARK TOWERS  
6000 FAIRVIEW ROAD, SUITE 200  
CHARLOTTE, NC 28210  
TEL: (704) 522-0330  
FAX: (704) 522-0063



DRAWN BY: JTH - 10/6/2016  
CHECKED BY: RHM - 10/6/2016  
PROJECT NO.:

**APPENDIX A**  
**DOCUMENTATION OF PLUME STABILITY EVALUATION**



**LEGEND**

- Jordan Cleaners, 220 Morganton Blvd SW
- Petitioned Property Boundary
- Former Dry Cleaning Machine Location
- Parcel Lines
- URS Monitoring Well Location and Identification  
 MW-1
- IBS Groundwater Sample Location and Identification (IBS, 2015)  
 MW

Note: Historical data by others obtained from the *Limited Phase II Site Assessment* prepared by IBS Environmental, Services (IBS) and dated 8/10/2015.

Monitoring Well Location Map  
 Jordan Cleaners  
 220 Morganton Boulevard SW  
 Lenoir, NC  
 DSCA Site DC140001

URS CORPORATION - NORTH CAROLINA  
 SOUTH PARK TOWERS  
 6000 FAIRVIEW ROAD, SUITE 200  
 CHARLOTTE, NC 28210  
 TEL: (704) 522-0330  
 FAX: (704) 522-0063



DRAWN BY: JTH - 3/18/2016	CHECKED BY: RHM - 3/18/2016
PROJECT NO.: 60503905	
SHEET: <b>ATT. 4</b>	

APPROX. SCALE, ft.

**Table 8: Analytical Data for Groundwater**

DSCA ID No.: DC140001																				
Groundwater Sampling Point	Sampling Date (mm/dd/yy)	Benzene	cis-1,2-Dichloroethylene	Ethylbenzene	Methyl tert-butyl ether (MTBE)	Naphthalene	Tetrachloroethylene	Toluene	trans-1,2-Dichloroethylene	Trichloroethylene	Vinyl chloride	Xylenes (total)	Chloroform	Chloromethane						
		[mg/L]																		
MW	7/24/2015	NA	NA	NA	NA	NA	0.0568	NA	NA	NA	NA	NA	NA	NA						
MW-1	12/9/2015	<0.001	<0.001	<0.001	<0.001	<0.001	0.0011	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001						
MW-2	12/9/2015	<0.001	0.0004 8 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001						
MW-3	12/9/2015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001						
MW-4	12/9/2015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001						
MW-1	3/9/2016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001						
MW-2	3/9/2016	<0.001	0.0003 2 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001						
MW-3	3/9/2016	<0.001	0.0002 6 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001						
MW-4	3/9/2016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001						
MW-1	6/9/2016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001						
MW-2	6/9/2016	<0.001	0.0003 3 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001						
MW-3	6/9/2016	<0.001	0.0003 2 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001						
MW-4	6/9/2016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	0.0004 5 J	<0.001						
MW-1	9/8/2016	<0.001	0.0002 6 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001						
MW-2	9/8/2016	<0.001	0.0004 8 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001						



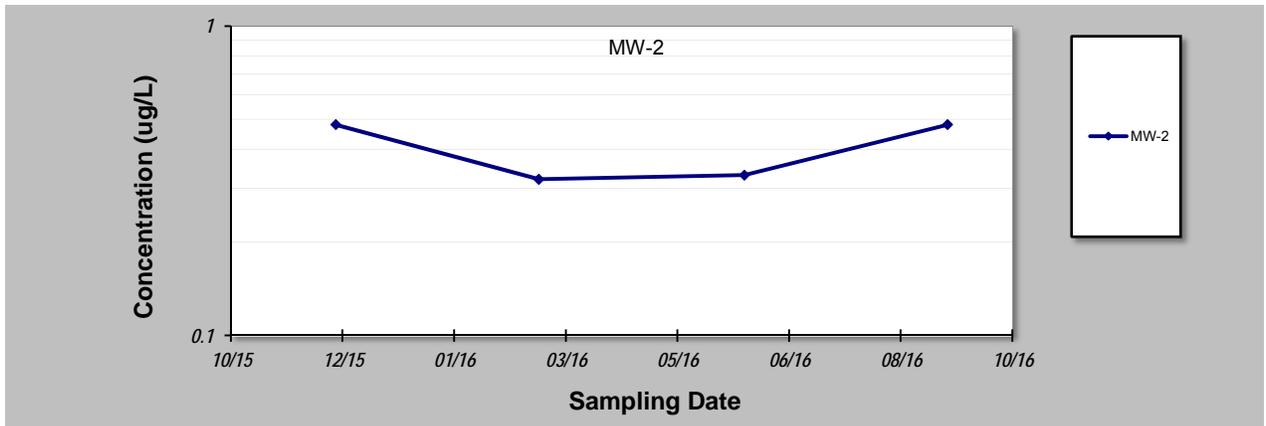
# GSI MANN-KENDALL TOOLKIT for Constituent Trend Analysis

Evaluation Date: <b>15-Sep-16</b>	Job ID: <b>DC140001</b>
Facility Name: <b>Jordan Cleaners</b>	Constituent: <b>cis-1,2-Dichloroethylene</b>
Conducted By: <b>M. Stone</b>	Concentration Units: <b>ug/L</b>

Sampling Point ID: **MW-2**

Sampling Event	Sampling Date	CIS-1,2-DICHLOROETHYLENE CONCENTRATION (ug/L)						
1	9-Dec-15	0.48						
2	9-Mar-16	0.32						
3	9-Jun-16	0.33						
4	8-Sep-16	0.48						
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Coefficient of Variation:	0.22							
Mann-Kendall Statistic (S):	1							
Confidence Factor:	50.0%							
Concentration Trend:	No Trend							



- Notes:**
- At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
  - Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
  - Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

**DISCLAIMER:** The GSI Mann-Kendall Toolkit is available "as is". Considerable care has been exercised in preparing this software product; however, no party, including without limitation GSI Environmental Inc., makes any representation or warranty regarding the accuracy, correctness, or completeness of the information contained herein, and no such party shall be liable for any direct, indirect, consequential, incidental or other damages resulting from the use of this product or the information contained herein. Information in this publication is subject to change without notice. GSI Environmental Inc., disclaims any responsibility or obligation to update the information contained herein.

## APPENDIX B

### LEVEL I ECOLOGICAL RISK ASSESSMENT CHECKLISTS



February 26, 2016

North Carolina Department of Environmental Quality  
Division of Waste Management – DSCA Program  
1646 Mail Service Center  
Raleigh, North Carolina 27699-1646

Att: Mr. Jay King  
DSCA Project Manager

Re: Level 1 Ecological Risk Assessment  
Jordan Cleaners, DSCA Site ID DC140001  
220 Morganton Boulevard SW  
Lenoir, Caldwell County, North Carolina  
URS-NC Project Number 60477865

Dear Mr. King:

URS Corporation – North Carolina (URS) is pleased to present the findings of the Level 1 Ecological Risk Assessment (Eco Risk Assessment) for the former Jordan Cleaners facility (site) located at 220 Morganton Boulevard SW in Lenoir, Caldwell County, North Carolina to the North Carolina Department of Environmental Quality (NCDEQ) Dry-Cleaning Solvent Cleanup Act (DSCA) Program. The Eco Risk Assessment was completed in accordance with the applicable DSCA Program guidance for assessment of potential ecological receptors. If you have any questions or require additional information, please do not hesitate to contact us at 704-522-0330.

Sincerely,

**URS CORPORATION-NORTH CAROLINA**

Jeffrey T. Hvozdk, PG  
Project Manager

Robert H. MacWilliams, PG  
Program Manager

Attachment

cc: Project File (hard copy)

URS Corporation – North Carolina  
6000 Fairview Road, Suite 200  
Charlotte, North Carolina 28210  
(704) 522-0330 Phone  
(704) 522-0063 Fax

**Level 1 Ecological Risk Assessment**  
**Checklist A for Potential Receptors and Habitats**  
**Jordan Cleaners/Piedmont Cleaners, DSCA Site ID DC140001**

- 1. Are there any navigable water bodies or tributaries to a navigable water body on or within the one-half mile of this site?** No. Based on URS' review of the United States Geological Survey (USGS) Topographic Map of Lenoir, North Carolina dated 1995, Zack's Fork Creek, Lower Creek and tributaries thereof were identified within a one-half mile radius of the Jordan Cleaners / Piedmont Cleaners dry cleaning facility formerly located at 220 Morganton Boulevard SW (site). The surface water features within one-half mile of the site are attached to this report as **Figure 1**. As evident on **Figure 1**, Zack's Fork Creek is located approximately 615 feet east of the site, and Lower Creek is located approximately 2,315 feet southeast of the site. Zack's Fork Creek, Lower Creek and tributaries thereof are considered navigable.
- 2. Are there any water bodies anywhere on or within the one-half mile of the site?** Yes. The above referenced Zack's Fork Creek, Lower Creek and tributaries thereof are located within a one-half mile radius of the site.
- 3. Are there any wetland areas such as marshes or swamps on or within one-half mile of the site?** Yes. According to the EDR NEPACheck® report, the National Wetland Inventory (NWI) identified two wetland features within a one-half mile radius of the site. The off-site wetland features included:

  - PFO1Cd - [P] Palustrine, [FO] Forested, [1] Broad-Leaved Deciduous, [C] Seasonally Flooded, [d] Partially Drained/Ditched located approximately 1,939 feet east-southeast; and
  - PFO1Cd - [P] Palustrine, [FO] Forested, [1] Broad-Leaved Deciduous, [C] Seasonally Flooded, [d] Partially Drained/Ditched located approximately 2,597 feet east.
- 4. Are there any sensitive environmental areas on or within one-half mile of the site?** Yes. In addition to the above referenced surface water bodies, their tributaries and the identified national wetland features, a state natural area is located approximately 2,209 feet south-southeast of the site, and a North Carolina Historical Site (NCHS), the Lenoir Grammar School is located approximately 1,957 feet northwest of the site at 506 Harper Avenue NW.
- 5. Are there any areas on or within one-half mile of the site owned or used by local tribes?** No. None were identified by the Indian Reservation Database.
- 6. Are there any habitats, foraging areas or refuges by rare, threatened, endangered, candidate and/or proposed species (plants or animals), or any otherwise protected species on or within one-half mile of the site?** Yes. According to the EDR NEPACheck® report, a state natural area is located approximately 2,209 feet south-southeast of the site and the NC Natural Heritage Sites database reported one occurrence

of an extant vascular plant within one-half mile of the site (NCNHEO000011823). The EDR NEPACheck® report also identified four endangered or threatened species within Caldwell County: 1) the Spruce-fir moss spider (arachnid); 2) the Spreading avens (vascular plant); 3) Heller's blazing star (vascular plant); and 4) Blue ridge goldenrod (vascular plant). In addition, the US Fish and Wildlife Service (FWS) identified the following two additional endangered species, three threatened species, and fifteen federal species of concern (FSCs) (<http://www.fws.gov/raleigh/species/cntylist/caldwell.html>). The Carolina northern flying squirrel (vertebrate) and Virginia big-eared bat are listed as endangered; the Bog turtle (vertebrate), Northern long-eared bat, and Dwarf-flowered heartleaf (vascular plant) are listed as threatened; and the Allegheny woodrat (vertebrate), Pygmy salamander (vertebrate), Brook floater (invertebrate), Diana fritillary butterfly (invertebrate), Edmund's snaketail (invertebrate), Margarita River skimmer (invertebrate), Bent avens (vascular plant), Butternut (vascular plant), Fraser fir (vascular plant), Gray's lily (vascular plant), Mountain bitter cress (vascular plant), Riparian vervain (vascular plant), Sweet pinesap (vascular plant), and two liverworts (nonvascular plants) are listed as FSCs. However, none of these species have specifically been identified at or within one-half mile of the site.

7. **Are there any breeding, roosting or feeding areas by migratory bird species on or within one-half mile of the site?** No. The North Carolina Audubon Society (<http://netapp.audubon.org/iba/state/US-NC>) does not identify any Important Bird Areas (IBAs) within one-half mile of the site.
8. **Are there any ecologically, recreationally or commercially important species on or within one-half mile of the site?** No. Five endangered species, four threatened species and fifteen FSCs were identified in Caldwell County by the EDR NEPACheck® report or the US FWS. However, none of these species have specifically been identified at or within one-half mile of the site.

**Are there any threatened and/or endangered species (plant or animal) on or within one-half mile of the site?** Yes. According to the EDR NEPACheck® report, a state natural area is located approximately 2,209 feet south-southeast of the site and the NC Natural Heritage Sites database reported one occurrence of an extant vascular plant within one-half mile of the site (NCNHEO000011823). The EDR NEPACheck® report also identified four endangered or threatened species within Caldwell County: 1) the Spruce-fir moss spider (arachnid); 2) the Spreading avens (vascular plant); 3) Heller's blazing star (vascular plant); and 4) Blue ridge goldenrod (vascular plant). In addition, the US Fish and Wildlife Service (FWS) identified the following two additional endangered species, three threatened species, and fifteen federal species of concern (FSCs) (<http://www.fws.gov/raleigh/species/cntylist/caldwell.html>). The Carolina northern flying squirrel (vertebrate) and Virginia big-eared bat are listed as endangered; the Bog turtle (vertebrate), Northern long-eared bat, and Dwarf-flowered heartleaf (vascular plant) are listed as threatened; and the Allegheny woodrat (vertebrate), Pygmy salamander (vertebrate), Brook floater (invertebrate), Diana butterfly (invertebrate), Edmund's snaketail (invertebrate), Margarita River skimmer (invertebrate), Bent avens (vascular plant), Butternut (vascular plant), Fraser fir (vascular plant), Gray's lily (vascular plant), Mountain bitter cress (vascular plant), Riparian vervain (vascular plant), Sweet pinesap (vascular plant), and two liverworts (nonvascular plants) are listed as

FSCs. However, none of these species have specifically been identified at or within one-half mile of the site.

**If the answer is “Yes” to any of the above questions, then complete Level 1 Ecological Risk Assessment, Checklist B for Potential Exposure Pathways.**

---

Wetlands are defined in 40 CFR §232.2 as “areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” The sources to make the determination whether or not wetland areas are present may include, but not limited to, national wetland inventory available at <http://nwi.fw.gov>, federal or state agency, and USGS topographic maps. Areas that provide unique and often protected habitat for wildlife species. These areas typically used during critical life stages such as breeding, rearing or young and overwintering. Refer to Attachment 1 for examples of sensitive environments. Ecologically important species include populations of species which provide a critical food resource for higher organisms. Ecologically important species include pest and opportunistic species that populate an area if they serve as a food source for other species, but do not include domesticated animals or plants/animals whose existence is maintained by continuous human interventions.

March 2007

DSCA Program

**Level 1 Ecological Risk Assessment  
Checklist B for Potential Receptors and Habitats  
Jordan Cleaners, DSCA Site ID DC140001**

- 1A. Can chemicals associated with the site leach, dissolve, or otherwise migrate to groundwater?** Yes. The primary chemical of concern (COC) is tetrachloroethene (PCE) and its daughter products: trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE) and vinyl chloride (VC).
- 1B. Are chemicals associated with the site mobile in groundwater?** Yes.
- 1C. Does groundwater from the site discharge to ecological receptor habitat?** Potentially. Groundwater beneath the site was interpreted to be to the south-southeast towards Zack's Fork Creek. As such, the shortest downgradient distance from the soil/groundwater source area to the nearest receptor and/or point of exposure (POE) is likely Zack's Fork Creek, located approximately 680 feet south-southeast of the site.
- Question 1. Could chemicals associated with the site reach ecological receptors through groundwater?** Potentially. The groundwater flow direction beneath the site is interpreted to be to the southeast towards Zack's Fork Creek. Groundwater assessment activities completed to date have identified impacted groundwater beneath the site. However, the identified groundwater impacts appear to be horizontally defined in the direction of groundwater flow, as well as confined to the site. Given the distance to the receptor(s) and/or POE, surface water impacts from groundwater discharge are not a concern.
- 2A. Are chemicals present in surface soils on the site?** Yes. COCs have been detected at the site in surface soil samples collected from 0-8 feet below ground surface (bgs). However, soil samples were collected from onsite locations capped by impervious surfaces (i.e. asphalt and/or concrete).
- 2B. Can chemicals be leached from or be transported by erosion of surface soils on the site?** No. To date, the surface soil impacts have only been identified under impervious surfaces at the site.
- Question 2. Could chemicals associated with the site reach ecological receptors through runoff or erosion?** Not likely. To date, the only impacted areas of the site have been identified under impervious surfaces.
- 3A. Are chemicals present in surface soil or on the surface of the ground?** Yes.
- 3B. Are potential ecological receptors on the site?** No.
- Question 3. Could chemicals associated with the site reach ecological receptors through direct contact?** No. To date, the surface soil impacts have only been identified under impervious surfaces at the site.
- 4A. Are chemicals on the site volatile?** Yes.
- 4B. Could chemicals on the site be transported in air as dust or particulate matter?** Not likely. To date, the only impacted areas of the site have been identified under impervious surfaces.

**Question 4. Could chemicals associated with the site reach ecological receptors through inhalation of volatilized chemicals or adhered chemicals to dust in ambient air or in subsurface burrows?** Yes. Although potential vapor intrusion pathways at this site have not been evaluated to date, the potential exists for PCE to reach ecological receptors through off-gassing from soil and/or groundwater. However, the surface soil impacts have only been identified under impervious surfaces and no burrowing animals have been observed or would be expected beneath the impervious surfaces at the site. In addition, review of site analytical data from groundwater samples collected on December 9, 2015 does not warrant further assessment of potential vapor intrusion pathways at this time. The groundwater quality sampling results were documented in the *Prioritization Assessment Report* dated February 10, 2016.

**5A. Is Non-Aqueous Phase Liquid (NAPL) present at the site?** No.

**5B. Is NAPL migrating?** No.

**5C. Could NAPL discharge occur where ecological receptors are found?** No.

**Question 5. Could chemicals associated with site reach ecological receptors through migration of NAPL?** No.

**6A. Are chemicals present in surface and shallow subsurface soils or on the surface of the ground?** Yes. Chemicals have been identified at 0-8 feet bgs beneath impervious surfaces at the site.

**6B. Are chemicals found in soil on the site taken up by plants growing on the site?** Not likely. Vegetative growth was not observed in the area of the identified source area, and surface soil impacts were only identified under the impervious surface at the site.

**6C. Do potential ecological receptors on or near the site feed on plants (e.g., grasses, shrubs, forbs, trees, etc.) found on the site?** None have been specifically identified. Furthermore, vegetative growth was not observed in the area of the identified source area, and surface soil impacts were only identified under the impervious surface at the site.

**6D. Do chemicals found on the site bioaccumulate?** No. The primary COC is PCE, which has a low bioaccumulation potential and is not likely to accumulate in the tissue of organisms through respiration, ingestion, or direct contact.

**Question 6. Could chemicals associated with the site reach ecological receptors through direct ingestion of soil, plants animals or contaminants?** Not likely. As soil impacts have only been identified beneath impervious surfaces, the potential for direct ingestion is not a concern.

If the answer to one or more of the above six questions is “Yes”, the NCDEQ may require further assessment to determine whether the site poses an unacceptable risk to ecological receptors.

**APPENDIX C**

**NOTICE OF DRY CLEANING SOLVENT REMEDIATION (NDCSR)  
FOR THE SOURCE PROPERTY**

**(Mountain Properties of Lenoir LLC: 220 Morganton Boulevard SW)**

## NOTICE OF DRY-CLEANING SOLVENT REMEDIATION

Property Owner: Mountain Properties of Lenoir LLC  
Recorded in Book \_\_\_\_\_, Page \_\_\_\_\_  
Associated plat recorded in Plat Book \_\_\_\_\_, Page \_\_\_\_\_

This documentary component of a Notice of Dry-Cleaning Solvent Remediation (hereinafter "Notice") is hereby recorded on this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ by Mountain Properties of Lenoir LLC (hereinafter "Property Owner"). The survey plat component of the Notice is being recorded concurrently with this documentary component. The real property (hereinafter "Property") which is the subject of this Notice is located at 220 Morganton Boulevard SW, Lenoir, North Carolina, Parcel Identification Number (PIN) 2759163876.

The Property is contaminated with dry-cleaning solvent, as defined at North Carolina General Statutes (hereinafter "N.C.G.S."), Section (hereinafter "§") 143-215.104B(b)(9) and other contaminants, and is the parcel that makes up the dry-cleaning solvent contamination site (hereinafter "Contamination Site"). This Notice has been approved by the North Carolina Department of Environmental Quality, or its successor in function (hereinafter "DEQ") under the authority of the Dry-Cleaning Solvent Cleanup Act of 1997, as amended, N.C.G.S. § 143-215.104A *et seq.* (hereinafter "DSCA"), and is required to be filed in the Register of Deeds' Office in the county or counties in which the land is located, pursuant to NCGS § 143-215.104M. A Notice will be recorded separately in each chain of title of the Contamination Site.

Soil and groundwater at the Property are contaminated with dry-cleaning solvents associated with dry-cleaning operations at the former Jordan Cleaners (DSCA Site DC140001) located at 220 Morganton Boulevard SW, Lenoir, North Carolina. Dry-cleaning operations were conducted on the Property from approximately 1993 to 2015.

Pursuant to N.C.G.S. § 143-215.104M, this Notice is being filed in order to reduce or eliminate the danger to public health or the environment posed by the Property. Attached hereto as **Exhibit A** is a reduction, to 8.5" x 11", of the survey plat component of the Notice required by N.C.G.S. § 143-215.104M. The survey plat has been prepared and certified by a professional land surveyor and meets the requirements of G.S. 47-30, and contains the following information required by N.C.G.S. § 143-215.104M:

(1) A description of the location and dimensions of the areas of potential environmental concern (Area "A") with respect to permanently surveyed benchmarks; and

(2) The type, location and quantity of regulated dry-cleaning solvent contamination and other contaminants known to exist on the Property.

Attached hereto as **Exhibit B**, is a legal description of the Property that would be sufficient as a description in an instrument of conveyance.

Pursuant to NCGS § 143-215.104M, a certified copy of this Notice must be filed within 15 days of receipt of DEQ's approval of the Notice or the effective date of the dry-cleaning solvent remediation agreement, whichever is later. Pursuant to NCGS § 143-215.104M, the copy of the Notice certified by DEQ must be recorded in the grantor index under the names of the owners of the land.

### **LAND-USE RESTRICTIONS**

NCGS § 143-215.104M requires that the Notice identify any restrictions on the current and future use of the Property that are necessary or useful to maintain the level of protection appropriate for the designated current or future use of the Property and that are designated in the dry-cleaning remediation agreement. The restrictions shall remain in force in perpetuity unless canceled by the Secretary of DEQ, or his/her designee, after the hazards have been eliminated, pursuant to NCGS §143-215.104M. Those restrictions are hereby imposed on the Property, and are as follows:

1. Without prior written approval from DEQ, the Property shall not be used for:
  - a. child care centers or schools; or
  - b. mining or extraction of coal, oil, gas or any mineral or non-mineral substances.
2. No activities that encounter, expose, remove or use groundwater (for example, installation of water supply wells, fountains, ponds, lakes or swimming pools that use groundwater, or construction or excavation activities that encounter or expose groundwater) may occur on the Property without prior approval of DEQ.
3. In January of each year, on or before January 31<sup>st</sup>, the owner of any portion of the Property shall submit a notarized Annual Certification of Land-Use Restrictions to DEQ certifying that this Notice remains recorded at the Register of Deeds' office, and that the land-use restrictions are being complied with.
4. No person conducting environmental assessment or remediation at the Property or involved in determining compliance with applicable land-use restrictions, at the direction of, or pursuant to a permit or order issued by DEQ may be denied access to the Property for the purpose of conducting such activities.
5. The owner of any portion of the Property shall cause the instrument of any sale, lease, grant, or other transfer of any interest in the property to include a provision expressly requiring the lessee, grantee, or transferee to comply with this Notice. The failure to include such a provision shall not affect the validity or applicability of any land-use restriction in this Notice.

In addition to restrictions 1 through 5 above, restrictions 6 and 7 below also apply to the portion of the Property identified as Area "A" as shown on the survey plat attached as **Exhibit A**:

6. Except for routine maintenance, no construction activities or change in property use that cause or create an unacceptable human health risk from vapor intrusion may occur within Area "A" without prior approval of DEQ. These activities include but are not limited to: construction of new buildings, removal and construction of part of a building, construction of sub-grade structures that encounter contaminated soil or places building users in close proximity to contaminated groundwater, change from non-residential to residential property, change in tenant space usage, and addition of residential property use on higher floors.
7. No activities that cause or create an increase in infiltration (for example, removal or demolition of materials such as asphalt, concrete, buildings, or other structures that by their use and nature minimize infiltration of rain or water runoff into potentially contaminated soil) may occur in Area "A" of the Property, as shown on Exhibit A, without prior approval of DEQ.

#### **EASEMENT (RIGHT OF ENTRY)**

The property owner grants and conveys to DEQ, its agents, contractors, and employees, and any person performing pollution remediation activities under the direction of DEQ, access at reasonable times and under reasonable security requirements to the Property to determine and monitor compliance with the land-use restrictions set forth in this Notice. Such investigations and actions are necessary by DEQ to ensure that use, occupancy, and activities of and at the Property are consistent with the land-use restrictions and to ensure that the structural integrity and continued effectiveness of any engineering controls (if appropriate) described in the Notice are maintained. Whenever possible, at least 48 hours advance notice will be given to the Property Owner prior to entry. Advance notice may not always be possible due to conditions such as response time to complaints and emergency situations.

#### **REPRESENTATIONS AND WARRANTIES**

The Property Owner hereby represents and warrants to the other signatories hereto:

- i) that the Property Owner is the sole owner of the Property; **or** that the Property Owner has provided to DEQ the names of all other persons that own an interest in or hold an encumbrance on the Property and have notified such persons of the Property Owner's intention to enter into this Notice;
- ii) that the Property Owner has the power and authority to enter into this Notice, to grant the rights and interests herein provided and to carry out all obligations hereunder; and

- iii) that this Notice will not materially violate or contravene or constitute a material default under any other agreement, document or instrument to which the Property Owner is a party or by which the Property Owner may be bound or affected.

### **ENFORCEMENT**

The above land-use restrictions shall be enforceable without regard to lack of privity of estate or contract, lack of benefit to particular land, or lack of any property interest in particular land. The land-use restrictions shall be enforced by any owner of the Property. The land-use restrictions may also be enforced by DEQ through the remedies provided in NCGS § 143-215.104P or by means of a civil action; by any unit of local government having jurisdiction over any part of the Property; and by any person eligible for liability protection under the DSCA who will lose liability protection if the restrictions are violated. Any attempt to cancel any or all of this Declaration without the approval of the Secretary of DEQ (or its successor in function), or his/her delegate, shall be subject to enforcement by DEQ to the full extent of the law. Failure by any party required-or authorized to enforce any of the above restrictions shall in no event be deemed a waiver of the right to do so thereafter as to the same violation or as to one occurring prior or subsequent thereto.

If a land-use restriction set out in this Notice required under NCGS § 143-215.104.M is violated, the owner of the Property at the time the land-use restriction is violated, the owner's successors and assigns, and the owner's agents who direct or contract for alteration of the contamination site in violation of a land-use restriction shall be liable for remediation of all contaminants to unrestricted use standards.

### **FUTURE SALES, LEASES, CONVEYANCES AND TRANSFERS**

When any portion of the Property subject to this Notice is sold, leased, conveyed or transferred, the deed or other instrument of transfer shall contain in the description section, in no smaller type than that used in the body of the deed or instrument, (1) a statement that the property has been contaminated with dry-cleaning solvent and, if appropriate, cleaned up under the Act and (2) a reference by book and page to the recordation of this Notice.

The Property Owner shall notify DEQ within fourteen (14) calendar days of the effective date of any conveyance, grant, gift, or other transfer, whole or in part, of the Property Owner's interest in the Property. This notification shall include the name, business address and phone number of the transferee and the expected date of transfer.

The Property Owner shall notify DEQ within thirty (30) days following the petitioning or filing of any document by any person initiating a rezoning of the Property that would change the base zone of the Property.

This provision shall not apply to leases that do not provide for the right to take actions that would violate the prohibitions and restrictions of this Notice.

**PROPERTY OWNER SIGNATURE**

IN WITNESS WHEREOF, Property Owner has caused this instrument to be duly executed this \_\_\_ day of \_\_\_\_\_, 20\_\_.

Mountain Properties of Lenoir LLC

By:

\_\_\_\_\_  
Name of contact

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

I, \_\_\_\_\_, a Notary Public of the county and state aforesaid, certify that \_\_\_\_\_ personally came before me this day and acknowledged that he/she is a Member of Mountain Properties of Lenoir LLC, and that by authority duly given and as the act of the company, the foregoing Notice of Dry-Cleaning Solvent Remediation was signed in its name by him.

WITNESS my hand and official stamp or seal, this \_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Name typed or printed  
Notary Public

My Commission expires: \_\_\_\_\_  
[Stamp/Seal]

**APPROVAL AND CERTIFICATION**

The foregoing Notice of Dry-Cleaning Solvent Remediation is hereby approved and certified.

North Carolina Department of Environmental Quality

By: \_\_\_\_\_  
Jim Bateson, LG  
Chief, Superfund Section  
Division of Waste Management

\_\_\_\_\_  
Date

**LIMITED POWER OF ATTORNEY**

I \_\_\_\_\_ “Property Owner”, do hereby grant a limited power of attorney to DEQ and to DEQ’s independent contractors, as follows:

**DEQ and DEQ’s independent contractors shall have the limited power of attorney to record this Notice, including its documentary and survey plat components, in accordance with N.C.G.S. § 143-215.104M on my “Property Owner” behalf. This limited power of attorney shall terminate upon completion of the recordation of the Notice.**

Signature of Property Owner \_\_\_\_\_

Dated this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

I, \_\_\_\_\_, a Notary Public, do hereby certify that \_\_\_\_\_ personally appeared before me this day and signed this “Limited Power of Attorney”.

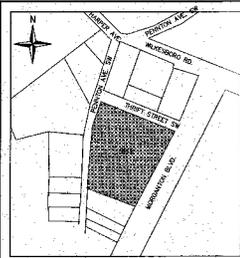
WITNESS my hand and official stamp or seal, this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Name typed or printed  
Notary Public

My Commission expires: \_\_\_\_\_  
[Stamp/Seal]



**EXHIBIT A**  
**REDUCTION OF SURVEY PLAT**



**LINE LEGEND**

---	PROPERTY LINE (PL)
---	N. LOT SHARED (NS)
---	R/W
---	TR. LINE ONLY
---	CURB & CURTIL
---	DRY-LOAD UTILITY W/RS
---	WALL OF CONTE

**HATCH LEGEND**

---	AREA "A"
-----	----------

**SYMBOL LEGEND**

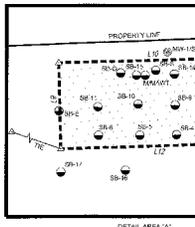
---	PROPERTY CORNER (PL)
---	FORMER POINT
---	ADJACENT CORNER POINT
---	1/2" T. PILE
---	WALL MARK
---	CAKON MARK
---	TRITICUM PILEMARK
---	2" GAS V. VE
---	3" WTR. MULE
---	4" CONCRETE WPT
---	5" W. MARK
---	6" LIGHT POLE
---	7" ELECTRIC BOX
---	8" TRANSFORMER
---	9" SANITARY SEWER MANHOLE
---	10" HYDRANT

**ABBREVIATIONS**

DB	DEED BOOK
MB	MAP BOOK
FC	FACE
NT	NOT OR FORMERLY
ROV	RIGHT OF WAY
RF	ROUND (LIT)
NSP	NEAR FOUND
REF	REFER. CAP FOUND BY
SMF	SMALL METAL SET
PNP	POULN FOUND
LIT	LITTLE HOLE FOUND
EN	ENHANCEMENT
WV	WATERING WELL
WVW	WELL CALL BY DEED

**LINE BEARING AND DISTANCE**

L1	345.00' ±	110.00' ±
L2	345.00' ±	110.00' ±
L3	345.00' ±	110.00' ±
L4	345.00' ±	110.00' ±
L5	345.00' ±	110.00' ±
L6	345.00' ±	110.00' ±
L7	345.00' ±	110.00' ±
L8	345.00' ±	110.00' ±
L9	345.00' ±	110.00' ±
L10	345.00' ±	110.00' ±
L11	345.00' ±	110.00' ±
L12	345.00' ±	110.00' ±



**VICINITY MAP (SCALE: 1"=400')**

**SURVEY NOTES**

1. THE PURPOSE OF THIS PLAT IS TO DISPLAY (1) THE LOCATION AND DIMENSIONS OF THE AREAS OF POTENTIAL ENVIRONMENTAL CONCERN WITH REFERENCE TO SURVEYED MEASUREMENTS AND (2) THE TYPE, LOCATION AND QUANTITY OF REGULATED SUBSTANCES AND HAZARDOUS WASTES LOCATED ON THE NORTH COURTYARD DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES (DEEN) DRY-CLEANING SOLVENT CLEANING ACT (DCCA) PROGRAM SITE, LISTED PHYSICAL IMPROVEMENTS HAVE BEEN SHOWN.

2. THE AREAS AND TYPES OF CONTAMINATION DEPICTED HEREON ARE APPROXIMATIONS DERIVED FROM THE BEST AVAILABLE INFORMATION AT THE TIME OF FILING. THIS INFORMATION WAS SUPPLIED TO TAYLOR WISEMAN & TAYLOR BY ASOOR.

3. ALL BEARINGS, DISTANCES AND COORDINATES SHOWN HEREON ARE BASED UPON LOCALIZED, HORIZONTAL GROUND MEASUREMENTS.

4. PROPERTY OWNER INFORMATION WAS OBTAINED VIA THE CALDWELL COUNTY ONLINE GIS WEBSITE.

5. ADJACENT PROPERTY LINES SHOWN HEREON WERE TAKEN FROM THE CALDWELL COUNTY GIS DATABASES ON 02/25/2016 AND THE INFORMATION HAS BEEN SHOWN HEREON FOR REFERENCE PURPOSES ONLY. NO ASSURANCE OF ACCURACY OR SCALING WAS PERFORMED ON THE GIS DATA. IT WAS ASSUMED INTO OUR DRAWING FILE AS PROVIDED. NO ACCURACY OR POSITIONAL TOLERANCE IS GUARANTEED BY THIS SURVEY AS TO HOW THE SURVEY FEATURES RELATE TO THE GIS INFORMATION SHOWN HEREON.

6. PROPERTIES SHOWN HEREON ARE SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD THAT WOULD BE REVEALED BY A THOROUGH TITLE SEARCH. THIS PLAT SHOULD NOT BE RELIED UPON AS A COMPLETE RECORD OF ALL EASEMENTS THAT MAY AFFECT THESE PROPERTIES.

7. MONITORING WELLS MW-1, MW-2, MW-3, & MW-4 WERE LOCATED BY CONVENTIONAL SURVEYING METHODS. SOIL BORINGS SHOWN ON PLAT WERE SCALES FROM A WYOMING ENTERIES 15062616 PROVIDED BY ASOOR ON 02/25/2016.

**CONTAMINATION STATEMENT:**

GROUNDWATER IN WELLS MW-1 THROUGH MW-4 EXCEEDED THE APPLICABLE 2,4,6-TRICHLORO BENZENE (2,4,6-T) MAXIMUM CONCENTRATION (MCC) FOR ONE OR MORE OF THE FOLLOWING CONTAMINANTS: TETRACHLOROETHENE, VINYL CHLORIDE, AND METYLENE CHLORIDE.

SOIL IN BORINGS 0, S, SB-1, SB-4, SB-4, SB-4, SB-4, SB-4, SB-4, SB-11, SB-12, AND SB-13 EXCEEDED THE ASSOCIATED RESIDENTIAL RISK BASED SCREENING LEVEL (RSL) (MCC) FOR ONE OR MORE OF THE FOLLOWING CONTAMINANTS: TETRACHLOROETHENE, CIS-1,2-DICHLOROETHANE, TRANS-1,2-DICHLOROETHENE, VINYL CHLORIDE, AND METYLENE CHLORIDE.

**SURVEY CONTROL / GRID NOTES**

THE CONTROL LINE SHOWN HEREON WAS ESTABLISHED BY GPS SURVEY METHODS USING THE NORTH CAROLINA GOODETS SURVEY (NCGS) VERTICAL REFERENCE STATION (VRS), WHICH IS BASED UPON THE CONTINUALLY OPERATING REFERENCE STATION (CORS).

1. CLASS OF SURVEY: CLASS A

2. POSITIONAL ACCURACY: ± 0.017' (95% CONFIDENCE)

3. DATE OF GPS FIELD PROCESSING: 08/11/2016

4. DATE OF GPS SURVEY: 08/11/2016

5. REAL TIME KINEMATIC NETWORKS (RTK): USED

6. DATE OF SURVEY: 08/11/2016

7. HORIZONTAL DATUM: NAD 83

8. VERTICAL DATUM: NAVD83

9. ELEVATION: 1131.37' ±

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100. ELEVATION: 1131.37' ±

**SURVEYOR'S CERTIFICATE**

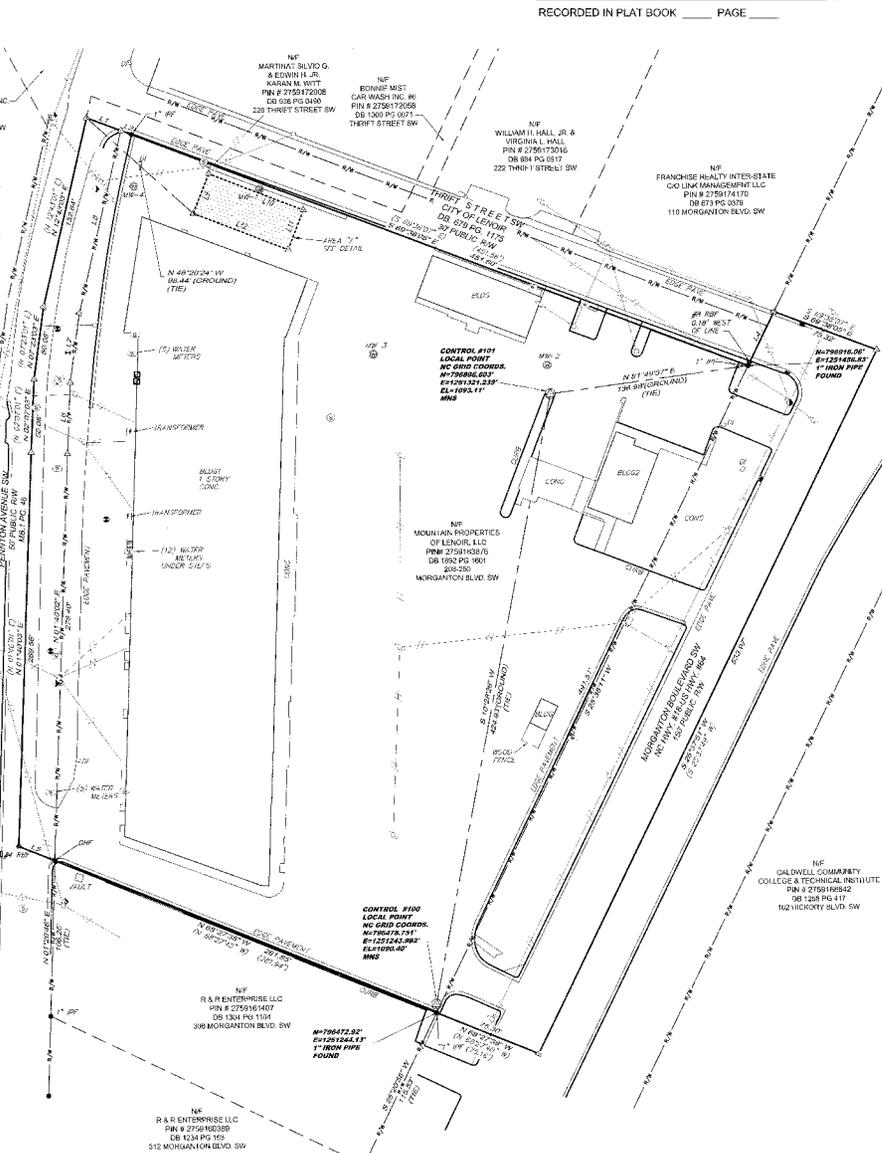
I, JAMES M. PENNELL, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM A TOTAL STATION SURVEY BY SUPERVISOR (DEED) INFORMATION RECORDED IN BOOK 1862, PAGE 4801. THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS SUCH. I HAVE MADE NO SUPERVISION REFERENCES ON THE FACE OF THIS PLAT. THAT THE RATIO OF PRECISION IS 6:00, ASSUMING THAT THIS SURVEY IS OF AN OPENING PARCEL OR PARCELS OF LAND AND DOES NOT CREATE A NEW SURVEY OR CHANGE AN EXISTING SURVEY. THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH S.E. 17-25 AS AMENDED, WITHIN MY ORIGINAL JURISDICTION, REGISTERED AND SEAL THE 10th DAY OF JANUARY, A.D., 2016.



**FLOOD CERTIFICATION**

UPON EXAMINATION OF FLOOD RESISTANCE RATE (FRR) MAP, NUMBER 2703 OF COMMUNITY NUMBER 27040, LENOIR COUNTY, BEARING MAP # 171079600, DATED JULY 7, 2002, THE SUBJECT PROPERTY IS LOCATED WITHIN THE 2% ANNUAL FLOOD HAZARD ZONE (AHZ).

NOTE: FLOOD LINES NOT SHOWN FOR CLARITY.



**CONTROL LINE**

CONTROL	NORTHINGS	EASTINGS	ELEVATION
100	79978.700	125143.590	1093.40
101	79950.000	125132.240	1093.11

**WELL TABLE**

WELL ID	NORTHINGS	EASTINGS	GROUND ELEVATION	TOP OF CASING	LATITUDE	LONGITUDE
MW-1	796208.166	1251370.200	1092.87	1093.06	35°58'49.432N	81°31'45.261W
MW-2	796165.430	1251398.800	1093.30	1093.10	35°58'48.266N	81°31'42.949W
MW-3	796023.200	1251199.800	1094.12	1093.69	35°58'48.338N	81°31'44.417W
MW-4	796237.890	1251035.400	1092.95	1092.36	35°58'49.435N	81°31'43.434W

**CERTIFICATE OF REVIEW OFFICER**

STATE OF NORTH CAROLINA

REVIEW OFFICER OF \_\_\_\_\_ REVIEW OFFICER OF \_\_\_\_\_

CALDWELL COUNTY CERTIFY THAT THE MAP OR PLAT TO WHICH THIS CERTIFICATION IS AFFIXED MEETS ALL STATUTORY REQUIREMENTS FOR RECORDING.

REVIEW OFFICER: \_\_\_\_\_ DATE: \_\_\_\_\_

**DEED STATEMENT**

N.C.G.S. 143-215 (3)(a)(ii) REQUIRES THAT WHEN A PROPERTY FOR WHICH A DEED OF DRY-CLEANING SOLVENT REMEDIATION HAS BEEN FILED IS SOLD, LEASED, CONVEYED OR TRANSFERRED, THE DEED OR OTHER INSTRUMENT OF TRANSFER SHALL CONTAIN IN THE DESCRIPTION SECTION, IN NO SMALLER TYPE THAN THAT USED IN THE BODY OF THE DEED OR INSTRUMENT, A STATEMENT THAT THE PROPERTY HAS BEEN CONTAMINATED WITH DRY-CLEANING SOLVENT AND, IF APPROPRIATE, CLEANED UP UNDER THIS PART. USE THE FOLLOWING STATEMENT TO COMPLY WITH C.S. 143-215 (3)(a)(ii):

THIS PROPERTY HAS BEEN CONTAMINATED WITH DRY-CLEANING SOLVENT. A NOTICE OF DRY-CLEANING SOLVENT REMEDIATION IS RECORDED IN THE CALDWELL COUNTY REGISTER OF DEEDS OFFICE AT BOOK \_\_\_\_\_ PAGE \_\_\_\_\_.

QUESTIONS CONCERNING THIS MATTER MAY BE DIRECTED TO THE NORTH CAROLINA DIVISION OF WASTE MANAGEMENT, SUPERVISOR SECTION, 1700 FLORENCE STREET, RALEIGH, NC 27603-1906.

**DEQ ACKNOWLEDGEMENT:**

APPROVED FOR THE PURPOSES OF N.C.G.S. 143-215.16(a)

JIM BATHS, DEQ  
CHIEF SUPERVISOR SECTION  
DIVISION OF WASTE MANAGEMENT

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_  
I, \_\_\_\_\_, A NOTARY PUBLIC OF SAID COUNTY AND STATE,  
DO HEREBY CERTIFY THAT \_\_\_\_\_ DID PERSONALLY APPEAR  
AND SIGN BEFORE ME THIS THE \_\_\_\_\_ DAY OF \_\_\_\_\_

NOTARY PUBLIC (SIGNATURE)  
MY COMMISSION EXPIRES \_\_\_\_\_

**OWNERS ACKNOWLEDGEMENT**

I, JAMES M. PENNELL, BEING FULLY AUTHORIZED TO EQUALLY EXECUTE A DEED FOR THIS PROPERTY,

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_  
I, \_\_\_\_\_, A NOTARY PUBLIC OF SAID COUNTY AND STATE,  
DO HEREBY CERTIFY THAT \_\_\_\_\_ DID PERSONALLY APPEAR  
AND SIGN BEFORE ME THIS THE \_\_\_\_\_ DAY OF \_\_\_\_\_

NOTARY PUBLIC (SIGNATURE)  
MY COMMISSION EXPIRES \_\_\_\_\_

**OWNER'S ACKNOWLEDGEMENT**

I, JAMES M. PENNELL, BEING FULLY AUTHORIZED TO EQUALLY EXECUTE A DEED FOR THIS PROPERTY,

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_  
I, \_\_\_\_\_, A NOTARY PUBLIC OF SAID COUNTY AND STATE,  
DO HEREBY CERTIFY THAT \_\_\_\_\_ DID PERSONALLY APPEAR  
AND SIGN BEFORE ME THIS THE \_\_\_\_\_ DAY OF \_\_\_\_\_

NOTARY PUBLIC (SIGNATURE)  
MY COMMISSION EXPIRES \_\_\_\_\_

**OWNER'S ACKNOWLEDGEMENT**

I, JAMES M. PENNELL, BEING FULLY AUTHORIZED TO EQUALLY EXECUTE A DEED FOR THIS PROPERTY,

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_  
I, \_\_\_\_\_, A NOTARY PUBLIC OF SAID COUNTY AND STATE,  
DO HEREBY CERTIFY THAT \_\_\_\_\_ DID PERSONALLY APPEAR  
AND SIGN BEFORE ME THIS THE \_\_\_\_\_ DAY OF \_\_\_\_\_

NOTARY PUBLIC (SIGNATURE)  
MY COMMISSION EXPIRES \_\_\_\_\_

**OWNER'S ACKNOWLEDGEMENT**

I, JAMES M. PENNELL, BEING FULLY AUTHORIZED TO EQUALLY EXECUTE A DEED FOR THIS PROPERTY,

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_  
I, \_\_\_\_\_, A NOTARY PUBLIC OF SAID COUNTY AND STATE,  
DO HEREBY CERTIFY THAT \_\_\_\_\_ DID PERSONALLY APPEAR  
AND SIGN BEFORE ME THIS THE \_\_\_\_\_ DAY OF \_\_\_\_\_

NOTARY PUBLIC (SIGNATURE)  
MY COMMISSION EXPIRES \_\_\_\_\_



**TAYLOR WISEMAN & TAYLOR**  
ENGINEERS, E. SURVEYORS, E. SOILISTS  
SURFACE UTILITIES ENGINEERS  
700 FOREST POINT CIRCLE, SUITE 110  
CHARLOTTE, NC 28207  
PHONE: 704.366.4527  
NORTH CAROLINA LICENSE NUMBER: 67582



**SURVEY PLAT - EXHIBIT "A"**  
TO THE NOTICE OF DRY-CLEANING SOLVENT REMEDIATION  
OWNER: MOUNTAIN PROPERTIES OF LENOIR, LLC  
PIN 2759163876

FORMER JORDAN CLEANERS - DC140001  
220 MORGANTON BLVD. SW, CITY OF LENOIR  
CALDWELL COUNTY, NORTH CAROLINA

**REVISIONS**

DATE	REVISION
08/11/2016	ISSUED

SCALE: 1" = 40'

DRAWN BY: JPM

CHECKED BY: JPM

PROJECT: 1077496236

**EXHIBIT B**  
**PROPERTY LEGAL DESCRIPTION**

**METES AND BOUNDS DESCRIPTION  
EXHIBIT "B" NDCSR**

**BEGINNING** AT A DRILL HOLE FOUND IN THE EASTERLY MARGIN OF PENNTON AVENUE (A 50' PUBLIC R/W), SAID DRILL HOLE ALSO BEING N01°20'46"E A DISTANCE OF 106.25' FROM A 1" IPF ON THE SOUTHWESTERLY CORNER OF THE PROPERTY OWNED BY R&R ENTERPRISES AS RECORDED IN DB. 1304, PG. 1184 IN THE CALDWELL COUNTY REGISTER OF DEEDS. THENCE COMMENCING FROM SAID **POINT OF BEGINNING** N 68°27'38" W A DISTANCE OF 26.58' TO A #4 REBAR FOUND IN THE CENTERLINE OF SAID PENNTON AVENUE. THENCE ALONG SAID CENTERLINE THE FOLLOWING FOUR (4) CALLS: 1) N 01°40'03" E A DISTANCE OF 269.56' TO A POINT; 2) N 02°07'03" E A DISTANCE OF 50.08' TO A POINT; 3) N 07°23'03" E A DISTANCE OF 50.08' TO A POINT; 4) N 12°43'03" E A DISTANCE OF 132.64' TO A POINT IN THE SOUTHERLY MARGIN OF THRIFT STREET (A 30' PUBLIC R/W). THENCE ALONG SAID SOUTHERLY MARGIN THE FOLLOWING THREE (3) CALLS: 1) S 69°38'05" E A DISTANCE OF 25.22' TO A POINT; 2) S 69°38'05" E A DISTANCE OF 7.73' TO A POINT; 3) S 69°38'05" E A DISTANCE OF 451.60' TO A 1" IPF IN THE WESTERLY MARGIN OF MORGANTON BLVD. (A 150' PUBLIC R/W). THENCE ALONG SAID WESTERLY MARGIN N 25°40'51" E A DISTANCE OF 40.87' TO A POINT. THENCE LEAVING SAID WESTERLY MARGIN S 69°38'05" E A DISTANCE OF 75.32' TO A POINT IN THE CENTERLINE OF MORGANTON BLVD. THENCE ALONG SAID CENTERLINE S 25°37'51" W A DISTANCE OF 533.97' TO A POINT. THENCE LEAVING SAID CENTERLINE THE FOLLOWING TWO (2) CALLS: 1) N68°27'38"W A DISTANCE OF 75.30' TO A 1" IPF; 2) N 68°27'38" W A DISTANCE OF 281.85' TO THE **POINT AND PLACE OF BEGINNING**, CONTAINING 5.461 ACRES, MORE OR LESS.

**APPENDIX D**  
**EXAMPLE ANNUAL CERTIFICATION OF**  
**LAND-USE RESTRICTIONS**



ROY COOPER  
*Governor*

MICHAEL S. REGAN  
*Secretary*

MICHAEL SCOTT  
*Director*

<date>

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Mountain Properties of Lenoir LLC  
10312 Annie Oakley Trail  
Charlotte, NC 28227

Subj: Annual Certification of Land-Use Restrictions  
Jordan Cleaners, 220 Morganton Boulevard SW  
Lenoir, Caldwell County, North Carolina  
DSCA Site DC140001

Dear Mountain Properties of Lenoir LLC:

On <date>, the Division of Waste Management made a “No Further Action” decision for the above referenced site. As part of that decision, it was determined that land-use restrictions were necessary to ensure protection of human health and the environment. The land-use restrictions for this site are specified in the enclosed Notice of Dry-Cleaning Solvent Remediation (Notice) signed by the property owner and the Division of Waste Management.

As owner of at least a portion of the DSCA Site, you are required to comply with Condition      of the Notice by submitting to DEQ a notarized Annual Certification of Land-Use Restrictions certifying that the Notice remains recorded at the Caldwell County Register of Deeds’ office and that the Land-Use Restrictions are being complied with. Please complete the enclosed Annual Certification of Land-Use Restrictions and return it to me on or before **January 31, 20\_\_**.

In accordance with § 143-215.104M(f), any person who fails to comply within the time specified in this letter, shall then be subject to the applicable enforcement procedures. The Notice further states that if a land-use restriction is violated, the owner of the contamination site at the time the land-use restriction is violated, the owner’s successors and assigns, and the owner’s agents who direct or contract for alteration of the contamination site in violation of a land-use restriction shall be liable for remediation of all contaminants to unrestricted use standards.

If you have any questions concerning these documents or the site, please contact me at (919) 707-8367 or via email at [jay.king@ncdenr.gov](mailto:jay.king@ncdenr.gov).

Sincerely,

Jay W. King, Project Manager  
DSCA Remediation Unit  
Superfund Section  
Division of Waste Management

Attachments: Copy of Notice of Dry-Cleaning Solvent Remediation  
Annual Certification of Land-Use Restrictions form

Cc: DSCA Site DC140001 File

**Annual Certification of Land-Use Restrictions**

**Site Name:** Jordan Cleaners  
**Site Address:** 220 Morganton Boulevard SW, Lenoir, Caldwell County  
**DSCA ID No:** DC140001

**ANNUAL CERTIFICATIION of LAND-USE RESTRICTIONS**

Pursuant to Condition    in the Notice of Dry-Cleaning Solvent Remediation (Notice) signed by Mountain Properties of Lenoir LLC and recorded in Deed Book <blank>, Page <blank> on <date> at the Caldwell County Register of Deeds Office, Mountain Properties of Lenoir LLC hereby certifies, as an owner of at least part of the property that is the subject of the Notice, that the Notice remains recorded at the Caldwell County Register of Deeds office and the land-use restrictions therein are being complied with.

Duly executed this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Mountain Properties of Lenoir LLC  
By: \_\_\_\_\_  
Name typed or printed:

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

I, \_\_\_\_\_, a Notary Public of the county and state aforesaid, certify that \_\_\_\_\_ personally came before me this day and the foregoing certification was signed by him/her.

WITNESS my hand and official stamp or seal, this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Name typed or printed:  
Notary Public

My Commission expires: \_\_\_\_\_  
[Stamp/Seal]

**APPENDIX E**

**EXAMPLE DOCUMENTS ANNOUNCING PUBLIC COMMENT PERIOD**



ROY COOPER  
Governor

MICHAEL S. REGAN  
Secretary

MICHAEL SCOTT  
Director

<Date>

<name>, <City Manager/County Health Director>  
<address>  
<city>, NC <zip>

Subj: Remediation of Dry-Cleaning Solvent Contamination  
DSCA Site DC140001  
Jordan Cleaners, 220 Morganton Boulevard SW, Lenoir

Dear <name>:

The Dry-Cleaning Solvent Cleanup Act of 1997 (DSCA), North Carolina General Statutes (N.C.G.S.) Sections 143-215.104A through 143-215.104U, provides for the assessment and remediation of properties that may have been or were contaminated by chlorinated solvents. To satisfy the requirements of N.C.G.S. 143-215.104L, this letter serves as the **Notice of Intent to Remediate a Dry-Cleaning Solvent Facility or Abandoned Site** (NOI) approved by the North Carolina Department of Environmental Quality (DEQ).

The NOI must provide, to the extent known, a legal description of the location of the DSCA Site, a map showing the location of the DSCA Site, a description of the contaminants involved and their concentrations in the media of the DSCA Site, a description of the intended future use of the DSCA Site, any proposed investigation and remediation, and a proposed Notice of Dry-Cleaning Solvent Remediation (NDCSR) prepared in accordance with N.C.G.S. Section 143-215.104M. The required components of the NOI are included in the attached Risk Management Plan, and are available during the public comment period on our website at:

<https://deq.nc.gov/about/divisions/waste-management/superfund-section/special-remediation-branch/dsca-public-notices-announcements>

The DSCA Program is providing a copy of the NOI to all local governments having jurisdiction over the DSCA Site. A 30-day public comment period is being held from <date>, until <date>. Written comments may be submitted to DEQ no later than <date>. Written requests for a public meeting may be submitted to DEQ no later than <date>. All such comments and requests should be sent to:

Jay W. King, DSCA Remediation Unit  
Division of Waste Management, NCDEQ  
1646 Mail Service Center  
Raleigh, North Carolina 27699-1646

A Summary of the NOI is being published in the News-Topic, copies are being sent to owners of property within and contiguous with the area of contamination, and a copy of the Summary will be conspicuously posted at the Site during the public comment period.

Remediation of Dry-Cleaning Solvent Contamination  
DSCA Site DC140001  
Jordan Cleaners, 220 Morganton Boulevard SW, Lenoir  
Page 2

<date>

If you have any questions, please feel free to contact me at (919)707-8367.

Sincerely,

[SIGNATURE]

Jay King, DSCA Project Manager  
Division of Waste Management, NCDEQ

**Public Notice**

**SUMMARY OF NOTICE OF INTENT TO REMEDIATE A DRY-CLEANING SOLVENT FACILITY OR ABANDONED SITE**

**N.C. Department of Environmental Quality  
Division of Waste Management  
Dry-Cleaning Solvent Cleanup Act (DSCA) Program**

Jordan Cleaners  
DSCA Site DC140001

Pursuant to N.C.G.S. §143-215.104L, on behalf of Mountain Properties of Lenoir LLC, the North Carolina Department of Environmental Quality's (NCDEQ's) private contractor has prepared a Notice of Intent to Remediate a Dry-Cleaning Solvent Facility or Abandoned Site (NOI). The purpose of this Summary of the NOI is to notify the community of the proposed remedy for the contamination site and invite comment on the proposed remedy.

Jordan Cleaners formerly conducted dry-cleaning operations at 220 Morganton Boulevard SW, in Lenoir, North Carolina. The site currently exists as asphalt-paved surface level parking for the Thrift Shopping Center. Dry-cleaning solvent contamination in soil and/or groundwater has been identified at the following parcel(s):

220 Morganton Boulevard SW, in Lenoir; Parcel No. 2759163876

An investigation of the extent of contamination has been completed. A risk assessment of the contaminated properties concluded that the contamination poses no unacceptable risks. A Risk Management Plan (RMP) has been prepared which proposes using land-use controls to prevent current and future risks at the affected properties.

The elements of the complete NOI are included in the RMP which is available online at <https://deq.nc.gov/about/divisions/waste-management/superfund-section/special-remediation-branch/dsca-public-notices-announcements>

***The public comment period begins [REDACTED], 20[REDACTED], and ends [REDACTED], 20[REDACTED].***

Comments must be in writing and submitted to NCDEQ no later than [REDACTED], 20[REDACTED]. Written requests for a public meeting may be submitted to NCDEQ no later than [REDACTED], 20[REDACTED]. Requests for additional information should be directed to Jay King at (919)707-8367. All comments and requests should be sent to:

Jay W. King, DSCA Remediation Unit  
Division of Waste Management, NCDEQ  
1646 Mail Service Center  
Raleigh, North Carolina 27699-1646



ROY COOPER  
*Governor*

MICHAEL S. REGAN  
*Secretary*

MICHAEL SCOTT  
*Director*

<date>

Mountain Properties of Lenoir LLC  
10312 Annie Oakley Trail  
Charlotte, NC 28227

Subj: Dry-Cleaning Solvent Contamination  
220 Morganton Boulevard SW, NC

Dear Mountain Properties of Lenoir LLC:

The Dry-Cleaning Solvent Clean-up Act (DSCA) Program has completed an assessment of the dry-cleaning solvent contamination associated with the Jordan Cleaners at 220 Morganton Boulevard SW in Lenoir. The site currently exists as asphalt-paved surface level parking for the Thrift Shopping Center. A Risk Management Plan (RMP) to address the site contamination has been prepared. You are receiving this letter in accordance with the DSCA Program's statutes, which provide the community an opportunity to review and comment on the proposed RMP. Attached is a ***Summary of the Notice of Intent to Remediate a Dry-Cleaning Solvent Facility or Abandoned Site*** which provides a brief description of the proposed remedy, a web link with more details, and the dates and procedures for commenting on the proposed RMP. We ask that you review these documents. If you do not have access to the internet, we ask that you contact us to request a hard copy.

You are also receiving this letter because your property lies within an area where dry-cleaning solvents have been detected in groundwater. An evaluation of the risks concluded that the contamination poses no unacceptable risks for the current use of your property. However, because groundwater under your property is contaminated, state regulations and local regulations prohibit the installation of a water supply well on this property. If the RMP is approved, a notice will be recorded in the chain of title indicating that groundwater is contaminated with dry-cleaning solvents and that regulations prohibit installation of a water supply well into a contaminated aquifer.

If you would like to see an example of this notice, please access the website:  
<https://deq.nc.gov/about/divisions/waste-management/superfund-section/special-remediation-branch/dsca-public-notices-announcements>

Open the Risk Management Plan for the Jordan Cleaners site, and see Appendix D. If the proposed remedy is approved, you will be sent a letter describing your rights to appeal the decision to file such a notice in the chain of title, and providing you the option of filing the notice yourself.

If you have questions, please contact me at (919) 707-8367.

Sincerely,

[SIGNATURE]

Jay W. King, DSCA Project Manager  
Division of Waste Management, NCDEQ

Attachments: Summary of the NOI

Cc: DSCA Site DC140001 File



ROY COOPER  
*Governor*

MICHAEL S. REGAN  
*Secretary*

MICHAEL SCOTT  
*Director*

<date>

<property owner>  
<mailing address>  
<city, state, zip>

Subj: Dry-Cleaning Solvent Contamination at 220 Morganton Boulevard SW  
Lenoir, NC

Dear <property owner>:

You are receiving this letter because your property at <adjacent property address> is adjacent to an area contaminated with dry-cleaning solvents. The Dry-Cleaning Solvent Clean-up Act (DSCA) Program has completed an assessment of the dry-cleaning solvent contamination associated with the former Jordan Cleaners at 220 Morganton Boulevard SW in Lenoir. The site currently exists as asphalt-paved surface level parking for the Thrift Shopping Center. A remedial strategy to address the site contamination has been prepared, and in accordance with our program's statutes, the community has an opportunity to review and comment on the proposed strategy.

The attached Summary of the Notice of Intent to Remediate a Dry-Cleaning Solvent Facility or Abandoned Site (NOI) provides a brief description of the proposed remedy, a web link to the complete NOI, and the dates and procedures for commenting on the proposed remedy. If you do not have access to the internet, we ask that you contact us to request a hard copy of the complete NOI.

If you have questions, please contact me at (919) 707-8367.

Sincerely,

[SIGNATURE]

Jay W. King, DSCA Project Manager  
Division of Waste Management, NCDEQ

Attachments: Summary of the NOI

Cc: DSCA Site DC140001 File