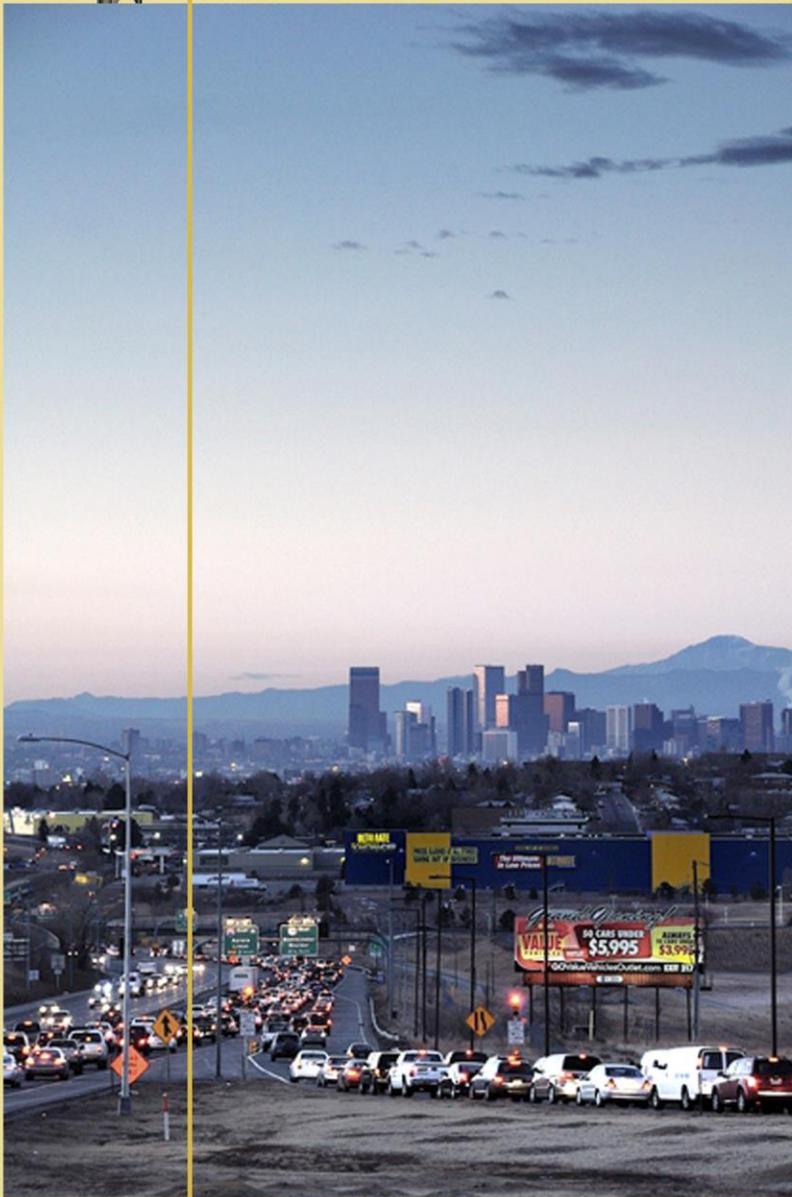


Appendix G.
Modified Environmental Site Assessment Addendum (HDR, 2015)



120TH AVENUE TO SH 7



Modified Environmental Site Assessment Addendum



RECORD OF DECISION 2

FINAL September 28, 2015

ACRONYMS AND ABBREVIATIONS

ACM	Asbestos-containing Materials
AS/SVE	Air Sparge/Soil Vapor Extraction System
ASTM	American Society for Testing and Materials
AST	Above-ground Storage Tank
AUL	Activity Use Limitation
CAP	Corrective Action Plan
CDLE	Colorado Department of Labor and Employment
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health and Environment
CERLCA	Comprehensive Environmental Response, Compensation, and Liability Act
CESQG	Conditionally Exempt Small Quantity Generator
CORRACTS	Corrective Action Site
CREC	Controlled Recognized Environmental Condition
CSP	Colorado State Patrol
EC	Environmental Control
EDR	Environmental Data Resources
EIS	Environmental Impact Statement
EP	Environmental Professional
ESA	Environmental Site Assessment
FHU	Felsburg Holt & Ullevig
HREC	Historical Recognized Environmental Condition
I-25	North Interstate 25
IC	Institutional Control
LQG	Large Quantity Generator
LUST	Leaking Underground Storage Tank
MESA	Modified Phase I Environmental Site Assessment
NFA	No Further Action
NPDES	National Pollutant Discharge Elimination System
OPS	Division of Oil and Public Safety
PCB	Polychlorinated Biphenyls
PEC	Potential Recognized Environmental Condition
PEL	Planning and Environmental Linkages

RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
ROD	Record of Decision
SH	State Highway
SQG	Small Quantity Generator
UST	Underground Storage Tank

CONTENTS

	Page No.
1.0 Introduction.....	1
1.1 Purpose and Scope of Services	1
1.2 Project Description.....	1
2.0 Methodology.....	3
3.0 Phase I Standard Update	3
4.0 Site Reconnaissance.....	5
4.1 Off-Site Property Uses	6
5.0 Database Search.....	6
5.1 Previous Studies.....	6
5.1.1 Facilities Identified in the 2008 MESA.....	6
5.1.2 Facilities Identified in the 2011 MESA Addendum.....	8
5.1.3 Facilities Identified in the North I-25 Final EIS 2011	8
5.1.4 Facilities Identified in the I-25 Managed Lanes ISA 2013.....	8
5.1.5 Facilities Identified in the 2014 PEL	9
5.2 Facilities Identified in This 2014 MESA Addendum	9
5.2.1 Details of 2014 REC and PEC Facilities.....	15
6.0 Conclusions.....	17
6.1 Findings	17
6.2 Conclusions	17
6.3 Discussion	22
6.4 Recommendations.....	22
7.0 References	23
8.0 Limitations	23

Appendices

Appendix A . Database Report (on CD-ROM)

Figures

Figure 1.	Location of Selected Alternative in the ROD2 Study Area	2
Figure 2.	Facilities That Could Be Impacted Within The Study Area.....	21

Tables

Table 1.	2014 Identified Facilities.....	10
Table 2.	Facilities That Could Be Impacted Within The Study Area.....	18

1.0 INTRODUCTION

1.1 Purpose and Scope of Services

This document is an Addendum to the Modified Phase I Environmental Site Assessment (MESA) Addendum (Felsburg Holt & Ullevig [FHU], 2011) to the North Interstate 25 (I-25) Environmental Impact Statement (EIS) MESA (FHU, 2008), originally submitted as part of the North I-25 Draft EIS (Colorado Department of Transportation [CDOT], 2008). This Addendum provides documentation of the hazardous material impacts associated with the Preferred Alternative in the *North I-25 Final Environmental Impact Statement* (FEIS) (CDOT, 2011).

The objective of this MESA Addendum is to provide information about facilities within the study area (or site) and vicinity that pose a potential risk of environmental contamination from Recognized Environmental Conditions (RECs). Thorough assessment of facilities in and near the study area for past or present soil and/or groundwater contamination is an integral component of the planning process. In the case where potential contamination of soil and/or groundwater is suspected, avoidance or identification of potential mitigation measures can be implemented when reasonably possible.

This MESA Addendum addresses all components of the CDOT Form 881, including detailed discussion regarding a description of the project, the background and methodology utilized, existing conditions/findings, conclusions and recommendations. This document serves as an attachment to CDOT Form 881.

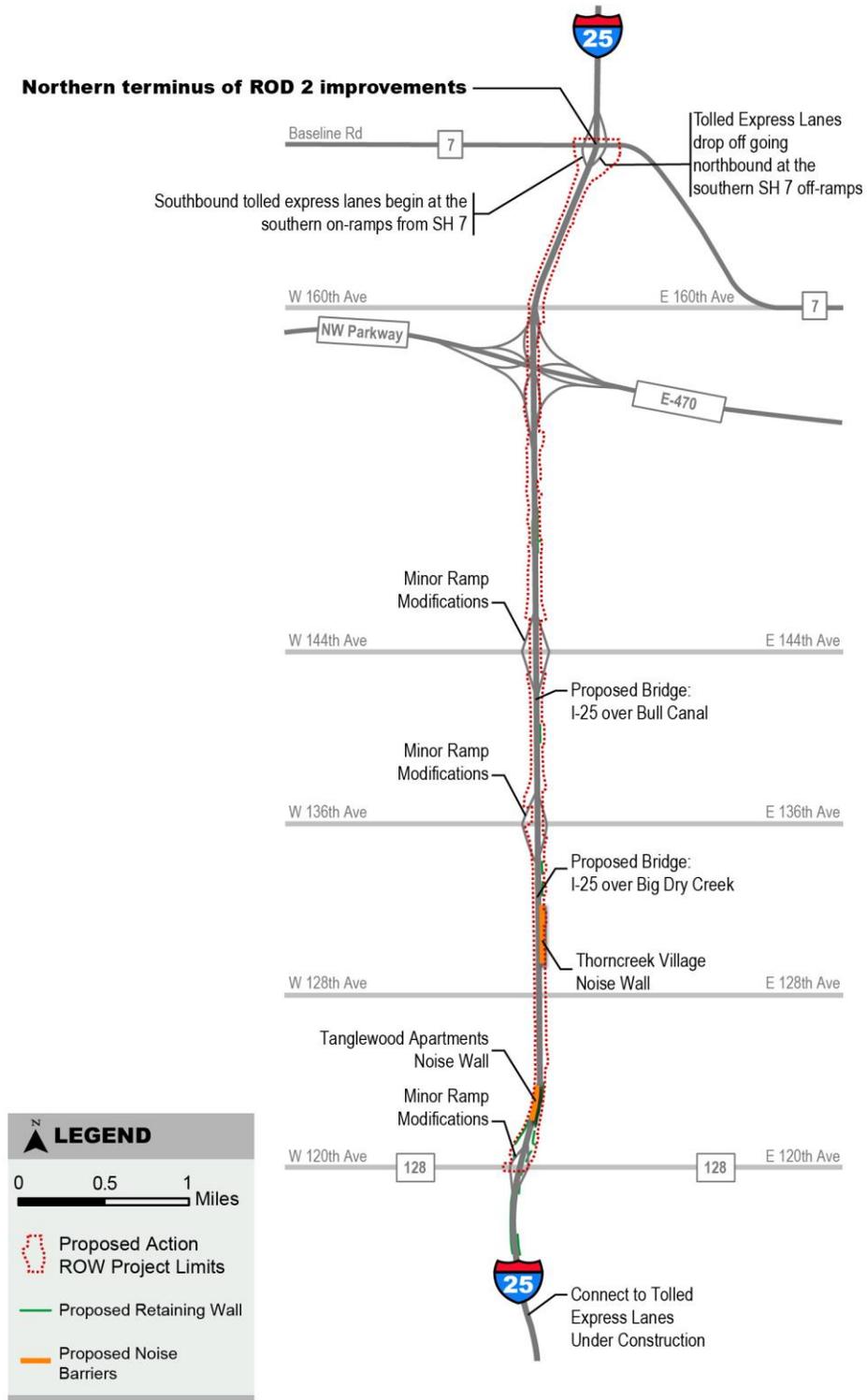
RECs, as defined by American Society for Testing and Materials (ASTM) E 1527-13, include sites with “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.” Sites identified as having potential hazardous materials concerns during site reconnaissance, following a review of agency databases, or through investigation of other relevant resources that could not be confirmed without additional inspection or investigation, are distinguished as sites with potential recognized environmental conditions (PECs).

1.2 Project Description

Subsequent to the *North I-25 Record of Decision 1 (ROD1)* (CDOT, 2011), CDOT has secured funding for a portion of the 2011 FEIS Preferred Alternative from 120th Avenue to just south of State Highway (SH) 7. The Record of Decision 2 (ROD2) updates the findings in the *2011 FEIS* and documents the environmental analyses for all improvements that are a part of the ROD2 Selected Alternative. The ROD2 Selected Alternative is shown in Figure 1 and is described as follows:

The ROD2 Selected Alternative for the North I-25 segment from 120th Avenue to SH 7 would consist of adding one buffer-separated Express Lane in each direction of I-25 from just south of 120th Avenue to just south of SH 7. The buffer-separated lanes would be separated from the existing general purpose lanes by a painted 4-foot strip. The new Express Lanes would tie into the Express Lanes that are currently under construction just south of 120th Avenue. The widening of I-25 would occur to the outside because the

Figure 1. Location of Selected Alternative in the ROD2 Study Area



existing cross section does not include a median. A concrete barrier would separate the northbound and southbound lanes. Interchange configurations, water quality features, drainage improvements, retaining walls, and express bus station configurations are all planned to be identical to the design developed for the Preferred Alternative in the 2011 FEIS and ROD1.

2.0 METHODOLOGY

The methodology for this MESA Addendum was based on the previous work completed for the 2008 North I-25 MESA and 2011 MESA Addendum. This previous work included the identification of sites with RECs and PECs. No additional historical review activities were conducted as part of this Addendum. The methodology used to identify sites with RECs or PECs is discussed further in the 2008 MESA. However, the basic methodology is described below:

Site Reconnaissance: Performance of a limited site reconnaissance (“windshield survey”) of properties within the study area from public right-of-way to identify current site activities and potential contamination sources adjacent to the study area. Following the site visit, any areas that could not be accessed were evaluated more closely on current aerial photographs provided by public sources (e.g., Google Earth). Site-specific details were documented and representative photos were taken.

Database Review: Screening and ranking of sites identified in the local, state, and federal environmental agency databases (Environmental Data Resources [EDR], 2014) by distance and estimated groundwater flow to identify additional sites with PECs or RECs that were not evaluated in the 2008 MESA or the 2011 MESA Addendum. The screening process conducted for the 2011 FEIS Preferred Alternative for this Addendum was consistent with the screening process that was previously conducted in the 2008 MESA for Packages A and B and the 2011 MESA Addendum. The sites were ranked based on the type of site, the distance from the site, and the groundwater flow direction relative to the site. A copy of the EDR Database Report from May 2, 2014 is provided in Appendix A.

Records Review: Review of CDOT, Colorado Department of Public Health and Environment (CDPHE), Colorado Department of Labor and Employment–Division of Oil and Public Safety (OPS) records, and other available records from local, state, and federal agencies regarding properties with RECs within the study area if a review had not previously been conducted as part of the 2008 MESA or the 2011 MESA Addendum.

Property Analysis: Analysis of properties to be partially or fully acquired for right-of-way for the 2011 FEIS Preferred Alternative with regard to sites with PECs and RECs (direct impacts), and identification of properties requiring additional evaluation or investigation to assist in project design, specific materials management/institutional controls that may be required during construction, or the right-of-way acquisition process, if full acquisition is necessary.

3.0 PHASE I STANDARD UPDATE

Because the MESA Addendum was performed in 2011, the ASTM Standard for Phase I ESAs was changed from ASTM E 1527-05 to ASTM E 1527-13. The main changes to the standard are as follows:

The definition of a REC was changed from “the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property, or into the ground, groundwater, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws,” to “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.”

The definition of a Historical REC was revised from “an environmental condition which in the past would have been considered a *recognized environmental condition*, but which may or may not be considered a *recognized environmental condition* currently. The final decision rests with the *environmental professional* and will be influenced by the current impact of the *historical recognized environmental condition* on the *property*. If a past release of any *hazardous substances* or *petroleum products* has occurred in connection with the *property* and has been remediated, with such remediation accepted by the responsible regulatory agency (for example, as evidenced by the issuance of a no further action letter or equivalent), this condition shall be considered an *historical recognized environmental condition* and included in the findings section of the *Phase I Environmental Site Assessment* report. The *environmental professional* shall provide an opinion of the current impact on the *property* of this *historical recognized environmental condition* in the opinion section of the *report*. If this *historical recognized environmental condition* is determined to be a *recognized environmental condition* at the time the *Phase I Environmental Site Assessment* is conducted, the condition shall be identified as such and listed in the conclusions section of the *report*.”, to “a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority, without subjecting the property to any required controls (e.g., property use restrictions, activity use limitations [AULs], institutional controls [IC’s], or environmental controls [EC’s]). Before calling the past release a historical REC (HREC), the environmental professional (EP) must determine whether the past release is a REC at the time the Phase I ESA is conducted (e.g., if there has been a change in the regulatory criteria). If the EP considers this past release to be a REC at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as a REC.”

A new definition was added, a Controlled REC, it is defined as “a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (e.g., as evidenced by the issuance of a no-further-action (NFA) letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (e.g., property use restrictions, AULs, institutional controls, or engineering controls) a controlled recognized environmental condition (CREC) shall be listed in the Findings Section of the Phase I ESA report, and as a REC in the Conclusions Section of the report.”

Contaminated vapor migration is now clarified to be associated with a release, and a definition of migration was added as “refers to the movement of hazardous substances or petroleum products in any form, including, for example, solid and liquid at the surface or subsurface, and vapor in the subsurface.”

A new section was added to the standard referring to regulatory file reviews: if the target property or adjoining is identified in government records, “pertinent regulatory files and/or records associated with the listing should be reviewed” at the EPs discretion. If the environmental professional deems it not warranted, or not reasonably ascertainable, the environmental professional must provide justification in the Phase I report. The environmental professional may use files from alternative sources, such as on-site records, user-provided records, records from local agencies, interviews with agency officials, and online resources, among others. A summary of information obtained from the file review shall be included in the Phase I report and the environmental professional must include an opinion on the sufficiency of the information obtained.

Because a MESA categorizes facilities as RECs and PECs only, the changes in the definitions of RECs and HRECs, and the added definition of CREC in the new ASTM standard, do not change how facilities are categorized in this MESA. RECs, HRECs, and CRECs are categorized as RECs. To fulfill the new ASTM standard, vapor migration into structures was analyzed along with soil and groundwater contamination; whereas in the previous version of the ASTM standard it was not fully considered.

4.0 SITE RECONNAISSANCE

To obtain current information on the presence of PECs or RECs, a limited site reconnaissance (“windshield survey”) of the study area and adjacent properties was conducted on May 8, 2014.

Because of the large size of the study area and the fact the study area is located along a federal highway the “windshield survey” was conducted from public right-of-way. The interior of buildings, fenced areas, and rear lots (alley side portion of each site) were not inspected during the site reconnaissance. Additionally, interviews with current and/or past owners or occupants of the properties located within the study area were not conducted. However, the windshield survey included an assessment of the current land uses and observable site activities associated with properties along the study area. The properties were assessed for evidence of potential presence of hazardous substances, such as:

- General site uses; in particular, uses that could result in the use or release of hazardous substances or petroleum products.
- Presence of above-ground storage tanks (ASTs) and evidence of secondary containment for spill prevention.
- Evidence of underground storage tanks (USTs), including fill ports, vent pipes, and fueling facilities.
- Disposal of solid waste, waste management practices, and general housekeeping of waste storage/disposal areas.
- Evidence of on-site dumping or landfilling.
- Presence of types of equipment that have been historically associated with the use of polychlorinated biphenyls (PCBs) as a dielectric fluid coolant and stabilizer.

- Handling and storage of hazardous materials, such as the presence of 55-gallon drums or tote containers.
- Presence of drains, sumps, septic systems, wastewater discharges, pits, ponds, lagoons, staining, pooled liquids, stressed vegetation, odors, or wells.

The study area is an approximately 4-mile-long corridor along I-25 between just south of 120th Avenue and just south of SH 7. The proposed project is located partially within existing CDOT right-of-way and partially on new right-of-way to be acquired for project purposes.

4.1 Off-Site Property Uses

The adjoining and surroundings properties are a mixture of residential, commercial, vacant, and agricultural land with a minor amount of light industrial properties. Agricultural land uses are located in the northern portion of the study area. Residential properties consist of a mixture of single-family homes, apartments, and condominiums. Commercial properties consist mostly of large-scale shopping malls, restaurants, stores, and gas stations. Two ASTs and associated infrastructure possibly associated with a gas line or well were observed within 100 feet of I-25, south of the hospital complex at the southwest corner of 144th Avenue and I-25.

Several pad-mounted transformers were observed inside and outside the study area. Electrical transformers have the potential to include fluid which contains PCBs. Although PCBs were generally banned in 1979, the installation date of the transformers observed is unknown. These transformers have the potential to contain PCBs. However, they are likely owned and operated by the local utility provider (Xcel Energy). In the event of a release or relocation, the management of the regulated waste would be the responsibility of the utility provider. No significant evidence of a release (e.g., staining) was noted on or around the observed transformers.

Because of the location and history of land use surrounding and adjacent to the study area, asbestos-contaminated soils and/or asbestos-containing utilities may be encountered during the construction of this project. Asbestos-containing transite pipes and magnesia block insulated utilities are often found in areas where former buildings were located and new excavation or grading occurs. Although no historical landfill or demolished structures were identified within the study area, there is a possibility that asbestos-containing materials (ACM) and/or soils may be encountered.

5.0 DATABASE SEARCH

5.1 Previous Studies

5.1.1 Facilities Identified in the 2008 MESA

In 2008 the following facilities were identified as presenting a high liability concern for any potential right-of-way acquisition (full or partial) in the ROD2 study area. In 2008 these facilities were identified as facilities with potentially contaminated groundwater and/or soil that may be encountered onsite or downgradient of the site during subsurface activities and could present a concern for worker health and safety and materials management (see the 2008 MESA for details). See Table 1 for current 2014 status of the facilities identified in the 2008 MESA. If the

facilities are not identified in Table 1, they are no longer considered as facilities presenting a high liability concern.

45 E. 120th Avenue, Thornton

The property at 45 E. 120th Avenue is a closed leaking underground storage tank (LUST) site. Three 1,000-gallon gasoline USTs were closed and removed in 2001, and one 550-gallon waste oil tank was closed and removed in 1999. Soil and groundwater contamination were detected upon removal of the waste oil tank. A Corrective Action Plan (CAP) was approved by the Colorado Department of Labor and Employment–Division of OPS in June 2001 that identified natural attenuation processes in conjunction with groundwater monitoring as the recommended remediation methods. An NFA/closure letter was issued for this site by OPS in July 2005.

20 E. 120th Avenue, Northglenn

The facility at 20 E. 120th Avenue is an open LUST site. In November/December 1995 a release was confirmed from the then active gasoline station. A 550-gallon UST for waste oil was removed from the site in 1997. An enhanced fluid recovery system and quarterly groundwater monitoring were enacted as part of the CAP to remediate the release. After a 1-year review of the quarterly groundwater monitoring data, the enhanced fluid recovery system was determined to be ineffective, and an air sparge/soil vapor extraction system (AS/SVE) system was installed in 2000. The AS/SVE system was shut down in October 2003. Site closure was initially requested in 2004. The Northglenn Urban Renewal Authority purchased the property in November 2006 and removed one 4,000-gallon, one 10,000-gallon, and one 8,000-gallon gasoline UST from the site in 2007.

12121 Grant Street, Thornton

The property at 12121 Grant Street is a closed LUST, Resource Conservation and Recovery Act (RCRA) Small Quantity Generator (SQG) with no violations, AST, and UST site, with a confirmed UST release reported in 1996. The site previously had five USTs that have been permanently closed (date unknown). The USTs consisted of four 20,000-gallon diesel tanks, one 1,000-gallon tank with unknown contents, and one 560-gallon used/waste oil tank. The site previously had one 1,500-gallon AST installed in 1993 that is permanently closed. In April 1998 OPS issued an NFA/closure letter for this facility.

500 West 120th Avenue, Northglenn

A retail gas station at 500 West 120th Avenue is identified as a closed LUST, UST, and CO site with a confirmed release reported in 1990. The site previously had four USTs installed in 1968 that have been permanently closed, with a last use recorded in 1990. The USTs closed consisted of two 6,000-gallon gasoline tanks, one 8,000-gallon gasoline tank, and one 1,000-gallon used/waste oil tank. The property was issued an NFA/closure letter in June 1995.

12299 Grant Street, Thornton

The facility at 12299 Grant Street is a closed LUST and UST site. The site had one UST installed in 1988 that had a last use of 1996. The UST consisted of one 10,000-gallon diesel tank. OPS issued the property an NFA/closure letter in January 1997.

440 E. 144th Avenue, Broomfield

The property at 440 E. 144th Avenue is a closed LUST, RCRA SQG with no violations, and LUST site with a confirmed release reported in 1989. The site has two permanently closed

USTs that were installed in 1977 with last uses reported in 1990. The tanks out of use include one 10,000-gallon diesel tank and one 500-gallon used/waste oil tank. OPS issued the property an NFA/closure letter in June 1993.

505 West 120th Avenue, Westminster

The property at 505 West 120th Avenue is a closed LUST and UST site with a confirmed petroleum release in August 1987. Three USTs have been permanently closed at this site, including two 6,000-gallon tanks containing gasoline and one 550-gallon tank containing waste oil. A CAP was approved by OPS in August 1995 and remediation activities continued until May 1999. OPS issued an NFA/closure letter for this facility in August 1999. Another release was suspected in January 2000.

5.1.2 Facilities Identified in the 2011 MESA Addendum

In 2011 only one of the facilities mentioned above in the 2008 MESA was retained as presenting a high liability concern for any potential right-of-way acquisition (full or partial) in the ROD2 study area. In 2011 this facility was identified as a facility with potentially contaminated groundwater and/or soil that may be encountered onsite or downgradient of the site during subsurface activities and could present a concern for worker health and safety and materials management (see the 2011 MESA Addendum for details). See Table 1 for current 2014 status of the facilities identified in the 2008 MESA. If the facilities are not identified in Table 1, they are no longer considered as facilities presenting a high liability concern.

45 E. 120th Avenue, Thornton

A detailed records review was previously conducted for this site as part of the 2008 MESA (FHU, 2008; Section 4.2.3.4 of the MESA). The property at 45 E. 120th Avenue is a closed LUST site. This site will be a full or partial acquisition associated with the 2011 FEIS Preferred Alternative. Three 1,000-gallon gasoline USTs were closed and removed in 2001 and one 550-gallon waste oil tank was closed and removed in 1999. Soil and groundwater contamination were detected upon removal of the waste oil tank. A CAP was approved by OPS in June 2001 that identified natural attenuation processes in conjunction with groundwater monitoring as the recommended remediation methods. An NFA/closure letter was issued for this site by OPS in July 2005.

5.1.3 Facilities Identified in the North I-25 Final EIS 2011

Facilities identified in the *North-I 25 Final Environmental Impact Statement* (FHU, 2011) as presenting a high liability concern for any potential right-of-way acquisition (full or partial) in the ROD2 study area were derived from the 2008 MESA and the 2011 MESA Addendum. Only one was listed as having a high potential to impact the Site—45 E. 120th Avenue. This facility was described above in the 2008 MESA and 2011 MESA Addendum sections. See Table 1 for current 2014 status of the facility identified in the 2011 FEIS.

5.1.4 Facilities Identified in the I-25 Managed Lanes ISA 2013

The 2013 *Initial Site Assessment: Interstate 25 Managed Lanes, between US 36 and 120th Avenue, Adams County, Colorado* (Pinyon, 2013) identified 11 sites with potential to impact the study area (between US 36 and 120th Avenue); however, none of the sites were located within the ROD2 study area.

5.1.5 Facilities Identified in the 2014 PEL

The 2014 *North I-25: US 36 to SH 7 Planning and Environmental Linkages Study* (PEL) (FHU, 2014) identified five facilities within the ROD2 study area located within 500 feet of I-25. These facilities include:

12299 Grant Street, Thornton/BMC Millwork

This closed LUST facility is located within 500 feet of I-25 and was identified as a REC. Residual soil and/or groundwater contamination could be present. Note: this facility is also listed as presenting a high liability concern in the 2008 MESA.

12121 Grant Street, Thornton/ Morgan Reed (former Data Processing Center)

This closed LUST, RCRA SQG, and AST facility is located within 500 feet of I-25 and was identified as a REC. No RCRA violations are reported. Three USTs containing diesel fuel are currently in use (two 15,000-gallon and one 1,000-gallon). Residual soil and/or groundwater contamination could be present. Note: this facility is also listed as presenting a high liability concern in the 2008 MESA.

45 E. 120th Avenue, Thornton/Starbucks (former Larry's Texaco Gas Station)

This closed LUST facility is located within 500 feet of I-25 and was identified as a REC. Residual soil and/or groundwater contamination could be present. Note: this facility is also listed as presenting a high liability concern in the 2008 MESA, the 2011 MESA Addendum, and the 2011 Final EIS.

See Table 1 in Section below for current 2014 status of the facilities identified in the 2014 PEL. If they facilities are not identified in the table they are no longer considered as facilities presenting a high liability concern.

5.2 Facilities Identified in This 2014 MESA Addendum

A total of 41 facilities were identified in the May 2, 2014, EDR Database Report, and several of the facilities were identified with multiple database listings.

The following criteria were used to divide the database report into facilities that have a low potential to impact the study area versus facilities that have a high potential to impact the study area:

- A Site reconnaissance on May 8, 2014, to evaluate current conditions.
- Groundwater flow direction, using information from the site visit, United State Geological Survey (USGS) topographic maps of the study area, and other hydro-geologic information sources.
- Active or inactive status of the facilities, as identified in the database report.
- The type of facility listing, i.e., a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) listing versus a RCRA-SQG listing.

- Proximity of the facilities to the study area, primarily whether they are within the study area, or are up-gradient or adjacent to the study area with respect to groundwater flow direction.

Facilities with a low potential to impact the study area are facilities with minimal indications of an existing release, past release, or material threat of a release of any hazardous substances or petroleum products into the ground (soil), groundwater, or surface water that could impact the study area including facilities that are located hydraulically down-gradient of the study area.

Facilities with a high potential to impact the study area are facilities with indications of a known, existing, or past release of any hazardous substances or petroleum products into the ground (soil), groundwater, or surface water and the possibility of large-scale migration from the contaminant source into the study area. Generally, if the facility identified in the database report was active with an event that had the potential for contamination, and groundwater flow could cause migration of the contaminants into the study area, the facility was considered to have a high potential to impact the study area.

High potential facilities were then further defined into PECs and RECs.

PECs are defined as sites identified within the study area as having potential environmental conditions (e.g., evidence of storage, handling, or disposal of hazardous materials).

RECs are defined from ASTM E 1527-13 as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.”

The currently (2014) identified facilities are summarized in Table 1.

Table 1. 2014 Identified Facilities

Name/Address	Database Listings	Location	Summary	Potential to Affect Site
Macys West #17041A, 1435 Delaware Street, Westminster, CO 80023	RCRA-Conditionally Exempt Small Quantity Generator (CESQG)	~1,000 feet west and up-gradient of Site	No violations	Low
Adams County School District 12-Storage Shed, 440 E. 144th Avenue, Broomfield, CO 80020	RCRA Nongen	~1,000 feet east and down-gradient of Site	No violations	Low
Adams Transportation Center, 444 E. 144th Avenue, Broomfield, CO 80020	LUST, LUST TRUST, UST	~2,000 feet east and down-gradient of Site	LUSTs closed 1989 and 2011	Low

Table 1. 2014 Identified Facilities

Name/Address	Database Listings	Location	Summary	Potential to Affect Site
Lowes #2432, 13650 Orchard Parkway, Westminster, CO 80234	AST	Within 500 feet west and up-gradient of the Site	Diesel AST currently in use	High: PEC
Walmart Supercenter #3867, 200 W 136th Avenue, Westminster, CO 80234	RCRA-CESQG	Within 500 feet and up-gradient of the Site	No violations	Low
Unknown, Adams County	Mine Site (MINES)	Unknown location	Unknown location of mine as of 2008	Low
Big Dry Creek WWTF, 13150 N. Huron Street, Westminster, CO 80234	LUST, National Pollutant Discharge Elimination System (NPDES), Air Permit (AIRS)	~2,000 feet west and down-gradient of the Site	LUST closed 1998; NPDES and AIRS permits	Low
Hi-Tech Manufacturing, 12520 Grant Drive, Thornton, CO Gerico Inc, 12520 Grant Dr, Denver, CO 80233 SMTC Manufacturing of CO, 12520 Grant Dr, Thornton, CO 80241	RCRA Nongen, FINDS, AST	~500-1,000 feet east and cross-gradient of the Site	No violations, closed propane AST	Low
Data Packaging, 12550 W Grant Dr, Thornton, Co 80241	RCRA Nongen	~500-1,000 feet east and cross-gradient of the Site	No violations	Low
Keebler CO, 12299 Grant Street, Thornton, CO 80229	UST	Within 500 feet east and cross-gradient of the Site	Diesel UST closed in 1988	High; REC (See 2008 MESA and 2014 PEL Listings)
Ascent Solar Technologies, Inc., 12300 N. Grant Street, Thornton, CO 80241	RCRA-Large Quantity Generator (LQG), US AIRS	~500-1,000 feet east and cross-gradient of the Site	Has received various RCRA violations; has a AIR permit	High: PEC

Table 1. 2014 Identified Facilities

Name/Address	Database Listings	Location	Summary	Potential to Affect Site
Google Inc., 12396 Grant Street, Thornton, CO 80241	RCRA-CESQG, UST	~500-1,000 feet east and cross-gradient of the Site	No violations, three diesel USTs currently in use	Low
Tri-State Generation & Transmission, 12076 Grant Street, Thornton, CO 80233 Tri-State Generation & Transmission, 12076 Grant Street, Northglenn, CO 80233	LUST, AIRS, UST	~1,000 feet east and cross-gradient of the Site	LUST closed in 1989; Has an air permit; Four USTs were closed in 1979	Low
Former US West Communications, 12121 Grant Street, Thornton, Co 80229 QWEST Thornton Data Processing Center, 12121 Grant Street, Thornton, CO 80241 Data Processing Center, 12121 Grant Street, Thornton, CO 80241	UST, AST RCRA Nongen, FINDS, US AIRS, LUST	Within 500 feet east and cross-gradient of the Site	Five USTs were closed in 1985; LUST site closed in 1996, in April 1998 OPS issued an NFA/closure letter for this facility; three diesel USTs are currently in use; one AST was closed in 1993; No violations; has an Air permit	High: REC (See 2008 MESA and 2014 PEL Listings)
500 W. 120th Avenue, Denver, CO 80234 ConocoPhillips Site 6515, 500 W. 120th Avenue, Northglenn, Co 80234	US Historic Auto Station, LUST, LUST TRUST, UST, AIRS	~500 feet west and cross-gradient	Has been a gas station at this location since at least 1999; Confirmed release in 1990 with an NFA in 1995; confirmed release in 2007 and closure in 2010; two gasoline and one diesel UST in use; has an air permit	High: REC (See 2008 MESA Listing)

Table 1. 2014 Identified Facilities

Name/Address	Database Listings	Location	Summary	Potential to Affect Site
Safeway #12, 774 W 120th Avenue, Northglenn, CO 80234	LUST	~1,500 feet west and cross-gradient	Confirmed release in 1993, closed	Low
505 W 120th Avenue Denver, CO 80234 CST Metro LLC DBA Corner Store #4146, 505 W 120th Avenue, Westminster, CO 80234	US Historic Auto Station, LUST, AIRS, UST	~500-1,000 feet west and cross-gradient of the Site	Has been a gas station at this location since at least 1999; Three USTs are closed; one diesel and one gasoline USTs are in use; Confirmed release in 1987; OPS issued an NFA/closure letter for this facility in August 1999. Another release was suspected in January 2000; has an air permit	High: PEC (See 2008 MESA Listing)
Circle K Store #2709839, 12051 N. Huron Street, Westminster, Co 80234	LUST	~2,000 feet west and cross-gradient of the Site	Confirmed release in 2012, site is closed	Low
Park Centre Shopping Center, 12000 Pecos Street, Westminster, CO 80234	Corrective Action Site (CORRACTS), RCRA Nongen, FINDS	~ 1 mile west and cross-gradient of the Site	Groundwater NFA 2007; various RCRA violations	Low
Park Center Cleaners, 12055 Pecos Street, Westminster, CO 80234	CORRACTS, RCRA-CESQG, DRYCLEANERS, AIRS, US AIRS	~ 1 mile west and cross-gradient of the Site	Groundwater CAP terminated 1995; has an air permit	Low
11990 Grant Street, Denver, CO 80233	US Historic Auto Station	~ 1,500 feet east and cross-gradient	Listed as DB Collision in 2005 and 2006	Low

Table 1. 2014 Identified Facilities

Name/Address	Database Listings	Location	Summary	Potential to Affect Site
I-25 and 120th Avenue, Westminster, CO	CO ERNS	On Site	Activated sludge and wastewater spilled on highway and cleaned up in 2001	Low
Northglenn Urban Renewal Authority, 20 E. 120th Avenue, Northglenn, CO 80233 20 E. 120th Avenue, Denver, CO 80233	LUST, LUST TRUST, UST, AST, US Historic Auto Station	~500 -1,000 feet east and cross-gradient of the Site	Confirmed release in 1995, site closed in 2004; five USTs closed; one AST closed; Listed as JPD Auto since 1999	High: PEC (See 2008 MESA Listing)
Palen Enterprises INC DBA Executive Surf Texaco, 45 E. 120th Avenue, Thornton, CO 80234 Larrys Texaco NKA Palen Enterprises Inc., 45 E. 120th Avenue, Thornton, CO 80233 45 E. 120th Avenue, Denver, CO 80233	UST, LUST, LUST TRUST, US Historic Auto Station	Within 500 feet west and cross-gradient of the Site	Gas station since at least 1999; three gasoline USTs were closed in 1987 and one waste oil UST was closed in 1972; Confirmed release in 1999, an NFA/closure letter was issued by OPS in July 2005	High: REC (See 2008 MESA, 2011 MESA, 2011 Final EIS, and 2014 PEL Listings)
CST Metro LLC DBA Corner Store #1139, 301 E. 120th Avenue, Thornton, CO 80233 301 E. 120th Avenue, Denver, CO 80233	UST, US Historic Auto Station	~1,000 to 1,000 feet east and cross-gradient to the Site	Two gasoline USTs and one diesel UST are currently in use; Gas station since at least 2005	Low
83 E. 120th Avenue, Denver, CO 80233	US Historic Auto Station	Within 500 feet east and cross-gradient of the Site	Since 2012 listed as Auto Wrecker Buy Junk Cars	High: PEC

5.2.1 Details of 2014 REC and PEC Facilities

RECs

The following four facilities were identified as RECs during the 2014 database and past records review:

Keebler CO, 12299 Grant Street, Thornton, CO 80229

This facility is located within 500 feet east and cross-gradient of the site. It was listed in previous databases as a UST and LUST site, and in the 2014 database as a UST site. This facility had one 10,000 gallon diesel UST installed in 1988 that was used until 1996. OPS issued an NFA/closure letter in January 1997. This facility was also identified as presenting a high liability concern in the 2008 MESA and as a REC in the 2014 PEL. Residual soil and/or groundwater contamination could be present. The OPS Web site (<http://costis.cdle.state.co.us/ois2000/home.asp>) was reviewed for this facility on May 7, 2014. The latest update for this facility was in 1997 when an NFA closure letter was sent on January 9, 1997.

Former US West Communications, 12121 Grant Street, Thornton, CO 80229

This facility is located within 500 feet east and cross-gradient of the Site. It is listed in the database as a UST, AST, RCRA Nongen (former RCRA-SQG), FINDS, US AIRS, and LUST site. Five USTs (four 20,000-gallon diesel, one 1,000-gallon with unknown contents, and one 560-gallon used/waste oil) were closed at the facility in 1985. The site also previously had one 1,500-gallon AST installed in 1993 that is permanently closed. A confirmed release from a UST was reported in 1996. The LUST site was closed in 1996, and in April 1998 OPS issued an NFA/closure letter for this facility. Three diesel USTs (two 15,000-gallon and one 1,000-gallon) are currently in use. This facility has no RCRA violations and it has an Air Permit. This facility was also identified as presenting a high-liability concern in the 2008 MESA and as an REC in the 2014 PEL. Residual soil and/or groundwater contamination could be present. The OPS Web site (<http://costis.cdle.state.co.us/ois2000/home.asp>) was reviewed for this facility on May 7, 2014. The Web site confirms the above information.

500 W. 120th Avenue, Denver, CO 80234

This facility is located approximately 500 feet west and cross-gradient of the Site. It is listed in the database as an US Historic Auto Station, LUST, LUST TRUST, UST, and AIRS site. There has been a gas station at this location since at least 1999. The site previously had four USTs (two 6,000-gallon gasoline, one 8,000-gallon gasoline, and one 1,000-gallon used/waste oil) installed in 1968 that have been permanently closed, with a last use recorded in 1990. This facility had a confirmed release in 1990 and was given an NFA letter in 1995. It also had a confirmed release in 2007. It presently has two gasoline USTs and one diesel UST in use, and has an air permit. This facility was also identified as presenting a high liability concern in the 2008 MESA. Residual soil and/or groundwater contamination could be present. The OPS Web site (<http://costis.cdle.state.co.us/ois2000/home.asp>) was reviewed for this facility on May 7, 2014. The Web site shows activity at the facility (monitoring reports) up until 2010. An NFA closure letter was sent on March 31, 2010.

45 E. 120th Avenue, Denver, CO 80233

This facility is located within 500 feet west and cross-gradient of the site and will be a full or partial acquisition associated with the 2011 FEIS Preferred Alternative. It is listed in the

database as a UST, LUST, LUST TRUST, and US Historic Auto Station site. This facility has been listed as a gas station since at least 1999. Three 1,000 gallon gasoline USTs were closed in 1987 and removed in 2001, and one waste oil UST was closed in 1972 and removed in 1999. Soil and groundwater contamination were detected upon removal of the waste oil tank. A CAP was approved by OPS in June 2001 that identified natural attenuation processes in conjunction with groundwater monitoring as the recommended remediation methods. An NFA/closure letter was issued for this site by OPS in July 2005. This facility was also identified as presenting a high-liability concern in the 2008 MESA, 2011 MESA Addendum, and 2011 Final EIS; and as a REC in the 2014 PEL. Residual soil and/or groundwater contamination could be present. The OPS Web site (<http://costis.cdle.state.co.us/ois2000/home.asp>) was reviewed for this facility on May 7, 2014. The Web site confirms the above information. An NFA/closure letter was sent on July 19, 2005.

PECs

The following five facilities were identified as PECs during the 2014 database and past records review:

Lowes, #2432, 13650 Orchard Parkway, Westminster, CO 80234

This facility is located within 500 feet west and up-gradient of the site. It is listed in the database as an AST site and has a diesel AST currently in use. This facility is not listed in any of the other databases and there is no known record of contamination at the facility. However, if the AST has leaked it has the potential to have soil and/or groundwater contamination.

Ascent Solar Technologies, Inc., 12300 N. Grant Street, Thornton, CO 80241

This facility is located approximately 500-1,000 feet east and cross-gradient of the site. It is listed in the database as a RCRA-LQG and US AIRS site. It has received various RCRA violations and has an Air Permit. This facility is not listed in any of the other databases and there is no known record of contamination at the facility. However, because of its history of RCRA violations and the nature of its business, it has the potential to have soil and/or groundwater contamination.

505 W. 120th Avenue, Denver, CO 80234

This facility is located approximately 500-1,000 feet west and cross-gradient of the site. It is listed in the database as a U.S. Historic Auto Station, LUST, AIRS, and UST site. There has been a gas station at this location since at least 1999. Three USTs have been permanently closed (two 6,000-gallon gasoline and one 550-gallon waste oil), and one diesel UST and one gasoline UST are in use. This facility had a confirmed release in 1987. A CAP was approved by OPS in August 1995 and remediation activities continued until May 1999. OPS issued an NFA/closure letter for this facility in August 1999. Another release was suspected at this facility in January 2000. This facility also has an air permit. This facility was also identified as presenting a high liability concern in the 2008 MESA. This facility has the potential to have residual soil and/or groundwater contamination. The OPS Web site (<http://costis.cdle.state.co.us/ois2000/home.asp>) was reviewed for this facility on May 7, 2014. Leak detection tests (statistical inventory reconciliation) were performed in 2000 and 2001 and the tests passed, thus the suspected release was not verified.

20 E. 120th Avenue, Denver, CO 80233

This facility is located approximately 500 feet to 1,000 feet east and cross-gradient of the site. It is listed in the database as a LUST, LUST TRUST, UST, AST, and U.S. Historic Auto Station site. It has been listed as JPD Auto since 1999. In November/December 1995, a release was confirmed from the then active gasoline station. A 550-gallon UST for waste oil was removed from the site in 1997. An enhanced fluid recovery system and quarterly groundwater monitoring were enacted as part of the CAP to remediate the release. After a 1-year review of the quarterly groundwater monitoring data, the enhanced fluid recovery system was determined to be ineffective, and an air sparge/soil vapor extraction system (AS/SVE) system was installed in 2000. The AS/SVE system was shut down in October 2003. Site closure was initially requested in 2004. The Northglenn Urban Renewal Authority purchased the property in November 2006 and removed one 4,000-gallon, one 10,000-gallon, and one 8,000-gallon UST from the site in 2007. This facility was also identified as presenting a high-liability concern in the 2008 MESA. This facility has the potential to have residual soil and/or groundwater contamination. The OPS Web site (<http://costis.cdle.state.co.us/ois2000/home.asp>) was reviewed for this facility on May 7, 2014. The Web site shows activity at the facility until 2008. In 2007 the CAP was modified, and monitoring reports were received in 2007 and 2008. An NFA/closure letter was sent on April 30, 2008.

83 E. 120th Avenue, Denver, CO 80233

This facility is located within 500 feet east and cross-gradient of the site. It is listed in the database as a US Historic Auto Station. Since 2012 it has been listed as Auto Wrecker Buy Junk Cars. This facility is not listed in any of the other databases and there is no known record of contamination at the facility. However, because of the nature of its business, it has the potential to have soil and/or groundwater contamination.

6.0 CONCLUSIONS

6.1 Findings

The facilities listed in Table 2 and depicted on Figure 2 (approximate location) have the potential to impact the study area.

6.2 Conclusions

Given the presence of the above-referenced findings, the following should be considered during proposed construction activities within the study area:

- Impacted soil could be encountered during construction of this project.
- There is a low potential for groundwater beneath the project to be contaminated. The project entails some shallow soil excavations for the installation of noise walls and it is not anticipated that groundwater will be encountered at these locations. If groundwater is encountered during excavation activities, water generated should be analyzed before discharge in accordance with a CDPHE–Water Quality Control Division Dewatering Permit. If constituents in the water exceed the Colorado Surface Water Standards and/or permit limits, the water must be either treated before being discharged to a Waters of the State, or disposed properly off-site.

- One roadway spill and emergency response notification was identified in the database report. The Colorado State Patrol (CSP) is responsible for cleanup of spills that occur on Colorado highways, and although no additional records were provided, CSP hazardous response crews generally clean these spills up quickly to protect the environment.
- Observations made during the site visit indicated the presence of several automobile repair and gasoline station facilities located in close proximity to the study area.
- Pad-mounted transformers, which may have historically been associated with the use of PCB coolant, were observed in close proximity to the study area.
- Potential ACM may be encountered within the project boundaries. If ACMs are encountered during construction of this project, it must be properly abated in accordance with state and federal regulations.

Table 2. Facilities That Could Be Impacted Within The Study Area

Name/Address (# on Figure 2)	Database Listings	Location	Summary
RECs			
12299 Grant Street, Thornton, CO 80229 (#1)	UST, LUST	Within 500 feet east and cross-gradient of the Site	This facility had one 10,000 gallon diesel UST installed in 1988 that was used until 1996. The OPS Web site was reviewed in May 2014 and the latest update for this facility was in 1997 when OPS issued a closure letter on 9 January 1997. Also identified in the 2008 MESA and 2014 PEL.
12121 Grant Street, Thornton, CO 80241 (#2)	UST, AST RCRA Nongen, FINDS, US AIRS, LUST	Within 500 feet east and cross-gradient of the Site	Five USTs were closed in 1985; LUST site closed in 1996, in April 1998 OPS issued an NFA/closure letter for this facility; three diesel USTs are currently in use; one AST was closed in 1993. Also identified in the 2008 MESA and 2014 PEL.
500 W 120 th Avenue, Northglenn, Co 80234 (#3)	US Historic Auto Station, LUST, LUST TRUST, UST, AIRS	~500 feet west and cross-gradient	Has been a gas station at this location since at least 1999; Confirmed release in 1990 with an NFA in 1995; confirmed release in 2007 and closure in 2010; two gasoline and one diesel UST in use. The OPS Web site was reviewed in May 2014 and it showed activity at the facility (monitoring reports) up until 2010. A closure letter was sent on 31 March 2010. Also identified in the 2008 MESA.

Table 2. Facilities That Could Be Impacted Within The Study Area

Name/Address (# on Figure 2)	Database Listings	Location	Summary
45 E. 120th Avenue, Thornton, CO 80234 (#4)	UST, LUST, LUST TRUST, US Historic Auto Station	Within 500 feet west and cross-gradient of the Site	Gas station since at least 1999; three gasoline USTs were closed in 1987 and one waste oil UST was closed in 1972; Confirmed release in 1999, an NFA/closure letter was issued by OPS in July 2005. Also identified in the 2008 MESA, 2011 MESA, 2011 Final EIS, and 2014 PEL Listings.
PECs			
13650 Orchard Parkway, Westminster, CO 80234 (#5)	AST	Within 500 feet west and up-gradient of the Site	Diesel AST currently in use
505 W 120th Avenue, Westminster, CO 80234 (#6)	US Historic Auto Station, LUST, AIRS, UST	~500-1,000 feet west and cross-gradient of the Site	Has been a gas station at this location since at least 1999; Three USTs are closed; one diesel and one gasoline USTs are in use; Confirmed release in 1987; OPS issued an NFA/closure letter for this facility in August 1999. Another release was suspected in January 2000. The OPS Web site was reviewed in May 2014 - leak detection tests (statistical inventory reconciliation) were performed in 2000 and 2001 and the tests passed, thus the suspected release was not verified. Also identified in the 2008 MESA Listing.
12300 N. Grant Street, Thornton, CO 80241 (#7)	RCRA-LQG, US AIRS	~500-1,000 feet east and cross-gradient of the Site	Has received various RCRA violations
20 E. 120th Avenue, Northglenn, CO 80233 (#8)	LUST, LUST TRUST, UST, AST, US Historic Auto Station	~500 -1,000 feet east and cross-gradient of the Site	Confirmed release in 1995, site closed in 2004; five USTs closed; one AST closed; Listed as JPD Auto since 1999. The OPS Web site was reviewed in May 2014 and it showed activity at the facility until 2008. In 2007 the CAP was modified, and monitoring reports were received in 2007 and 2008. A closure letter was sent on 30 April 2008.

Table 2. Facilities That Could Be Impacted Within The Study Area

Name/Address (# on Figure 2)	Database Listings	Location	Summary
			Also identified in the 2008 MESA Listing.
83 E. 120th Avenue, Denver, CO 80233 (#9)	US Historic Auto Station	Within 500 feet east and cross-gradient of the Site	Since 2012 listed as Auto Wrecker Buy Junk Cars
Facility Identified in the 2008 MESA Only			
440 E. 144th Avenue, Broomfield (#10)	LUST, RCRA- SQG	~1,000 feet east and down-gradient of the Site	LUST site with a confirmed release reported in 1989. OPS issued the property an NFA/closure letter in June 1993.

Figure 2. Facilities That Could Be Impacted Within The Study Area



6.3 Discussion

The magnitude of the findings and conclusions presented in this report is dependent on the potential construction impacts in the study area. The majority of the project will entail resurfacing of the I-25 roadway with new pavement surfaces. In this situation, it is unlikely that regulated materials would be encountered during construction. Other construction activities could lead to somewhat more soil disturbance (e.g., installation of new noise walls or other components), and could, therefore, increase the potential for exposure of regulated materials in the soil or groundwater.

6.4 Recommendations

The following recommendations are presented where deep excavations will be completed in areas near facilities with high potential to affect the study area:

1. Workers on this project must follow CDOT Specification 250—Environmental, Health and Safety Management.
2. The selected contractor should be notified that transformers may contain PCBs and that the transformer coolant be tested for the presence of PCBs and the power company should be notified prior to removal or disposal of the transformers.
3. Potentially contaminated soil and/or groundwater should be characterized and disposed in accordance with local, state and federal regulations.

In the event that asbestos-containing material is encountered, workers must follow *CDOT Specification 250.07—Asbestos-Containing Material Management and CDOT Asbestos-Contaminated Soil Management Standard Operating Procedure*. Additionally, depending on the type of ACM, this material must also be abated in accordance with either Section 5.5 of the Solid Waste Regulations, or Regulation No. 8 of the Air Quality Control Commission Regulations.

7.0 REFERENCES

Colorado Department of Labor and Employment (CDLE)/Oil and Public Safety (OPS), 2013. Colorado Storage Tank Information System Web Site. United States Air Force Academy (USAFA) facility. Available online: <http://costis.cdle.state.co.us/ois2000/home.asp>. Assessed on 07 May, 2014

Environmental Data Resources, Inc. 2014. (EDR). EDR DataMap Corridor Study. North I-25 Corridor 112th Avenue to Hwy 7, Broomfield, CO 80023. May 2, 2014.

Felsburg Holt & Ullevig (FHU). 2008. North I-25 EIS Modified Phase I Environmental Site Assessment. October 2008.

—. **2011.** North I-25 EIS Modified Phase I Environmental Site Assessment Addendum. August 2011.

—. **2011.** North-I-25 Final Environmental Impact Statement. August 2011.

—. **2014.** North I-25: US 36 to SH 7 Planning and Environmental Linkages Study. January 2014.

HDR. 2014. North I-25 120th Avenue to E-470/NW Parkway, Record of Decision 2, Section 4(f) Technical Memorandum. March 2014.

Pinyon 2013. Initial Site Assessment: Interstate 25 Managed Lanes, between US 36 and 120th Avenue, Adams County, Colorado. February 11, 2013.

8.0 LIMITATIONS

A MESA addendum does not meet the ASTM 1527-13 standard, as several key components of the ASTM standard are not included in the MESA methodology, including but not limited to: property observations/access, property owner interviews, or completion of user questionnaires. Additionally, sampling of soils, groundwater and/or surface water is beyond the scope of this MESA addendum, unless otherwise noted herein. The visual assessment was limited to areas accessible along the public right-of-way and did not include access to private properties where right of entry was unavailable, fenced-in areas, interiors of buildings, rear lots or areas not visible from public right-of-way in the study area. Also, interviewing property owners or tenants was beyond the scope of this assessment. Accordingly, it is possible that additional assessment and/or field investigations may be required in the future if right-of-way acquisition is required, including but not limited to, completion of an ASTM 1527-13 Phase I Environmental Site Assessment. Mitigation for potential contaminants, including, but not limited to, development of specific materials management or institutional controls may be required during construction, and have not been completed as part of this MESA addendum.

**Appendix A.
Database Report (on CD-ROM)**

