SOUTH WEBER CITY
CITY COUNCIL MEETING

DATE OF MEETING: 27 August 2019 **TIME COMMENCED:** 6:00 p.m.

LOCATION: South Weber City Office at 1600 East South Weber Drive, South Weber, UT

PRESENT:

MAYOR:	Jo Sjoblom
COUNCIL MEMBERS:	Blair Halverson Kent Hyer (electronically) Angie Petty Merv Taylor Wayne Winsor (excused)
FINANCE DIRECTOR:	Mark McRae
CITY ENGINEER:	Brandon Jones
CITY RECORDER:	Lisa Smith
CITY MANAGER:	David Larson

Transcriber: Minutes transcribed by Michelle Clark

ATTENDEES: Mindi Smith, Brandyn Bodily, Craig Layton, Jacqui Layton, Trent Nelson, Mike Skousen, Natalie Browning, Todd Rimmosch, Shawn Magelby, Candace Magelby, Mike Sampson, Ember Davis, Lacee Westbroek, Paul Sturm, Michael Grant, Linda Marvel, Sherrie West, Haley Alberts, Captain West, Chris Pope, Sheriff Sparks, Tonya Mackintosh, Cory Mackintosh, Kathy Devro, Randy Elliott, Lorene Kamalu, and Corinne Johnson.

Mayor Sjoblom called the meeting to order and welcomed those in attendance recognizing Captain West, Sergeant Pope, Sheriff Sparks and the County Commissioners. She apologized for the construction. She excused Councilman Winsor from tonight's meeting.

Councilman Halverson moved to approve Councilman Hyer joining tonight's meeting electronically via phone. Councilman Taylor seconded the motion. Mayor Sjoblom called for the vote. Council Members Halverson, Petty, and Taylor voted aye. The motion carried.

PLEDGE OF ALLEGIANCE: Councilwoman Petty

PRAYER: Councilman Taylor

Introduction of County Commissioners:

Mayor Sjoblom introduced Davis County Commissioners, Randy Elliott and Lorene Kamalu. She excused Commissioner Stevenson who is out of town. Commissioner Elliott described a new facility involved in the missile defense program will be built by the HAFB museum and is hiring over 2500 people with a possible additional 2500 employed later. Commissioner Kamalu recognized the great active citizenry in South Weber City demonstrated by the high attendance. She joked that Davis County includes North Salt Lake and South Weber. She explained this city is a reminder there are still open spaces, wind, and people who enjoy a rural feel in their community. She thanked the City Council and city staff who are currently serving. Commissioner Elliott announced he recently met with a Maverik planner who relayed to him that South Weber has blown away their expectations. Commissioner Kamalu agreed Maverik is always busy. She held a meeting there during elections. She reported Mayor Sjoblom serves on multiple county committees and is very active with Wasatch Front Regional Council. She conveyed the Mayor has a creative way of making presentations.

Mayor Sjoblom related Prop 1 money is being utilized with the South Bench Drive Phase 1 project, the box culvert will be installed next summer and the Transportation and Land Use Connection (TLC) grant will be used for Weber River Trail and Bonneville Shoreline Trail. She thanked the Commissioners for their support, and they pledged to continue. Commissioner Elliott gave an update on trails. There will be a parking area for Adams Canyon Trail in Layton when the Highway 89 expansion is implemented.

Mayor Sjoblom solicited questions for the Commissioners.

Michael Grant, 2622 Deer Run Drive, asked about the timeline for expansion of Highway 89. Commissioner Kamalu reported the project should begin in 2021 and last a couple of years. Commissioner Elliott elucidated Davis County will be the center of major construction on all fronts and encouraged citizens to be patient. The bottleneck area will not be part of this construction, but the state is aware and studying possibilities currently. The river, train and sand make it a difficult situation. Commissioner Kamalu stated it is great that South Weber has leadership that is speaking up about their concerns regarding the reconstruction of Highway 89.

Councilman Taylor questioned the rumor about a sound wall on Highway 89. David Larson, City Manager, spoke with the project manager for UDOT this morning and there are currently no sound walls planned for South Weber. If the sound wall is needed later, there is a process set in place which requires a percentage of affected neighbors voting in favor.

PUBLIC COMMENT:

a. Please state your name and address
b. Please keep public comments to 3 minutes or less per person
c. Please address the entire City Council
d. City Council will not respond during the public comment period
e. Don't address the Council from your seat

Jackie Layton, 8017 S. Cedar Court, thanked those who serve in public office. She was in support of tax increase if the money is spent wisely. She was concerned about the Lofts at Deer Run. She spoke of Farmington Station and that a walkable community is not a good fit for this community. She discussed the connection to Layton City and her concern about chemicals being released if the hillside is disturbed. She felt a road up the hill would create safety issues. She

presented studies she found doing Google searches. She would like to see more testing done. (SEE ATTACHED Addendum #1)

Craig Layton, 8017 Cedar Court, voiced concern over the proposed connection to Layton City on 1900 East. He understood the necessity but didn't think it could be implemented practically. He expressed there will be a lot of people flying down. He referred to mudslides and felt the hill is unstable.

Michael Grant, 2622 Deer Run Drive, voiced his concerns with the public comment format and felt there is a lack of dialogue. He was frustrated with the delay getting answers posed during the comment period. He feared the General Plan will be stamped without regard to public input. He demanded remote connection to the meetings so people could interact if they are not present.

Mike Skousen, 7932 S. 2530 E., related when emotions are high, IQs are low. He trusted his elected officials but claimed he shouldn't have trusted them or their decisions. He felt the current Council is defensive by which he infers they are hiding something. He agreed the citizens are not receiving answers to their questions or the answers are to deflect or protect which doesn't present a clear picture of what is going on. He proclaimed the City Council's job is to work for the citizens: The citizens don't work for the council. He evaluated the Council is not doing a good job. He emphasized the citizens want the Council to do what they want, not what the developer or a master planner that doesn't live in the city want. He was dismayed that the Council would remain neutral. He admonished the Council to review the past and if something was done incorrectly determine how to fix it. He was frustrated that he was told nothing could be done. He opined there hasn't been checks and balances. He commented people aren't getting involved because their concerns have no effect and they don't think they can make a difference. He stated his citizen group plans to take legal action. He expressed the cycle of training new Mayors and Council upon election doesn't utilize the experience of those who previously served so the errors continue. He proposed paying Mayor Sjoblom more and eliminating the City Planner and City Manager positions. He recommended contracting for those services. He expressed disbelief that those who live outside of the city can have the best interests of the city in mind. He accused the Council to have been bullied and pushed in the direction staff wanted. He wanted to see development slow down. He thanked the Council for their time and service.

Corinne Johnson, 8020 S. 2500 E., asked if the work completed on the General Plan by the Planning Commission last Thursday had been reviewed by the City Council. She declared there was no new information presented about the mixed-use guidelines. She suggested it should not go out to the public on September 1st until the mixed-use overlay is defined.

Mindi Smith, 2440 E. 8300 S., voiced her concerns with the Lofts at Deer Run. She was distressed the Mayor and Council did not have full disclosure when the Lofts was presented. She wanted to know who should have relayed information and didn't. She expressed displeasure that the citizens didn't know about the development agreement until it had been signed. She wondered why the Council didn't find it odd that no one was present to oppose it. She inquired who changed the general plan in 2016. She sought understanding on why the Citizens weren't given a vote regarding South Bench Road. She communicated the City Planner stated in two different meetings that the City must have a moderate-income housing plan and made it sound

like a fact. She referenced Hayley's research which found of the 25 options the city must pick three. She claimed some of the options have nothing to do with high density.

Todd Rimmosch, 7879 S. 1800 E., expressed his apprehension of increased traffic if 1900 East connects to Layton City. He suggested a toll road to help regulate traffic.

Natalie Browning, 926 E. 7240 S., disclosed she has been sitting by naively thinking things were going along the way she wanted until this outcry. She examined the General Plan and disagrees that it follows most citizen's wants. She defined a planning commission is in charge of providing orderly development of the city including making provisions for land uses in the best interest of its citizens. She related that Planning Commission agenda for 08-22-19 scheduled public comment for 6:30 pm but was not held for 3.5 hours. She challenged if that was illegal or just rude. She disclosed the City Manager, the City Planner, and one Planning Commission Member were the primary speakers in the meeting and other people's input didn't seem to be valued. She accounted there was an incident where a citizen was verbally attacked by the leader of the Planning Commission. She petitioned to remove Tim Grubb because he pushed through his own interests. She was frightened her family farm is in danger as it is designated moderate density housing in the General Plan. She articulated the city doesn't need both a City Manager and City Planner. She urged more input from citizens.

Kathy Devino, 2480 E. 8300 S., announced concern about the South Bench connection to Layton City. She was apprehensive about disturbing the soil and chemicals.

Haley Alberts, 7550 S. 1450 E., proclaimed the focus of the recent Planning Commission meeting seemed to be a walkable community. She opposed that idea. She discussed high density housing for the Ray property. She noted there is already an access road which would eliminate the need to exit onto South Weber Drive. She reported Brent Poll has been challenging HAFB soil pollution for a long time and it concerns many residents. She asked about the status of the wetlands at Canyon Meadows Park.

Mayor Sjoblom invited comments from the Council. Noting not all questions could be answered in this meeting, she articulated David Larson is willing to answer questions on the city website so that it available for the whole community. She defended the public comment format as necessary to avoid problems demonstrated by the previous planning meeting. She offered to stay after meetings to answer questions. She also voiced emails or calls are welcome. She expressed appreciation for the service of the Planning Commission.

Councilwoman Petty thanked the public for their attendance. She clarified that only South Bench Drive Phase 1 is currently in process. The other phases are not imminent. She understood the concerns with soil contamination and grade and pronounced if it isn't feasible it will not happen. She appreciated the solution of a toll road. She addressed the political education process. She vowed to be transparent but explained she doesn't want to open herself to personal attacks.

Mayor Sjoblom addressed the definition of mixed-use overlay and explained they will take their time to make sure it is clearly defined so that everyone knows.

Councilman Halverson vocalized Planning Commission Thursday night was exhausting for everyone. He will try to answer any questions. He reminded those in attendance that the General

Plan is just a concept, and the city wants feedback and public input. He expressed there are a lot of different opinions even within the same meetings and same groups and sometimes the best outcome is a happy medium. He explained the concept of a walkable community has not been adopted as the city vision. He related the zoning change that took place in his backyard and discussed how he ignored the public notices. He divulged nothing underhanded happened.

Councilman Taylor explained before the South Bench Drive is connected the Army Corp of Engineers will need to test the soil, elevation and stability. He declared the City Council is governed by laws which must be followed. No one serves with a personal agenda to get something done. He proclaimed the city needs another exit out of the city in case of emergency.

Councilman Halverson pointed out the city cannot offer more answers about the Lofts until presented with a plan. The only thing available is a concept. He stated the Council wants to know what the developer intends as much as the citizens.

Councilman Taylor reported the gravel pit pays over $100,000 to the community every year. He believed without their support the city would go belly up.

David Larson, City Manager, gave an update on the wetland situation. The map had been sent to the Army Corp for approval. The city will then create a restoration plan removing the fill. He didn't anticipate the wetlands will last forever based on natural hydrology. He revealed the park is on hold. Mayor Sjoblom added there will be no improvements made until the wetlands are restored.

Councilman Hyer echoed thanks to those in attendance. He related four years ago he was in their position and decided to run for office. He expressed there are a lot of things residents have heard that may or may not be right. He disclosed there are sampling of individuals tonight who have one opinion and if there were a sampling of other individuals, they may have the opposite opinion. He disclosed the Council makes the best decision they can with the information available always looking toward the future. He understood the frustration with the Lofts at Deer Run. He wasn't present at that meeting but has since reviewed the information. He recounted there was no indication that the development being proposed was a possibility. He defended City Manager David Larson and announced David is doing great things for our city and leading in a terrific way. He said the current City Council is united and in tune with the city. He pointed out the City Council has the same concerns as the citizens. He clarified there are certain things, legally, by which the Council must abide. The Council will use all resources at their disposal to limit developers. He assured individuals that the City Council is open to ideas. He explained the City Council has been looking at some of these items for years, not weeks. He revealed the City Council is trying their best to serve the citizens. He encouraged individuals to contact him with their questions and concerns. He echoed the City Manager is trying his best to answer questions on the city website.

Councilman Halverson spelled out that the City Planner and City Engineer are on contract with the city. Mayor Sjoblom said the General Plan will be open for opinions and suggestions. She warned there will be varying opinions and requested residents respect opposing views.

Approval of Consent Agenda

a. July Check Register

Councilwoman Petty moved to approve the consent agenda as presented. Councilman Halverson seconded the motion. Mayor Sjoblom called for the vote. Council Members Halverson, Hyer, Petty, and Taylor voted aye. The motion carried.

Davis County Sheriff's Report by Captain West

Sergeant Pope from the Davis County Sheriff's Office presented the quarterly report. He introduced Captain West and Sheriff Sparks who were in attendance. He reviewed weekly staffing performance hours for dayshift and nightshift. He noted the weekly average is 98 hours in South Weber. He disclosed there have been 27 arrests, 53 offenses, 33 citations, 47 violations, and 343 incidents (average 3 calls per day) in the last 90-120 days. He reported they enjoyed hanging out with the kids at Country Fair Days. He updated everyone on the U-turn situation off the South Weber exit. He verified it is a legal turn. UDOT said a study will need to be completed before they will put up signs. (The full presentation is attached as Addendum #2)

RESOLUTION 19-40: Adopt International Wildland-Urban Interface Code

Mayor Sjoblom noted as urban development reaches into wildland areas the risk of fire is substantially increased. South Weber City has wildland areas with development potential. For the purpose of prescribing regulations governing conditions hazardous to life and property from impacts related to development in wildlands, it is necessary for South Weber City to adopt the International Wildland-Urban Interface Code. Captain Cole Fessler explained that this code implements building construction more resistant to fire.

Councilman Taylor moved to approve Resolution 19-40 Adopt International Wildland-Urban Interface Code. Councilwoman Petty seconded the motion. Mayor Sjoblom called for the vote. Council Members Halverson, Hyer, Petty, and Taylor voted aye. The motion carried.

New Business

Mayor Sjoblom directed David to include recent citizen's questions with new answers above older posts on the city website.

Reports:

Councilman Halverson: He encouraged everyone to make public comments for the General Plan. He recounted that Barry Burton, City Planner, and the Planning Commission have been working on the General Plan since February 2019. He voiced the commercial overlay zone has been removed.

Captain Fessler: He articulated the South Weber Fire Department also responded to most of the calls reported by the Davis County Sheriff's Office.

Councilman Halverson moved to adjourn to a Closed Executive Session - UCA § Section 52-4-205(1) (d): to discuss the purchase, exchange or lease of real property. Councilman Taylor seconded the motion. Mayor Sjoblom called for the vote. Council Members Halverson, Hyer, Petty, and Taylor voted yes. The motion carried.

Closed Executive Session - UCA § Section 52-4-205(1) (d): to discuss the purchase, exchange or lease of real property.

Closed Session Commenced at 7:58 p.m.

In Attendance: Mayor Sjoblom, David Larson (City Manager), Lisa Smith (City Recorder), Michelle Clark (Transcriber), Council Members Halverson, Hyer, Petty, and Taylor.

Councilman Halverson moved to adjourn the closed session at 8:21 p.m. Councilwoman Petty seconded the motion. Council Members Halverson, Petty, Hyer, and Taylor voted aye. The motion carried.

Councilman Halverson moved to open the public session at 8:25 p.m. Councilman Taylor seconded the motion. Council Members Halverson, Hyer, Petty, and Taylor voted aye. The motion carried.

ADJOURNED: Councilman Taylor moved to adjourn the Council Meeting at 8:25 p.m. Councilman Hyer seconded the motion. Council Members Halverson, Hyer, Petty, and Taylor voted yes. The motion carried.

APPROVED: Wayne Winsor **Date** 09-17-2019
Mayor Pro Tempore: Wayne Winsor

Michelle Clark
Transcriber: Michelle Clark

Attest: **City Recorder: Lisa Smith**

CC 2019-08-27 Addendum #1 Jackie Layton

Final

Operable Unit 15
Site ZZ113
Hill Air Force Base, Utah
Proposed Plan

Public Comment Period: June 12 through July 11, 2017

Public Meetings: June 21, 2017, 6 to 8 p.m.
June 22, 2017, 5 to 7 p.m.

Submitted:
June 2017

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Introduction

The U.S. Air Force (USAF) is requesting public comment on its **Proposed Plan** for **vapor intrusion** mitigation measures associated with **Operable Unit (OU)** 15 associated with Hill Air Force Base (AFB). OU 15 is one of 15 OUs at Hill AFB. The other 14 OUs were defined based on the presence of contamination in soil or groundwater. OU 15 addresses off- and on-Base areas managed under the **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)** where vapor intrusion into residences and other structures is known to occur. An important distinction for OU 15 is that the single affected environmental medium is indoor air. The purpose of the proposed actions in this plan is to control or prevent human exposures to **volatile organic compounds (VOCs)** in indoor air during the period while remedies for the other OUs are used to permanently reduce VOC concentrations in groundwater and **source areas**. OU 15 is also referred to as Site ZZ113 by the USAF Environmental Restoration Program.

The focus at OU 15 is on indoor air impacted by VOCs moving from the contaminated groundwater or soil into the air, potentially exposing building occupants to VOCs by inhalation. Hill AFB groundwater contaminated with VOCs has migrated from on-Base sources to off-Base areas beneath parts of seven residential communities surrounding the Base, including Riverdale, Roy, Sunset, Clinton, Clearfield, South Weber, and Layton, in Weber and Davis Counties.

This Proposed Plan is a document that the USAF issues to seek public participation regarding actions it proposes to perform under CERCLA and the **National Oil and Hazardous Substances Pollution Contingency Plan (NCP)**. Public participation requirements are discussed in CERCLA Sections 113(k) and 117(a) and Part 300.430(f)(2) of Title 40, Chapter I, Subchapter J of the Code of Federal Regulations (CFR).

This Proposed Plan is based on findings summarized in the OU 15 **Remedial Investigation** Report (EA Engineering, Science, and Technology, Inc., PBC [EA] 2016) and the OU 15 **Feasibility Study** Report (EA 2017). The Remedial Investigation Report documents the investigative work done to learn about underground conditions leading to vapor intrusion in residences and other structures, and details potential risk to human health from this vapor intrusion. The Feasibility Study Report evaluates potential remedies or response actions to address vapor intrusion in residences or other structures with VOC concentrations above site-specific, **risk-based action levels (RBALs)**. The Remedial Investigation and Feasibility Study were conducted according to CERCLA, applicable CERCLA guidance, and the NCP.

This Proposed Plan summarizes the Remedial Investigation and Feasibility Study reports. The public is encouraged to reference these documents for specific details that may not be included in this Proposed Plan. These documents are included in the **Administrative Record** at locations listed at the end of this document.

This document is issued by the USAF, which is the lead agency for response actions at OU 15, and by the **U.S. Environmental Protection Agency (EPA)**, which is the lead regulatory agency for CERCLA response actions at Hill AFB. **Utah Department of Environmental Quality (UDEQ)** is a support agency providing regulatory oversight. The public comment period begins June 12, 2017, and ends July 11, 2017. The USAF will consider the public's verbal and written comments and prepare responses following the public comment period. The USAF and EPA will jointly approve the remedy after consulting with UDEQ. A summary of the comments and responses will accompany the **Record of Decision** for OU 15. The Record of Decision is a legally binding decision document signed by the USAF, EPA, and UDEQ that states what response actions will be taken at the site and includes the rationale for making the selection. The **preferred alternative**, or recommended action, may be modified or different alternatives other than those presented in this Proposed Plan may be selected on the basis of new information or public comment. Written comments should be sent to Mr. Mark Roginske (refer to contact information on Page 18).

To assist the reader, when a key technical or administrative term is first introduced in this Proposed Plan, it appears in **bold type**. A glossary of these specialized terms, as well as a list of the acronyms and abbreviations used in this document, is included at the end of this Proposed Plan.

Site Background

Hill AFB is located in northern Utah, approximately 30 miles north of Salt Lake City and 7 miles south of Ogden. Hill AFB occupies approximately 6,700 acres within portions of Davis and Weber counties. Hill AFB has been the site of military activities since 1920, including distribution of military equipment, aircraft rehabilitation and maintenance, and missile assembly. A variety of ongoing industrial operations support the missions of Hill AFB, including metal plating, degreasing, paint stripping, painting, sanding, and other operations associated with aircraft, missile, and vehicle repair and maintenance. These industrial operations have generated numerous spent chemicals and wastes, including chlorinated and non-chlorinated solvents and degreasers, petroleum hydrocarbons, acids, bases, metals, and other chemicals.

For many years, chemicals and associated waste products were disposed in chemical disposal pits and landfills or released from storage or process areas. Since the 1970s, the USAF has (1) changed its procedures to reduce or eliminate its use of numerous chemicals, and (2) developed and practiced regulated waste management, storage, and disposal procedures in compliance with regulations developed since that time.

Historical chemical handling practices resulted in soil (on-Base) and groundwater (on- and off-Base) becoming contaminated with VOCs. Vapor intrusion is a process where VOCs in the soil or groundwater volatilize, or evaporate, and move through soil or utility lines (e.g., sewers and drain lines) into nearby, occupied buildings. **Figure 1** illustrates key vapor intrusion concepts including the following:

- **Subsurface vapor sources:** Soil or groundwater contaminated with VOCs. For off-Base areas, the vapor sources consist of the groundwater VOC plumes. In on-Base areas, the vapor sources consist of the (1) groundwater VOC plumes, and (2) areas where soil is contaminated with VOCs.

- **Receptors:** Residents or workers occupying homes or buildings near the vapor source.

- **Vapor migration:** The path that vapors travel between source and receptors. Typically, this involves VOCs moving upward through soil, through a building slab, and into indoor air. Vapors may also move from a vapor source to a building through preferential pathways such as utility lines (e.g., sewers and drain lines). In areas with very shallow groundwater, contaminated groundwater may enter a building directly through a sump and VOCs may volatilize from the groundwater.

Hill AFB has a long history of investigating and **mitigating** vapor intrusion in the surrounding communities and on-Base, including:

- As early as 1992, indoor air samples were collected in off-Base residences as part of groundwater investigations for some OUs.

- In May 2000, Hill AFB standardized the procedures for collecting and analyzing air samples and began more widespread indoor air sampling of off-Base residences.

- Hill AFB initiated a CERCLA regulatory mechanism known as a **Time Critical Removal Action (TCRA)** that included installing vapor intrusion mitigation systems in residences with elevated indoor air concentrations of possible site-related VOCs (MWH 2003).

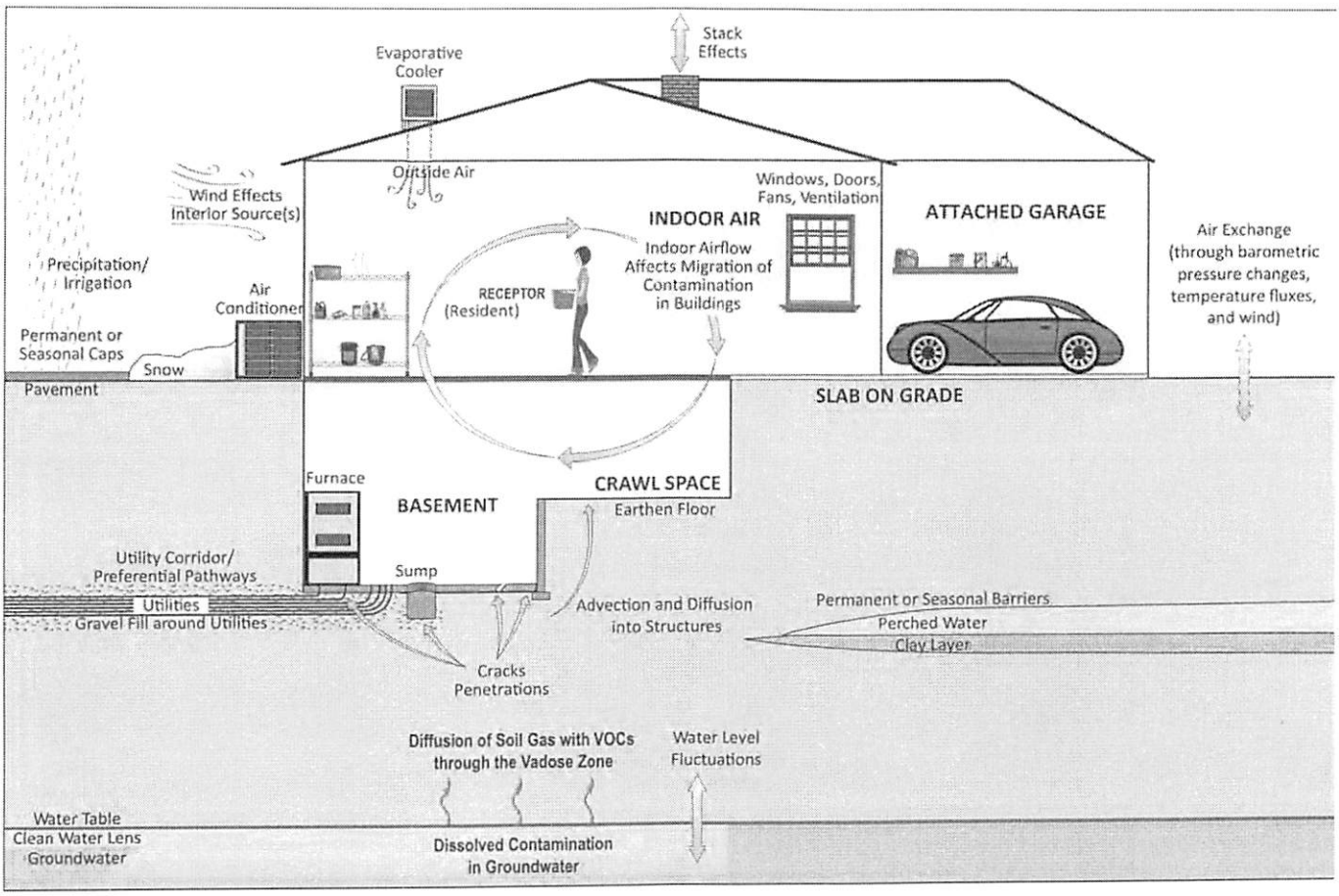
- In 2003, Hill AFB established the Indoor Air Program with the Basewide Air Sampling and Analysis Plan, Indoor Residential Air Sampling (MWH 2004) as the primary governing document for indoor air sampling and mitigation activities.

- Between January 2000 and April 2013, Hill AFB has collected more than 8,500 indoor air samples from nearly 2,000 off-Base residences and installed 120 vapor intrusion mitigation systems.

- From 2008 through 2009, Hill AFB performed a vapor intrusion investigation of on-Base industrial and office buildings at OU 10. This investigation found no buildings requiring mitigation.

- Starting in 2014, Hill AFB investigated vapor intrusion at industrial buildings in other areas of the Base. This investigation also found no buildings requiring mitigation. However, further monitoring was recommended at one building to address uncertainties identified while analyzing the results.

FIGURE 1
Key Vapor Intrusion Concepts
Operable Unit 15 – Site ZZ113 Proposed Plan, Hill Air Force Base, Utah



Site Characteristics

Current occupied buildings and future off- and on-Base buildings located in portions of certain OUs are considered to be within the scope of OU 15 until remedies for those OUs permanently reduce VOC vapor sources. A summary of the OUs included in OU 15 is provided in **Table 1**. These OUs were determined as a result of investigations discussed in the Site Background section and the risk assessment discussed in the Summary of Site Risks section of this Proposed Plan. **Figure 2** shows the areas within those OUs with the potential for vapor intrusion. These areas are within approximately 100 feet of the VOC soil and groundwater contamination associated with OUs 1, 2, 4, 5, 6, 8, 10, and 12, combined with areas containing known or suspected preferential vapor pathways.

Table 1 also lists the preliminary **chemicals of concern (COCs)** and/or **chemicals of potential concern (COPCs)** associated with each OU. For OU 15, preliminary COCs are chemicals detected in indoor air at concentrations above RBALs due to vapor intrusion. COPCs are chemicals identified in soil or groundwater during a remedial investigation at concentrations with the potential to volatilize to indoor air, but have not been detected in indoor air above RBALs.

TABLE 1
Scope of Operable Unit 15
Operable Unit 15 – Site ZZ113 Proposed Plan, Hill Air Force Base, Utah

Scenario	Operable Unit(s)	Preliminary COC(s)	COPCs
Off-Base – Current and Future	OUs 1 and 2 (sewer gas intrusion only)	TCE	Benzene, chlorobenzene, 1,1-DCA, 1,2-DCA, 1,2-DCB, 1,3-DCB, 1,4-DCB, ethylbenzene, toluene, trans-1,2-DCE, VC
	OUs 5, 6, and 12	TCE	NA
	OU 8	1,2-DCA and TCE	NA
On-Base – Current	OU 8 (Building 265 only)	TCE	NA
On-Base – Future[1]	OU 1 and 2	NA	TCE, benzene, chlorobenzene, 1,1-DCA, 1,2-DCA, 1,2-DCB, 1,3-DCB, 1,4-DCB, ethylbenzene, toluene, cis-1,2-DCE, trans-1,2-DCE, 1,1,1-TCA, VC
	OUs 4, 5, 6, and 10	NA	TCE, 1,1-DCA, 1,2-DCA, 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, PCE, and VC
	OU 8 and 12	NA	TCE, carbon tetrachloride, 1,1-DCA, 1,2-DCA, 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, PCE, 1,1,1-TCA, and VC

NOTES:
[1] The identified list of future on-Base preliminary COCs may be revised at a later time to account for additional information or updated site understanding.

COC = Chemical of concern.
COPC = Chemical of potential concern.
DCA = Dichloroethane.
DCB = Dichlorobenzene.
DCE = Dichloroethene.
NA = Not applicable.
OU = Operable Unit.
PCE = Tetrachloroethene.
TCA = Trichloroethane.
TCE = Trichloroethene.
VC = Vinyl chloride.

The OU 15 Remedial Investigation Report (EA 2016) documents the investigative work done to learn about underground conditions leading to vapor intrusion in residences and other structures and details potential risk to human health from this vapor intrusion. In 2003, the USAF initiated mitigation measures that included installing vapor intrusion mitigation systems in off-Base residences with concentrations of potential site-related VOCs in indoor air. **Table 2** summarizes key information associated with the investigations and mitigation activities.

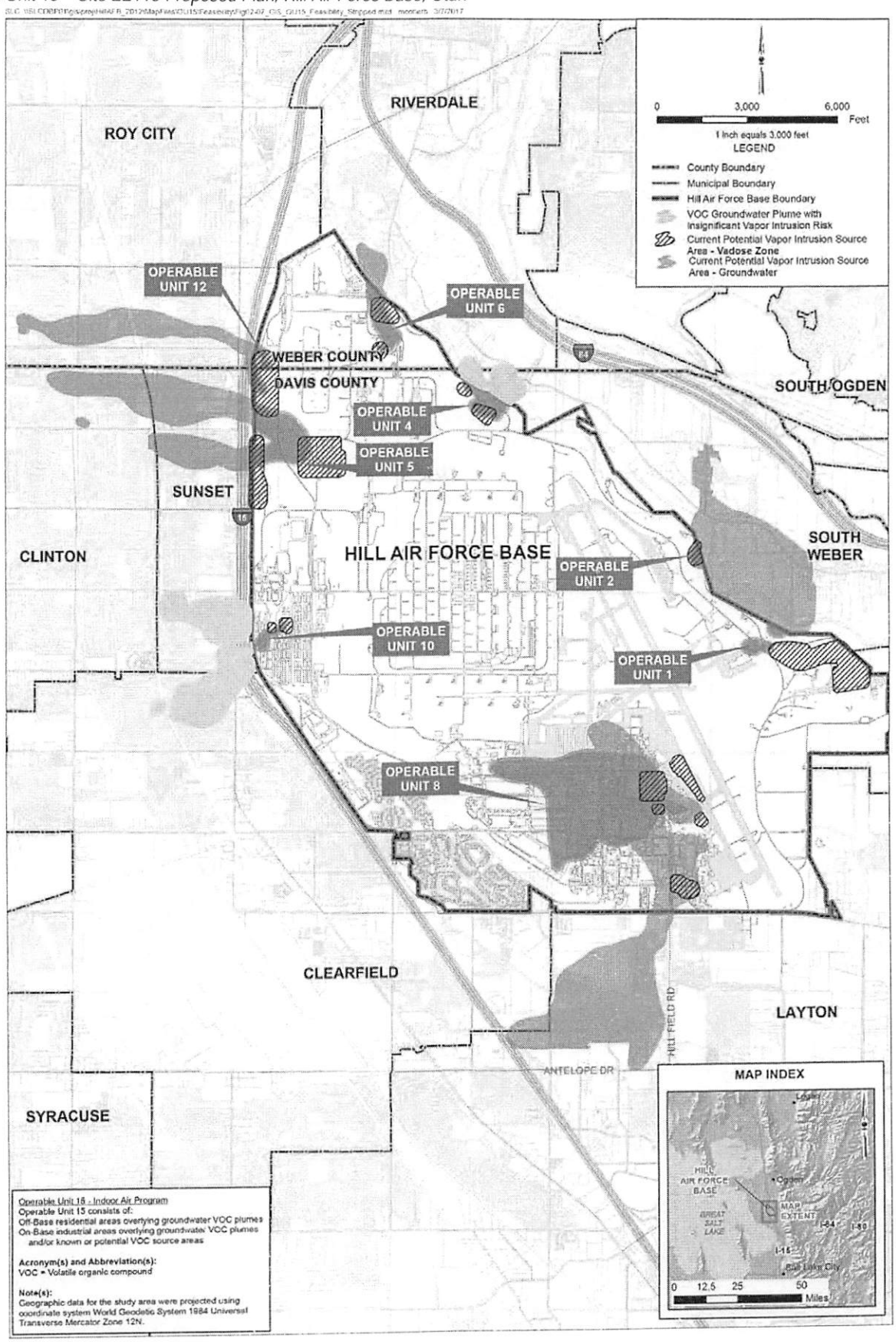
TABLE 2
Investigation and Mitigation Summary
Operable Unit 15 – Site ZZ113 Proposed Plan, Hill Air Force Base, Utah

Groundwater Operable Unit	Off-Base		On-Base		Notes
	Residences Investigated	Residences Mitigated	Buildings Investigated[1]	Buildings Mitigated	
1	37	2	0	0	Off-Base vapor intrusion occurs from contaminated water in sewer pipes.
2	23	3	3	0	Off-Base vapor intrusion occurs from contaminated water in sewer pipes.
4	3	0	0	0	
5	611	19	0	0	
6	84	9	2	0	
8	646	63	8	0[2]	
10	201	1	7	0	
12	356	23	0	0	
Total	**1,961**	**120**	**20**	**0**	

NOTES:
[1] The occupied on-Base buildings overlying these OUs (except OU 10) were ranked with respect to potential for vapor intrusion. High-priority buildings were targeted for investigation. At OU 10, investigation included subslab soil gas and indoor air sampling at seven buildings.
[2] Additional monitoring will be conducted for one building (Building 265) to address remedial investigation uncertainties.

OU = Operable Unit.

FIGURE 2
Operable Unit 15 Location Map
Operable Unit 15 – Site ZZ113 Proposed Plan, Hill Air Force Base, Utah



Scope and Role of Response Action

OU 15 was designated in 2013 as a media-specific OU under the CERCLA statute to address indoor air where occupied buildings or residences overlie or are near VOC-contaminated soil or groundwater, or where vapors can migrate from VOC-contaminated soil or groundwater to occupied buildings through preferential pathways like sewers and drain lines. These source areas and groundwater plumes are managed under eight other Hill AFB OUs. Managing vapor intrusion-related indoor air across the Hill AFB CERCLA program under a single OU has simplified management and improved consistency of the Indoor Air Program.

This Proposed Plan includes assessment of vapor intrusion mitigation alternatives for off-Base OUs 1, 2, 5, 6, 8, and 12 and on-Base OUs 1, 2, 4, 5, 6, 8, 10, and 12. The off-Base areas of OUs 4 and 10 are not included as part of OU 15 because significant vapor intrusion is not occurring in those areas (i.e., measured indoor air concentrations of VOCs that originated at Hill AFB were below RBALs). The remaining OUs are not included as part of OU 15 for the following reasons:

- OUs 3 and 7 are investigated as part of OU 8.
- At OU 9, there are no unacceptable current or hypothetical future risks associated with vapor intrusion. Off-Base, no groundwater plumes associated with OU 9 extend beneath off-Base residences. On-Base, a soil gas investigation completed during the OU 9 specific RI process determined that there is no unacceptable vapor intrusion risk for current or future receptors (Hill AFB 2015a).
- At OU 11, there is not a groundwater plume that extends off-Base. On-Base, a soil gas investigation determined that while there are no current vapor intrusion risks, there are hypothetical risks associated with potential future buildings at the site. Institutional controls were established in the OU 11 Record of Decision that restrict potential future construction at the site (Hill AFB 2015b).
- OUs 13 and 14 address non-VOC contaminants.

The cleanup of contaminated groundwater/soil that may be a source for vapor intrusion is being performed as part of individual Operable Unit (i.e., OUs 1, 2, 4, 5, 6, 8, 10, and 12) cleanup remedies. Therefore, remedial alternatives considered in this Proposed Plan for OU 15 are focused on actions associated with preventing exposure to contaminant vapors, not treating the vapor source (contaminated groundwater/soil). At OUs with ongoing **remedial actions** that have the potential to increase vapor intrusion, measures to mitigate potential vapor intrusion may be incorporated into remedies for those OUs. At OU 10, for example, operation of a soil vapor extraction system may be implemented as part of the OU 10 groundwater bioremediation remedy if soil gas concentrations exceed screening levels (EA 2015).

The Remedial Investigation focused on existing buildings and did not identify on-Base buildings where mitigation was warranted. It is possible that new buildings could be constructed in on-Base areas with VOC contaminated soil and/or groundwater. Hill AFB has controls in place to evaluate vapor intrusion in such cases. If such an evaluation shows a potential for significant vapor intrusion, then the Feasibility Study Report may be consulted for appropriate pre-emptive vapor intrusion mitigation technologies that could be designed and constructed for the purpose of mitigating the potential vapor intrusion pathway during building construction. However, the costs of implementing any building pre-emptive vapor intrusion mitigation technologies would be funded as part of the construction project, not as part of OU 15.

Similarly, for new residential construction in off-Base areas with the potential for vapor intrusion, the Feasibility Study Report will be available as a reference for relevant pre-emptive vapor intrusion mitigation technologies, but the costs of implementing any building preemptive vapor intrusion mitigation technologies would be funded as part of the off-Base construction project, not as part of OU 15. Once constructed, new residential structures in off-Base areas may be incorporated into the OU 15 indoor air monitoring program. As part of the current Indoor

Air Program, the USAF works closely with the communities potentially affected by vapor intrusion. The USAF presents at city council meetings, provides city leaders with regular updates on changes to areas in their communities with a potential for vapor intrusion, and works directly with cities to notify residents of the sampling program in their city newsletters. In turn, cities have used the information provided by the USAF for their planning purposes.

A statutory review will be conducted every five years to ensure that OU 15 response actions are protective of human health and the environment. These Five-Year Reviews will continue until conditions are attained that allow for unlimited use and unrestricted exposure, as required pursuant to CERCLA §121(c) and NCP §300.430(f)(5)(iii)(C).

Summary of Site Risks

A **Human Health Risk Assessment** was completed as part of the Remedial Investigation Report. The risk assessment applied standard EPA methodology to derive conservative estimates of potential risks to building or residence occupants exposed to VOCs coming from vapor intrusion. There are no ecological risks associated with OU 15 because vapor intrusion is the only potential exposure pathway applicable to OU 15. The words "complete" and "significant" are used in the discussion of the OU 15 results below. In the context of OU 15, those words are defined as follows:

- Complete means that the VOCs detected in a building or residence came from soil or groundwater contaminated with VOCs that originated at Hill AFB.

- Significant means that detected indoor air concentrations were above established RBALs.

The risks associated with OU 15 were evaluated in the OU 15 Remedial Investigation Report (EA 2016) and are summarized below.

- Complete and significant vapor intrusion was found off-Base at OUs 1 and 2 (sewer gas intrusion only), and in OUs 5, 6, 8, and 12.

- Vapor intrusion was incomplete and/or insignificant off-Base at OUs 4, 9, and 10.

- No on-Base buildings were found to have complete and significant vapor intrusion. However, due to the uncertainties in the results of investigation performed at Building 265, further indoor air monitoring at that building is warranted.

The main outputs of the risk assessment were non-cancer hazard quotients (HQs), hazard indexes (HIs), and excess lifetime cancer risks (ELCRs). An HQ is the ratio of the potential exposure to the substance and the level at which no adverse effects are expected; the HI is the sum of HQs for substances that affect the same target organ or organ system. An ELCR is the risk of developing cancer due to a chemical exposure beyond the normal risk of an individual developing cancer in a lifetime. These results were compared to criteria presented in the NCP and EPA CERCLA guidance, specifically, an HI of 1 (an HI less than or equal to 1 indicates that adverse non-cancer effects are not likely to occur) or an ELCR range of 1×10^{-6} to 1×10^{-4} (i.e., 1 in 1 million to 1 in 10,000). **Table 3** provides counts of the residences that fall within various ranges of cancer risks and non-cancer hazards and the applicable risk drivers. Indoor risks and hazards associated with the on-Base buildings evaluated are summarized in **Table 4**. No cancer risk or non-cancer HI drivers were identified for vapor intrusion on-Base.

The risk assessment results were based on indoor air samples collected before vapor intrusion mitigation systems were installed. Based on the results of indoor air monitoring, the USAF has installed, operated, and maintained 120 vapor intrusion migration systems since 2000 for vapor intrusion thought to be associated with Hill AFB. Structures with vapor intrusion mitigation systems are regularly monitored to ensure indoor air concentrations remain below action levels.

TABLE 3
Summary of Carcinogenic Risk and Non-Cancer Hazard Estimates, Off-Base
Operable Unit 15 – Site ZZ113 Proposed Plan, Hill Air Force Base, Utah

OU	Total Locations	Cancer (ELCR)					
		Not Calculated	≤ 10^{-6}	10^{-6} to 10^{-5}	10^{-5} to 10^{-4}	> 10^{-4}	Risk Drivers
1	11	6	1	4	0	0	--
2	12	2	4	6	0	0	--
5	149	4	83	52	8	2	TCE
6	34	10	1	18	3	2	TCE
8	260	28	5	116	102	9	TCE, 1,2-DCA
9	1	0	1	0	0	0	--
10	47	2	31	14	0	0	--
12	55	1	6	37	10	1	TCE

OU	Total Locations	Non-Cancer (HI)			
		Not-Calculated	≤ 1	> 1	Risk Drivers
1	11	3	7	1	TCE
2	12	0	12	0	--
5	149	1	128	20	TCE
6	34	1	24	9	TCE
8	260	2	184	74	TCE
9	1	0	1	0	--
10	47	0	46	1	See Note
12	55	1	36	18	TCE

NOTES:
AFB = Air Force Base.
COPC = Chemical of potential concern.
HI = Hazard index.
DCA = Dichloroethane.
ELCR = Excess lifetime cancer risk.
OU = Operable Unit.
PCE = Tetrachloroethene.
TCE = Trichloroethene.
VI = Vapor intrusion.

OU 1: The single TCE detection corresponding to HI > 1 is due to sewer gas intrusion, not the typical subsurface to indoor air VI pathway.

OU 5: PCE was identified as a risk driver at one location, but PCE in groundwater near that residence is not related to Hill AFB releases.

OU 9: No residences had a cancer risk exceeding 10^{-6} or a non-cancer HI of 1.

OU 10: PCE was the primary risk driver at OU 10. However, multiple lines of evidence suggest VI from Hill AFB contamination is not the source of PCE in the indoor air at this location (EA 2017). As a result, PCE was not identified as a risk driver at OU 10.

OU 12: PCE was identified as a risk driver at one location, but PCE in groundwater near that residence is not related to Hill AFB releases.

Not Calculated: Risks or hazards may not be calculated for a particular residence due to lack of detections or lack of toxicity values for the specific detected analytes and health endpoints (cancer or non-cancer).

The number of total locations includes only those residences with detections of at least one COPC. The majority of the Hill AFB indoor air dataset consists of non-detect analytical results. More than 2,000 residences have been sampled in total.

TABLE 4
Summary of Carcinogenic Risk and Non-Cancer Hazard Estimates, On-Base
Operable Unit 15 – Site ZZ113 Proposed Plan, Hill Air Force Base, Utah

OU[1]	Building	Cancer (ELCR)	Non-Cancer (HI)
OU 6	2013	2×10^{-7}	0.02
OU 6	2014	3×10^{-7}	0.05
OU 8	225	4×10^{-7}	0.08
OU 8	227	1×10^{-7}	0.01
OU 8	265	2×10^{-6}[2]	0.4[2]
OU 8	505	3×10^{-7}	0.06
OU 8	507	9×10^{-7}	0.1
OU 8	510	3×10^{-7}	0.04
OU 8	576	4×10^{-7}	0.01
OU 8	592S	3×10^{-7}	0.03
OU 10	1243	5×10^{-8}	0.01
OU 10	1244	4×10^{-7}	0.1
OU 10	1254	2×10^{-7}	0.07
OU 10	1284	1×10^{-8}	0.002
OU 10	1285	2×10^{-8}	0.005

NOTES:
[1] Data from OUs 6 and 8 were collected using a pressure cycling approach.
[2] The highest TCE concentrations used for the ELCR and HI estimates at Building 265 were collected under non-baseline conditions due to the implementation of temporary mitigation measures.

ELCR = Excess lifetime cancer risk.
HI = Hazard index.
OU = Operable Unit.
TCE = Trichloroethene.

Remedial Action Objective

Remedial action objectives (RAOs) are specific goals for protecting human health and the environment. Based on the Remedial Investigation and risk assessment results, one RAO was developed for OU 15 indoor air. **Applicable or Relevant and Appropriate Requirements (ARARs)** were considered in developing the RAO.

Applicable or Relevant and Appropriate Requirements (ARARs):
A state and/or federal environmental regulation that is applicable to, or relevant and appropriate for, a particular site. ARARs must be considered when selecting remedial actions.

The OU 15 RAO is defined as follows:

Prevent human exposure to indoor air chemical of concern concentrations that are present due to vapor intrusion and are above their respective residential (in the case of homes) and industrial (in the case of industrial/commercial buildings) risk-based action levels.

This RAO applies to the following scenarios:

- Current off-Base buildings or residences at OUs 1 and 2 (sewer gas intrusion only), 5, 6, 8, and 12.
- Future new, off-Base buildings or residences overlying OUs 1 and 2 (sewer gas intrusion only), 5, 6, 8, and 12 or existing buildings in those same OUs that undergo renovations or other changes that could increase vapor intrusion.
- Current on-Base Building 265.
- Future new, on-Base buildings overlying OUs 1, 2, 4, 5, 6, 8, 10, and 12 or existing buildings in those same OUs that undergo renovations or other changes that could increase vapor intrusion.

Preliminary remediation goals are defined as the respective residential (in the case of homes) and industrial (in the case of industrial/commercial buildings) indoor air RBALs developed in the Remedial Investigation Report (EA 2016). The following sections summarize an evaluation of potential remedies. Part of the evaluation is whether the potential remedies can achieve the RAO.

Summary of Alternatives

Remedy Components

The potential **remedy components** considered in the Feasibility Study Report included no action, monitoring, and mitigation. Remediation of any vapor sources (i.e., soil or groundwater contamination) at Hill AFB is being done under the OU in which the soil/groundwater contamination is associated, thus alternative development for OU 15 focused on actions associated with preventing exposure, not treating the vapor sources.

The USAF's preferred remedy components for OU 15 are monitoring and mitigation.

Remedy Components are individual technologies or other remediation actions that might be implemented at a site.

Remedial Alternatives consist of (1) a single remedy component or (2) combination of remedy components.

Remedial Action. A single remedial alternative will be selected as the Remedial Action in the Record of Decision and will be implemented according to the Remedial Design/Remedial Action Work Plan.

A general description of each potential remedy component follows.

No Action

The No Action Response would require no action to be implemented to address indoor air RBAL exceedances in current or future occupied buildings. The No Action Response serves as a baseline with which other alternatives are compared.

Notification

An annual mailing would be sent to residence areas with the potential for vapor intrusion to solicit indoor air sampling participation. Mailings would be sent using Certified Mail and Signature Confirmation services to document that mailing packets were delivered and received. Residents who refuse sampling for that year or residents who do not respond to the mailing will still receive the annual mailings in the following years in the event that either they decide they would like to participate or a new resident has moved into the home.

Monitoring

Indoor air monitoring would be performed to (1) assess the effectiveness of mitigation systems and (2) determine if vapor intrusion is complete and significant at buildings or residences where mitigation systems have not been installed.

Mitigation

Mitigation systems would be installed where the vapor intrusion is complete and significant (in the case of off-Base residences, mitigation systems would be recommended to residents). The USAF would install, operate, and maintain new mitigation systems along with existing mitigation systems. Because a wide variety of building or residence types and site conditions exist at OU 15, there is no single vapor intrusion mitigation technology that can be effectively applied in every location. Therefore, this alternative would allow flexibility in selecting an appropriate mitigation technology for a specific building or residence while controlling cost to the extent practical. The following paragraphs describe the type of technologies that may be applied individually or in various combinations to mitigate indoor air VOC concentrations above RBALs due to vapor intrusion.

Building and Residence Vapor Intrusion Mitigation

Building and residence vapor intrusion mitigation systems are designed to break the pathway that vapors follow into a building or residence, thereby reducing the potential for human exposure to site-related VOCs above RBALs. There are generally three basic technology types of vapor intrusion mitigation systems – sealing, venting, and building environmental system controls. Some components of each of those mitigation technology types are often implemented together to provide redundancy and protectiveness when designing a mitigation system.

Sealing

Sealing floors or installing a vapor barrier system impedes the entry of vapor phase contaminants into a structure.

Venting

A venting system prevents subsurface vapors from entering a building or residence by providing a preferential pathway that directs vapors from beneath a building or residence to a discharge point, rather than allowing them to migrate into the structure's interior.

Building or Residence Environmental System Controls

The existing heating, ventilation, and air conditioning (HVAC) system within the building or residence may be used or modified to maintain indoor air quality at or below RBALs. For example, a building's or residence's HVAC system could be used to maintain positive pressure in the structure, relative to the pressure below the foundation, to minimize vapor intrusion. Alternatively, an indoor air purifier could be installed within a building's or residence's HVAC system, or a smaller air purifier system could be installed in a particular area of the building or residence, to treat indoor air quality to acceptable levels.

Sewer/Drain Vapor Intrusion Mitigation

In areas of shallow soil and groundwater contamination or where drain systems convey contaminated groundwater (whether from intentional discharges or from intrusion of contaminated water), drain systems may be potential preferential pathways for vapor intrusion. VOC vapors may travel through these conduits to soils beneath or near occupied buildings/residences and result in potential vapor intrusion. VOC vapors also may travel through sewer/drain pipes into these structures via lateral connections. Sewer/drain vapor intrusion mitigation may be considered for portions of the conduit that are confirmed as a source of site-related VOCs causing indoor air concentrations above RBALs.

Venting

Sewer/drain ventilation is designed to evacuate the headspace within these conduits to mitigate vapor conveyance and reduce the potential for site-related vapor intrusion. Active or passive venting can be utilized.

Drain Removal/Modification

Field drain systems exist in some parts of OU 15 where groundwater is very shallow. In some cases, the field drain piping is no longer needed to manage the shallow groundwater but may convey vapors into buildings or residences. To break the vapor intrusion pathway associated with field drains, these drains can be abandoned or check valves can be installed on the drains to restrict water and vapor flow. For abandonment, field drain piping would be backfilled with either a bentonite slurry or cement grout. Check-valve(s) installation focuses on breaking the vapor intrusion pathway by installing valves at strategic location(s) of a field drain network identified as a known potential preferential pathway for vapor intrusion into a building or residence.

Dewatering Measures

Dewatering measures are designed to prevent or remove contaminated groundwater from basements within a structure and mitigate evaporation of VOCs from groundwater into a building or residence. Dewatering may be employed alone or in conjunction with vapor intrusion mitigation actions described above. Options include foundation crack repairs and installation of French drains, sumps, check valves, waterproof membranes, or floor drain traps.

Remedial Alternatives

The retained remedy components were assembled into two remedial alternatives, which are defined below.

Alternative 1 – No Action

Alternative 1 consists of taking no further action. This alternative serves as a baseline for evaluating alternatives and is required by the NCP. The USAF would cease operation, maintenance, and monitoring of existing mitigations systems under the no action alternative and there would be no monitoring or administrative review of site conditions. Furthermore, existing mitigation systems are USAF property and would need to be removed and homes restored under a no action alternative.

Alternative 2 – Notification, Monitoring, and Mitigation

Alternative 2 consists of notification, monitoring, and mitigation. Residents would be directly contacted to participate in indoor air sampling through annual mailings. Indoor air monitoring would be performed to determine if vapor intrusion is complete and significant at occupied buildings. Mitigation would be undertaken for occupied buildings or residences with indoor air concentrations (attributable to vapor intrusion) that exceed RBALs to reduce those concentrations to below the RBALs. One or more of the technologies described above would be implemented and maintained at each building or residence to break the vapor intrusion pathway. At buildings or residences where vapor intrusion mitigation systems are installed, monitoring would occur to assess system performance. The USAF would work with EPA and UDEQ to determine the type and frequency of indoor air monitoring and when monitoring/mitigation would no longer be required. Those details would be provided in the **Remedial Design/Remedial Action Work Plan** following the signing of the Record of Decision.

Evaluation of Alternatives

Evaluation Criteria

Federal regulations (40 CFR 300; EPA 1990) require that remedial alternatives be evaluated against the nine criteria presented in **Table 5**.

TABLE 5
National Oil and Hazardous Substances Pollution Contingency Plan Evaluation Criteria (40 CFR 300)
Operable Unit 15 – Site ZZ113 Proposed Plan, Hill Air Force Base, Utah

1	**Overall Protection of Human Health and the Environment.** Will the alternative adequately protect human health and the environment against unacceptable risk?
2	**Compliance with ARARs.** Does the alternative attain all federal and state laws and regulations that are either applicable or relevant and appropriate to the circumstances found at a particular site or provide grounds to invoke a waiver?
3	**Long-term Effectiveness and Permanence.** How certain is it that an alternative will provide a successful, permanent, long-term solution to the problem with minimal residual risk?
4	**Reduction of Toxicity, Mobility, or Volume through Treatment.** Will the alternative use treatment to reduce the toxicity, reduce the volume of the contaminants, or reduce their ability to migrate?
5	**Short-Term Effectiveness (Impact on Community).** What risks would implementing the alternative have on the community, workers, and environment? How long until RAOs are achieved?
6	**Implementability.** Can the alternative be practically and successfully implemented, considering any technical and administrative issues that may need to be addressed?
7	**Cost.** What is the cost to design, build, and operate the remedy?
8	**Regulatory Acceptance (State and/or Support Agency Acceptance).** Do EPA and UDEQ accept, oppose, or have comments on the alternative?
9	**Community Acceptance.** Evaluates the community's preferences for, or concerns about, the alternative (this stage occurs upon receiving public comment).

NOTES:
ARAR = Applicable or Relevant and Appropriate Requirement.
CFR = Code of Federal Regulations.
EPA = U.S. Environmental Protection Agency.
RAO = Remedial action objective.
UDEQ = Utah Department of Environmental Quality.

The nine criteria are divided into the following three categories: threshold, balancing, and modifying. Threshold criteria include (1) overall protection, and (2) compliance with ARARs, and must be met by a particular alternative for it to be eligible for selection as a remedial action.

The balancing criteria are (3) long-term effectiveness and permanence, (4) reduction of toxicity, mobility, or volume through treatment, (5) short-term effectiveness, (6) implementability, and (7) cost. The five balancing criteria weigh the tradeoffs between alternatives, allowing low ratings on one balancing criterion to be compensated by a high rating on another.

The two modifying criteria are (8) EPA and state acceptance, and (9) community acceptance. As remedial alternatives are reviewed, a preferred alternative will be selected with concurrence from EPA and UDEQ. Community acceptance will be considered following public comment.

Comparison of Alternatives

The two remedial alternatives for OU 15 were compared against the evaluation criteria presented in **Table 5**. A summary of the evaluation is described as follows and is shown in **Table 6**. The evaluation of remedial alternatives and relative rankings presented in this Proposed Plan are based on the information provided in the Remedial Investigation and Feasibility Study Reports (EA 2016; EA 2017). Please refer to those documents for additional details.

TABLE 6
Comparative Analysis of Alternatives
Operable Unit 15 – Site ZZ113 Proposed Plan, Hill Air Force Base, Utah

		Alternatives	
		1	2
	Operable Unit 15 Remedial Alternative Evaluation	No Action	Notification, Monitoring, and Mitigation
NCP Alternative Evaluation Criteria	**Threshold**		
	Overall Protection of Human Health and the Environment	Not Protective	Protective
	Compliance with ARARs	Compliant	Compliant
	Balancing		
	Long-Term Effectiveness and Permanence	Poor	Fair
	Reduce Toxicity, Mobility, or Volume	Poor	Fair
	Short-Term Effectiveness	Good	Good
	Implementability	Good	Good
	Present Value Cost (millions of dollars)	$0	$8.11
	Modifying		
	Regulatory Acceptance	Not Acceptable	Acceptable
	Community Acceptance[1]	-	-

NOTES:
[1] This criterion will be evaluated through the public comment and response period for the Proposed Plan.

ARAR = Applicable or Relevant and Appropriate Requirement.
NCP = National Oil and Hazardous Substances Pollution Contingency Plan.

Overall Protection of Human Health and the Environment

With Alternative 1, no monitoring would occur to determine risk to building occupants and no new remedial actions would be implemented at locations where vapor-intrusion-related VOC concentrations exceed RBALs. Accordingly, Alternative 1 would not identify or prevent vapor-intrusion-related exposures above RBALs so Alternative 1 does not meet the threshold criteria of protection of human health and environment.

Implementation of Alternative 2 would involve notifying residents of the Indoor Air Program, monitoring, and implementing mitigation systems in vapor-intrusion-impacted, occupied structures. An annual mailing would be sent to residences within areas with the potential for vapor intrusion to solicit indoor air sampling participation. Mailings would be sent using Certified Mail and Signature Confirmation services to document that mailing packets were delivered and received. Indoor air monitoring would be performed to determine if vapor intrusion is complete and significant at occupied buildings. In buildings with indoor air concentrations (attributable to vapor intrusion) that exceed RBALs, installation of a vapor intrusion mitigation system would break the vapor intrusion pathway; thus, mitigating the human receptor exposure risk. Indoor air sampling would occur once vapor intrusion mitigation system installation is complete to verify system performance and achievement of the RAO. This alternative is protective of human health and the environment.

Compliance with Applicable or Relevant and Appropriate Requirements

The ARARs identified in the Feasibility Study Report include the following:

1. Hazardous waste regulations that would be applicable if air purifiers were used to reduce indoor-air VOC concentrations. These regulations require (a) evaluation to determine whether spent filters should be classified as non-hazardous or hazardous waste, and (b) proper waste management in accordance with that determination.

2. Regulations regarding pre-treatment of waters discharged to public sewers. These regulations would be applicable if a dewatering system was installed and the water was discharged to a sewer.

These ARARS are associated with specific mitigation actions and therefore do not apply to Alternative 1 (No Action). Therefore, Alternative 1 achieves compliance with ARAR criterion (because there are no applicable ARARs).

Alternative 2 can be implemented in a way that complies with the hazardous waste and wastewater ARARs. Therefore, Alternative 2 meets this threshold criteria.

Long-Term Effectiveness and Permanence

Under Alternative 1, no remedial action(s) would be conducted. Therefore, the alternative would have poor long-term effectiveness and permanence.

Mitigation measures implemented under Alternative 2 would be effective in the long term as long as maintenance of the mitigation systems and continued indoor air monitoring are in effect. However, the mitigation systems installed under Alternative 2 would not be permanent as the remedies for the groundwater and soil contamination OUs at Hill AFB would reduce and ultimately eliminate the underlying vapor sources, and thus eliminate the need for the mitigation systems.

Reduction of Toxicity, Mobility, or Volume through Treatment

Under Alternative 1, no remedial action(s) would be conducted. Therefore, the alternative would not be effective at reducing the toxicity, mobility, or volume of indoor air contamination.

In some circumstances (e.g., when indoor air purifiers are used), Alternative 2 would provide good reduction of toxicity, mobility, or volume of indoor air contamination through treatment. In other instances (e.g., when sealing or venting are used), although Alternative 2 does not involve treatment to reduce vapors, it would reduce the amount of vapors entering a structure, thus reducing or eliminating indoor air contamination.

Short-Term Effectiveness

Under Alternative 1, no remedial action(s) would be conducted. Therefore, the alternative would not be effective at preventing building occupants' exposure to VOCs in the short term.

Short-term effectiveness evaluates worker and community protection during remedial actions. Under Alternative 2, exposure of workers to contaminated indoor air during monitoring would be minimal. Based on Hill AFB's experience, indoor air VOC concentrations typically diminish rapidly after mitigation measures are put in place. No new adverse risks to the community would result from Alternative 2 implementation.

Implementability

Alternative 1 would be easily implementable since this alternative would not involve any construction or operation and maintenance activities. The USAF would cease operation, maintenance, and monitoring of existing mitigations systems under the no action alternative and there would be no monitoring or administrative review of site conditions. Furthermore, existing mitigation systems are USAF property and would need to be removed and homes restored under a no action alternative.

Implementation of Alternative 2 would include a notification and monitoring program to solicit participation in the Indoor Air Program, identify residences where vapor intrusion is occurring, and monitor the performance of mitigation systems. Details of the monitoring program will be specified in the Remedial Design/Remedial Action Work Plan.

Suitable mitigation technologies for structures within OU 15 are available and implementable, assuming access is granted for off-Base structures, as demonstrated by the 120 mitigation systems that have already been installed in off-Base residences at OU 15. Various mitigation technologies are available to accommodate structure types and implementation limitations and may be altered to improve performance, if necessary. Appropriate materials and qualified subcontractors for vapor intrusion mitigation system installations are readily available and easily obtained.

Cost

For comparison purposes, the estimated capital and operation and maintenance costs for Alternative 1, No Action, are $0. It should be noted, however, that mitigation systems are USAF property and would need to be removed and homes restored under a no action alternative, which would result in tangible costs to the USAF.

The cost for Alternative 2 is broken into two components: (1) Capital Costs (i.e., vapor intrusion mitigation system [VIMS] installations), and (2) Periodic Costs (i.e., operation and maintenance [O&M] and Five-Year Reviews). A 30-year period was used for costing purposes as required by EPA guidance. It is likely that some of the off-Base groundwater plumes will be remediated to below groundwater RBALs in that 30-year period, while the remediation timeframe for other source areas/groundwater plumes will extend beyond 30 years in some areas. Alternative 2 would continue indefinitely and would be discontinued when the source areas/groundwater sources are remediated to concentrations that no longer present a vapor intrusion risk. Actual costs will depend on the cleanup time of the vapor intrusion sources in each OU.

The VIMS installation component of Alternative 2 is flexible, allowing different VIMS technologies to be used contingent on the particular building-specific conditions. However, for preparing a cost estimate for this alternative, a number of assumptions were made based on experience during the Indoor Air Program. Key assumptions used to develop a cost estimate for the Capital Costs component of Alternative 2 include:

- Number of VIMSs installed per year:
  - Two VIMS installations per year
  - VIMS installations will stay constant over the 30 years, so approximately 60 new VIMSs will be installed at OU 15.
- Typical building type: Existing residential construction
- VIMS installation costs include labor associated with site walks and oversight; travel; subcontractor costs; miscellaneous material costs; initial indoor air performance sampling; management; and reporting.

Indoor air sampling will be performed annually at residences where a determination has not been made if significant vapor intrusion is occurring (i.e., residences that have not been sampled or adequate indoor air data have not been collected). During the same sampling event, O&M of existing VIMS will also occur. Key assumptions used to develop a cost estimate for the Periodic Cost component of Alternative 2 include the following:

- Number of VIMSs decommissioned per year:
  - Two existing VIMSs will be decommissioned per year as groundwater plumes are remediated and the vapor intrusion pathway becomes incomplete in some areas
  - Combined with the two VIMS installations per year, the assumed total number of VIMSs in OU 15 will remain constant over the 30-year period.

- Annual indoor air monitoring of residences to determine if significant VI is occurring:
  - 300 residences sampled in first year and a 10 percent annual decrease in residences sampled thereafter
  - Annual indoor monitoring costs include labor, travel, miscellaneous supplies and materials, laboratory costs, and reporting
  - Annual monitoring costs include the possibility of indoor air sampling in an on-Base building in a vapor intrusion source area.
- O&M inspection of new and existing VIMSs:
  - Annual O&M required at all existing and new VIMSs
  - O&M costs include labor, travel, indoor air performance sampling, miscellaneous repair costs, management/oversight, and reporting.
- Five-Year Reviews: Periodic administrative costs include those associated with preparing Five-Year Reviews for OU 15.

The total present value cost of Alternative 2 is $8.11 million. The total cost includes $1.16 million for capital costs and $6.95 million for periodic costs. These estimates were prepared primarily based on experience with the current monitoring program. Present worth costs were calculated using a discount rate of 1.5 percent (Office of Management and Budget 2015). This cost estimate is intended for comparison purposes only and may not represent the actual cost that is expended at the time of implementation.

Regulatory Acceptance

EPA and UDEQ have tentatively agreed with the preferred alternative. However, this is subject to change after considering public comments received on this Proposed Plan and until the final Record of Decision is signed for OU 15.

Preferred Alternative

The preferred remedial alternative for OU 15 Site ZZ113 is Alternative 2 (Notification, Monitoring, and Mitigation). The components of this alternative are described above.

Alternative 2 is protective of human health and the environment, is compliant with ARARs, would create no new adverse risks to the community, is easily implementable, and its associated costs are not prohibitive. Alternative 2 mirrors the current interim remedy established by the 2003 TCRA. The interim remedy has been successful at identifying locations where vapor intrusion is occurring and mitigating vapor intrusion at those locations.

Based on the information currently available, the USAF (the lead agency) believes the preferred alternative meets the threshold criteria and provides the best balance of tradeoffs with respect to the balancing and modifying criteria. The USAF expects the preferred alternative to satisfy the following applicable statutory requirements of CERCLA §121(b): (1) be protective of human health and the environment, (2) comply with ARARs (or justify a waiver), (3) be cost effective, and (4) use long-term solutions and alternative treatment technologies to the maximum extent practicable. Although some components of this remedy (e.g., sealing and venting) do not attain the statutory preference for treatment, the remedy would reduce the amount of vapors entering a structure, thus reducing or eliminating indoor air contamination. The USAF, EPA, and UDEQ agree on the selection of the preferred alternative. However, the preferred alternative can change after consideration of public comments or new information.

Community Participation

Community Acceptance

A public meeting and 30-day public comment period will be provided for this Proposed Plan. The public meeting will be planned for 1 to 2 weeks into the 30-day public comment period. Hill AFB will publish a notice in the local newspaper(s) advertising the start and end date of the public comment period, date and location of the public meeting, and contact information for the public. Public comments on this document will be evaluated to assess the community's acceptance of the preferred alternative and will be documented in the responsiveness summary included in the Record of Decision for OU 15. The preferred alternative may be modified or different alternatives other than those presented in this Proposed Plan may be selected on the basis of public comment.

Providing Public Comment

The public comment period begins June 12, 2017, and ends July 11, 2017. Two open-house-style public meetings will be held regarding the Proposed Plan for OU 15. Attendees can come anytime during the 2-hour window of each meeting. Meetings will include poster stations with information about the Proposed Plan and staff to assist with questions and concerns. Attendees may choose the meeting most convenient to their schedule and location:

(1) **Layton**: Wednesday, June 21, 2017, 6:00 p.m. to 8:00 p.m. at Lincoln Elementary School, 591 W Antelope Dr., Layton, Utah.

(2) **Riverdale**: Thursday, June 22, 2017, 5:00 p.m. to 7:00 p.m at Riverdale Community Center, 4360 South Parker Drive, Riverdale, Utah.

Public comments may be made at the public meetings or sent to Mr. Mark Roginske (see below for contact and mailing information). A responsiveness summary of the comments and responses will accompany the Record of Decision for OU 15.

Hill Air Force Base
Attn: Mr. Mark Roginske
Department of the Air Force
Air Force Civil Engineer Center/Environmental Restoration
c/o 75th CEG/CEIE
7290 Weiner Street, Building 383
Hill Air Force Base, UT 84056-5003

Telephone: (801) 775-3651
Email: Mark.Roginske@us.af.mil

References

EA Engineering, Science, and Technology, Inc., PBC (EA). 2015. *Operable Unit 10 – Site SS109 (Zone 1200) Remedial Design/Remedial Action Work Plan,* Hill Air Force Base, Utah. Final. September.

EA. 2016. *Operable Unit 15 – Site ZZ113 Remedial Investigation Report,* Hill Air Force Base, Utah. Final. August.

EA. 2017. *Operable Unit 15 – Site ZZ113 Feasibility Study Report*, Hill Air Force Base, Utah. Final. June.

(U.S.) Environmental Protection Agency (EPA). 1990. *National Oil and Hazardous Substances Contingency Plan (NCP),* Federal Register. Vol. 55(46).

Hill Air Force Base (AFB). 2015a. *Operable Unit 9 Record of Decision,* Hill Air Force Base, Utah. Final. September.

Hill AFB. 2015b. *Operable Unit 11 Record of Decision*, Hill Air Force Base, Utah. Final. June.

MWH. 2003. *Final Action Memorandum for Time-Critical Removal Actions for Indoor Air,* Hill Air Force Base, Utah. September.

MWH. 2004. *Basewide Air Sampling and Analysis Plan, Indoor Residential Air Sampling,* Hill Air Force Base, Utah. January.

Office of Management and Budget. 2015. *Budget Assumptions Nominal Treasury Interest Rates for Different Maturities.* Available from https://obamawhitehouse.archives.gov/sites/default/files/omb/assets/a94/dischist-2016.pdf. November.

Glossary of Terms

Administrative Record: The Administrative Record consists of the documents (including studies, plans, and reports) used in the decision-making process and to document the remedial process.

Applicable or Relevant and Appropriate Requirements (ARARs): State and/or federal environmental regulations that are applicable to, or relevant and appropriate for, a particular site. ARARs must be considered when selecting remedial actions. Chemical-specific ARARs are health- or risk-based numeric values or methodologies that establish the acceptable amount or concentration of a chemical that may be found in, or discharged to, the ambient environment. Location-specific ARARs are restrictions placed on the concentration of hazardous substances or activities based solely because they occur in special locations, such as wetlands or historical sites. Action-specific ARARs are technology- or activity-based requirements or limitations on actions involving the management of hazardous wastes.

Chemical of concern (COC): For OU 15, COCs are chemicals that have been detected in indoor air due to vapor intrusion at concentrations above RBALS.

Chemical of potential concern (COPC): For OU 15, COPCs are chemicals identified in soil or groundwater during a remedial investigation at concentrations that have the potential to volatilize to indoor air, but have not been detected in indoor air above RBALs.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): A federal law (42 U.S. Code Sec 9601) passed in 1980 that established programs to identify hazardous waste sites, ensure cleanup when necessary, evaluate damages to natural resources, and create claims procedures for parties who clean up the sites. Commonly known as Superfund, CERCLA was amended in 1986 by the Superfund Amendments and Reauthorization Act.

Feasibility Study: The process of developing and evaluating remedial action alternatives.

Human Health Risk Assessment: Qualitative or quantitative evaluation of the risk posed to human health by the actual or potential presence or release of hazardous substances, pollutants or contaminants.

Mitigating: Removing or reducing concentrations of contaminants (in this case, VOCs in indoor air) to levels below Risk-Based Action Levels.

National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR 300): These federal regulations define the implementation requirements of CERCLA. It provides the organizational structure and procedures for addressing federal Superfund sites.

Operable Unit (OU): A distinct part of an entire cleanup action. An OU may be established based on a particular type of contamination, contaminated media (for example, air, soil, or groundwater), source of contamination, or geographical location.

Preferred alternative: The alternative proposed by the lead agency (in this case, the USAF) that best meets the cleanup objectives.

Preliminary remediation goals: Target concentrations for contaminants in the affected environmental media (indoor air for OU 15) that are estimated to result in protection of human health. The goals are preliminary until the Record of Decision is signed.

Proposed Plan: A document prepared by the lead agency (in this case, the USAF) and made available to the public to inform the public about alternatives considered to remediate a contaminated site. This document also describes the preferred alternative(s) for site remediation.

Record of Decision: A public document that explains the selected remedy for a Superfund site. This document also includes the lead agency's rationale for making the selection.

Remedial action: Actions taken to eliminate, reduce, or control the hazards posed by a site.

Remedial action objectives (RAOs): Goals associated with the remedial actions for protecting human health and the environment, including preliminary cleanup goals, areas of attainment, and estimated restoration timeframes.

Remedial alternative: A single remedy component or combination of remedy components considered for implementation at a site.

Remedial Design/Remedial Action Work Plan: Document that outlines activities planned to implement the remedy as described in the applicable Record of Decision.

Remedial Investigation: Investigation to characterize the nature and extent of contamination and to assess the current and future risks to human health and the environment.

Remedy components: Individual technologies or other remediation actions that might be implemented at a site.

Risk-based action levels (RBALs): Concentrations that are used at OU 15 to evaluate the need for mitigation as a CERCLA time-critical removal action.

Source area: The location of the primary contaminant release (for example, leaking pipeline, old landfill, or chemical spill) that caused soil, soil gas, and/or groundwater contamination.

Time Critical Removal Action (TCRA): A type of cleanup action used at a Superfund Site when contamination poses an immediate threat to human health and the environment. A TCRA is documented in a memorandum that determines the need, provides the rationale, and authorizes the cleanup action.

U.S. Environmental Protection Agency (EPA): The federal agency responsible for overseeing the cleanup efforts at Hill AFB.

Utah Department of Environmental Quality (UDEQ): The lead state agency responsible for overseeing the cleanup efforts at Hill AFB.

Vadose Zone: The unsaturated portion of the subsurface between the land surface and the water table.

Vapor intrusion: The migration of volatile chemicals from contaminated groundwater or soil into an overlying building or residence.

Volatile organic compound (VOC): Organic compound that evaporates readily at room temperature.

List of Acronyms

AFB	Air Force Base
ARAR	Applicable or Relevant and Appropriate Requirement
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
COC	Chemical of concern
COPC	Chemical of potential concern
EA	EA Engineering, Science, and Technology, Inc. (prior to 12 December 2014) or EA Engineering, Science, and Technology, Inc., PBC (12 December 2014 and thereafter)
ELCR	Excess lifetime cancer risk
EPA	U.S. Environmental Protection Agency
HI	Hazard index
HQ	Hazard quotient
HVAC	Heating, ventilation, and air conditioning
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
O&M	operation and maintenance
OU	Operable Unit
RAO	Remedial action objective
RBAL	Risk-based action level
TCRA	Time Critical Removal Action
UDEQ	Utah Department of Environmental Quality
USAF	U.S. Air Force
VIMS	vapor intrusion mitigation system
VOC	Volatile organic compound

Additional information on the Proposed Plan or any of the supporting documentation is available at:

Hill AFB Administrative Records
All items contained within the Administrative Record file for OU 15 are available online at the U.S. Air Force Civil Engineer Center, Air Force Administrative Record, http://afcec.publicadmin-record.us.af.mil/ or by contacting:

Air Force Civil Engineer Center/Environmental Restoration
c/o 75th CEG/CEIE
7290 Weiner Street, Building 383
Hill Air Force Base, UT 84056-5003

Hours:
Mon – Fri: 7:30 a.m. – 4:30 p.m.
By Appointment: (801) 775-6913

U.S. Environmental Protection Agency
Attn: Ms. Sandra Bourgeois
USEPA Region VIII (EPR-FF)
1595 Wynkoop Street
Denver, CO 80202-1129

Telephone: (303) 312-6666
Email: Bourgeois.Sandra@epa.gov

Utah Department of Environmental Quality
Attn: Mr. Mo Slam
Utah Dept. of Environmental Quality
P.O. Box 144840
Salt Lake City, UT 84114-4840

Telephone: (801) 536-4178
Email: mslam@utah.gov

Public Comment may be addressed to the following:

Hill Air Force Base
Attn: Mr. Mark Roginske
Department of the Air Force
Air Force Civil Engineer Center/Environmental Restoration
c/o 75th CEG/CEIE
7290 Weiner Street, Building 383
Hill Air Force Base, UT 84056-5003

Telephone: (801) 775-3651
Email: Mark.Roginske@us.af.mil

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https://www.standard.net/south-weber-gets-warning-from-ecologist-on-possible-hill-pollution/article_79ea8850-32f2-5af0-a663-6c61e7d8cf85.html

South Weber gets warning from ecologist on possible Hill pollution

By Cheryl Strong Jun 28, 2012

SOUTH WEBER — Dr. John Carter, technical adviser to the South Weber Coalition, addressed the city council Tuesday about possible Hill Air Force Base contamination in the city.

Carter, who holds a doctorate in ecology from Utah State University, said the contamination, which likely started during World War II or earlier with the dumping of chemical warfare products, flares, bullets, herbicides and other materials, is being monitored by Hill.

The base is using the Monitored Natural Attenuation Program, Carter said, which means that any ground pollution will be contained by natural sources, such as using water in trenches to dilute chemicals and a clay/slurry wall around part of the base to prevent leakage.

However, Carter said, the slurry walls leak somewhat, reducing effectiveness.

Arsenic contamination caused by previous chemical dumping resulted in the base being deemed a Superfund site. Superfund is an environmental program established to address abandoned hazardous waste sites.

Carter said there is a possibility that South Weber residents could be suffering from chemical effects, such as neurological damage, cancers and skin disorders, among others, through inhaling, absorption, or digestion of chemicals.

Carter brought in charts to show that the contamination could descend because of gravity and then seep into aquifers in the city.

He said both the east and west ends of the city could be affected, and even though the base burns up chemical disposal, "a lot would soak into the ground."

According to Carter, at one time Hill Air Force Base had extraction wells to keep the groundwater table depressed; however, the wells were decommissioned. Today, the base is using trenches with permeable materials that capture as much contaminant as possible. However, he said, "Trenches ... are not 100 percent effective," because of possible gaps in the trench and water moving beneath the trench.

Carter suggested caps over the landfill to prevent rain or snow from going into contaminated areas and draining over the hill.

In addition to chemicals, there are also dangerous gases — such as benzene — that can leak, Carter said.

"If my property was (in South Weber), I would be very concerned," he said.

Carter also claimed there had not been a comprehensive study made to determine the contamination level in all parts of the city. Hill studies have been restricted to a limited area, he said.

Carter recommended several steps to help solve the contamination problem:

• To fill gaps in the study on the east end.

• To address the pathways or slope of contamination.

• To have active remediation with wells.

• To address epidemiological concerns — health, immune system, nervous, cancer, and liver.

Carter also recommended a "remedial investigation" to prevent problems that could come up in the next 10 years.

Brent Poll, a South Weber resident, said the council may know health and welfare are priorities; yet it has not aggressively acted upon those concerns, especially with new subdivisions that are under way. Poll, along with other residents, hired Carter and have advocated for better cleanup of the contamination in the city for the last 20 years.

Councilman Randy Hilton, who had attended a Restoration Advisory Board meeting that included communities around HAFB that are concerned about the pollution — said the contamination plumes have been getting smaller.

Mayor Jeff Monroe said some of the charts Carter presented date back to 1992 and 1994. Monroe questioned the validity of those charts and said he is going to look into Carter's recommended "next steps."

https://www.standard.net/news/environment/south-weber-group-wants-contaminated-soil-identified/article_26bdb1c0-cf7b-5dfd-86e6-ccec7c85a81a.html

South Weber group wants contaminated soil identified

By BRYON SAXTON, Standard-Examiner staff Feb 15, 2015

City Recorder Tom Smith says the city cannot restrict homes being built near a Superfund site without scientific evidence stating it is unsafe.

SOUTH WEBER — Identifying which building lots sit on top of contaminated soils is information that needs to be included in the building permits South Weber city issues, says a leader of a citizens group.

Lynn Poll, member of the South Weber Coalition, contacted the Standard-Examiner, claiming South Weber city officials were not doing enough to let future homebuyers know they could be building over a contaminated soil site.

The site in question is a recent rezone of nearly five acres at 400 E. Old Post Road. The council on Tuesday unanimously agreed to rezone the property from agricultural to low to moderate residential.

According to officials, the property is about 2,000 feet from an Environmental Protection Agency Superfund site, groundwater contamination, which the U.S. Air Force for the past 28 years has been in the process of cleaning up.

Under the threat of litigation, Poll said, the city was at one time issuing building permits in the area of Canyon Meadows Park that contained a warning if the lot rested on contaminated soils.

The city council on Tuesday discussed the possibility of placing a warning on the subdivision plat maps once they are submitted, but did not address placing warnings on future building permits to be issued for home building on that site.

Placing warnings on building permits implying the possibility the lot may sit on contaminated soils is something that could be legally challenged by the land owner where there is no conclusive scientific evidence that the lots are situated on contaminated soil sites, City Recorder Tom Smith said.

There is one subdivision in South Weber that was claimed to have carried such warnings on its building permits, but other subdivisions that have been developed in that area carry no such warning, and without conclusive evidence the city cannot deny someone the right to build on their land as long as its meets all land use requirements, Smith said.

"We can't do anything," Smith said. "There is all kinds of stuff built on that soil."

But some concerned residents say the city leaders' first priority should be the residents.

The city's land use ordinance contains as part of its "paramount starting block" that it is the city's job to protect the health and welfare of its residents, South Weber resident Brent Poll said.

"There has got to be some way to warn the landowner," said Brent Poll, also a member of the coalition group.

The city should not be trusting the federal government in this particular situation, Lynn Poll said. "The government is not honest with us." But he is concerned South Weber doesn't really want to know what the problems are with the property, he said.

Contaminated groundwater plumes linked to Hill Air Force Base's improper disposal of cleaning chemicals have also been identified in Layton, Clearfield, Sunset, Clinton, Roy and Riverdale.

Contact reporter Bryon Saxton at 801-625-4244 or bsaxton@standard.net. Follow him on Twitter at @BryonSaxton.

Utah Geological Survey

Project: Reconnaissance of the April 9, 2006, 1650 East landslide, South Weber, Utah			
By: Richard E. Giraud, P.G. and Greg N. McDonald, P.G.	Date: 07-26-06	County: Davis	
USGS Quadrangles: Ogden (1345)	Section/Township/Range: SW¼NE¼ section 34, T. 5 N., R. 1 W., SLBLM		
Requested by: Ron Chandler, South Weber City Manager			Job number: 06-10

INTRODUCTION

At the request of Ron Chandler, the Utah Geological Survey (UGS) conducted a reconnaissance of the 1650 East landslide in the Highland View Estates subdivision, South Weber, Davis County, Utah (figures 1 and 2) on April 10, 2006. Rick Chesnut (Terracon) and Lee Cammack (JUB Engineers) were also conducting a field study of the landslide and damage to the Davis-Weber Canal for the Davis-Weber Canal Company at the time of our visit. On April 11, 2006, Richard Giraud discussed the landslide hazard with city officials and homeowners in a public meeting and on April 14, 2006, provided a letter (Giraud, 2006) to South Weber City outlining recommendations for managing the landslide hazard.

The landslide occurred around 9:30 p.m. on the evening of April 9, 2006. It flowed over and damaged the Davis-Weber Canal at the base of the slope, and impacted the back of the house at 1650 East 7687 South below the canal (figures 3 and 4). The landslide caused significant damage to the house, injured a child inside the house, and prompted evacuation of nearby houses. The purpose of our investigation was to determine the cause of the landslide, document physical characteristics of the landslide, and evaluate the remaining landslide hazard to aid South Weber City in determining when to allow evacuated residents to return and in assessing the long-term risk to development at the base of the bluff.

For this study, we reviewed relevant geologic maps and reports of geology, geologic-hazard, and landslide investigations in the area. We also reviewed 1:20,000-scale (1937), 1:10,000-scale (1958), and 1:24,000-scale (1985) stereo aerial photographs; U.S. Geological Survey 1997 and 2003 orthophotos at various scales (TerraServer USA, 2006); and National Agriculture Imagery Program orthophotos at various scales (Utah Automated Geographic Reference Center, 2006).

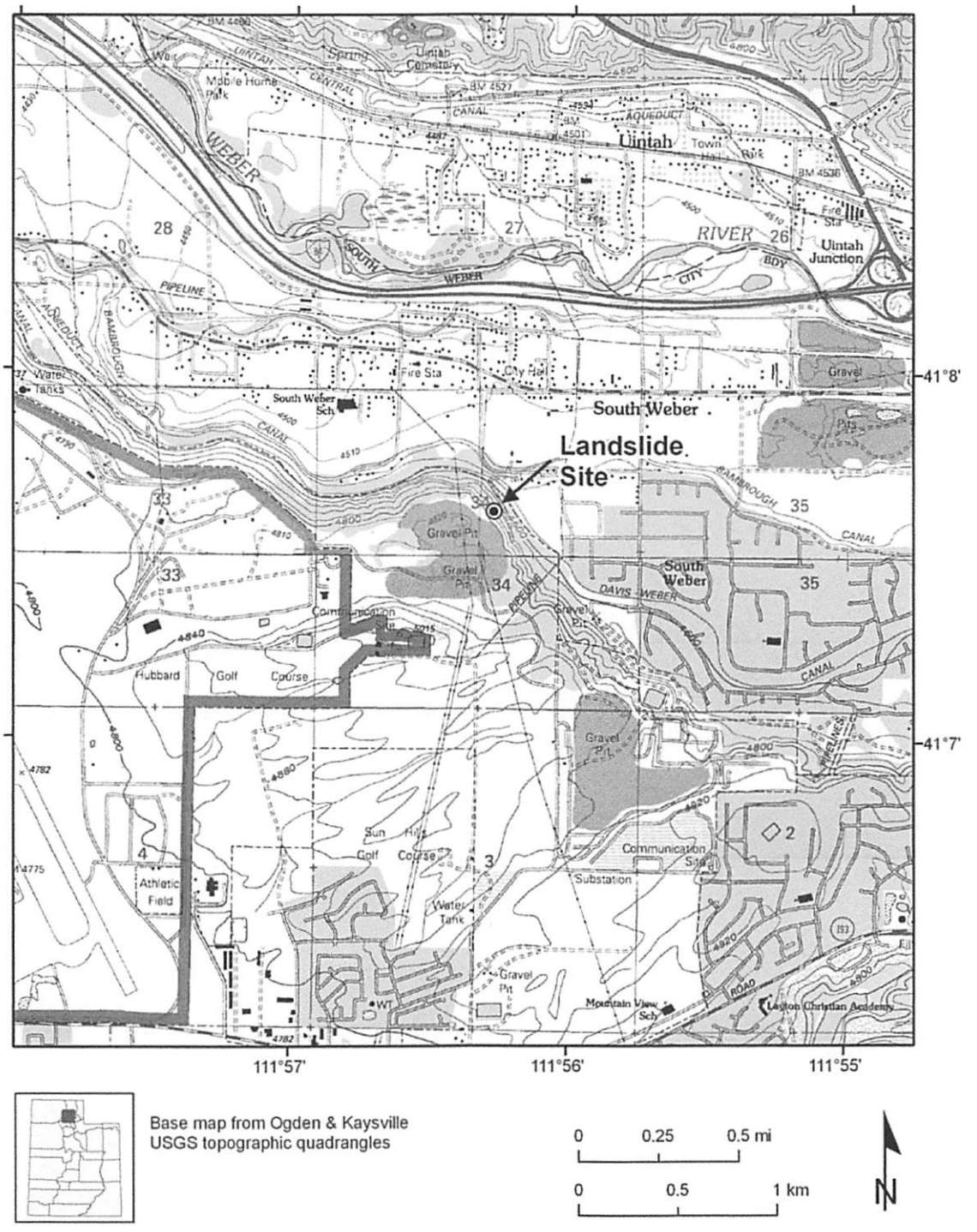


Figure 1. Location of the 1650 East landslide in South Weber, Utah.

Figure 2. Image showing landslide flow direction, Highland View Estates subdivision, gravel pit pond, and the Davis-Weber Canal. The pond boundary is approximate and is based on oblique aerial photographs taken by Davis County Sheriff's Office personnel on the morning of April 10, 2006.

Figure 3. Landslide damage to the house at 1650 East 7687 South.

Figure 4. Damage to the house and garage at 1650 East 7687 South.

CONCLUSIONS AND RECOMMENDATIONS

Based on this geologic investigation and hazard assessment of the 1650 East landslide, the UGS concludes the following:

- The 1650 East landslide was a rapid earth flow that damaged the Davis-Weber Canal and the house at 1650 East 7687 South, and injured a child inside the house.

- Piping holes near the head of the landslide below the slope crest indicate a pond and shallow ground water in the gravel pit atop the bluff saturated a zone in material along the slope crest and triggered the landslide. The steep slope, runoff of snowmelt into the pond, shallow ground water in the gravel pit, weight of embankment fill at the slope crest, and weak underlying geologic materials probably all contributed to the landslide.

- The houses along the base of the slope are in a runout zone for shallow rapidly moving landslides and may also be at risk from deep-seated rotational landslides.

- For potential deeper seated rotational landslides in the slope above the subdivision, Terracon's (2005) slope-stability investigation estimated a static factor of safety of 1.2, which is well below the normally accepted 1.5 factor of safety. Terracon's analysis indicates the slope will likely fail during an earthquake.

- Deep-seated landslides can impact the canal, and if the canal is conveying water and a landslide caused a canal breach, widespread flooding and sedimentation could occur at the base of the slope.

To reduce the potential impacts of landslide movement and manage the landslide hazard in this area, the UGS recommends the following:

- Implement surface- and ground-water control measures to ensure conditions at the slope crest that caused the 1650 East landslide do not reoccur.

- Because houses already exist along the base of the slope and are potentially impacted by both shallow and deep-seated landslides, a study should evaluate the landslide hazard, potential impacts to houses, and possible risk-reduction measures.

- Monitoring should continue of slope movement and ground-water levels in inclinometers and piezometers, respectively, installed by Terracon for the Davis-Weber, to assess potential movement of deep-seated landslides.

- South Weber City should consider both shallow and deep landslide hazards and hazards related to a possible canal breach when evaluating existing or future development and setbacks at the base of the slope along the city's entire south side.

- Disclose the existence of hazards reports and information to existing and future homeowners.

GEOLOGIC SETTING

The 1650 East landslide is in a steep northeast-facing slope forming the south side of the Weber River Valley (figure 1). The slope formed as the Weber River cut down into its former delta as Lake Bonneville receded from the Provo shoreline after 14,500 years ago to the present level of Great Salt Lake. The slope is approximately 220 feet high and has an average gradient of 45% (24°). The Davis-Weber Canal is in the lower slope just above houses built along the slope base.

Geologic evidence and historical records indicate relatively frequent landsliding in slopes in the area. Yonkee and Lowe (2004) mapped the northeast-facing slope as "older Holocene landslide deposits" that include widespread landslides developed within generally fine-grained lacustrine and deltaic sediments. The older Holocene landslide deposits are mainly slumps and earth flows. Lowe (1988) shows historically active landslides (LSa 331-334) near the 1650 East landslide and along the entire northeast-facing bluff, which he mapped as an older landslide complex (LS 335). Yonkee and Lowe (2004) mapped these historically active landslides as younger Holocene landslide deposits. Earthtec (2002) completed a geotechnical study for Highland View Estates subdivision and identified a landslide near the subdivision but did not show the landslide relative to the subdivision on a map. Other authors have documented numerous historical landslides in the slope east and west of the 1650 East landslide (Pashley and Wiggins, 1972; Lund, 1984; Black, 1999; Solomon, 1999). These landslide deposits are also derived from Lake Bonneville fine-grained lacustrine and deltaic deposits.

The 1650 East landslide is similar to the February 20, 2005, 425 East South Weber Drive landslide (Giraud, 2005). The 425 East South Weber Drive landslide threatened the Davis-Weber Canal, demolished a barn, blocked State Route 60 (South Weber Drive), and had a 150 foot runout beyond the slope toe onto flat ground. The Davis-Weber Canal Company installed drains and buttressed the slope to reduce the risk of future landslides.

LANDSLIDE DESCRIPTION

The 1650 East landslide was a rapid earth flow that started as a slide at the slope crest adjacent to a pond in a gravel pit (figures 2 and 5). The landslide main scarp extends a short distance back from the slope crest onto flat ground toward the pond in the gravel pit. The landslide is mostly a failure of fill pushed out of the gravel pit onto the upper slope to form a berm along the slope crest (figure 6). The landslide also involved native materials underlying and downslope of the fill. The slide at the crest mobilized into a flow that accelerated rapidly downslope, removing trees and crossing dirt roads, the canal, and a rock wall at the back of the lot before impacting the house at 7687 South 1650 East (figures 2 and 7). The landslide impact

Figure 5. View looking northwest at the pond in the gravel pit and the landslide head (arrow). A berm was placed between the pond and the landslide to prevent water from flowing onto the landslide. Photo taken on the morning of April 10, 2005, by Davis County Sheriff's Office personnel.

Figure 6. View to the southeast showing landslide main scarp and fill placed on the upper slope. Near the left edge of the photo, black top soil at the base of the scarp (arrow) underlying the brown fill is evident and indicates the original slope surface.

Figure 7. View looking down the landslide flow path at the damaged house at 1650 East 7687 South. The culvert in the lower slide path above the house was originally in the gravel pit. Subsequent water flow eroded the right side of the landslide.

broke through the house and garage walls and a small volume of sediment and tree debris was deposited in the house. A child inside the house was injured and the landslide impacted with sufficient force to break part of the house foundation wall (figure 8). The impact to the back of the garage pushed a car and pickup out through the garage doors. The landslide broke windows at the adjacent house to the southwest at 1650 East 7701 South. The landslide also damaged the Davis-Weber Canal which had recently been enclosed in a concrete box culvert but was not yet covered with backfill (Ray, 2006) (figure 9). Water had not yet been turned into the canal for the irrigation season so obstruction to flow in the canal by the landslide was not an issue.

The landslide likely moved initially as a shallow translational landslide but quickly transformed downslope into a rapidly moving earth flow. The landslide was about 80 feet wide and 600 feet long (figure 2). It initiated in the upper slope on gradients of as much as 60% (31°). The average gradient from the landslide main scarp to the impacted house is 45% (24°). The steep slopes accelerated the landslide downslope toward the subdivision. Some landslide material was deposited on the canal and canal access road (figure 9) and on dirt roads above the canal (figure 10), which reduced the landslide volume before impacting the house and likely reduced damage to the house. Following the landslide, water draining from the landslide crown and head eroded the right side of the landslide and flowed into the canal (figures 7 and 9).

The pond in the gravel pit collects surface-water runoff and also reflects the local shallow water table. Test pits excavated by the Davis County Public Works Department on April 10, 2006, near the landslide crown in the gravel pit showed shallow ground water perched at depths of 4 to 6 feet on clay beds. Cottonwood trees in the gravel pit and wetland vegetation in and near

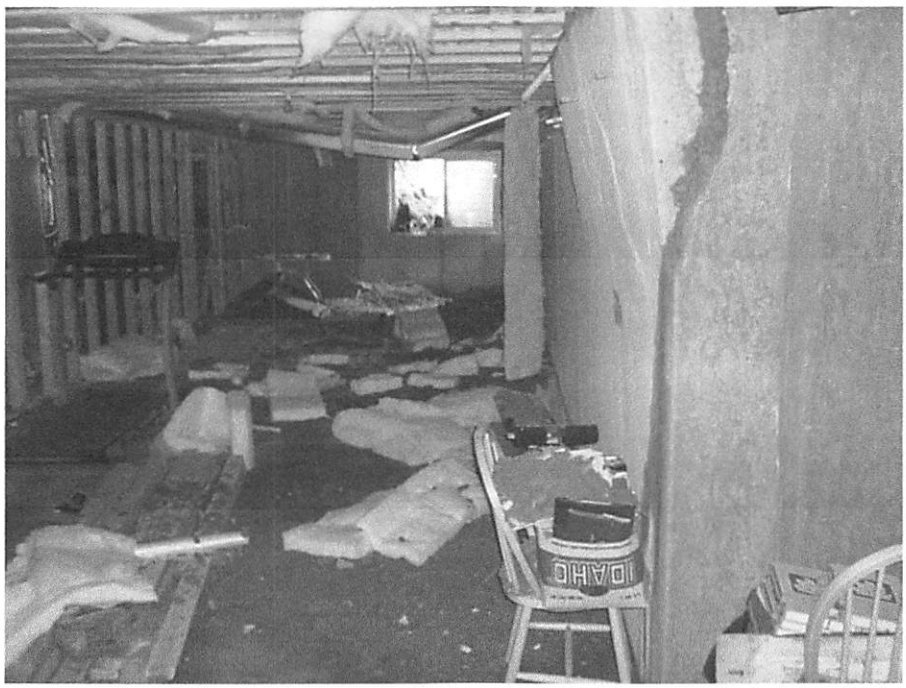


Figure 8. Basement at 1650 East 7687 South showing upper foundation wall (right side of photo) broken by landslide impact.

Figure 9. View looking northwest of Davis-Weber Canal showing landslide material deposited on the box culvert and canal access road. Following the landslide water and sediment flowed into the canal left of the box culvert.

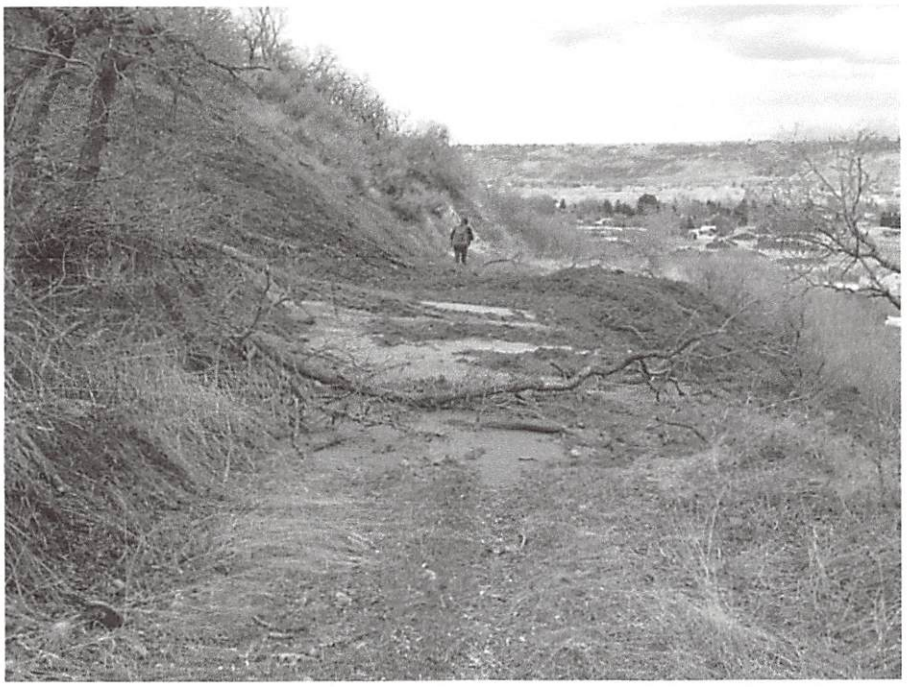


Figure 10. Landslide material deposited on a dirt road midslope above the Davis-Weber Canal.

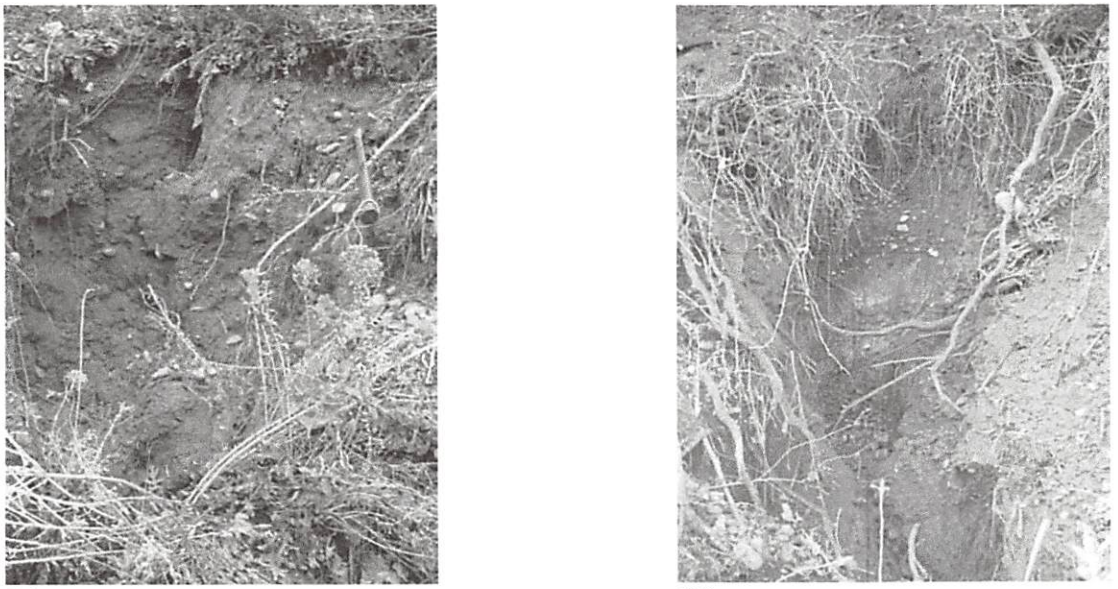
the pond (figure 5) also indicate the presence of perennial shallow ground water since surface-water runoff alone would not sustain this vegetation. Cottonwood trees growing along the slope crest also indicate shallow ground water (figure 6). Following the landslide, a soil berm was placed between the pond and the landslide to prevent pond water from flowing onto the landslide head (figure 5).

CANAL SLOPE-STABILITY INVESTIGATION

Prior to construction of the Highland View Estates subdivision, Terracon (2000) completed an initial geotechnical-engineering investigation along the bluff to identify areas along the Davis-Weber Canal that are prone to landsliding. This investigation indicated that the slope above the Highland View Estates subdivision and the canal is marginally stable. To address the landslide hazard, Terracon (2005) completed a follow-up slope-stability investigation, which included installation of piezometers and inclinometers and a subsequent slope-stability analysis. The boreholes encountered interbedded clay, sand, silty sand, sandy silt, and gravel. For the slope above the canal and subdivision, Terracon (2005) estimated a factor of safety of 1.2 under static conditions for deep rotational landsliding. For earthquake ground-shaking conditions, Terracon (2005) estimated the factor of safety to be well below 1.0, meaning the slope would fail during an earthquake. Terracon (2005) states that lot grading for the subdivision cut the slope toe and canal embankment which may decrease the stability of the slope. Terracon (2005) provides recommendations to reduce the landslide hazard and potential impacts to the canal but did not address the potential for shallow landsliding and rapid earth-flow landslides.

PROBABLE CAUSES OF MOVEMENT

Several factors likely contributed to landslide movement. The fill placed along the slope crest added weight, loading the underlying weak native slope materials and promoting slope failure. The elevated pond level and related shallow ground water saturated part of the fill and native material in the upper part of the slope and triggered the April 9, 2006, landslide. Piping holes along the landslide flanks (figure 11) near the landslide head indicate active subsurface flow through the fill on the slope crest prior to the landslide. A major spring storm on April 4 through 6, 2006, resulted in 10 inches of snow (2.12 inches water) in South Ogden and 8 inches of snow (1.95 inches water) in Layton (National Weather Service, 2006). The subsequent snowmelt and runoff likely increased the pond-water level and ground-water level and saturated part of the fill along the slope crest. The steep slope, runoff of snowmelt water into the pond, shallow ground water, weight of embankment fill, and weak underlying materials probably all contributed to the landslide.



(a) (b)

Figure 11. Piping holes in the upper slope near the landslide flanks. (a) Small piping hole near the landslide right flank. (b) Large piping hole adjacent to the landslide left flank.

FUTURE LANDSLIDE HAZARD POTENTIAL

The April 9, 2006, and February 20, 2005, landslides clearly demonstrate the potential for shallow, rapidly moving, earth-flow-type landslides with significant runout distances on similar slopes in South Weber. Flow-type landslides are destructive and a threat to life safety due to their velocity and impact. When such landslides occur above subdivisions built within the landslide runout zone, the potential exists for loss of life in addition to property damage. Both the April 9, 2006, and February 20, 2005, landslides demonstrate the distance small earth flows can travel beyond the base of a slope.

Both shallow- and deep-seated landslides have potential to damage the Highland View Estates subdivision. Controlling the pond- and ground-water levels in the gravel pit, as discussed in the April 11, 2006, meeting and April 14, 2006, letter (Giraud, 2006), manages one landslide triggering mechanism but does not eliminate all risk from shallow landslides. Shallow landslides can be triggered by rapid snowmelt, prolonged rainfall, or periods of above-normal precipitation. The February 20, 2005, 425 East South Weber landslide (Giraud, 2005) was triggered in a year that had above-normal precipitation. For deep-seated landslides, Terracon (2005) estimated a static factor of safety of 1.2 for the slope and emphasized that 1.2 is below the normally accepted 1.5 factor of safety. Deep-seated landslides have the potential to damage both the subdivision and the canal. Earthquakes could trigger both shallow and deep landslides.

Because houses have been constructed along the base of the slope and can potentially be impacted by both shallow and deep-seated landslides, a study should evaluate the landslide hazard, potential impacts to houses and lots, and possible risk-reduction measures. The study should include an assessment of drainage and ground-water conditions in the gravel pit at the top of the slope, the extent of fill placed at the slope crest, and thickness and nature of shallow colluvial deposits on the face of the slope as they relate to shallow landslides and the potential to transform into rapid earth flows. The study should evaluate rapid snowmelt, prolonged rainfall, and periods of above-normal precipitation as potential landslide triggers. The landslide study should also evaluate global stability of the slope with respect to deep-seated rotational landslides and the stability effects of undercutting the base of the slope to enlarge back-yard areas in lots below the canal.

Because the canal is now buried in a concrete box culvert, rapid earth flows may travel over the canal but deep-seated landslides may still damage the canal. If deep-seated landslides impact the Davis-Weber Canal when the canal is conveying water, the potential exists for the canal to breach and cause widespread flooding and sediment deposition. The Davis-Weber Canal Company has studied the deep-seated landslide hazard relative to their canal and Terracon (2005) provided recommendations to reduce the potential impacts to the canal.

SUMMARY

The 1650 East landslide was a rapid earth flow that damaged the Davis-Weber Canal and a house at 1650 East 7687 South. The landslide also injured a child inside the house. Piping holes in the upper slope adjacent to the landslide head indicate saturation of part of the fill along the slope crest from a pond and shallow ground water and triggered the landslide. The steep slope, runoff of snowmelt into the pond, shallow ground water, weight of embankment fill, and weak underlying geologic materials probably all contributed to the landslide.

The Terracon study of deep-seated landsliding indicated the slope has a static factor of safety of 1.2, which is below the normally accepted factor of safety of 1.5. Both shallow and deep-seated landslides have the potential to damage houses constructed along the base of the slope. Deep-seated landslides may also damage the canal and cause widespread flooding and sediment deposition. We recommend a landslide study to evaluate shallow and deep-seated landslide hazards, potential impacts to houses, and possible risk-reduction measures. For

existing and future development in South Weber near the base of the slope along the city's south side, South Weber should consider the potential impacts of shallow and deep-seated landslides and the possibility of a breach of the Davis-Weber Canal.

LIMITATIONS

Although this product represents the work of professional scientists, the Utah Department of Natural Resources, Utah Geological Survey, makes no warranty, expressed or implied, regarding its suitability for a particular use. The Utah Department of Natural Resources, Utah Geological Survey, shall not be liable under any circumstances for any direct, indirect, special, incidental, or consequential damages with respect to claims by users of this product.

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South Weber

May 1, 2019 to Aug 27, 2019

Introduction

- Captain West
- Sgt. Pope
- Why are we presenting?
- What are we presenting?

Staffing Hours and Performance

South Weber May-August 2019

Weekly Contract Hours

Week	Dayshift	Nightshift	Weekly Total
4/31/19 - 5/6/19	40	50	90
5/7/19 - 5/13/19	33	54	87
5/14/19 - 5/20/19	43	41	84
5/21/19 - 5/27/19	47	36	83
5/28/19- -6/3/19	29	36	65
6/4/19 - 6/10/19	22	37	59
6/11/19 - 6/17/19	19	33	52
6/18/19 - 6/24/19	36	32	68
6/25/19 - 7/1/19	27	28	55
7/2/19 - 7/8/19	32	24	56
7/9/19 - 7/15/19	38	43	81
7/16/19 - 7/22/19	54	36	90
7/23/19 - 7/29/19	38	36	74
7/30/19 - 8/6/19	58	27	85
8/6/19 - 8/13/19	73	57	130
8/20/19 - 8/27/19	71	45	116
Total hours	**660**	**615**	**1275**

Weekly Avg. Dayshift	Weekly Avg. Nightshift	Weekly Avg. Total
50.77	**47.31**	**98.08**

Work Performance

Arrests	Offenses	Citations	Violations	Incidents	DUI
27	53	33	47	343	2

Significant Events

Significant Events

- **May 20, 2019**
- **Theft / 475 E Petersen Parkway / D19-04728**
- Superintendent of new construction townhomes at approximately 6550 S 390 E in South Weber called to report a theft in progress. Superintendent followed suspect to area of 536 E Green Springs Way in South Weber. 2 suspects found and identified. One was supervisor of sheetrock job at 342 E 6775 S in South Weber. Sheetrock crew ran out of materials and supervisor told them to take materials from construction at 6550 S 390 E. The supervisor ultimately agreed to making the decision and that the other did not know about this being a theft. The supervisor was cited for theft. The victim superintendent recovered stolen sheetrock mud.

Significant Events

- **May 16, 2019**
- **1231 hours / Threats / D19-04218**
- Female soccer coach called stating that a male soccer coach had threatened her. According to the victim, the male suspect approached an 11 year old referee and began yelling at him. They have had problems with this male coach in the past and the victim approached the suspect to tell him his actions were inappropriate. After telling him this, he took his team off the field while yelling profanity and making a scene. While the victim was speaking with her 9 year old soccer team after the game had ended, the male suspect came over to the team and began calling them retards and being aggressive. He eventually left and went back to his side of the field. He had taken the victim's soccer ball to which she approached him and asked him for it. The male suspect again began yelling at the victim stating he would show her how a man fights and threatened physical harm. He began to approach the victim to where she ran to her car and locked herself inside. Several parents had to intervene and were able to get him to back away. The league coordinator was contacted by several parents and the victim to report the incident. A second league coordinator also received several complaints. Witness statements gathered from parents found that the female complainant was just as aggressive as the male. The incident did not rise to the level of criminal charges. The soccer league administrators stated they would address the situation.

Significant Events

- **June 8, 2019**
- **1603 hours / Lewdness / D19-05337**
- Report of females with no tops in the swimming pool. Dpt. Wennergren responded and found that the females had left the area. Dpt. Wennergren spoke with Chris Tremea, one of the complainants, who informed her that the residence was recently approved as an Air BnB and that they have already had several issues at the residence

Significant Events

- **June 11, 2019**
- **1713 hours / Rape / D19-05446**
- SW citizen entered the Sheriff's Office with her 12 year old daughter requesting to report a juvenile rape. The citizen had already reported the incident that had occurred on November 24, 2018 to DCFS and a CANR report had been started. Sgt Marley and Lt West were contacted and had already received the report. A CJC interview has been scheduled for an interview of the child. The citizen was given information regarding a child protective order and for victim advocate contact for assistance. The children have since moved in with their mother. Several Keep the Peace incidents have been responded to since. None of them have had any issues.

Significant Events

- **June 15, 2019**
- **JOB CORPS, South weber / Sex offense / D19-05571**
- Two juveniles found outside dorms. Female juvenile reported what started as a consensual encounter became non-consensual and she was assaulted/Raped. Detectives responded and female was transported for a NUSANE examination.

Significant Events

- **June 25, 2019**
- **0845 hours / SW Elementary, South Weber / Criminal Mischief / D19-05822**
- Deputy Swenson took report of two windows being broken out. After making contact with a school representative, they advised that there had been a video uploaded to Instagram by a 14 year old male living in the area of him and a friend shooting out the window with a CO2 delivered pellet gun. The video showed the 14 year old recording the video and a second male, 18 years old, shooting the gun at the ground, then at the windows. The school had the 14 year olds information and Deputy Swenson made contact with him to which he admitted to uploading the video. Both the 14 year old and 18 year old have had charges filed with the attorney's office.

Significant Events

- **July 5, 2019**
- **0005 hours / Criminal Mischief / D19-06128**
- During the morning hours three mailboxes (all standing next to each other) were damaged by a vehicle. The original complainant did not want to pursue anything further than notification to the Sheriff's Office. The two other victims stated they heard a noise in the night, but thought it was fireworks. The mailboxes were replaced quickly. No suspect information or video was able to be located.

Significant Events

- **July 6, 2019**
- **2122 hours / Drug Offense / D19-06175**
- Deputies were dispatched to people doing drugs in a car parked at a residence. Upon deputies arrival, male ran out of the car and into the adjacent home. Male was identified and lives at the residence with his mother. All suspects were uncooperative with deputies and the male suspect stayed inside his mother's home. Other occupants in the car who did not run, stayed in the car with the drugs. They were cited and released.

Significant Events

- **July 6, 2019**
- **0957 hrs / Information / D19-06160**
- Contacted by Officer Larson with SLCPD. SLCPD received information about a male soliciting for models for photographing through social media. Complainants in SLC felt the females in the photos appeared to be juvenile aged. Suspect was identified as the homeowner attempting to turn the home into an air b&b. He advertised on facebook under 5 Star Boudoir, and Cobblestone Resorts Dustin. The SLCPD Officer and I did not think the models in the photos appeared to be juveniles. The homeowner has local file at the above address for lewdess (topless females) and suspicious when his pool was damaged from a water slide being left on.

Significant Events

- **July 28, 2019**
- **1618 hours / 1375 E South Weber Dr / ATL-DUI / D19-06866**
- A 911 call was made for a reckless driver driving all over the road into oncoming traffic near 1375 E South Weber Drive. The responding deputy caught up to the vehicle as it entered into Riverdale. The deputy attempted a traffic stop which the driver continued for a ½ mile in the oncoming lane before hitting a mailbox as he stopped. Upon contact, the male had a green powder around his nose and lips (later identified as crushed up xanax). The driver failed field sobriety tests and was arrested.

Significant Events

- **August 2, 2019**
- **0851 hours / Threats / D19-07024**
- Construction crews with the assisted living next to a residence were doing work on the residential driveway with permission of the homeowner. The homeowner's son made an overt threat towards construction workers and was generally obnoxious. He is on paper with AP&P and construction workers provided statements that he was seen placing a shotgun in his vehicle. The shotgun was not used in the threat or in a threatening manner, but he is a restricted person. He is known to be defiant of law enforcement, and when contact was attempted, he refused to talk to us. AP&P was notified, and the vehicle that he was seen placing the shotgun in was not listed with AP&P, therefore a search of the vehicle could not be completed.

Significant Events

- **August 9, 2019**
- 1731 hours / Attended Death / D19-07243
- 76 year old male cardiac arrest. EMS CPR attempt was made. Medical Control concurred with termination of efforts on scene. Pts physician will sign the death certificate. Family notified and on scene to be with victims spouse.

Significant Events

- **August 9, 2019**
- **0200 hrs / South Weber Maverick/ Suspicious DUI / D19-07255**
- Received a report of suspicious person/vehicle at Maverick. The vehicle was located parked in a stall. Signs of alcohol use were noted by Deputy A Gossels and the driver was found to be revoked alcohol, ignition interlock restricted, and alcohol restricted. The driver was arrested for the violations along with DUI. He had three prior convictions in the last 10 years.

Significant Events

- **August 10, 2019**
- **0300 hours / Maverik / Theft-Joyriding / D19-07279**
- A theft was called in by the clerk from Maverick advising that several teenage males came into the store and stole packages of cigarettes. The males then returned the cigarettes, asked the clerk not to call the police and left in a vehicle. The clerk was able to provide a license plate. After further investigation, it was found that a juvenile male residing in South Weber had taken the vehicle without his parents permission and had returned home. He had several friends in the vehicle who he picked up in Morgan and their identities and involvement are pending further follow up and investigation after receiving video footage from Maverick. The juvenile was referred to juvenile court for unauthorized control of a vehicle, curfew and learners permit violation.

Significant Events

- **August 17, 2019**
- **1810 hrs / SW Drive NB onramp to Hwy 89, SW / DUI / D19-07485**
- Deputy Gary ran the license plate of a vehicle in the Maverik and found the owner to have a suspended driver license. He confirmed the identity of the driver who exited and drove away. A traffic stop was completed where an odor of alcohol was noticed. The driver was put through field sobriety tests and failed. He was subsequently arrested and booked into the jail on the offense.

Significant Events

- **August 17, 2019**
- **0040 hrs / Noise Comp / D19-07489**
- Deputy Gall responded to a noise complaint for a loud party at the listed address. He discovered that a MC club member was having a party. The identity of the MC club was not recognized, however it was noticed that their support/affiliation was to a criminal enterprise MC club group. Night shift conducted several coordinated traffic stops on MC club members to identify the riders, and deter any likely related criminal activity.

Significant Events

- **August 24, 2019**
- **1640 hrs / Cornia Drive, SW / Warrant, Fleeing, CS violation, Parole violation /D19-07719**
- Suspect fled from Deputy Turley when he identified him as having several warrants. He ran across the Weber river and containment was set up with the aid of Weber county officers. Canines were deployed and the suspect was apprehended with a successful Canine deployment. He was taken into custody for several Outstanding no bail warrants. F2 possession with intent, Theft, possession of financial cards and his parole officer responded who had been searching for him for an extended period.

News Worthy Events

Man arrested after fleeing on foot, falling in river, caught by K-9

POSTED 9:15 PM, AUGUST 25, 2019, BY SPENCER BURT, *UPDATED AT 10:11PM, AUGUST 25, 2019*

FACEBOOK TWITTER REDDIT PINTEREST LINKEDIN

DAVIS COUNTY, Utah — A man was arrested Saturday after fleeing from an officer, swimming across a river and ultimately being apprehended by K-9 units, police say.

According to an arrest report, 27-year-old Anthony Wayne Draper was working on his motorcycle when a Davis County Sheriff's deputy saw him and asked if he needed help.

News Worthy Events

South Weber Country Fair Days

Questions or Concerns?

Captain Taylor West

801-451-4104

Sergeant Chris Pope

801-451-4150

SOUTH WEBER city
1600 E. South Weber Drive
South Weber, UT 84405
www.southwebercity.com
801-479-3177
FAX 801-479-0066

Affidavit of Closed Session

STATE OF UTAH)
: ss.
COUNTY OF DAVIS)

Mayor Jo Sjoblom upon oath, deposes and says:

1. She is the Mayor of South Weber City, a municipal corporation of the State of Utah.

2. As Mayor, Affiant, when available, presides at all meetings of the governing body of said City.

3. On 08-27-19 commencing at 7:58 pm, Affiant presided over a closed meeting of said City's governing body. The closed meeting was held pursuant to the provisions of UCA § Section 52-4-205(1) for the sole purpose of:

   € (a) discussion of the character, professional competence, or physical or mental health of an individual;
   € (b) to discuss collective bargaining;
   € (c) to discuss pending or reasonably imminent litigation;
   X (d) to discuss the purchase, exchange or lease of real property, including any form of a water right or water shares;
   € (e) to discuss the sale of real property, including any form of a water right or water shares;
   € (f) discussion regarding deployment of security personnel, devices, or systems;
   € (g) investigative proceedings regarding allegations of criminal misconduct

4. The closed meeting was held as scheduled and the only subject matter discussed in the meeting was, in fact, the aforementioned items.

5. Affiant states that any record of the meeting above referred to is protected under Title 63, Chapter 2, of the Government Records Access and Management Act and therefore is not subject to access by the public or media.

6. Further Affiant sayeth not.

Signature of Mayor, Affiant — Date 8/27/19

SUBSCRIBED, sworn to and acknowledged before me this 27th day of August, 2019.

Lisa Smith, City Recorder