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# Source Water Assessment

A Hydrogeologic Susceptibility and  
Vulnerability Assessment for  
Penland Park Mobile Home Park,  
Anchorage, Alaska  
PWSID # 210419.001

DRINKING WATER PROTECTION PROGRAM REPORT 778

Alaska Department of Environmental Conservation

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DRINKING WATER PROTECTION PROGRAM REPORT 778

The Drinking Water Protection Program is producing Source Water Assessments in compliance with the Safe Drinking Water Act Amendments of 1996. Each assessment includes a delineation of the source water area, an inventory of potential and existing contaminant sources that may impact the water, a risk ranking for each of these contaminants, and an evaluation of the potential vulnerability of these drinking water sources.

These assessments are intended to provide public water systems owners/operators, communities, and local governments with the best available information that may be used to protect the quality of their drinking water. The assessments combine information obtained from various sources, including the U.S. Environmental Protection Agency, Alaska Department of Environmental Conservation (ADEC), public water system owners/operators, and other public information sources. The results of this assessment are subject to change if additional data becomes available. If you have any additional information that may affect the results of this assessment, please contact the Program Coordinator of DWPP, (907) 269-7521.

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# Source Water Assessment for Penland Park Mobile Home Park Source of Public Drinking Water, Anchorage, Alaska

## Drinking Water Protection Program Alaska Department of Environmental Conservation

### EXECUTIVE SUMMARY

The public water system for Penland Park Mobile Home Park is a Class A (community) water system consisting of one well in the Anchorage area. Identified potential and existing sources of contaminants for Penland Park Mobile Home Park include: sewer lines, residential areas, motor vehicle repair shops, motor vehicle repair shops, photo processing, underground fuel tanks, airports, firehouses, jewelers, pharmacies, printers, gasoline stations, medical facilities, recognized contaminated sites and Leaking Underground Storage Tank (LUST) sites. These identified potential and existing sources of contamination are considered sources of bacteria and viruses, nitrates and/or nitrites, volatile organic chemicals, heavy metals, synthetic organic chemicals and other organic chemicals. Overall, Penland Park Mobile Home Park received a vulnerability rating of **Medium** for bacteria and viruses, nitrate/nitrites and synthetic organic chemicals, **High** for volatile organic chemicals, inorganic chemicals and other organic chemicals.

### INTRODUCTION

The Alaska Department of Environmental Conservation (ADEC) is completing source water assessments for all public drinking water sources in the State of Alaska. The purpose of this assessment is to provide public water system owners and/or operators, communities, and local governments with information they can use to preserve the quality of Alaska's public drinking water supplies. The results of this source water assessment can be used to decide where voluntary protection efforts are needed and feasible, and what efforts will be most effective in reducing contaminant risks to your water system.

This source water assessment combines a review of the natural conditions at the site and the potential and existing contaminant risks. These are combined to determine the overall vulnerability of the drinking water source to contamination.

### DESCRIPTION OF THE ANCHORAGE AREA, ALASKA

#### Location

Anchorage, located in south-central Alaska, encompasses 1,698 square miles of land and 264 square miles of water. The area containing a majority of the urban development, commonly referred to as the Anchorage Bowl, encompasses approximately 180 square miles [Partick, Brabets, and Glass, 1989] and envelopes the low lands of the area. This area is bounded on the east by the Chugach Mountains and the north, west, and south by the Knik and Turnagain Arm of Cook Inlet (Figure 1). In recent times, urban development has extended eastward along the flanks of the Chugach Mountains. This area, known locally as the Anchorage Hillside, contains development at elevations exceeding 3,700 feet in elevation above sea level.



Figure 1. Index map showing the location of Anchorage, Alaska

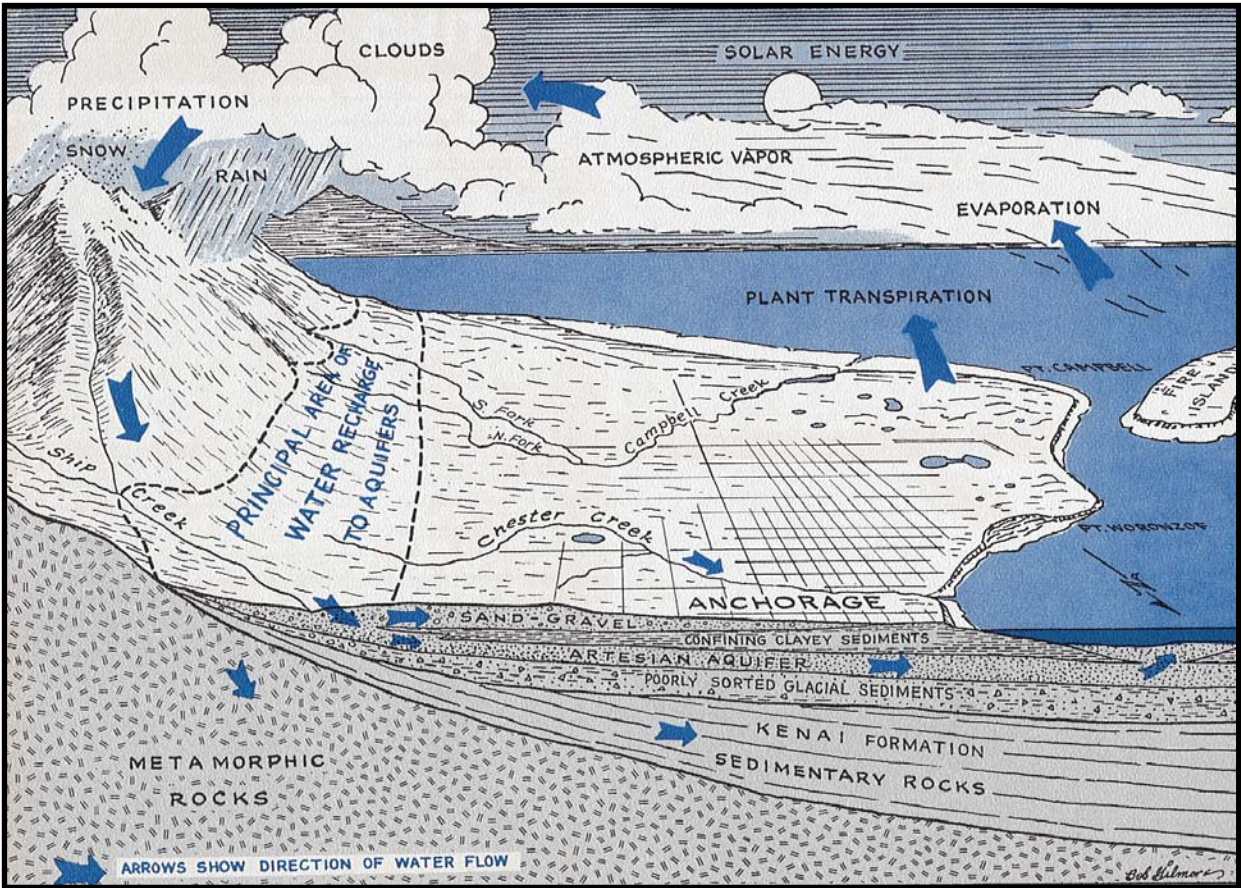


Figure 2. Generalized hydrologic cycle in the Anchorage area [Barnwell, George, Dearborn, Weeks, and Zenone, 1972].

**Climate**

The Anchorage area climate is somewhat transitional in that it does not experience large daily and annual temperature fluctuations like those experienced in the interior of Alaska nor does it experience high amounts of precipitation typified by gulf coast regions. Mean annual precipitation at the Anchorage International Airport is approximately 16 inches per year. On average, Anchorage receives a total snow accumulation of 69 inches per year. Precipitation generally increases inland toward the Chugach Mountains where annual precipitation may exceed 160 inches per year [Barnwell, George, Dearborn, Weeks, and Zenone, 1972]. Mean daily temperature ranges from 65° F during July to 8° F in January [Western Regional Climate Center, 2000].

**Physiography and Groundwater Conditions**

Surface elevations in the Anchorage area range from sea level at Knik and Turnagain Arms to well over 5,000 feet in the peaks that bound the area. Glacial moraine and outwash deposits primarily mantle the surface of the Anchorage Bowl.

The backbone of the Chugach Mountains is composed primarily of metamorphic marine and volcanic rocks (bedrock). These high peaks that bound Anchorage’s east side are flanked with colluvium or slope deposits. These slope deposits eventually grade into the glacial and stream deposits at lower elevations in the Anchorage Bowl.

In the Anchorage area, two principal groundwater flow systems or aquifers exist (see Figure 2). The upper unconfined aquifer or water-table aquifer is separated from a lower confined aquifer system by layers of silty, clayey glacially derived sediments (confining layer) [Ulery and Updike, 1983]. The lower confined aquifer system consists of a series of hydrologically interconnected layers and lenses of gravel, sand and silt that, collectively, form the confined aquifer. The confining layer ranges from 0 to 270 feet thick throughout the Anchorage area and generally thins with increasing distance from Cook Inlet, thus pinching out at the mountain front [Patrick, Brabets, and Glass, 1989].

Water enters or recharges these two aquifer systems in several different ways. Along the front of the Chugach Mountains, groundwater seeps from fractures in

bedrock into the sediments. At these higher elevations, rain and snowmelt also enters the sediments. This area along the mountain front is considered the principal recharge area for wells in the Anchorage area. Precipitation in the low lands may also percolate directly into the ground. Lastly, aquifers may also be recharged by streams where surface water percolates into surrounding permeable sediments (losing reaches of streams). Groundwater flow in the confined aquifer is generally east to west from the mountain front toward Cook Inlet and Turnagain Arm, except in areas where the direction of flow is influenced by large municipal or industrial production wells. The direction of groundwater flow in the upper unconfined aquifer is more variable due to the influence from surficial topography as well as its close connection with surface water bodies.

**PENLAND PARK MOBILE HOME PARK PUBLIC DRINKING WATER SYSTEM**

Penland Park Mobile Home Park is a Class A (community) water system. The system consists of one well in the Anchorage area. (See Map 1 of Appendix A).

The well is located in the parking lot of the Northway Mall, at an elevation of approximately 125 feet above sea level.

The 1997 Sanitary Survey indicates that the well is installed with caps providing a sanitary seal. A properly installed sanitary seal may provide protection against contaminants from entering the source waters at the well casing. Due to the date that the well was installed, 1977, it is suspected that the well was not grouted according to current ADEC regulations. Proper grouting provides added protection against contaminants traveling along the well casing and into source waters.

The well log indicates that the depth of the well is 164 feet below surface level (bsl) and the static water level at the time of drilling was 63 feet bsl. The log indicates that the well and passes through clay layers from 32-38, 46-103 feet bsl. The confining layers may provide protection from contaminates entering the aquifer. However, the protectiveness of the clay layers tend to thin out towards the mountains allowing contaminants that enter the subsurface near the base of the mountains to enter the confined aquifer uninhibited by the absence of any protective layer.

This system operates 365 days per year and serves 1500 residents through 389 service connections.

**PENLAND PARK MOBILE HOME PARK PROTECTION AREA**

In order to evaluate whether a drinking water source is at risk, we must first evaluate what are the most likely pathways for surface contamination to reach the groundwater. Some areas are more likely to allow contamination to reach the well than others. These areas are determined by looking at the characteristics of the soil, groundwater, aquifer, and well.

The most probable area for contamination to reach the drinking water well is the area that contributes water to the well, the groundwater recharge area. This area is designated as the Drinking Water Protection Area (DWPA). Because releases of contaminants within the DWPA are most likely to impact the drinking water well, this area will serve as the focus for voluntary protection efforts.

An outline of the immediate watershed was used to determine the size and shape of the DWPA for Penland Park Mobile Home Park. Available geology was also considered to take into account any uncertainties in groundwater flow and aquifer characteristics to arrive at a meaningful DWPA (Please refer to the Guidance Manual for Class A Public Water Systems for additional information).

The DWPAs established for wells by the ADEC are usually separated into four zones, limited by the watershed. These zones correspond to differences in the time-of-travel (TOT) of the water moving through the aquifer to the well. An analytical calculation was used to determine the size and shape of the DWPA. The input parameters describing the attributes of the aquifer in this calculation were adopted from the U.S. Geological Survey (*Patrick, Brabets, and Glass, 1989*), and State of Alaska Department of Water Resources (*Jokela et. al., 1991*).

The time of travel for contaminants within the water varies and is dependent on the physical and chemical characteristics of each contaminant. The following is a summary of the four DWPA zones and the calculated time-of-travel for each:

**Table 1. Definition of Zones**

<b>Zone</b>	<b>Definition</b>
A	¼ the distance for the 2-yr. TOT
B	Less than the 2 year TOT
C	Less Than the 5 year TOT
D	Less than the 10 year TOT

## INVENTORY OF POTENTIAL AND EXISTING CONTAMINANT SOURCES

The Drinking Water Protection Program has completed an inventory of potential and existing sources of contamination within Penland Park Mobile Home Park DWPA. This inventory was completed through a search of agency records and other publicly available information. Potential sources of contamination to the drinking water aquifer include a wide range of categories and types. Potential drinking water contaminants are found within agricultural, residential, commercial, and industrial areas, but can also occur within areas that have little or no development.

For the basis of all Class A public water system assessments, six categories of drinking water contaminants were inventoried. They include:

- Bacteria and viruses;
- Nitrates and/or nitrites;
- Volatile organic chemicals
- Heavy metals, cyanide, and other inorganic chemicals,
- Synthetic organic chemicals, and
- Other organic chemicals.

The sources are displayed on Maps 2 -10 in Appendix C and summarized in Table 1 of Appendix B.

## RANKING OF CONTAMINANT RISKS

Once the potential and existing sources of contamination have been identified, they are assigned a ranking according to what type and level of risk they represent. Ranking of contaminant risks for a “potential” or “existing” source of contamination is a function of toxicity and volumes of specific contaminants associated with that source.

Tables 2 through 7 in Appendix B contain the ranking of potential and existing sources of contamination with respect to bacteria and viruses, nitrates and/or nitrites, volatile organic chemicals, heavy metals, synthetic organic chemicals, and other organic chemicals.

## VULNERABILITY OF PENLAND PARK MOBILE HOME PARK DRINKING WATER SOURCE

Vulnerability of a drinking water source to contamination is a combination of two factors:

- Natural susceptibility; and
- Contaminant risks.

Each of the six categories of drinking water contaminants has been analyzed and an overall vulnerability score of 0 to 100 is ultimately assigned:

Natural Susceptibility (0 – 50 points)

+

Contaminant Risks (0 – 50 points)

=

Vulnerability of the

Drinking Water Source to Contamination (0 – 100). A score for the Natural Susceptibility is achieved by analyzing the properties of the well and the aquifer.

Susceptibility of the Wellhead (0 – 25 Points)

+

Susceptibility of the Aquifer (0 – 25 Points)

=

Natural Susceptibility (Susceptibility of the Well) (0 – 50 Points)

Table 2 shows the Susceptibility scores and ratings for the well serving Penland Park Mobile Home Park.

**Table 2. Susceptibility of the well**

	Score	Rating
Susceptibility of the Wellhead	5	Low
Susceptibility of the Aquifer	15	High
Natural Susceptibility	20	Medium

Contaminant risks to a drinking water source depend on the type, number or density, and distribution of contaminant sources. This data has been derived from an examination of existing and historical contamination that has been detected at the drinking water source through routine sampling. It also evaluates potential sources of contamination. Table 3 summarizes the Contaminant Risks for each category of drinking water contaminants.

**Table 3. Contaminant Risks**

Category	Score	Rating
Bacteria and Viruses	30	High
Nitrates and/or Nitrites	30	High
Volatile Organic Chemicals	50	Very High
Heavy Metals, Cyanide, and Other Inorganic Chemicals	50	Very High
Synthetic Organic Chemicals	22	Medium
Other Organic Chemicals	45	Very High

Appendix D contains fourteen charts, which together form the ‘Vulnerability Analysis’ for a source water assessment for a public drinking water source. Chart 1 analyzes the ‘Susceptibility of the Wellhead’ to contamination by looking at the construction of the well and its surrounding area. Chart 2 analyzes the ‘Susceptibility of the Aquifer’ to contamination by looking at the naturally occurring attributes of the water source and influences on the groundwater system that might lead to contamination. Chart 3 analyzes ‘Contaminant Risks’ for the drinking water source with respect to bacteria and viruses. The ‘Contaminant Risks’ portion of the analysis considers potential sources of contaminants as well as a review of contamination that has or may have occurred, but has not arrived or been detected at the well. Lastly, Chart 4 contains the ‘Vulnerability Analysis for Bacteria and Viruses’. Charts 5 through 14 contain the Contaminant Risks and Vulnerability Analyses for nitrates and nitrites, volatile organic chemicals, heavy metals, synthetic organic chemicals, and other organic chemicals, respectively. Table 4 contains the overall vulnerability scores (0 – 100) and ratings for each of the six categories of drinking water contaminants. Note: scores are rounded off to the nearest five.

**Table 4. Overall Vulnerability**

Category	Score	Rating
Bacteria and Viruses	50	Medium
Nitrates and Nitrites	50	Medium
Volatile Organic Chemicals	70	High
Heavy Metals, Cyanide and Other Inorganic Chemicals	70	High
Synthetic Organic Chemicals	40	Medium
Other Organic Chemicals	65	High

**Bacteria and Viruses**

The contaminant risk for bacteria and viruses is high with sewer lines presenting the most significant risk to the drinking water well (See Chart 3 – Contaminant Risks for Bacteria and Viruses in Appendix D).

Recent sampling of the well indicates that no bacteria and viruses have been detected. .

After combining the contaminant risk for bacteria and viruses with the natural susceptibility of the well, the overall vulnerability is medium.

**Nitrates and Nitrites**

The contaminant risk for nitrates and nitrites is high with sewer lines presenting the most significant risk to the drinking water well.

Recent historical sampling data indicates that nitrates have not been detected in source waters.

After combining the contaminant risk for nitrates and nitrites with the natural susceptibility of the well, the overall vulnerability of the well to contamination is medium.

**Volatile Organic Chemicals**

The contaminant risk for volatile organic chemicals is very high with motor vehicle waste disposal wells, underground fuel tanks and airports presenting the most significant risk to the drinking water source. (See Chart 7 – Contaminant Risks for Volatile Organic Chemicals in Appendix D).

Recent sampling indicates that no volatile organic chemicals have been detected in the source waters.

After combining the contaminant risk for volatile organic chemicals with the natural susceptibility of the well, the overall vulnerability of the well to contamination is high.

**Heavy Metals, Cyanide, and Other Inorganic Chemicals**

The contaminant risk for heavy metals, cyanide and other inorganic chemicals is very high with motor vehicle repair shops, motor vehicle waste disposal wells, underground fuel tanks, photo supply shops and existing contamination presenting the most significant risk to the drinking water source (See Chart 9 – Contaminant Risks for Heavy Metals, Cyanide, and Other Inorganic Chemicals in Appendix D).

Sampling on 8/30/92 indicates that arsenic was detected at 0.11 mg/l (>100% % of the current MCL of 0.01 mg/l) in source waters. See Chart 9 – Contaminant Risks for Heavy Metals and Other Inorganic Chemicals in Appendix D). The MCL for arsenic has recently been lowered from 0.050 mg/l to 0.01 mg/l.

According to the EPA, “Arsenic occurs naturally in rocks and soil, water, air, and plants and animals. It can be further released into the environment through natural



activities such as volcanic action, erosion of rocks, and forest fires, or through human actions. Approximately 90 percent of industrial arsenic in the U.S. is currently used as a wood preservative, but arsenic is also used in paints, dyes, metals, drugs, soaps, and semi-conductors. Agricultural applications, mining, and smelting also contribute to arsenic releases in the environment.” (USEPA, 2001). It is likely that the arsenic detected is from natural sources.

Studies have linked long-term exposure to arsenic in drinking water to cancer of the bladder, lungs, skin, kidney, nasal passages, liver, and prostate. Non-cancer effects of ingesting arsenic include cardiovascular, Pulmonary, immunological, neurological, and endocrine (e.g., diabetes) effects. Short-term exposure to high doses of arsenic can cause other adverse health effects, but such effects are unlikely to occur from U.S. public water supplies that are in compliance with the previous arsenic standard of 0.050 mg/l. (USEPA, 2001).

Barium and cadmium have also been detected in the source waters at very low levels. It is likely that these contaminants are naturally occurring. (See Chart 9 – Contaminant Risks for Heavy Metals, Cyanide, and Other Inorganic Chemicals in Appendix D)

Combining the contaminant risk with the natural susceptibility of the well leads to an overall vulnerability to heavy metals and other inorganic chemical contamination of high.

### **Synthetic Organic Chemicals**

The contaminant risk for synthetic organic chemicals is medium with sewer lines, residential areas and airports presenting the most significant risk. (See Chart 11 – Contaminant Risks for Synthetic Organic Chemicals in Appendix D, respectively).

Sampling of synthetic organic chemicals has not occurred. After combining the contaminant risk with the natural susceptibility of the well, the overall vulnerability to synthetic organic chemicals is medium.

### **Other Organic Chemicals**

The contaminant risk for other organic chemicals is very high with lubrication shops, motor vehicle repair shops, sewer lines, and a motor vehicle waste disposal well presenting the most significant risk.

Sampling of other organic chemicals has not occurred. After combining the contaminant risk with the natural susceptibility of the well, the overall vulnerability to other organic chemicals is high. (See Chart 13 – Contaminant Risks for Other Organic Chemicals in Appendix D, respectively).

## **SUMMARY**

A *Source Water Assessment* has been completed for the source of public drinking water serving Penland Park Mobile Home Park. The overall vulnerability of this source to contamination is **Medium** for bacteria and viruses, nitrate/nitrites and synthetic organic chemicals, **High** for volatile organic chemicals, inorganic chemicals and other organic chemicals. This assessment of contaminant risks can be used as a foundation for local voluntary protection efforts as well as a basis for the continuous efforts on the part of Penland Park Mobile Home Park to protect public health. It is anticipated that *Source Water Assessments* will be updated every five years to reflect any changes in the vulnerability and/or susceptibility of Penland Park Mobile Home Park public drinking water source.

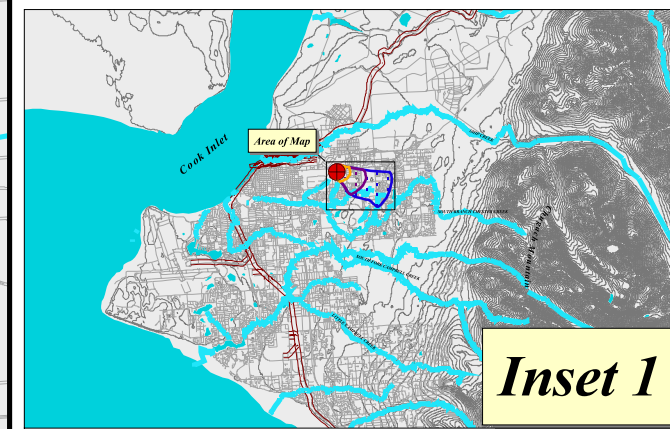
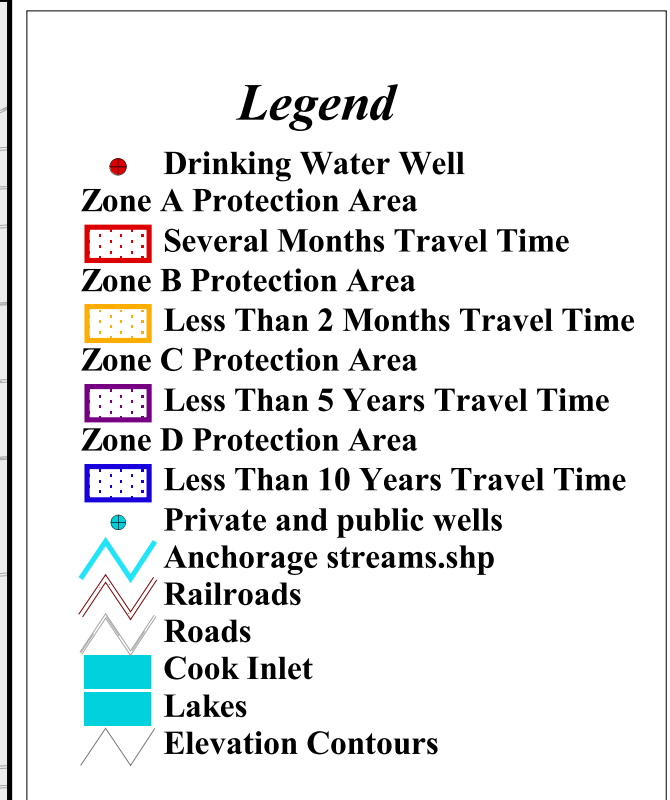
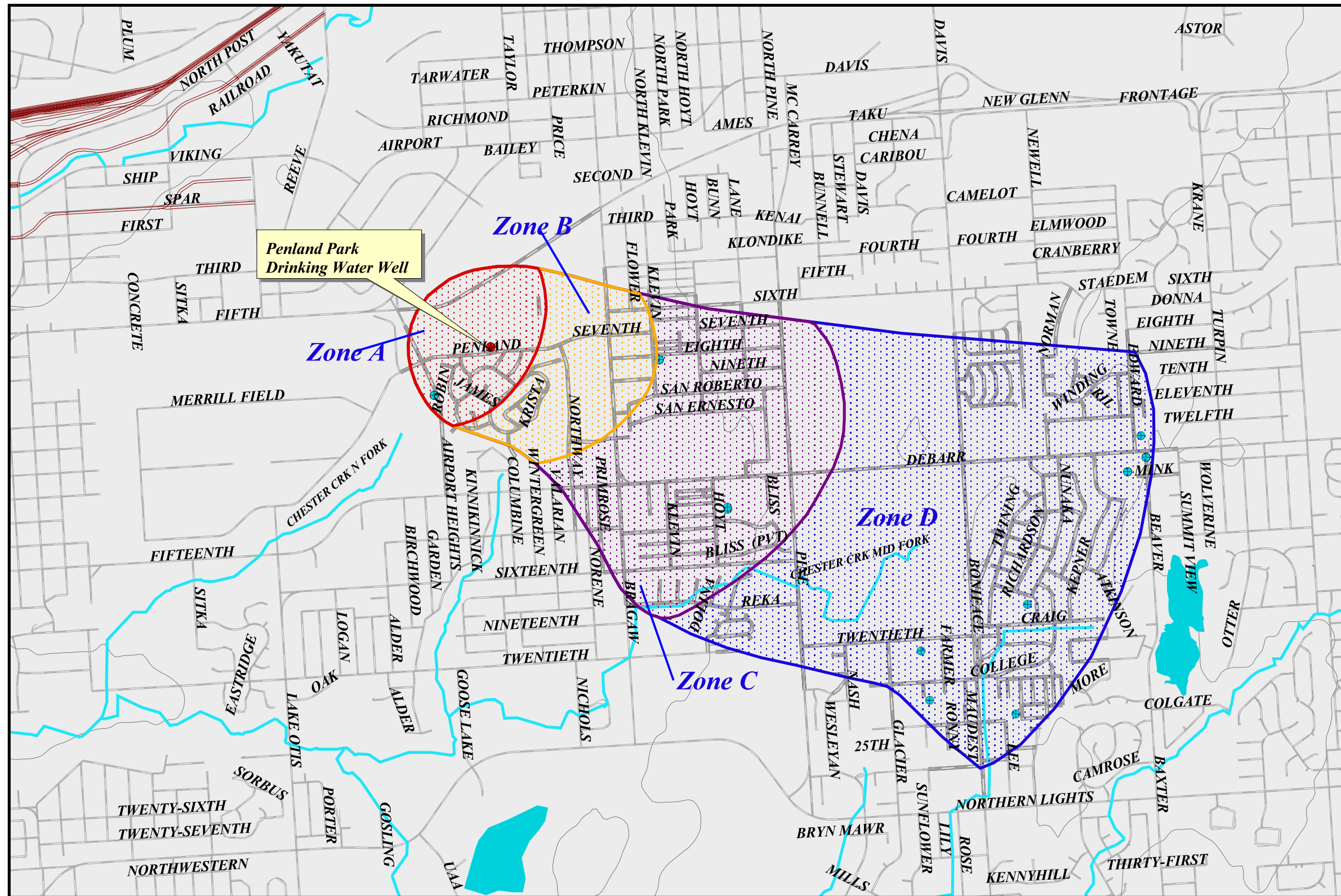
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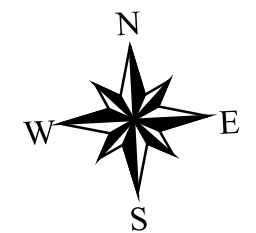
## **APPENDIX A**

### **Penland Park Mobile Home Park Drinking Water Protection Area Location Map (Map 1)**

# Drinking Water Protection Area for Penland Park Mobile Home Park



PWSID 210419.001



**Map 1**

## **APPENDIX B**

### **Contaminant Source Inventory and Risk Ranking for Penland Park Mobile Home Park (Tables 1-7)**

**Table 1****Contaminant Source Inventory for  
Penland Park Mobile Home Park****PWSID 210419.001**

<b>Contaminant Source Type</b>	<b>Contaminant Source ID</b>	<b>CS ID tag</b>	<b>Zone</b>	<b>Map Number</b>	<b>Comments</b>
Jewelers	C19	C19-2	A	7	
Lubrication shops	C25	C25-1	A	7	
Motor /motor vehicle repair shops	C31	C31-1	A	3	
Pharmacies (with on-site wastewater disposal)	C35	C35-1	A	7	
Photography supplies/photo processing laboratories	C36	C36-1	A	7	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-1	A	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-10	A	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-2	A	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-3	A	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-4	A	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-5	A	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-6	A	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-7	A	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-8	A	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-9	A	3	
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-1	A	7	
Residential Areas	R01	R1-1	A	2	
Tanks, gasoline (underground)	T12	T12-1	A	7	
Tanks, gasoline (underground)	T12	T12-2	A	7	

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Map Number</i>	<i>Comments</i>
Government vehicle maintenance facilities	X19	X19-1	A	7	
Highways and roads, paved (cement or asphalt)	X20	X20-1	A	2	
Highways and roads, paved (cement or asphalt)	X20	X20-10	A	2	
Highways and roads, paved (cement or asphalt)	X20	X20-11	A	2	
Highways and roads, paved (cement or asphalt)	X20	X20-12	A	2	
Highways and roads, paved (cement or asphalt)	X20	X20-13	A	2	
Highways and roads, paved (cement or asphalt)	X20	X20-14	A	2	
Highways and roads, paved (cement or asphalt)	X20	X20-15	A	2	
Highways and roads, paved (cement or asphalt)	X20	X20-2	A	2	
Highways and roads, paved (cement or asphalt)	X20	X20-3	A	2	
Highways and roads, paved (cement or asphalt)	X20	X20-4	A	2	
Highways and roads, paved (cement or asphalt)	X20	X20-5	A	2	
Highways and roads, paved (cement or asphalt)	X20	X20-6	A	2	
Highways and roads, paved (cement or asphalt)	X20	X20-7	A	2	
Highways and roads, paved (cement or asphalt)	X20	X20-8	A	2	
Highways and roads, paved (cement or asphalt)	X20	X20-9	A	2	
Firehouses	X38	X38-1	A	3	
Dog walking areas/foot trails	X46	X46-1	A	2	
Dog walking areas/foot trails	X46	X46-2	A	2	
Dog walking areas/foot trails	X46	X46-3	A	2	
Heavy equipment rental/storage	C18	C18-1	B	7	
Jewelers	C19	C19-3	B	7	
Printers, publishers, copiers	C37	C37-1	B	7	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-11	B	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-12	B	3	

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Map Number</i>	<i>Comments</i>
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-13	B	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-14	B	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-15	B	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-16	B	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-17	B	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-18	B	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-19	B	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-20	B	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-21	B	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-22	B	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-23	B	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-24	B	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-25	B	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-26	B	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-27	B	3	
Residential Areas	R01	R1-2	B	2	
Highways and roads, paved (cement or asphalt)	X20	X20-16	B	2	
Highways and roads, paved (cement or asphalt)	X20	X20-17	B	2	
Highways and roads, paved (cement or asphalt)	X20	X20-18	B	2	
Highways and roads, paved (cement or asphalt)	X20	X20-19	B	2	



<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Map Number</i>	<i>Comments</i>
Highways and roads, paved (cement or asphalt)	X20	X20-20	B	2	
Highways and roads, paved (cement or asphalt)	X20	X20-21	B	2	
Highways and roads, paved (cement or asphalt)	X20	X20-22	B	2	
Highways and roads, paved (cement or asphalt)	X20	X20-23	B	2	
Highways and roads, paved (cement or asphalt)	X20	X20-24	B	2	
Highways and roads, paved (cement or asphalt)	X20	X20-25	B	2	
Highways and roads, paved (cement or asphalt)	X20	X20-26	B	2	
Highways and roads, paved (cement or asphalt)	X20	X20-27	B	2	
Highways and roads, paved (cement or asphalt)	X20	X20-28	B	2	
Highways and roads, paved (cement or asphalt)	X20	X20-29	B	2	
Highways and roads, paved (cement or asphalt)	X20	X20-30	B	2	
Highways and roads, paved (cement or asphalt)	X20	X20-31	B	2	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-1	B	7	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-2	B	7	
Dog walking areas/foot trails	X46	X46-4	B	2	
Car washes with engine or undercarriage cleaning	C08	C8-1	C	8	
Car washes with engine or undercarriage cleaning	C08	C8-2	C	8	
Construction trade areas and materials	C09	C9-1	C	7	
Construction trade areas and materials	C09	C9-1	C	8	
Funeral services and crematories	C13	C13-1	C	8	
Gasoline stations (without repair shop)	C15	C15-2	C	8	
Gasoline stations (without repair shop)	C15	C15-3	C	8	
Gasoline stations (without repair shop)	C15	C15-4	C	8	
Lubrication shops	C25	C25-2	C	7	
Lubrication shops	C25	C25-2	C	8	

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Map Number</i>	<i>Comments</i>
Motor vehicle dealerships - cars, trucks, motor cycles, ATV's, snow machines, boats (with service department)	C27	C27-1	C	8	
Motor/motor vehicle supplies stores	C28	C28-1	C	8	
Motor/motor vehicle supplies stores	C28	C28-2	C	8	
Motor /motor vehicle repair shops	C31	C31-1	C	8	
Motor /motor vehicle repair shops	C31	C31-1	C	7	
Motor /motor vehicle repair shops	C31	C31-2	C	6	
Motor /motor vehicle repair shops	C31	C31-3	C	6	
Photography supplies/photo processing laboratories	C36	C36-2	C	9	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-28-52	C	6	
Residential Areas	R01	R1-3	C	4	
Tanks, diesel (underground)	T08	T8-1	C	8	
Tanks, diesel (underground)	T08	T8-2	C	8	
Tanks, diesel (underground)	T08	T8-3	C	8	
Tanks, gasoline (underground)	T12	T12-3	C	8	
Tanks, gasoline (underground)	T12	T12-4	C	8	
Tanks, gasoline (underground)	T12	T12-5	C	8	
Tanks, gasoline (underground)	T12	T12-6	C	8	
Tanks, gasoline (underground)	T12	T12-7	C	8	
Tanks, gasoline (underground)	T12	T12-8	C	8	
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-2	C	8	CS100.244
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U4-1	C	8	File No. CS 100.228 Release of petroleum hydrocarbons from leaking hydraulic piping in 2000. Groundwater monitoring is underway. Priority: Medium
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U7-1	C	8	File No. L55.190 Gasoline contaminated soils were encountered during the removal of a regulated UST. Priority: Medium
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U7-2	C	8	File No. L30.01 benzene discovered in ground water in 1991. Priority: High
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U7-3	C	8	File No. L55.99 Soils tainted by oil from waste oil underground storage tank and oil/water separator. 127 cubic yards of contaminated soils removed. Priority: High

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Map Number</i>	<i>Comments</i>
Municipal or city parks (with green areas)	X04	X4-1	C	6	
Highways and roads, paved (cement or asphalt)	X20	X20-312-71	C	4	
Motor vehicle/general storage yards/facilities	X27	X27-1	C	6	
Motor vehicle/general storage yards/facilities	X27	X27-1	C	8	
Electric substation	X37	X37-1	C	6	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-10	C	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-3	C	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-4	C	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-5	C	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-6	C	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-9	C	8	
Dog walking areas/foot trails	X46	X46-5	C	4	
Dog walking areas/foot trails	X46	X46-6-8	C	5	
Municipal or city parks (with green areas)	X04	X4-2	C-D	6	
Orchards or nurseries	A10	A10-1	D	10	
Gasoline stations (without repair shop)	C15	C15-5	D	10	
Gasoline stations (without repair shop)	C15	C15-6	D	10	
Gasoline stations (without repair shop)	C15	C15-7	D	10	
Gasoline stations (without repair shop)	C15	C15-8	D	10	
Gasoline stations (with repair shop)	C16	C16-1	D	10	
Printers, publishers, copiers	C37	C36-2	D	8	
Printers, publishers, copiers	C37	C37-2	D	10	
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-2	D	10	

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Map Number</i>	<i>Comments</i>
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U4-2	D	10	File No. CS96.53 Soil and groundwater contamination due to home heating oil tank release. Wells are being monitored downgradient. Priority: High
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U4-3	D	10	File No. CS69.15 Diesel fuel concentrated in a vein under the city right-of-way. Extent of contamination unknown. Priority: Medium
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U7-4	D	10	File No. L100.22 Petroleum and solvent contamination found. Solvents discharged to an on-site leachfield. Priority: High
Closed Leaking Underground Fuel Storage Tank (LUST) Sites	U08	U8-1	D	10	File No. L25.14 Tank fittings leaking from gasoline underground storage tank. Priority: Low

**Table 2**

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Bacteria and Viruses*

**PWSID 210419.001**

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Pharmacies (with on-site wastewater disposal)	C35	C35-1	A	Low	7	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-1	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-10	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-10	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-2	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-3	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-3	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-4	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-5	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-6	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-7	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-8	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-9	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-9	A	Medium	3	
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-1	A	Low	7	
Residential Areas	R01	R1-1	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-1	A	Low	2	

Table 2 (continued)

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Bacteria and Viruses*

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Highways and roads, paved (cement or asphalt)	X20	X20-10	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-11	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-12	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-13	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-14	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-15	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-2	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-3	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-4	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-5	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-6	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-7	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-8	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-9	A	Low	2	
Dog walking areas/foot trails	X46	X46-1	A	Low	2	
Dog walking areas/foot trails	X46	X46-2	A	Low	2	
Dog walking areas/foot trails	X46	X46-3	A	Low	2	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-11	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-12	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-13	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-14	B	Medium	3	

Table 2 (continued)

Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Bacteria and Viruses

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-15	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-16	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-17	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-18	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-19	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-20	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-21	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-22	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-23	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-24	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-25	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-26	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-27	B	Medium	3	
Residential Areas	R01	R1-2	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-16	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-17	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-18	B	Low	2	

*Table 2 (continued)*

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Bacteria and Viruses*

*PWSID 210419.001*

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Highways and roads, paved (cement or asphalt)	X20	X20-19	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-20	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-21	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-22	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-23	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-24	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-25	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-26	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-27	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-28	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-29	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-30	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-31	B	Low	2	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-1	B	Medium	7	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-2	B	Medium	7	
Dog walking areas/foot trails	X46	X46-4	B	Low	2	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-9	C	Medium	8	
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-2	D	Low	10	



Table 3

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Nitrates/Nitrites*

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Pharmacies (with on-site wastewater disposal)	C35	C35-1	A	Low	7	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-1	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-10	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-10	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-2	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-3	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-3	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-4	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-5	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-6	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-7	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-8	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-9	A	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-9	A	Medium	3	
Residential Areas	R01	R1-1	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-1	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-10	A	Low	2	

Table 3 (continued)

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Nitrates/Nitrites*

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Highways and roads, paved (cement or asphalt)	X20	X20-11	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-12	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-13	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-14	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-15	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-2	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-3	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-4	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-5	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-6	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-7	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-8	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-9	A	Low	2	
Dog walking areas/foot trails	X46	X46-1	A	Low	2	
Dog walking areas/foot trails	X46	X46-2	A	Low	2	
Dog walking areas/foot trails	X46	X46-3	A	Low	2	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-11	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-12	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-13	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-14	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-15	B	Medium	3	

**Table 3 (continued)**

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Nitrates/Nitrites*

**PWSID 210419.001**

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-16	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-17	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-18	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-19	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-20	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-21	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-22	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-23	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-24	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-25	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-26	B	Medium	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-27	B	Medium	3	
Residential Areas	R01	R1-2	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-16	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-17	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-18	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-19	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-20	B	Low	2	

Table 3 (continued)

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Nitrates/Nitrites*

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Highways and roads, paved (cement or asphalt)	X20	X20-21	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-22	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-23	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-24	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-25	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-26	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-27	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-28	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-29	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-30	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-31	B	Low	2	
Dog walking areas/foot trails	X46	X46-4	B	Low	2	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-28-52	C	Medium	6	
Residential Areas	R01	R1-3	C	Low	4	
Highways and roads, paved (cement or asphalt)	X20	X20-312-71	C	Low	4	
Municipal or city parks (with green areas)	X04	X4-1	C	Medium	6	
Dog walking areas/foot trails	X46	X46-5	C	Low	4	
Dog walking areas/foot trails	X46	X46-6-8	C	Low	5	
Municipal or city parks (with green areas)	X04	X4-2	C-D	Medium	6	
Orchards or nurseries	A10	A10-1	D	Medium	10	

Table 4

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Volatile Organic Chemicals*

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Jewelers	C19	C19-2	A	Low	7	
Lubrication shops	C25	C25-1	A	Medium	7	
Motor /motor vehicle repair shops	C31	C31-1	A	Medium	3	
Photography supplies/photo processing laboratories	C36	C36-1	A	Medium	7	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-1	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-10	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-10	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-2	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-3	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-3	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-4	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-5	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-6	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-7	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-8	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-9	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-9	A	Low	3	

Table 4 (continued)

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Volatile Organic Chemicals*

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-1	A	High	7	
Residential Areas	R01	R1-1	A	Low	2	
Tanks, gasoline (underground)	T12	T12-1	A	High	7	
Tanks, gasoline (underground)	T12	T12-2	A	High	7	
Government vehicle maintenance facilities	X19	X19-1	A	Medium	7	
Highways and roads, paved (cement or asphalt)	X20	X20-1	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-10	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-11	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-12	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-13	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-14	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-15	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-2	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-3	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-4	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-5	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-6	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-7	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-8	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-9	A	Low	2	
Firehouses	X38	X38-1	A	Low	3	
Heavy equipment rental/storage	C18	C18-1	B	Medium	7	
Jewelers	C19	C19-3	B	Low	7	

Table 4 (continued)

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Volatile Organic Chemicals*

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Printers, publishers, copiers	C37	C37-1	B	High	7	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-11	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-12	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-13	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-14	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-15	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-16	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-17	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-18	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-19	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-20	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-21	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-22	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-23	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-24	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-25	B	Low	3	

Table 4 (continued)

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Volatile Organic Chemicals*

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-26	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-27	B	Low	3	
Residential Areas	R01	R1-2	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-16	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-17	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-18	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-19	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-20	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-21	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-22	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-23	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-24	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-25	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-26	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-27	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-28	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-29	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-30	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-31	B	Low	2	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-1	B	Low	7	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-2	B	Low	7	
Gasoline stations (without repair shop)	C15	C15-2	C	High	8	



Table 4 (continued)

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Volatile Organic Chemicals*

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Gasoline stations (without repair shop)	C15	C15-3	C	High	8	
Gasoline stations (without repair shop)	C15	C15-4	C	High	8	
Gasoline stations (without repair shop)	C15	C15-4	C	High	8	
Lubrication shops	C25	C25-2	C	Medium	7	
Lubrication shops	C25	C25-2	C	Medium	8	
Motor vehicle dealerships - cars, trucks, motor cycles, ATV's, snow machines, boats (with service department)	C27	C27-1	C	Medium	8	
Motor/motor vehicle supplies stores	C28	C28-1	C	Low	8	
Motor/motor vehicle supplies stores	C28	C28-2	C	Low	8	
Motor /motor vehicle repair shops	C31	C31-1	C	Medium	7	
Motor /motor vehicle repair shops	C31	C31-1	C	Medium	8	
Motor /motor vehicle repair shops	C31	C31-2	C	Medium	6	
Motor /motor vehicle repair shops	C31	C31-2	C	Medium	6	
Motor /motor vehicle repair shops	C31	C31-3	C	Medium	6	
Photography supplies/photo processing laboratories	C36	C36-2	C	Medium	9	
Car washes with engine or undercarriage cleaning	C08	C8-1	C	High	8	
Car washes with engine or undercarriage cleaning	C08	C8-2	C	High	8	
Construction trade areas and materials	C09	C9-1	C	Low	7	
Construction trade areas and materials	C09	C9-1	C	Low	8	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-28-52	C	Low	6	
Residential Areas	R01	R1-3	C	Low	4	
Tanks, gasoline (underground)	T12	T12-3	C	High	8	
Tanks, gasoline (underground)	T12	T12-4	C	High	8	

Table 4 (continued)

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Volatile Organic Chemicals*

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Tanks, gasoline (underground)	T12	T12-5	C	High	8	
Tanks, gasoline (underground)	T12	T12-6	C	High	8	
Tanks, gasoline (underground)	T12	T12-7	C	High	8	
Tanks, gasoline (underground)	T12	T12-8	C	High	8	
Tanks, diesel (underground)	T08	T8-1	C	High	8	
Tanks, diesel (underground)	T08	T8-2	C	High	8	
Tanks, diesel (underground)	T08	T8-3	C	High	8	
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U4-1	C	Medium	8	File No. CS 100.228 Release of petroleum hydrocarbons from leaking hydraulic piping in 2000. Groundwater monitoring is underway. Priority: Medium
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U7-3	C	High	8	File No. L55.99 Soils tainted by oil from waste oil underground storage tank and oil/water separator. 127 cubic yards of contaminated soils removed. Priority: High
Highways and roads, paved (cement or asphalt)	X20	X20-312-71	C	Low	4	
Motor vehicle/general storage yards/facilities	X27	X27-1	C	Low	8	
Motor vehicle/general storage yards/facilities	X27	X27-1	C	Low	6	
Electric substation	X37	X37-1	C	Low	6	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-10	C	Low	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-3	C	Low	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-4	C	Low	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-5	C	Low	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-6	C	Low	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-9	C	Low	8	

Table 4 (continued)

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Volatile Organic Chemicals*

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-9	C	Low	8	
Orchards or nurseries	A10	A10-1	D	Low	10	
Gasoline stations (without repair shop)	C15	C15-5	D	High	10	
Gasoline stations (without repair shop)	C15	C15-6	D	High	10	
Gasoline stations (without repair shop)	C15	C15-7	D	High	10	
Gasoline stations (without repair shop)	C15	C15-8	D	High	10	
Gasoline stations (with repair shop)	C16	C16-1	D	High	10	
Printers, publishers, copiers	C37	C36-2	D	High	8	
Printers, publishers, copiers	C37	C37-2	D	High	10	
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-2	D	High	10	
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U4-2	D	High	10	File No. CS96.53 Soil and groundwater contamination due to home heating oil tank release. Wells are being monitored downgradient. Priority: High
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U4-3	D	Medium	10	File No. CS69.15 Diesel fuel concentrated in a vein under the city right-of-way. Extent of contamination unknown. Priority: Medium
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U7-4	D	High	10	File No. L100.22 Petroleum and solvent contamination found. Solvents discharged to an on-site leachfield. Priority: High

**Table 5**

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Heavy Metals, Cyanide and Other Inorganic Chemicals*

**PWSID 210419.001**

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Jewelers	C19	C19-2	A	Low	7	
Lubrication shops	C25	C25-1	A	Low	7	
Motor /motor vehicle repair shops	C31	C31-1	A	Medium	3	
Pharmacies (with on-site wastewater disposal)	C35	C35-1	A	Low	7	
Photography supplies/photo processing laboratories	C36	C36-1	A	Medium	7	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-1	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-10	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-10	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-2	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-3	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-3	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-4	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-5	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-6	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-7	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-8	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-9	A	Low	3	

Table 5 (continued)

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Heavy Metals, Cyanide and Other Inorganic Chemicals*

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-9	A	Low	3	
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-1	A	High	7	
Residential Areas	R01	R1-1	A	Low	2	
Tanks, gasoline (underground)	T12	T12-1	A	Medium	7	
Tanks, gasoline (underground)	T12	T12-2	A	Medium	7	
Government vehicle maintenance facilities	X19	X19-1	A	Low	7	
Highways and roads, paved (cement or asphalt)	X20	X20-1	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-10	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-11	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-12	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-13	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-14	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-15	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-2	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-3	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-4	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-5	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-6	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-7	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-8	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-9	A	Low	2	
Firehouses	X38	X38-1	A	Low	3	
Heavy equipment rental/storage	C18	C18-1	B	Low	7	

Table 5 (continued)

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Heavy Metals, Cyanide and Other Inorganic Chemicals*

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Jewelers	C19	C19-3	B	Low	7	
Printers, publishers, copiers	C37	C37-1	B	Medium	7	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-11	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-12	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-13	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-14	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-15	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-16	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-17	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-18	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-19	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-20	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-21	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-22	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-23	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-24	B	Low	3	

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park*

*PWSID 210419.001*

*Table 5 (continued)*

*Sources of Heavy Metals, Cyanide and Other Inorganic Chemicals*

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-25	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-26	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-27	B	Low	3	
Residential Areas	R01	R1-2	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-16	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-17	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-18	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-19	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-20	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-21	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-22	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-23	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-24	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-25	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-26	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-27	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-28	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-29	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-30	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-31	B	Low	2	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-1	B	Low	7	

Table 5 (continued)

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Heavy Metals, Cyanide and Other Inorganic Chemicals*

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-2	B	Low	7	
Lubrication shops	C25	C25-2	C	Low	8	
Lubrication shops	C25	C25-2	C	Low	7	
Motor vehicle dealerships - cars, trucks, motor cycles, ATV's, snow machines, boats (with service department)	C27	C27-1	C	Low	8	
Motor /motor vehicle repair shops	C31	C31-1	C	Medium	7	
Motor /motor vehicle repair shops	C31	C31-1	C	Medium	8	
Motor /motor vehicle repair shops	C31	C31-2	C	Medium	6	
Motor /motor vehicle repair shops	C31	C31-3	C	Medium	6	
Photography supplies/photo processing laboratories	C36	C36-2	C	Medium	9	
Car washes with engine or undercarriage cleaning	C08	C8-1	C	Medium	8	
Car washes with engine or undercarriage cleaning	C08	C8-2	C	Medium	8	
Construction trade areas and materials	C09	C9-1	C	Low	7	
Construction trade areas and materials	C09	C9-1	C	Low	8	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-28-52	C	Low	6	
Residential Areas	R01	R1-3	C	Low	4	
Tanks, gasoline (underground)	T12	T12-3	C	Medium	8	
Tanks, gasoline (underground)	T12	T12-4	C	Medium	8	
Tanks, gasoline (underground)	T12	T12-5	C	Medium	8	
Tanks, gasoline (underground)	T12	T12-6	C	Medium	8	
Tanks, gasoline (underground)	T12	T12-7	C	Medium	8	
Tanks, gasoline (underground)	T12	T12-8	C	Medium	8	
Highways and roads, paved (cement or asphalt)	X20	X20-312-71	C	Low	4	



Table 5 (continued)

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Heavy Metals, Cyanide and Other Inorganic Chemicals*

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Electric substation	X37	X37-1	C	Low	6	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-10	C	Low	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-3	C	Low	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-4	C	Low	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-5	C	Low	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-6	C	Low	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-9	C	Low	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-9	C	Low	8	
Gasoline stations (with repair shop)	C16	C16-1	D	Low	10	
Printers, publishers, copiers	C37	C36-2	D	Medium	8	
Printers, publishers, copiers	C37	C37-2	D	Medium	10	
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-2	D	High	10	

Table 6

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Synthetic Organic Chemicals*

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Photography supplies/photo processing laboratories	C36	C36-1	A	Low	7	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-1	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-10	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-10	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-2	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-3	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-3	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-4	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-5	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-6	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-7	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-8	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-9	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-9	A	Low	3	
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-1	A	Low	7	
Residential Areas	R01	R1-1	A	Low	2	
Printers, publishers, copiers	C37	C37-1	B	Low	7	

Table 6 (continued)

Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Synthetic Organic Chemicals

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-11	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-12	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-13	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-14	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-15	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-16	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-17	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-18	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-19	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-20	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-21	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-22	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-23	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-24	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-25	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-26	B	Low	3	

Table 6 (continued)

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Synthetic Organic Chemicals*

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-27	B	Low	3	
Residential Areas	R01	R1-2	B	Low	2	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-1	B	Low	7	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-2	B	Low	7	
Funeral services and crematories	C13	C13-1	C	Low	8	
Photography supplies/photo processing laboratories	C36	C36-2	C	Low	9	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-28-52	C	Low	6	
Residential Areas	R01	R1-3	C	Low	4	
Municipal or city parks (with green areas)	X04	X4-1	C	Low	6	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-10	C	Low	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-3	C	Low	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-4	C	Low	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-5	C	Low	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-6	C	Low	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-9	C	Low	8	
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-9	C	Low	8	
Municipal or city parks (with green areas)	X04	X4-2	C-D	Low	6	
Orchards or nurseries	A10	A10-1	D	High	10	

*Table 6 (continued)*

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Synthetic Organic Chemicals*

*PWSID 210419.001*

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Printers, publishers, copiers	C37	C36-2	D	Low	8	
Printers, publishers, copiers	C37	C37-2	D	Low	10	
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-2	D	Low	10	

Table 7

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Other Organic Chemicals*

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Lubrication shops	C25	C25-1	A	Medium	7	
Motor /motor vehicle repair shops	C31	C31-1	A	Medium	3	
Photography supplies/photo processing laboratories	C36	C36-1	A	Low	7	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-1	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-10	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-10	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-2	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-3	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-3	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-4	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-5	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-6	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-7	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-8	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-9	A	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-9	A	Low	3	
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-1	A	Medium	7	

Table 7 (continued)

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Other Organic Chemicals*

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Residential Areas	R01	R1-1	A	Low	2	
Government vehicle maintenance facilities	X19	X19-1	A	Medium	7	
Highways and roads, paved (cement or asphalt)	X20	X20-1	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-10	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-11	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-12	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-13	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-14	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-15	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-2	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-3	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-4	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-5	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-6	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-7	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-8	A	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-9	A	Low	2	
Heavy equipment rental/storage	C18	C18-1	B	Medium	7	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-11	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-12	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-13	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-14	B	Low	3	

**Table 7 (continued)**

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Other Organic Chemicals*

**PWSID 210419.001**

<b>Contaminant Source Type</b>	<b>Contaminant Source ID</b>	<b>CS ID tag</b>	<b>Zone</b>	<b>Risk Ranking for Analysis</b>	<b>Map Number</b>	<b>Comments</b>
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-15	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-16	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-17	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-18	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-19	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-20	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-21	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-22	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-23	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-24	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-25	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-26	B	Low	3	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-27	B	Low	3	
Residential Areas	R01	R1-2	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-16	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-17	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-18	B	Low	2	



Table 7 (continued)

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Other Organic Chemicals*

PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Highways and roads, paved (cement or asphalt)	X20	X20-19	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-20	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-21	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-22	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-23	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-24	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-25	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-26	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-27	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-28	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-29	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-30	B	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-31	B	Low	2	
Gasoline stations (without repair shop)	C15	C15-2	C	Low	8	
Gasoline stations (without repair shop)	C15	C15-3	C	Low	8	
Gasoline stations (without repair shop)	C15	C15-4	C	Low	8	
Gasoline stations (without repair shop)	C15	C15-4	C	Low	8	
Lubrication shops	C25	C25-2	C	Medium	7	
Lubrication shops	C25	C25-2	C	Medium	8	
Motor vehicle dealerships - cars, trucks, motor cycles, ATV's, snow machines, boats (with service department)	C27	C27-1	C	Medium	8	
Motor /motor vehicle repair shops	C31	C31-1	C	Medium	7	
Motor /motor vehicle repair shops	C31	C31-1	C	Medium	8	

Table 7 (continued)

*Contaminant Source Inventory and Risk Ranking for  
Penland Park Mobile Home Park  
Sources of Other Organic Chemicals*

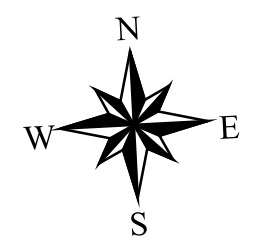
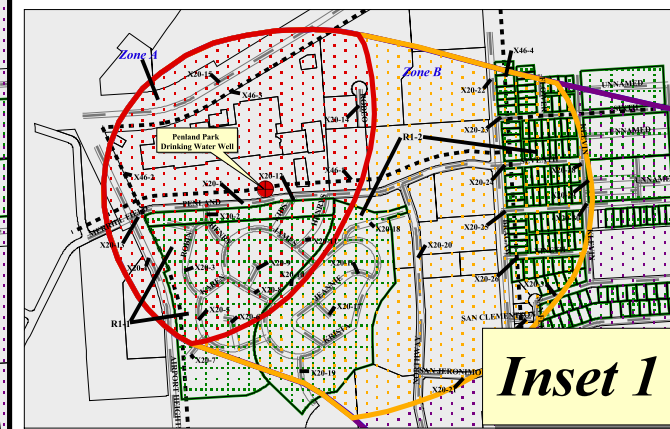
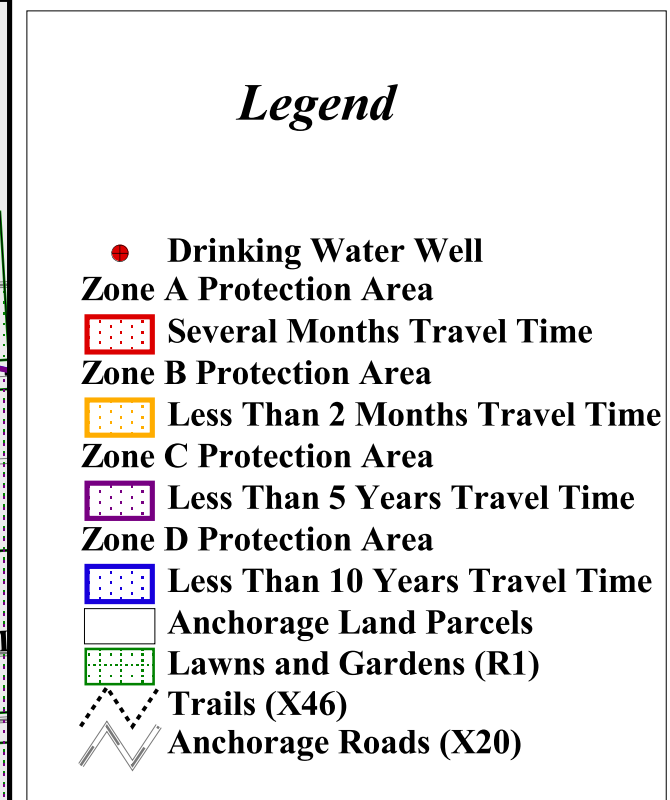
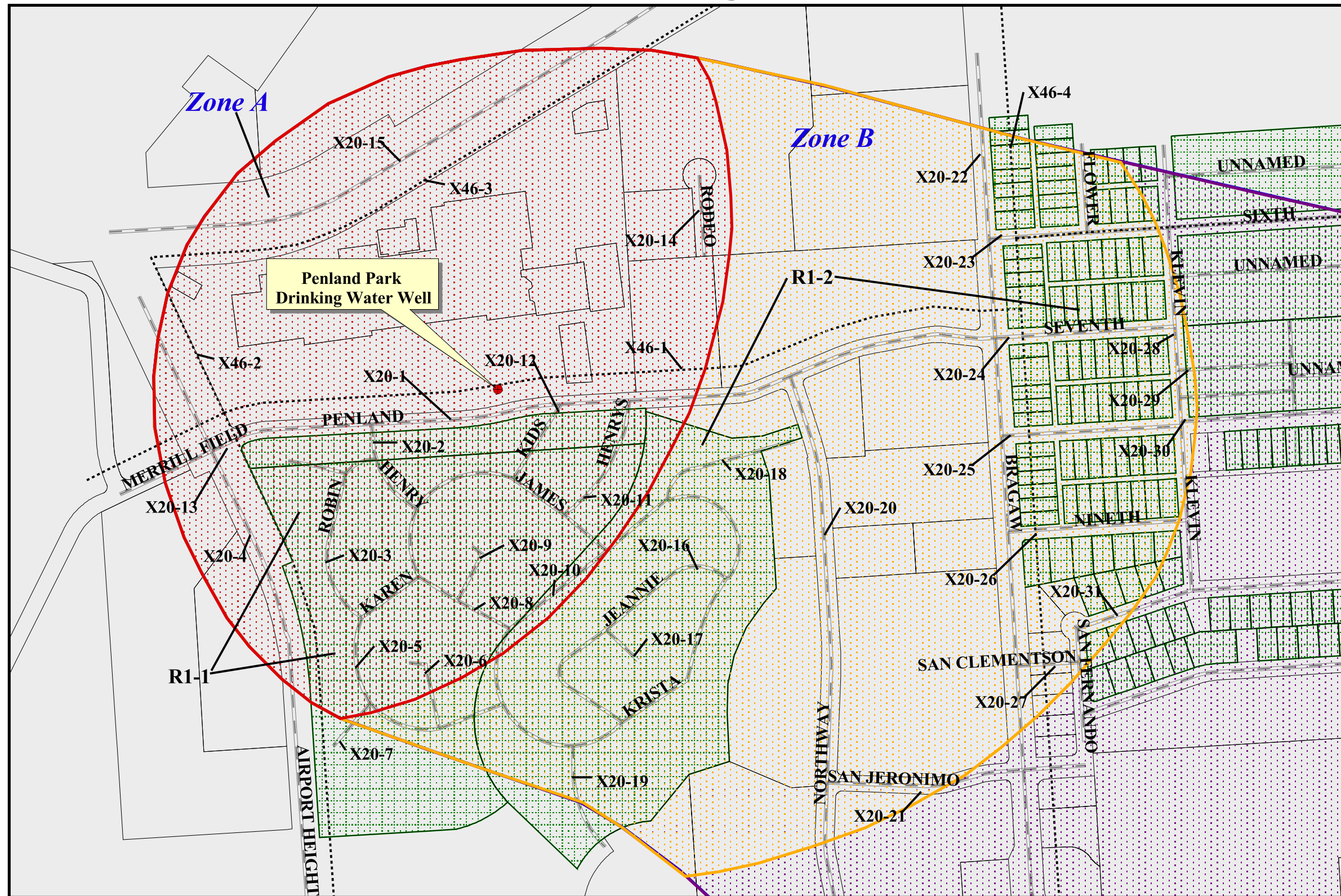
PWSID 210419.001

<i>Contaminant Source Type</i>	<i>Contaminant Source ID</i>	<i>CS ID tag</i>	<i>Zone</i>	<i>Risk Ranking for Analysis</i>	<i>Map Number</i>	<i>Comments</i>
Motor /motor vehicle repair shops	C31	C31-2	C	Medium	6	
Motor /motor vehicle repair shops	C31	C31-2	C	Medium	6	
Motor /motor vehicle repair shops	C31	C31-3	C	Medium	6	
Photography supplies/photo processing laboratories	C36	C36-2	C	Low	9	
Car washes with engine or undercarriage cleaning	C08	C8-1	C	Medium	8	
Car washes with engine or undercarriage cleaning	C08	C8-2	C	Medium	8	
Construction trade areas and materials	C09	C9-1	C	Low	8	
Construction trade areas and materials	C09	C9-1	C	Low	7	
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D1-28-52	C	Low	6	
Residential Areas	R01	R1-3	C	Low	4	
Highways and roads, paved (cement or asphalt)	X20	X20-312-71	C	Low	4	
Motor vehicle/general storage yards/facilities	X27	X27-1	C	Low	8	
Motor vehicle/general storage yards/facilities	X27	X27-1	C	Low	6	
Electric substation	X37	X37-1	C	High	6	
Orchards or nurseries	A10	A10-1	D	Low	10	
Gasoline stations (without repair shop)	C15	C15-5	D	Low	10	
Gasoline stations (without repair shop)	C15	C15-6	D	Low	10	
Gasoline stations (without repair shop)	C15	C15-7	D	Low	10	
Gasoline stations (without repair shop)	C15	C15-8	D	Low	10	
Gasoline stations (with repair shop)	C16	C16-1	D	Medium	10	
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-2	D	Medium	10	

## **APPENDIX C**

### **Penland Park Mobile Home Park Drinking Water Protection Area and Potential and Existing Contaminant Sources (Maps 2 - 10)**

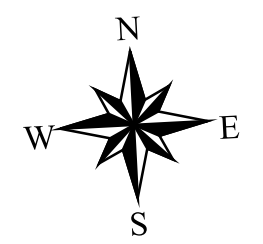
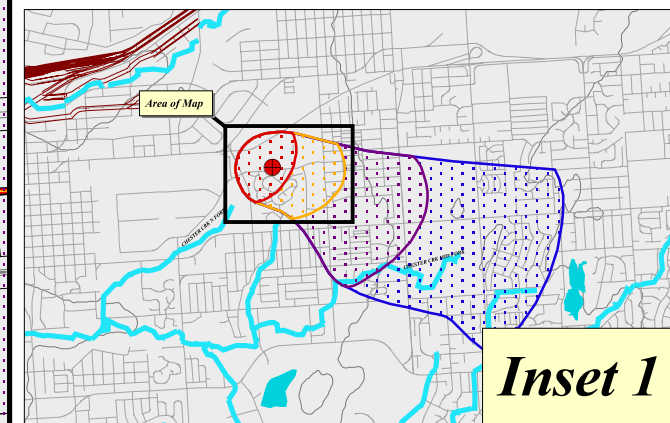
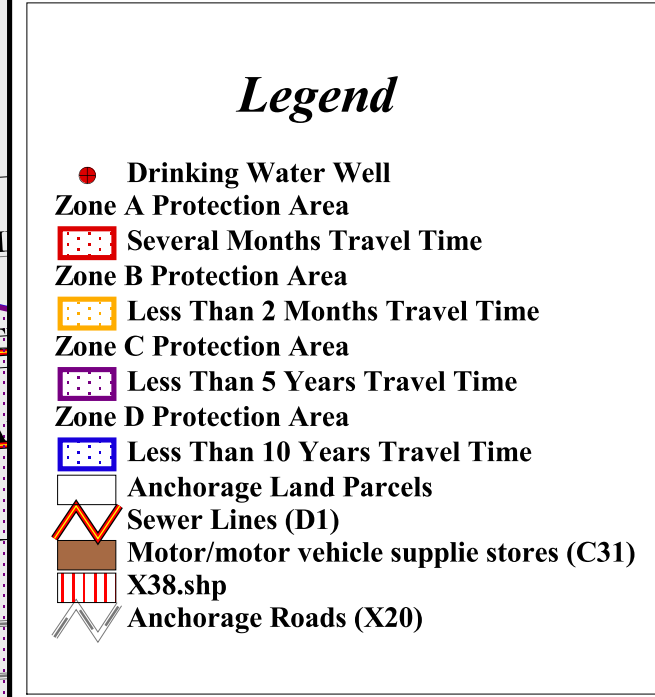
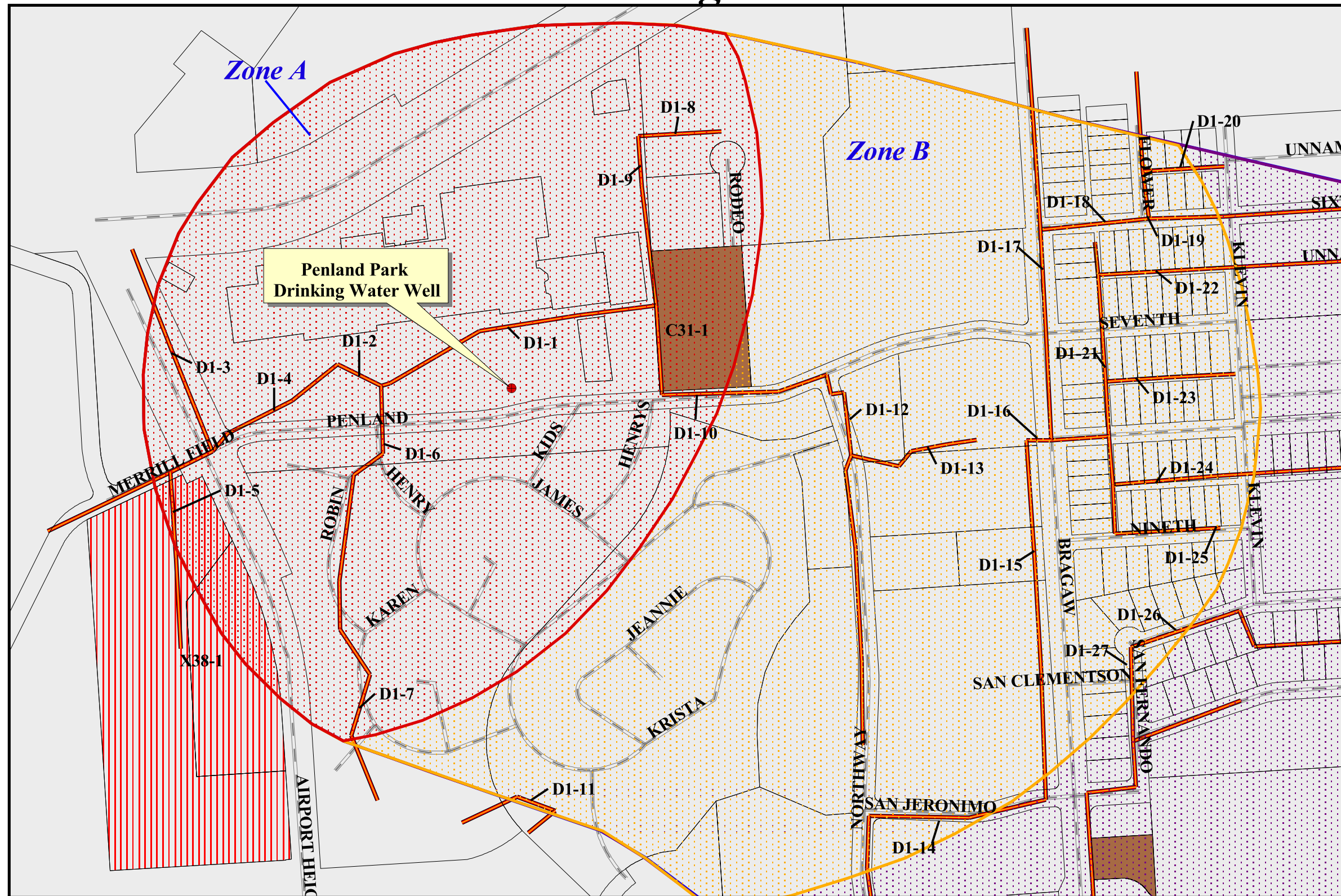
# Drinking Water Protection Area for Penland Park Mobile Home Park and Potential and Existing Sources of Contamination



PWSID 210419.001

## Map 2

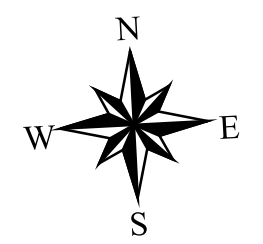
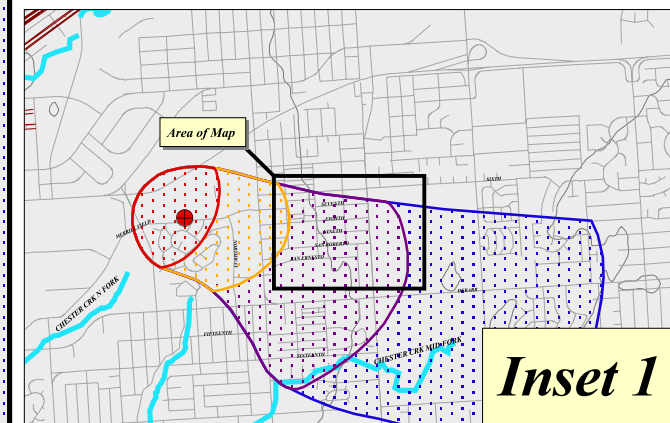
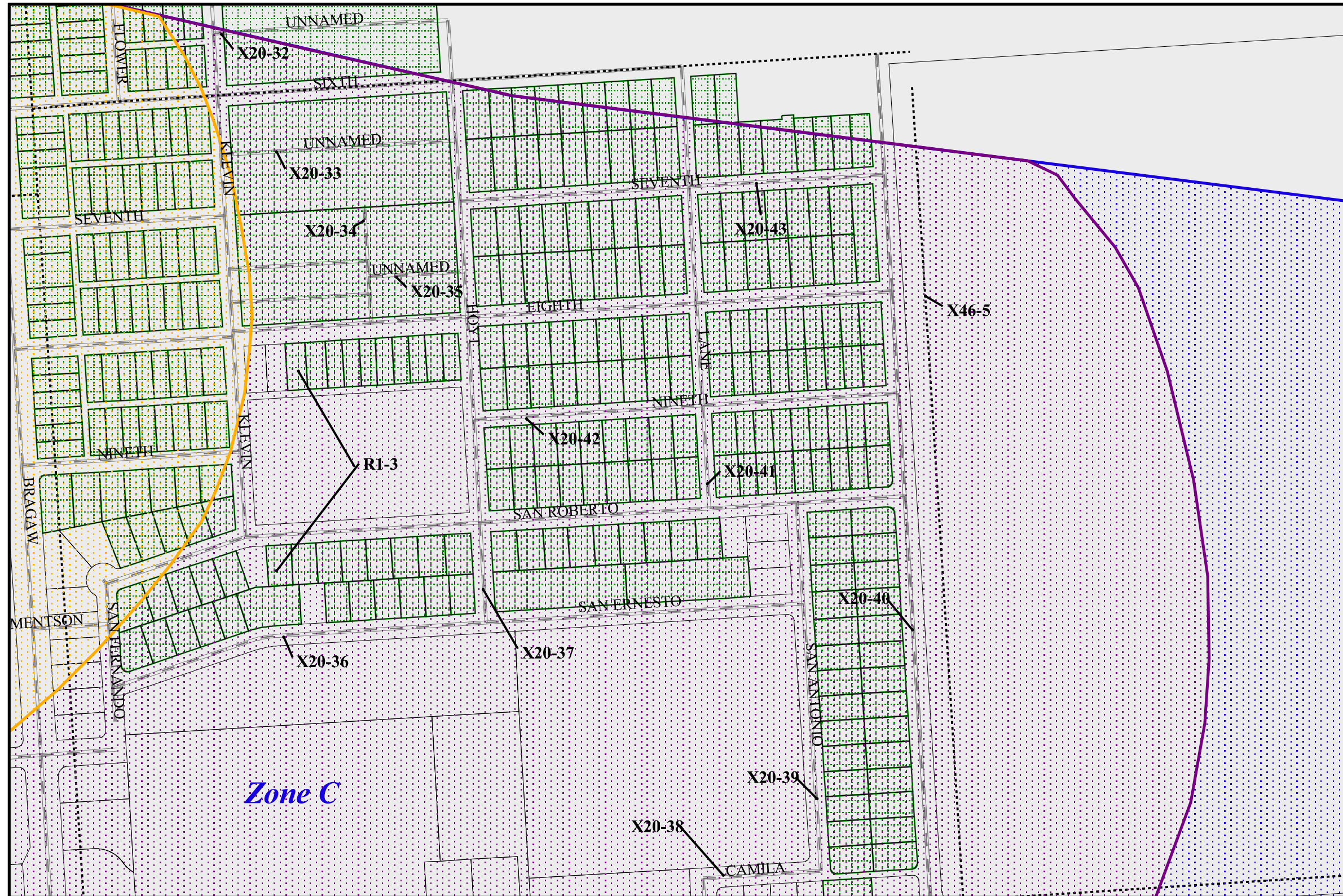
# Drinking Water Protection Area for Penland Park Mobile Home Park and Potential and Existing Sources of Contamination



PWSID 210419.001

## Map 3

# Drinking Water Protection Area for Penland Park Mobile Home Park and Potential and Existing Sources of Contamination



PWSID 210419.001

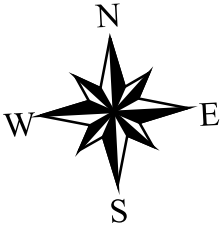
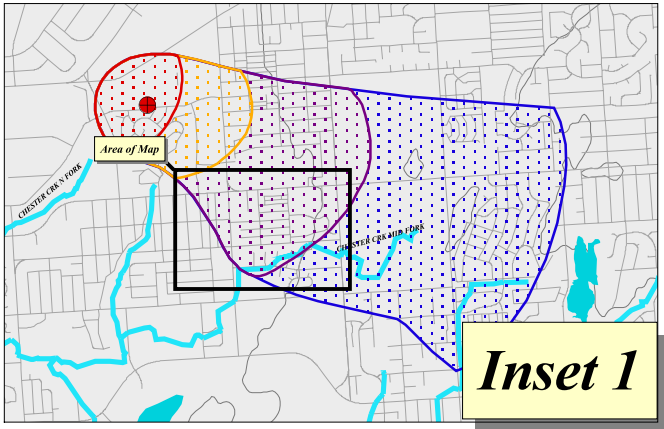
**Map 4**

# Drinking Water Protection Area for Penland Park Mobile Home Park and Potential and Existing Sources of Contamination



**Legend**

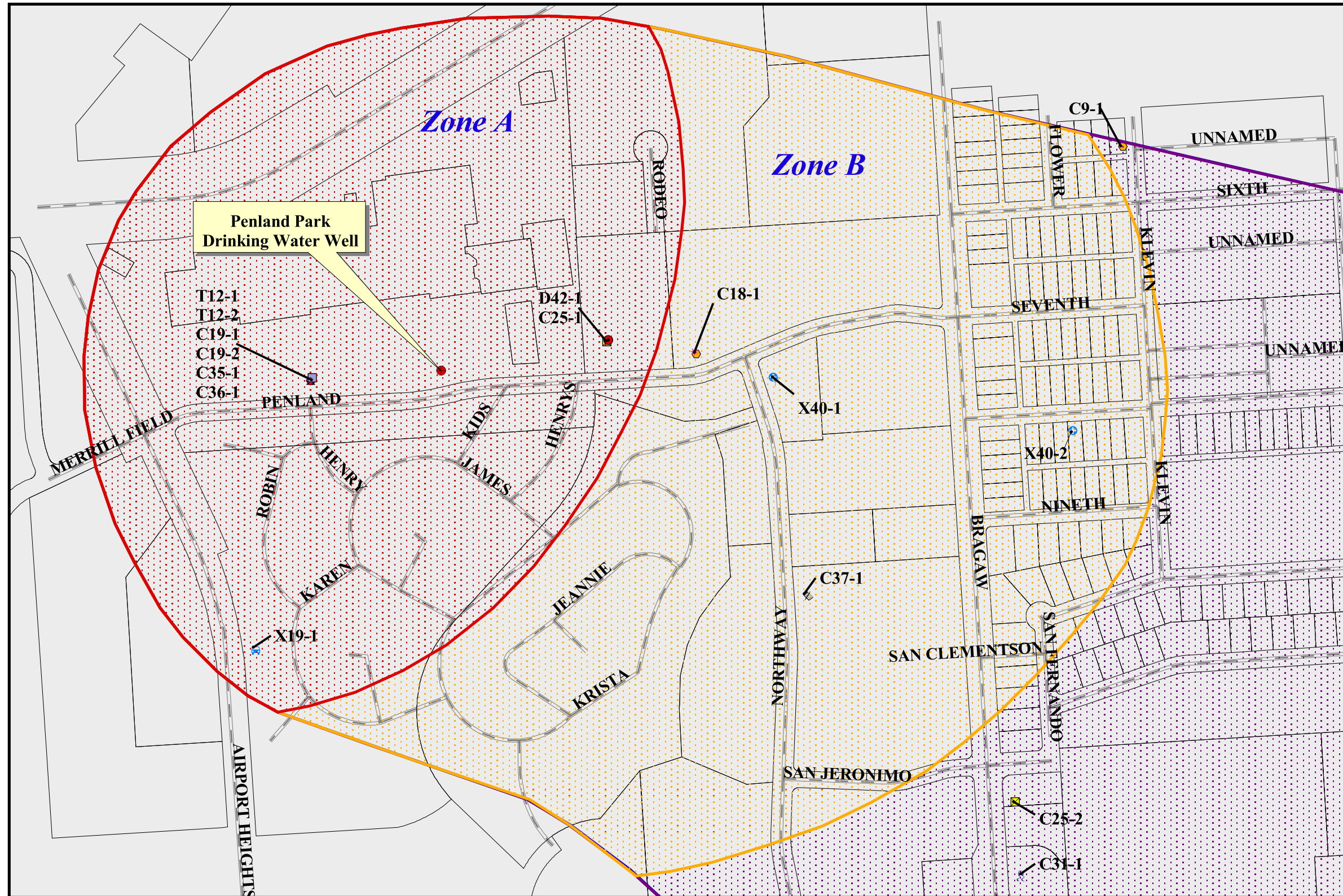
- Drinking Water Well
- Zone A Protection Area
  - Several Months Travel Time
- Zone B Protection Area
  - Less Than 2 Months Travel Time
- Zone C Protection Area
  - Less Than 5 Years Travel Time
- Zone D Protection Area
  - Less Than 10 Years Travel Time
- Anchorage Land Parcels
- Lawns and Gardens (R1)
- Trails (X46)
- Anchorage Roads (X20)



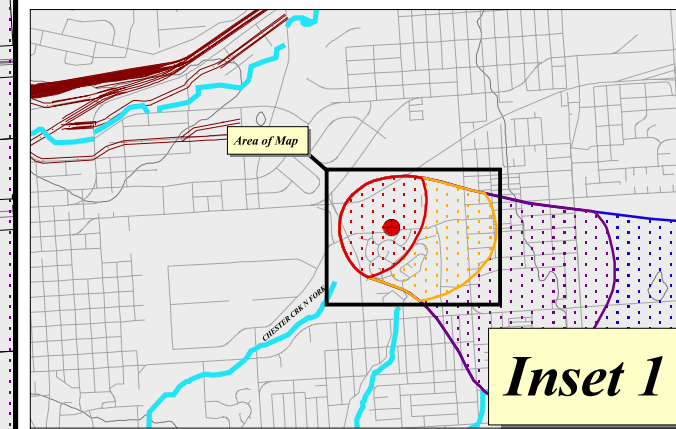
PWSID 210419.001

**Map 5**

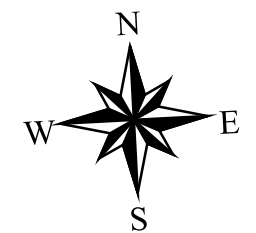
# Drinking Water Protection Area for Penland Park Mobile Home Park and Potential and Existing Sources of Contamination



- ### Legend
- Drinking Water Well
  - Zone A Protection Area
  - Several Months Travel Time
  - Zone B Protection Area
  - Less Than 2 Months Travel Time
  - Zone C Protection Area
  - Less Than 5 Years Travel Time
  - Zone D Protection Area
  - Less Than 10 Years Travel Time
  - Potential Contaminant Sources
  - Orchards or nurseries (A10)
  - Funeral services and crematories (C13)
  - Gasoline stations - without repair shop (C15)
  - Gasoline stations - with repair shops (C16)
  - Hardware stores (C17)
  - Heavy equipment rental/storage (C18)
  - Jewelers (C19)
  - Lubrication shops (C25)
  - Motor vehicle dealerships - without service (C27)
  - Motor/motor vehicle supply stores (C28)
  - Motor/motor vehicle repair shops (C31)
  - Pharmacies - with wastewater disposal (C35)
  - Photography supplies/photo processing (C36)
  - Printers, publishers, copiers (C37)
  - Car washes with engine/undercarriage cleaning (C8)
  - Construction trade areas (C9)
  - Class V injection well - motor vehicle waste (D42)
  - Tanks, heating oil - residential underground (R9)
  - Gasoline tanks - underground (T12)
  - Closed gasoline tanks - underground (T13)
  - Tanks, lubricants, other petroleum products - underground (T20)
  - Tanks, diesel - underground (T8)
  - Closed tanks, diesel - underground (T9)
  - Contaminated sites - DEC recognized (U-4)
  - Government vehicle maintenance facilities (X19)
  - Motor vehicle/general storage yards/facilities (X27)
  - Medical/veterinary facilities (X40)
  - Anchorage Land Parcels
  - Anchorage Roads (X20)



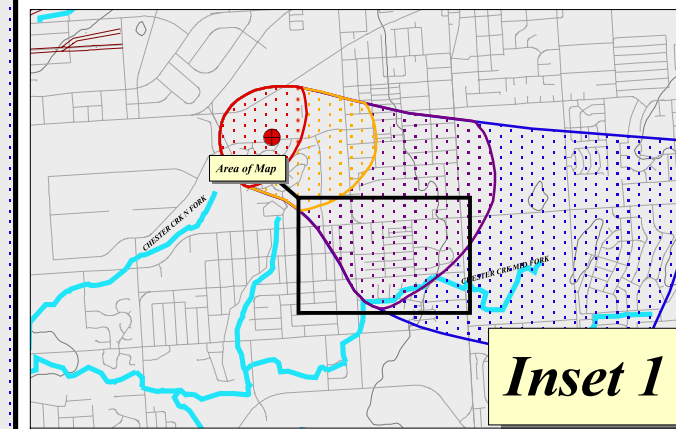
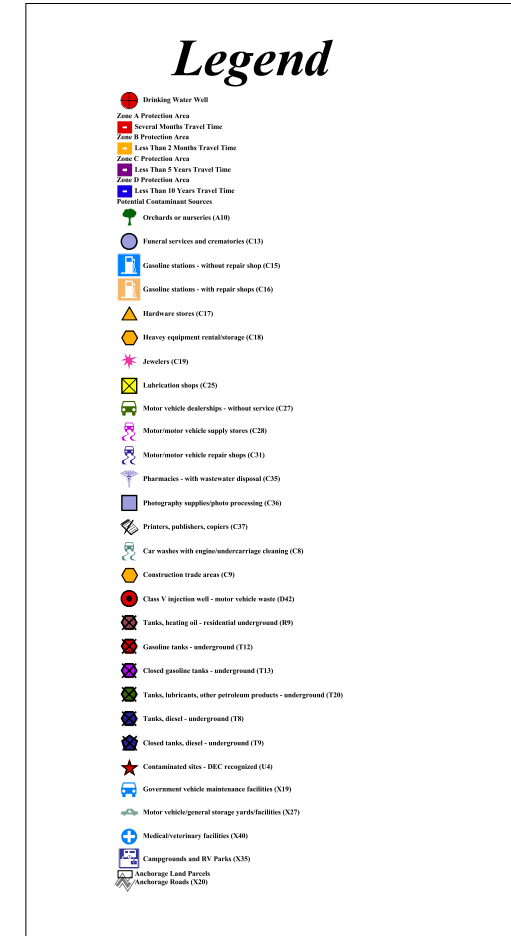
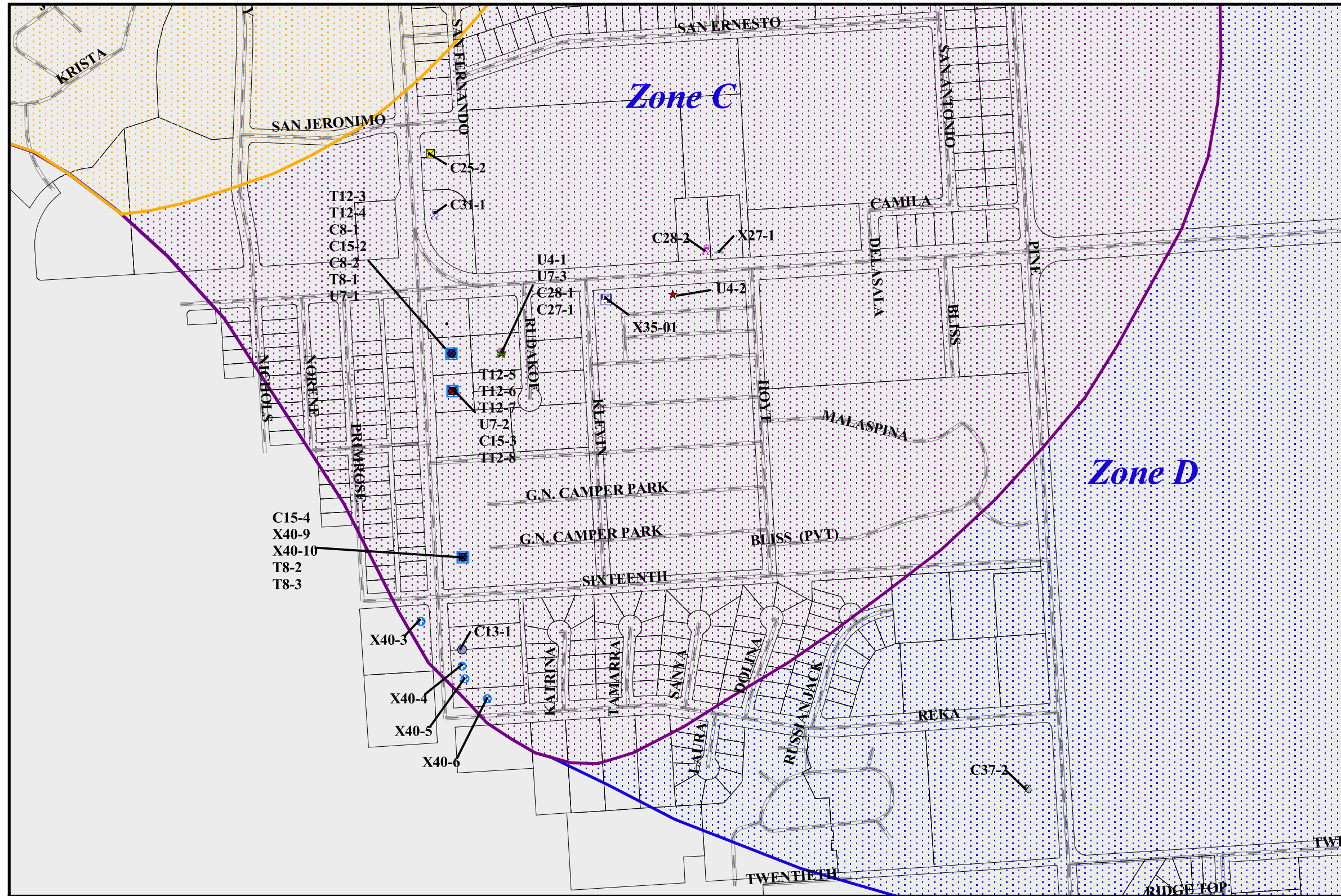
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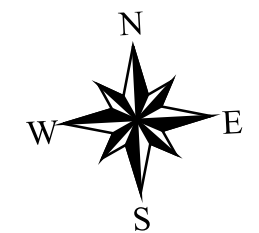
# Map 7



# Drinking Water Protection Area for Penland Park Mobile Home Park and Potential and Existing Sources of Contamination

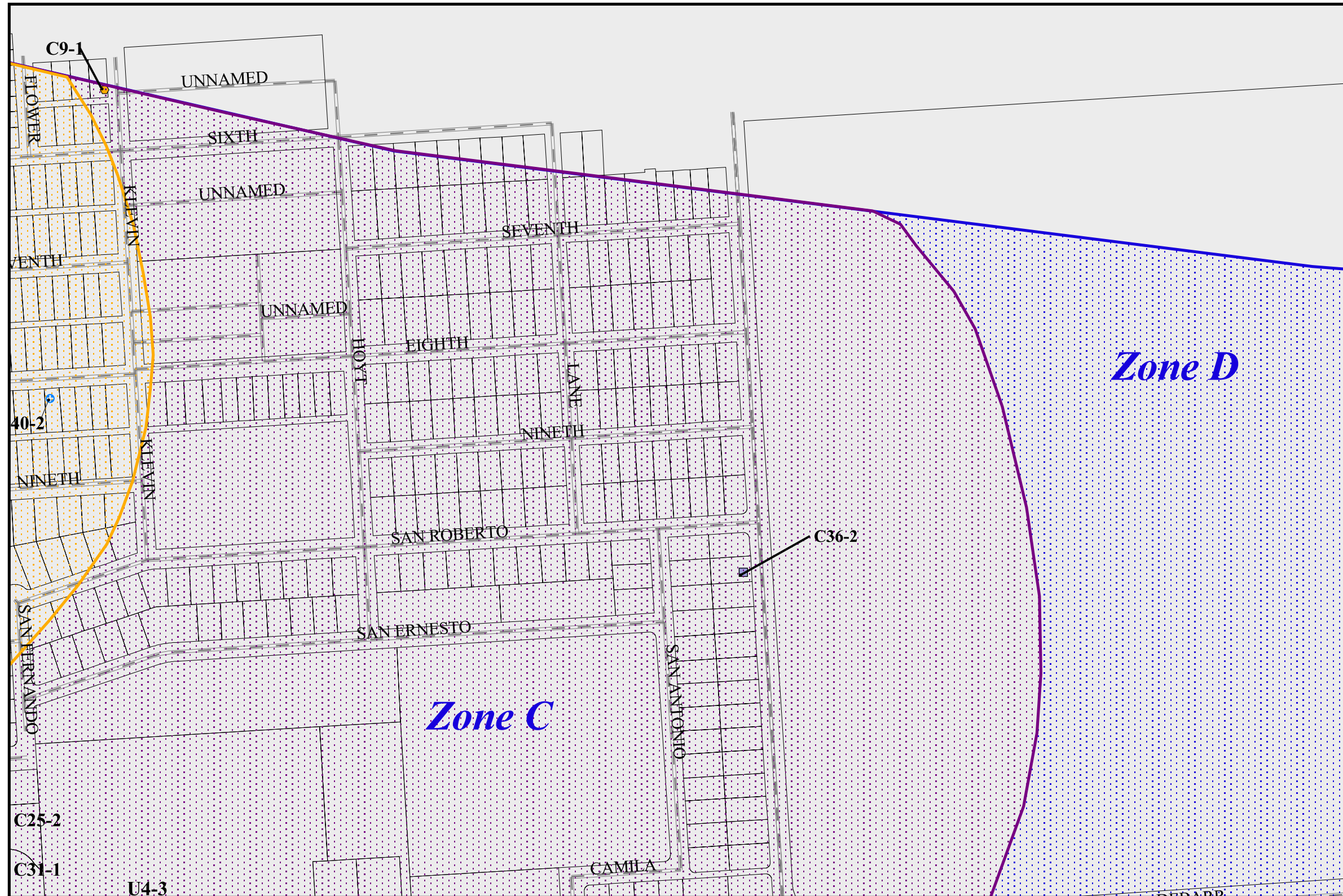


PWSID 210419.001



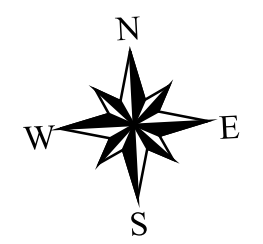
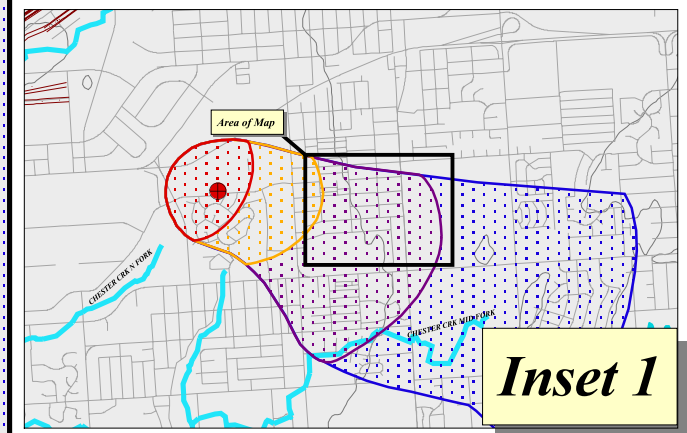
**Map 8**

# Drinking Water Protection Area for Penland Park Mobile Home Park and Potential and Existing Sources of Contamination



### Legend

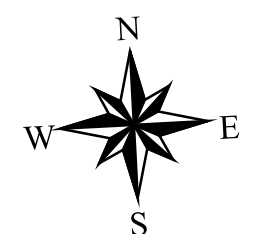
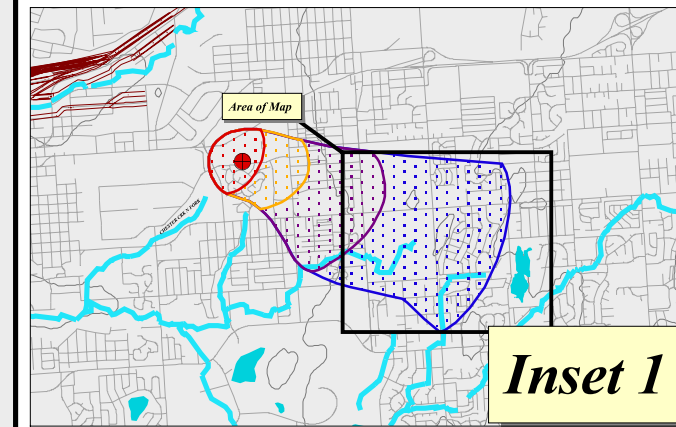
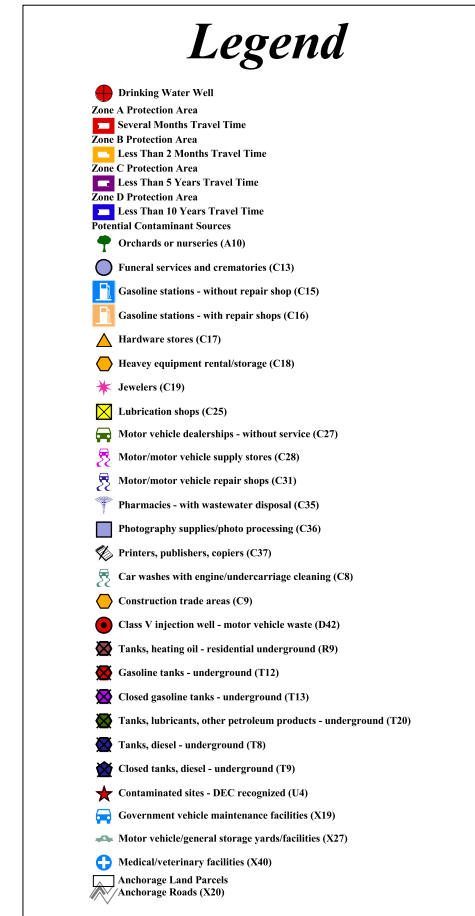
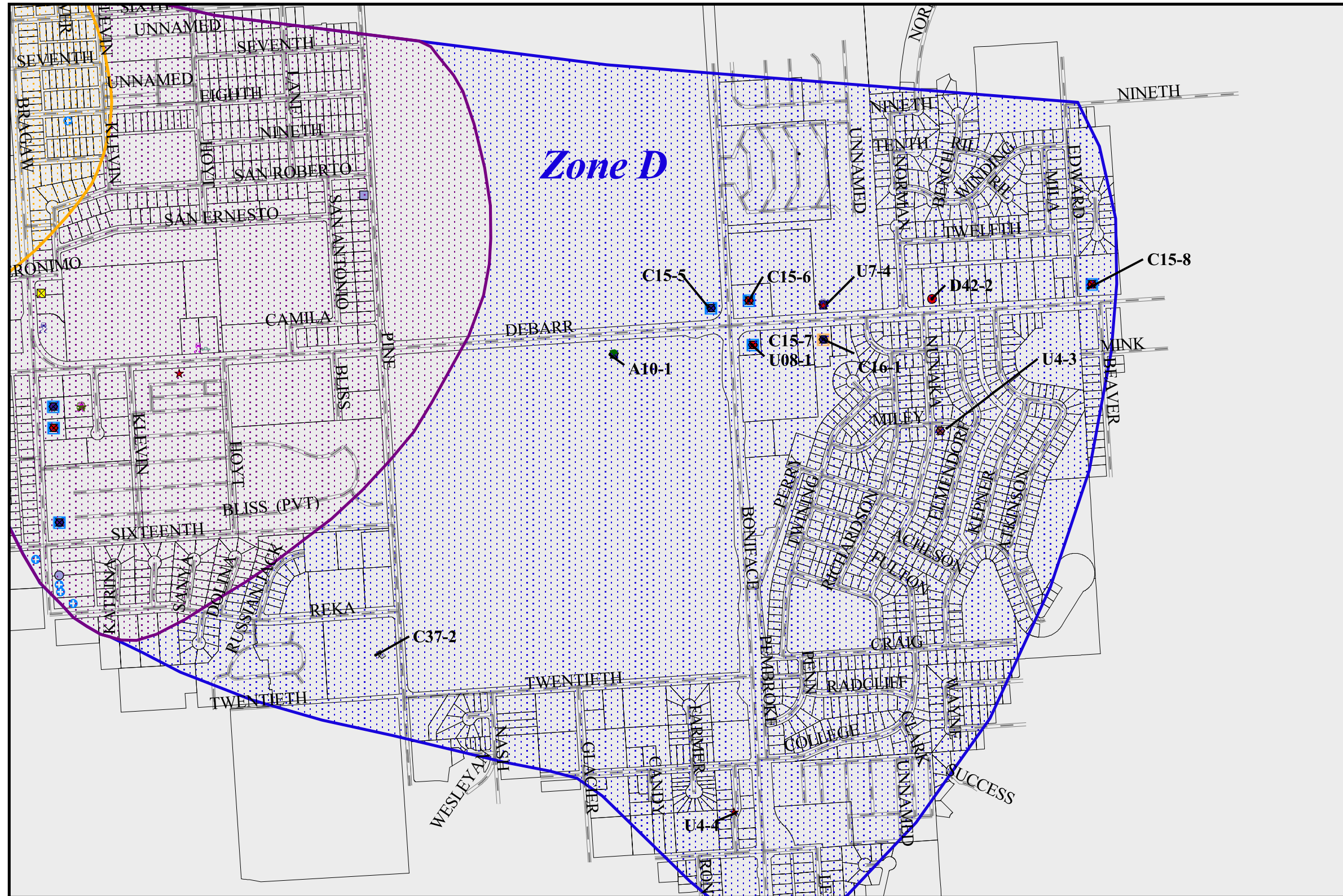
- Drinking Water Well
- Zone A Protection Area
- Zone B Protection Area
- Zone C Protection Area
- Zone D Protection Area
- Potential Contaminant Sources
- Orchards or nurseries (A10)
- Funeral services and crematories (C13)
- Gasoline stations - without repair shop (C15)
- Gasoline stations - with repair shops (C16)
- Hardware stores (C17)
- ▲ Heavy equipment rental/storage (C18)
- ★ Jewelers (C19)
- Lubrication shops (C25)
- Motor vehicle dealerships - without service (C27)
- Motor/motor vehicle supply stores (C28)
- Motor/motor vehicle repair shops (C31)
- Pharmacies - with wastewater disposal (C35)
- Photography supplies/photo processing (C36)
- Printers, publishers, copiers (C37)
- Car washes with engine/undercarriage cleaning (C8)
- Construction trade areas (C9)
- Class V injection well - motor vehicle waste (D42)
- Tanks, heating oil - residential underground (R9)
- Gasoline tanks - underground (T12)
- Closed gasoline tanks - underground (T13)
- Tanks, lubricants, other petroleum products - underground (T20)
- Tanks, diesel - underground (T8)
- Closed tanks, diesel - underground (T9)
- ★ Contaminated sites - DEC recognized (U4)
- Government vehicle maintenance facilities (X19)
- Motor vehicle/general storage yards/facilities (X27)
- Medical/veterinary facilities (X40)
- Anchorage Land Parcels
- Anchorage Roads (X20)



PWSID 210419.001

# Map 9

# Drinking Water Protection Area for Penland Park Mobile Home Park and Potential and Existing Sources of Contamination



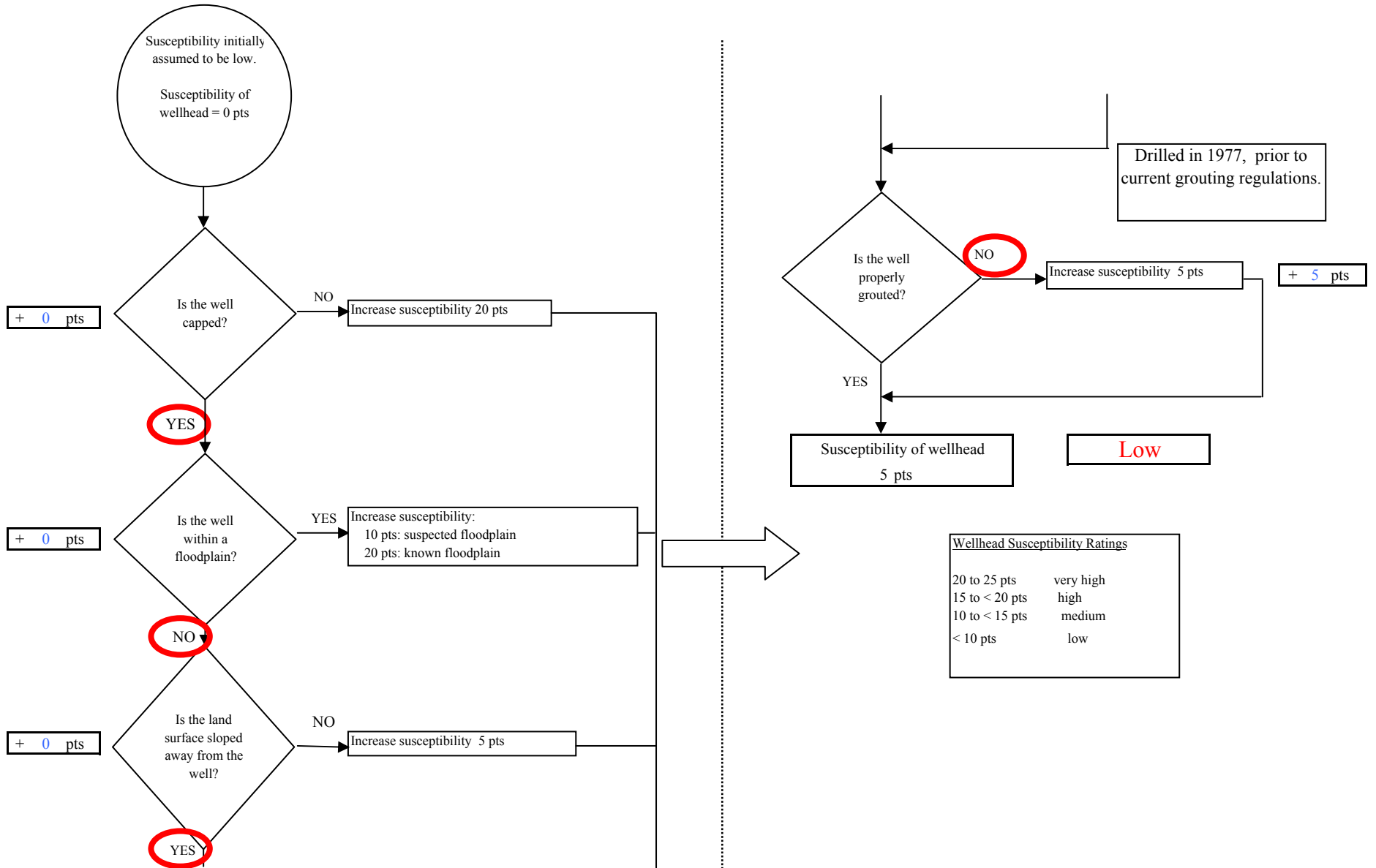
PWSID 210419.001

# Map 10

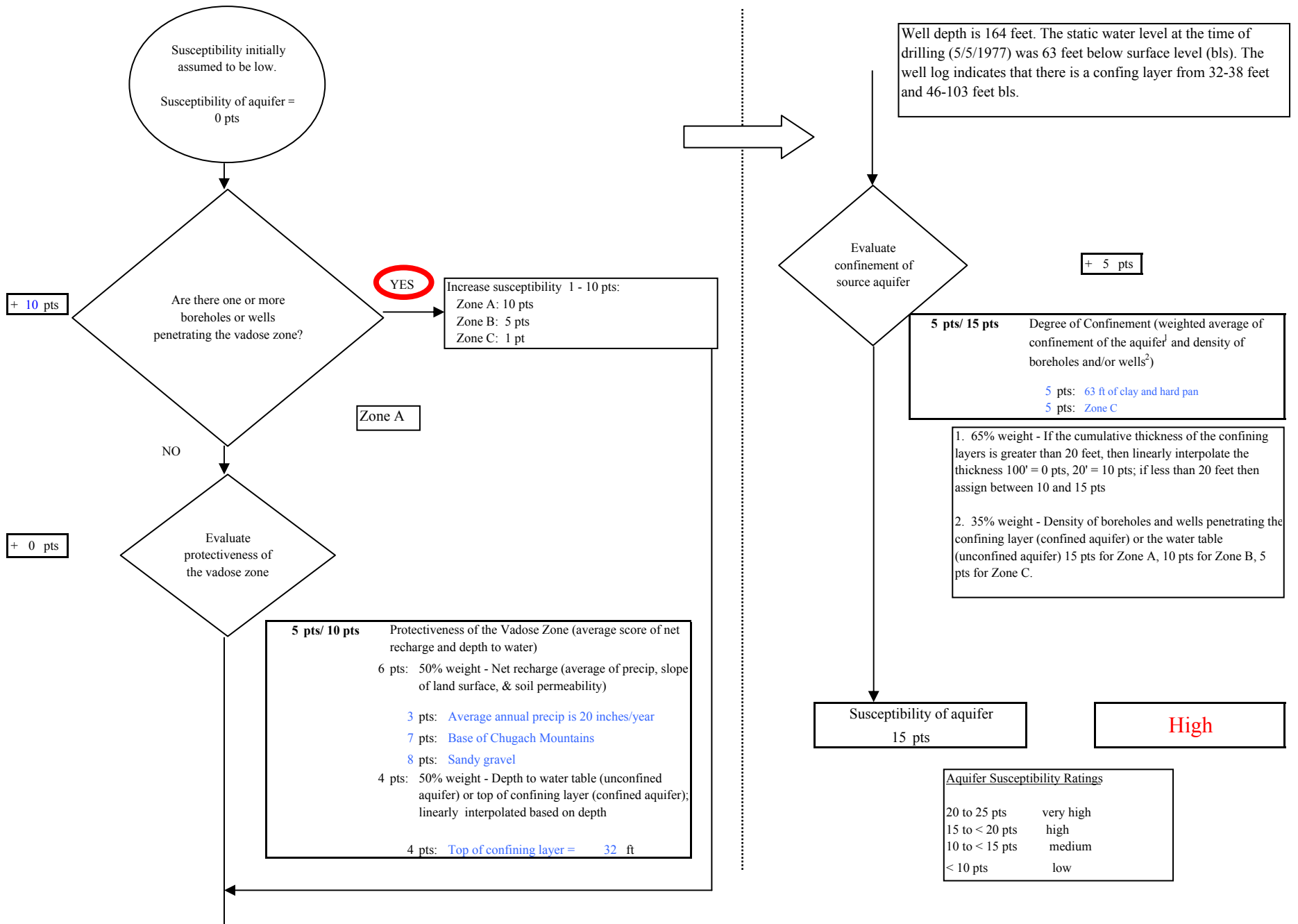
## **APPENDIX D**

### **Vulnerability Analysis for Penland Park Mobile Home Park (Charts 1-14)**

**Chart 1. Susceptibility of the wellhead - Penland Park Mobile Home Park**



**Chart 2. Susceptibility of the aquifer - Penland Park Mobile Home Park**



**Chart 3. Contaminant risks for Penland Park Mobile Home Park- Bacteria & Viruses**

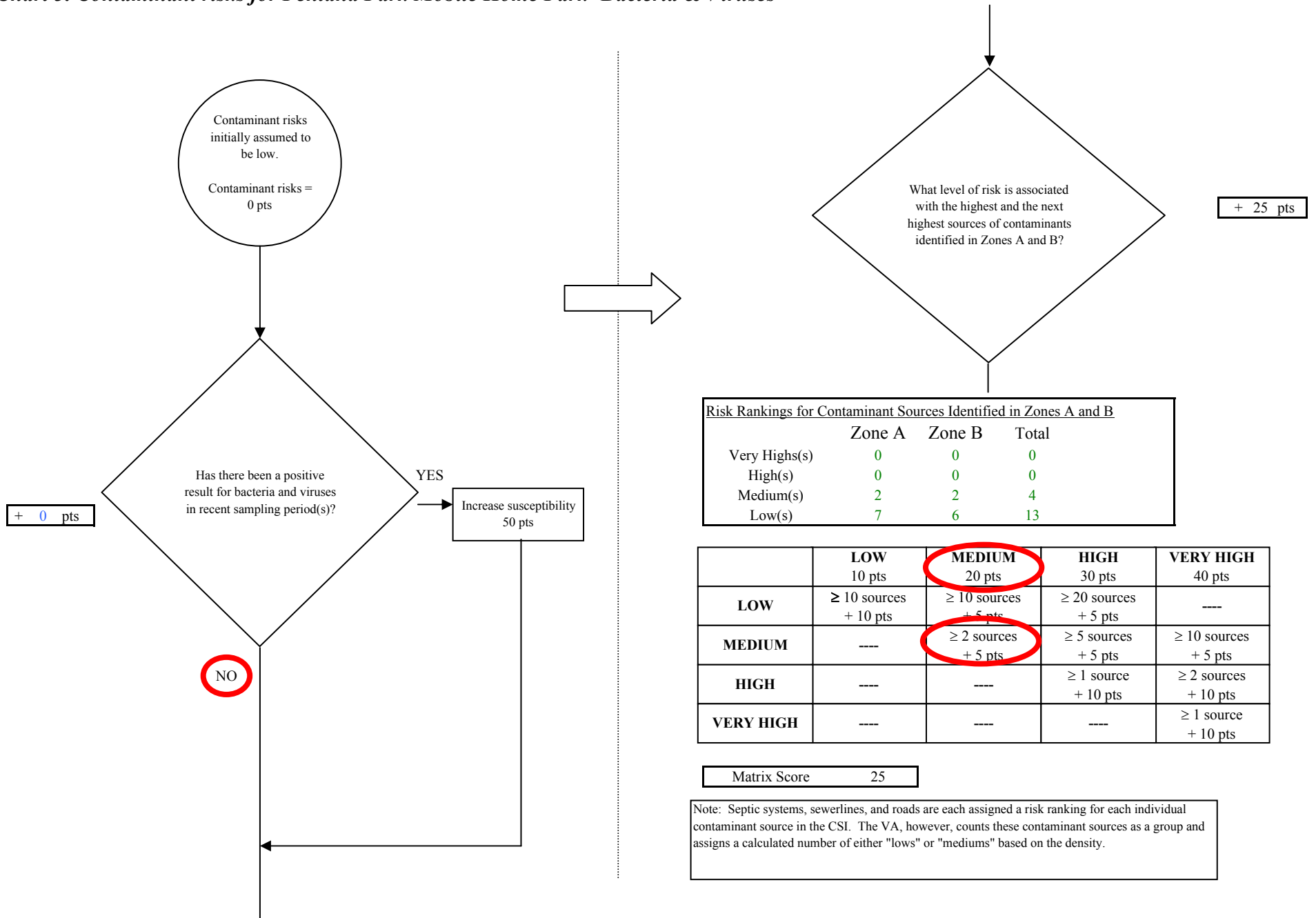
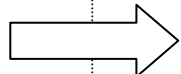
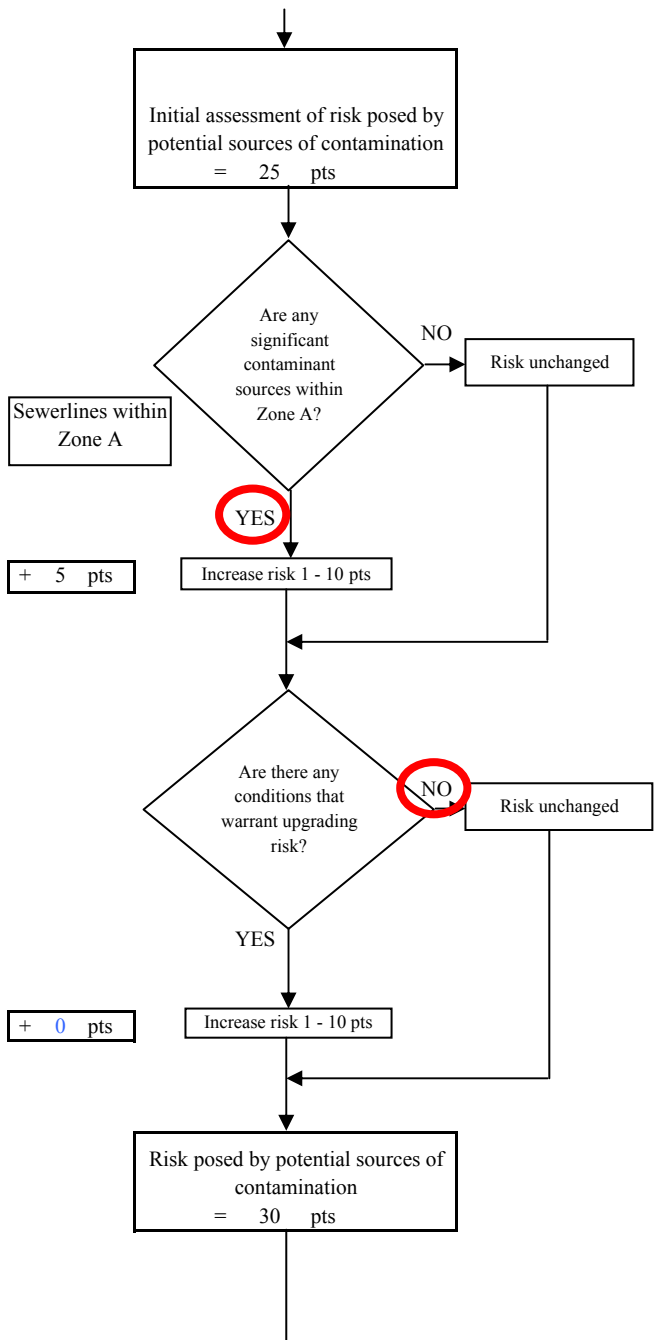
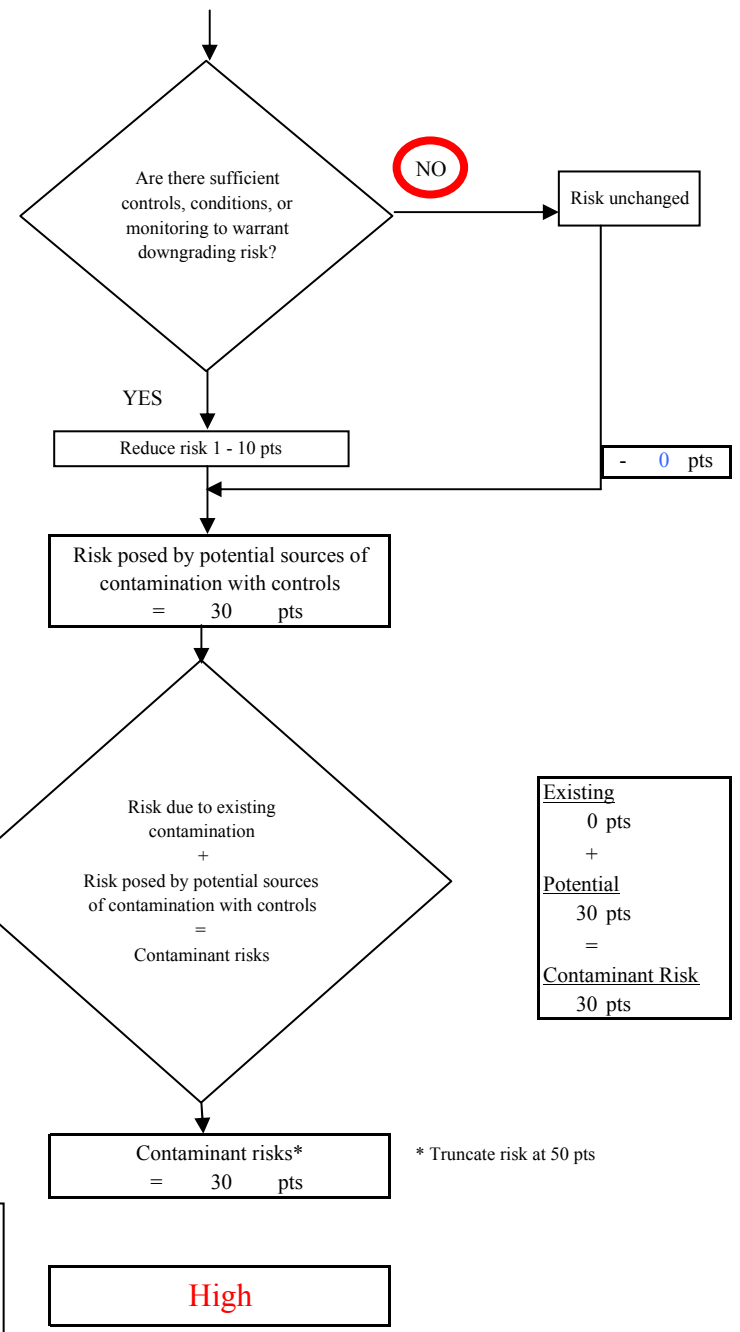


Chart 3. Contaminant risks for Penland Park Mobile Home Park- Bacteria & Viruses



Contaminant Risk Ratings	
40 to 50 pts	very high
30 to < 40 pts	high
20 to < 30 pts	medium
< 20 pts	low

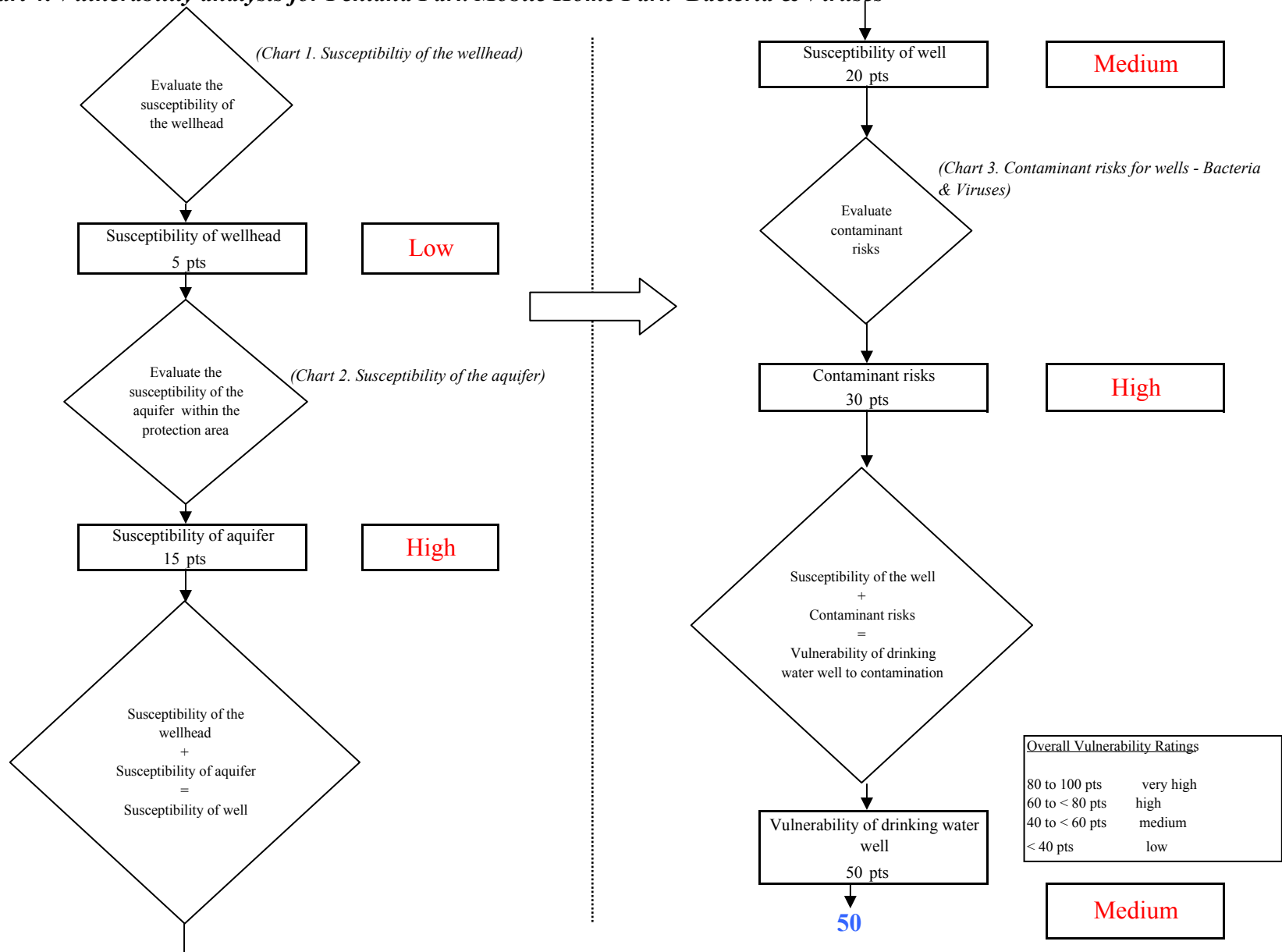


<u>Existing</u>	0 pts
+	
<u>Potential</u>	30 pts
=	
<u>Contaminant Risk</u>	30 pts

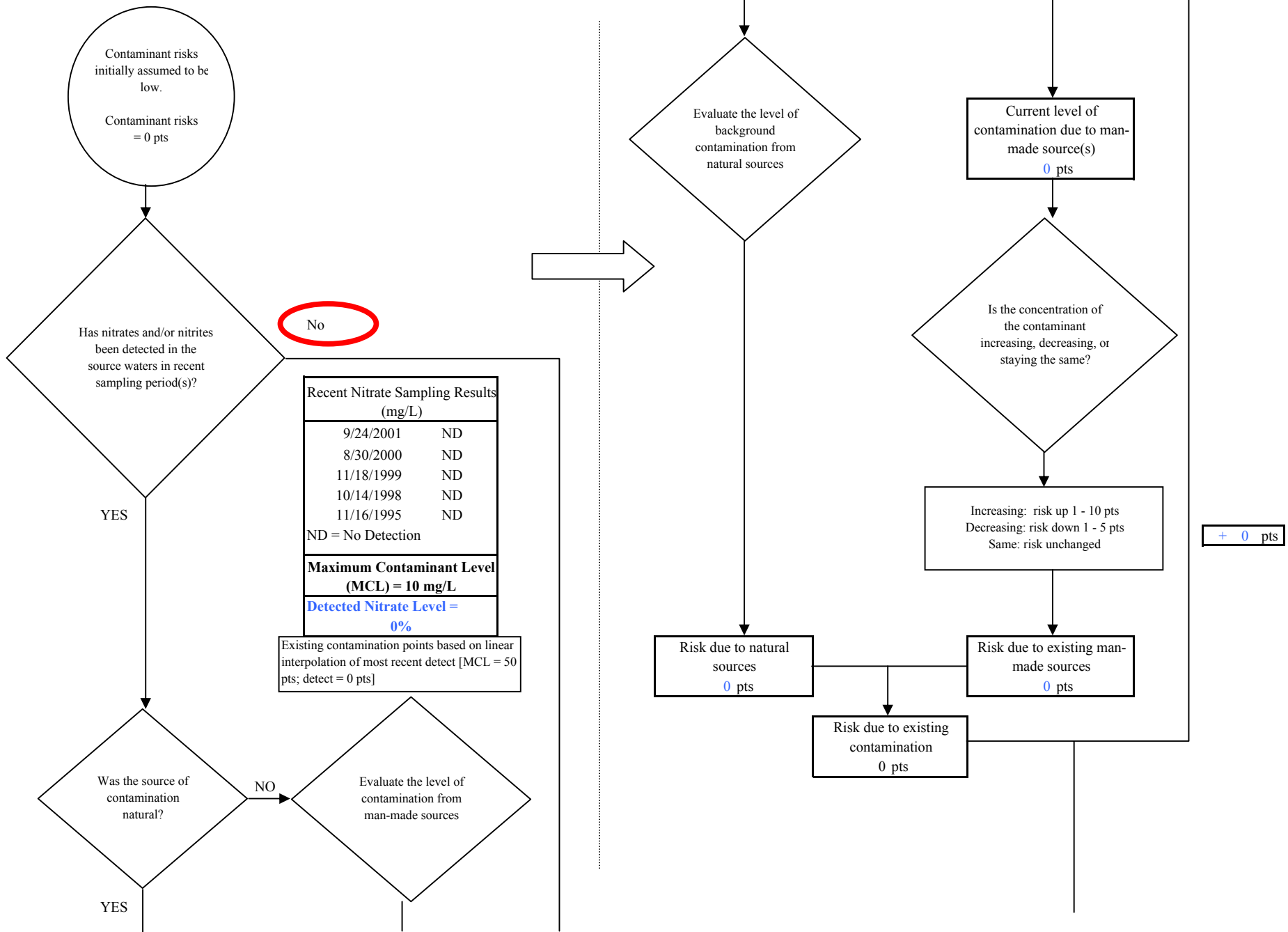
\* Truncate risk at 50 pts



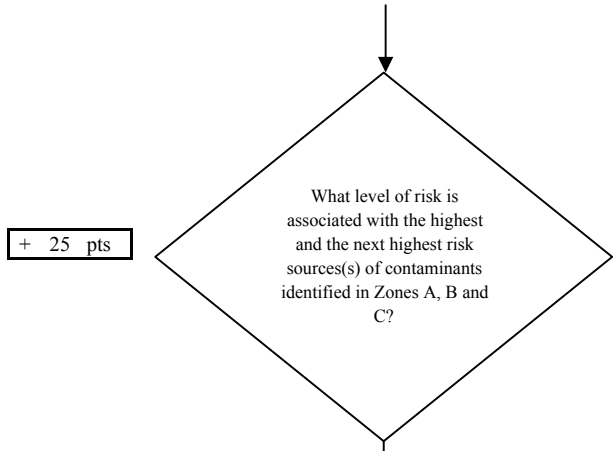
**Chart 4. Vulnerability analysis for Penland Park Mobile Home Park- Bacteria & Viruses**



**Chart 5. Contaminant risks for Penland Park Mobile Home Park- Nitrates and Nitrites**



**Chart 5. Contaminant risks for Penland Park Mobile Home Park- Nitrates and Nitrites**



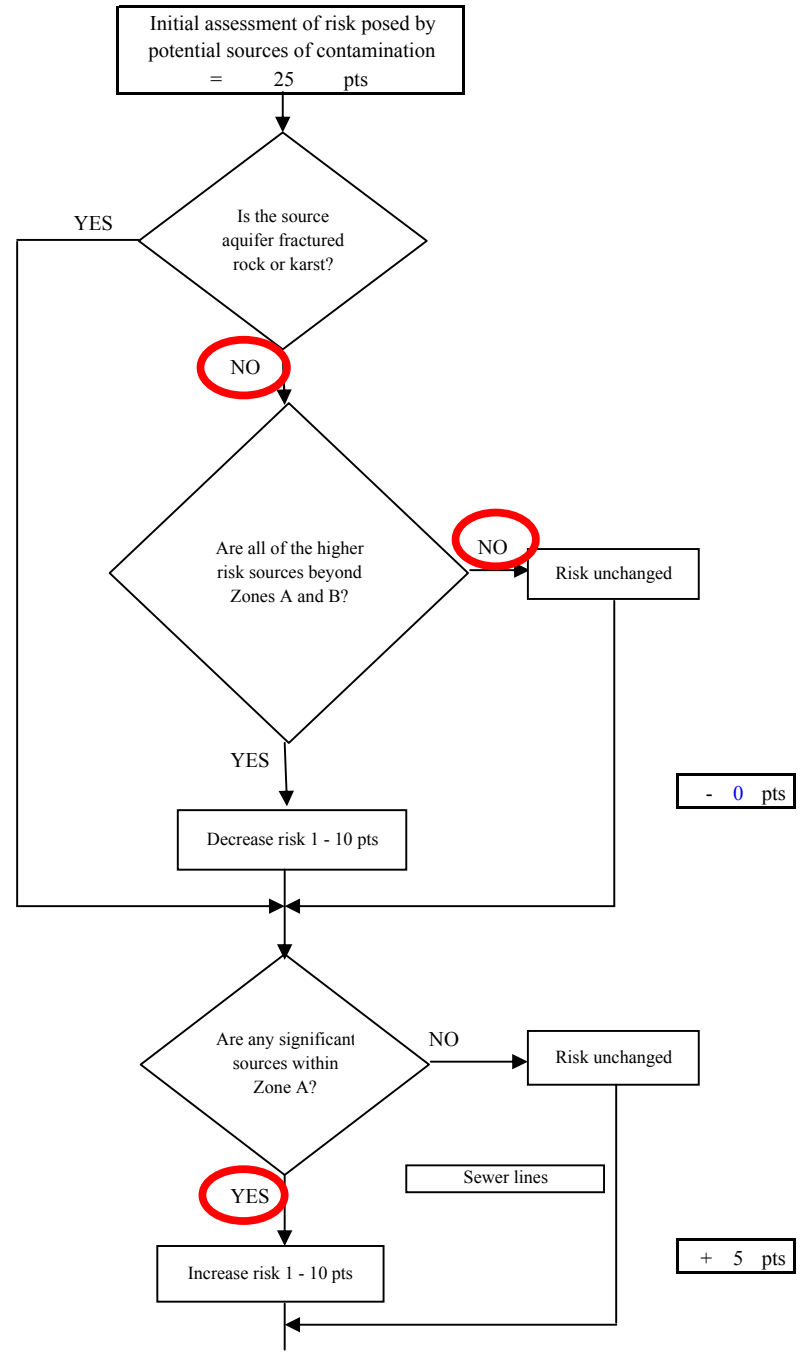
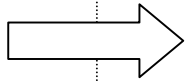
+ 25 pts

Risk Levels for Contaminant Sources identified in Zones A, B and C			
	Zone A	Zones B&C	Total
Very Highs(s)	0	0	0
High(s)	0	0	0
Medium(s)	2	1	3
Low(s)	7	11	18

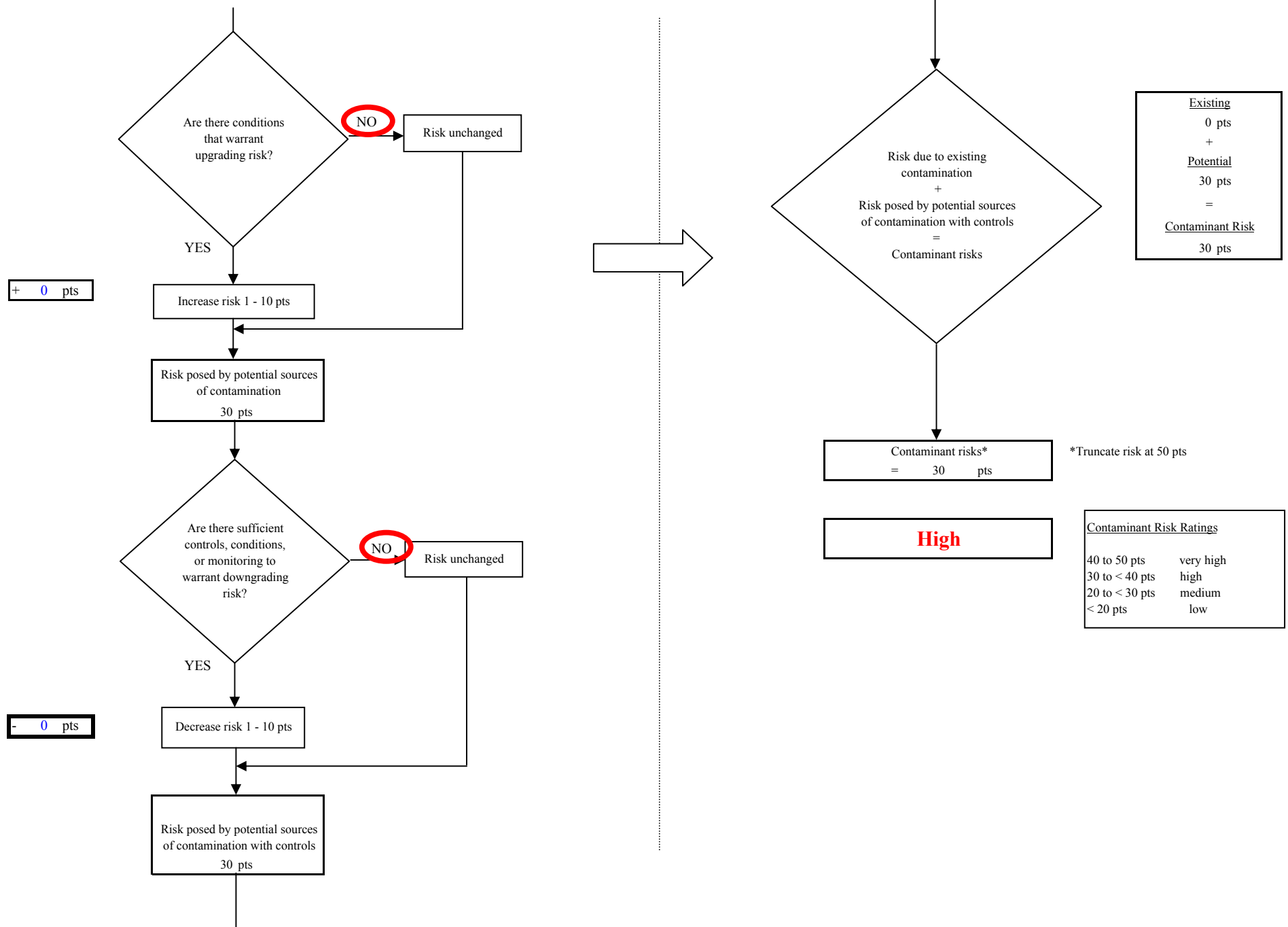
	LOW 10 pts	MEDIUM 20 pts	HIGH 30 pts	VERY HIGH 40 pts
LOW	≥ 10 sources + 10 pts	≥ 10 sources + 5 pts	≥ 20 sources + 5 pts	----
MEDIUM	----	≥ 2 sources + 5 pts	≥ 5 sources + 5 pts	≥ 10 sources + 5 pts
HIGH	----	----	≥ 1 source + 10 pts	≥ 2 sources + 10 pts
VERY HIGH	----	----	----	≥ 1 source + 10 pts

Matrix Score 25

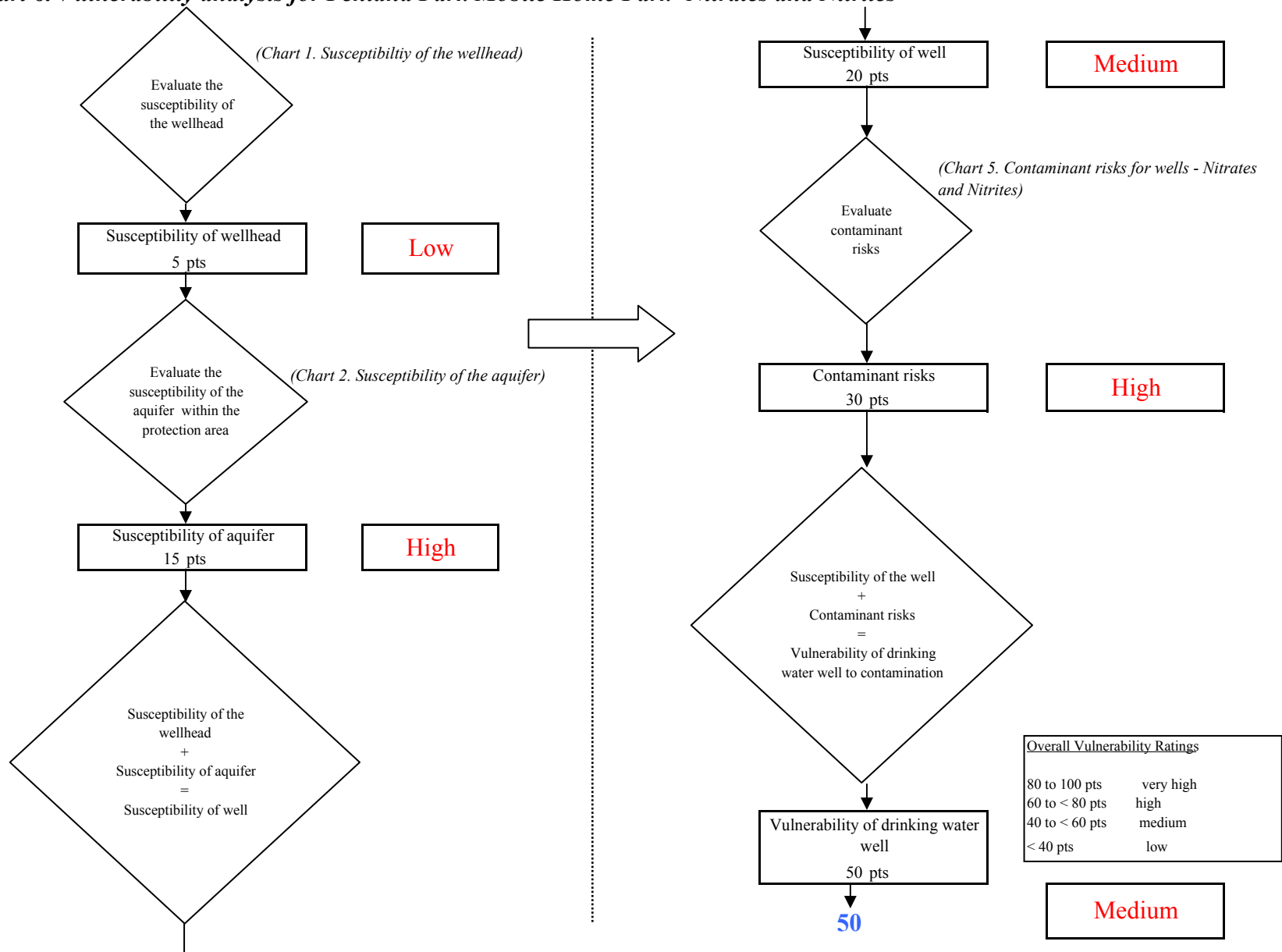
Note: Septic systems, sewerlines, and roads are each assigned a risk ranking for each individual contaminant source in the CSI. The VA, however, counts these contaminant sources as a group and assigns a calculated number of either "lows" or "mediums" based on the density.



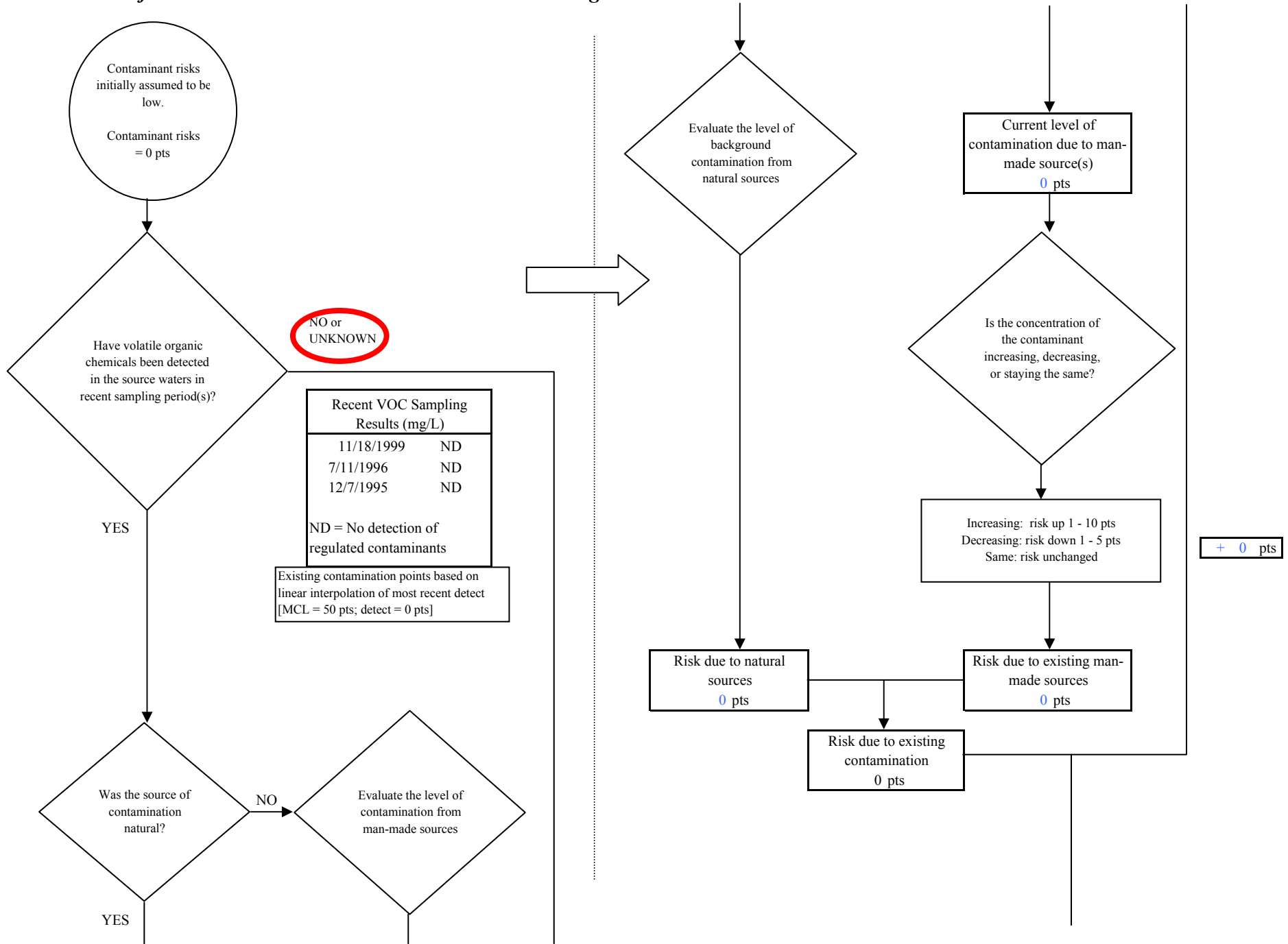
**Chart 5. Contaminant risks for Penland Park Mobile Home Park- Nitrates and Nitrites**



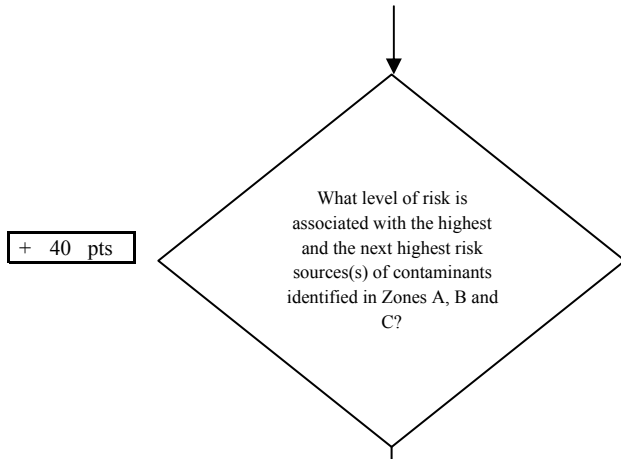
**Chart 6. Vulnerability analysis for Penland Park Mobile Home Park- Nitrates and Nitrites**



**Chart 7. Contaminant risks for Penland Park Mobile Home Park- Volatile Organic Chemicals**



**Chart 7. Contaminant risks for Penland Park Mobile Home Park- Volatile Organic Chemicals**

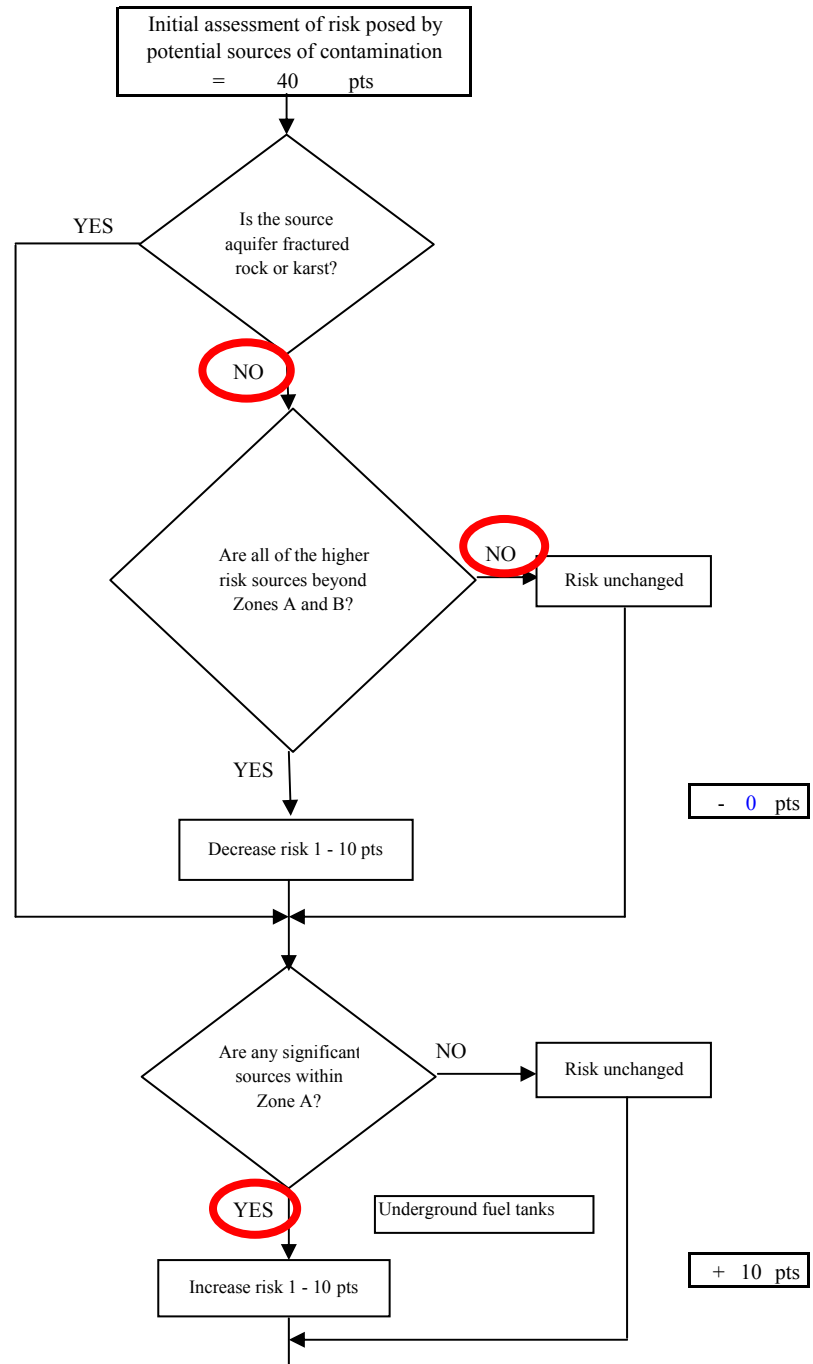
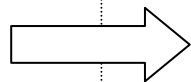


Risk Levels for Contaminant Sources identified in Zones A, B and C			
	Zone A	Zones B&C	Total
Very Highs(s)	0	0	0
High(s)	4	17	21
Medium(s)	4	11	15
Low(s)	7	24	31

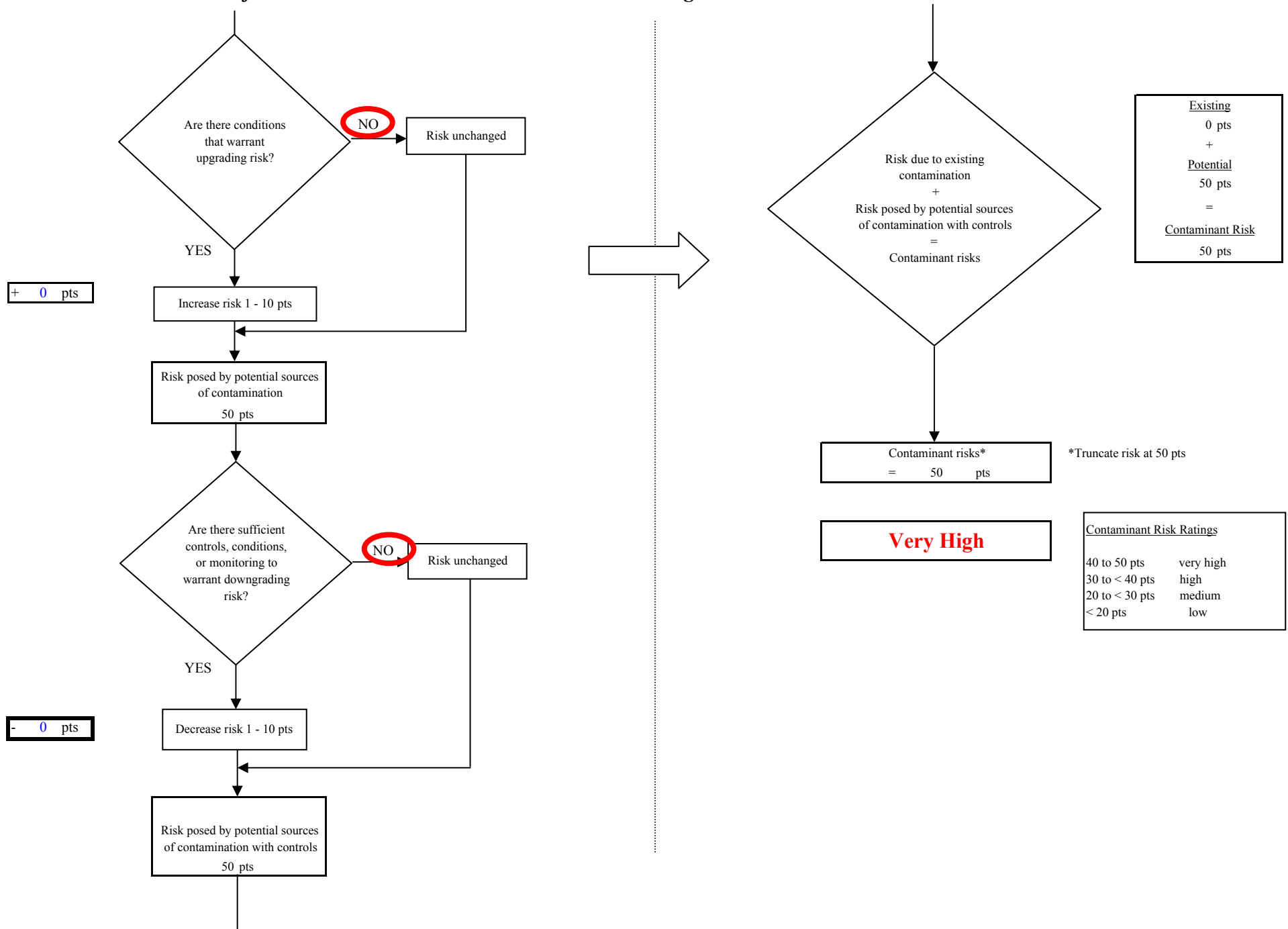
	LOW 10 pts	MEDIUM 20 pts	HIGH 30 pts	VERY HIGH 40 pts
<b>LOW</b>	≥ 10 sources + 10 pts	≥ 10 sources + 5 pts	≥ 20 sources + 5 pts	----
<b>MEDIUM</b>	----	≥ 2 sources + 5 pts	≥ 5 sources + 5 pts	≥ 10 sources + 5 pts
<b>HIGH</b>	----	----	≥ 1 source + 10 pts	≥ 2 sources + 10 pts
<b>VERY HIGH</b>	----	----	----	≥ 1 source + 10 pts

Matrix Score 40

Note: Septic systems, sewerlines, and roads are each assigned a risk ranking for each individual contaminant source in the CSI. The VA, however, counts these contaminant sources as a group and assigns a calculated number of either "lows" or "mediums" based on the density.

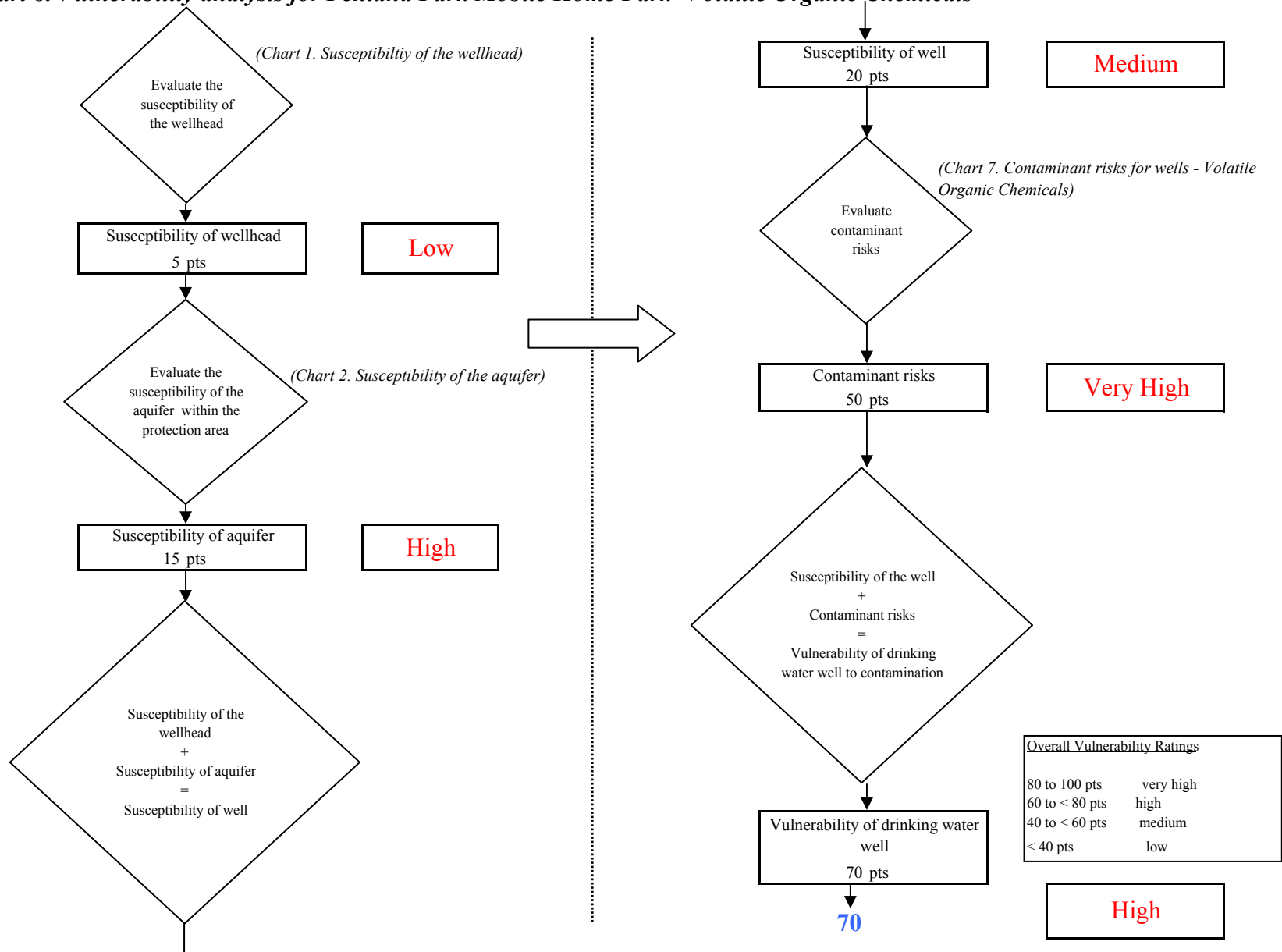


**Chart 7. Contaminant risks for Penland Park Mobile Home Park- Volatile Organic Chemicals**

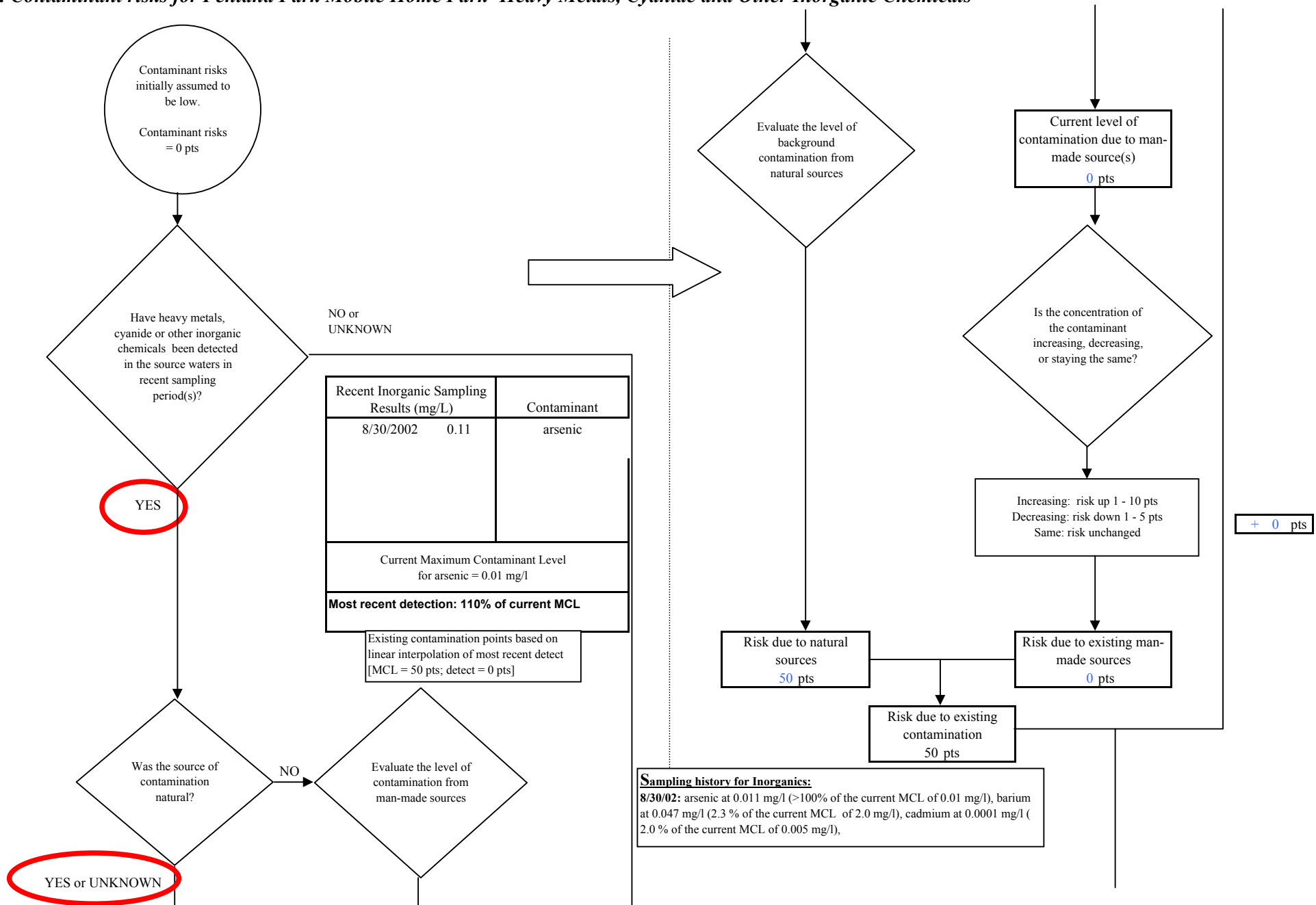




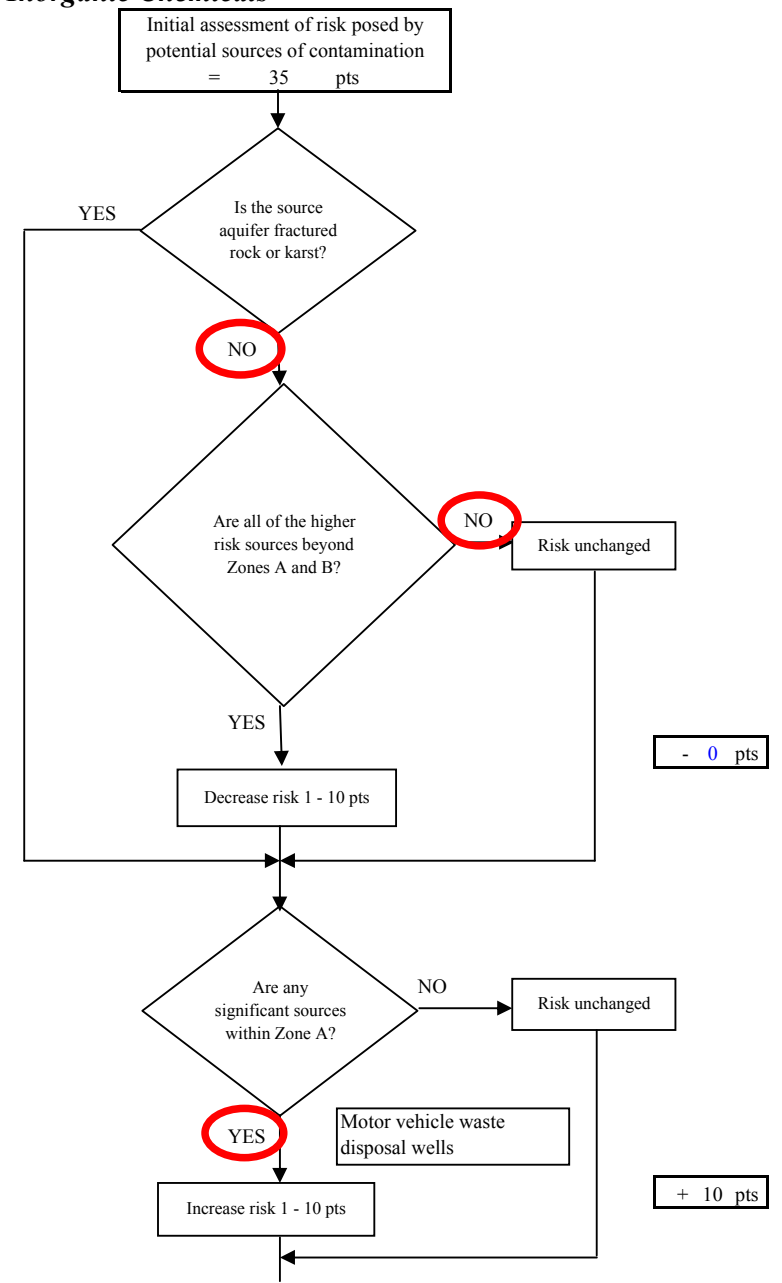
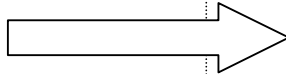
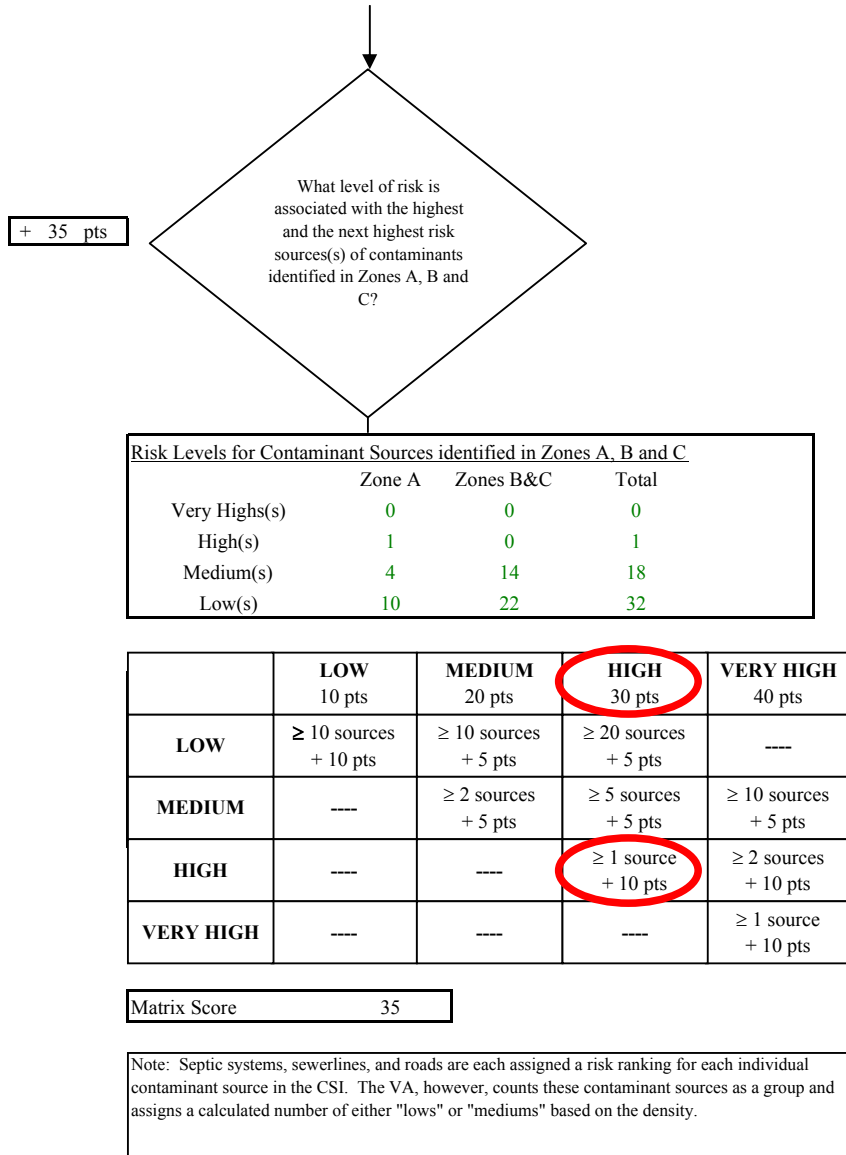
**Chart 8. Vulnerability analysis for Penland Park Mobile Home Park- Volatile Organic Chemicals**



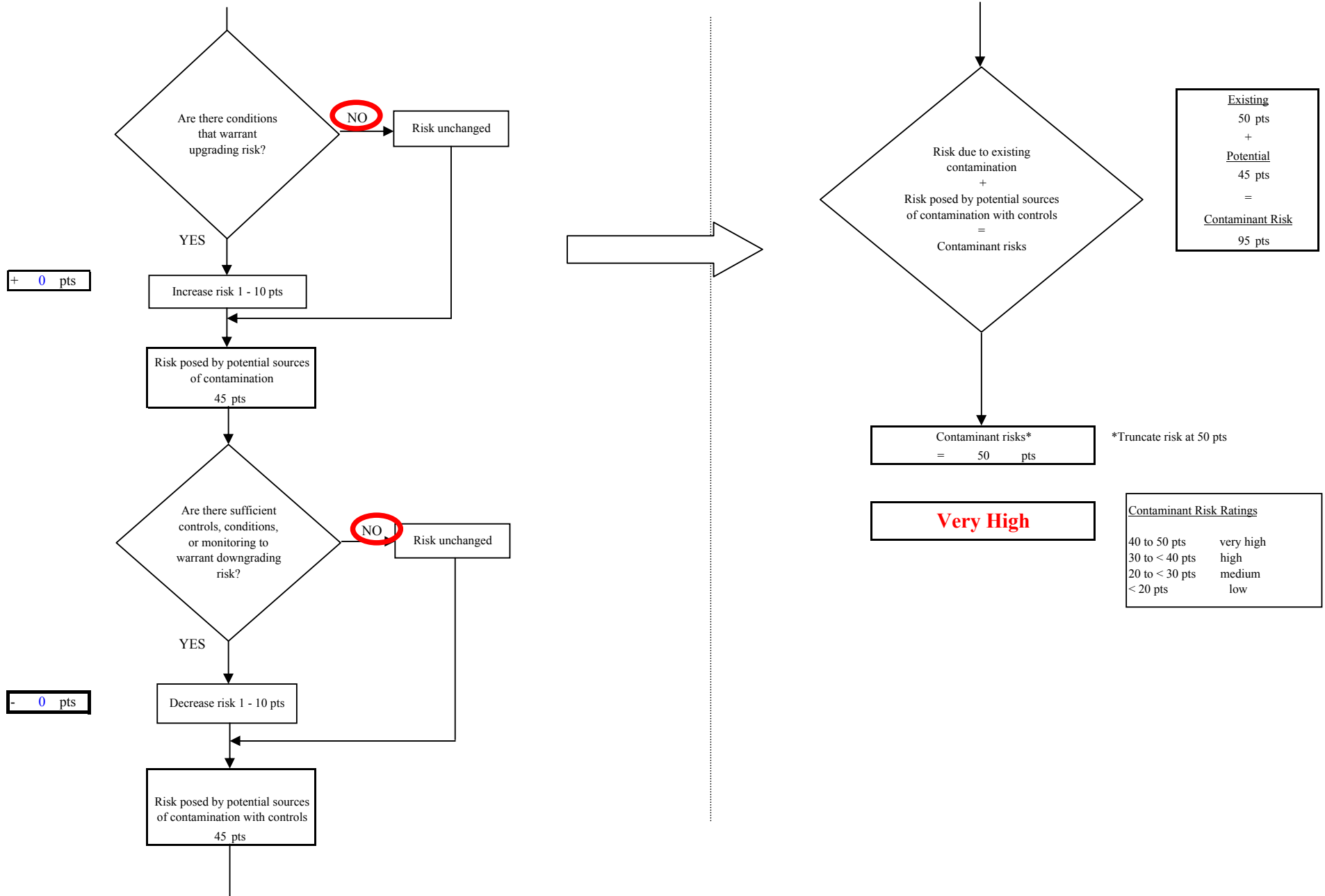
**Chart 9. Contaminant risks for Penland Park Mobile Home Park- Heavy Metals, Cyanide and Other Inorganic Chemicals**



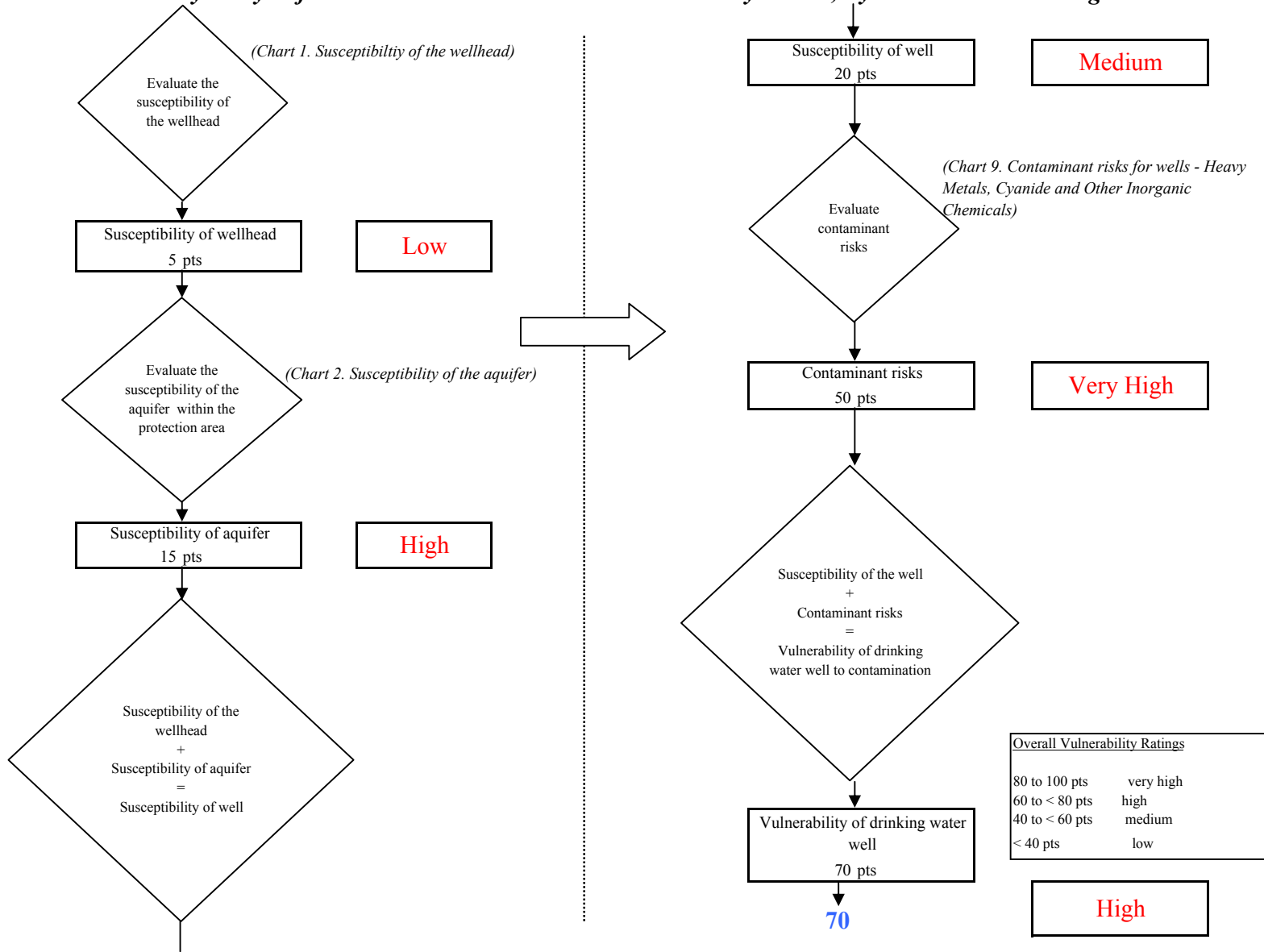
**Chart 9. Contaminant risks for Penland Park Mobile Home Park- Heavy Metals, Cyanide and Other Inorganic Chemicals**



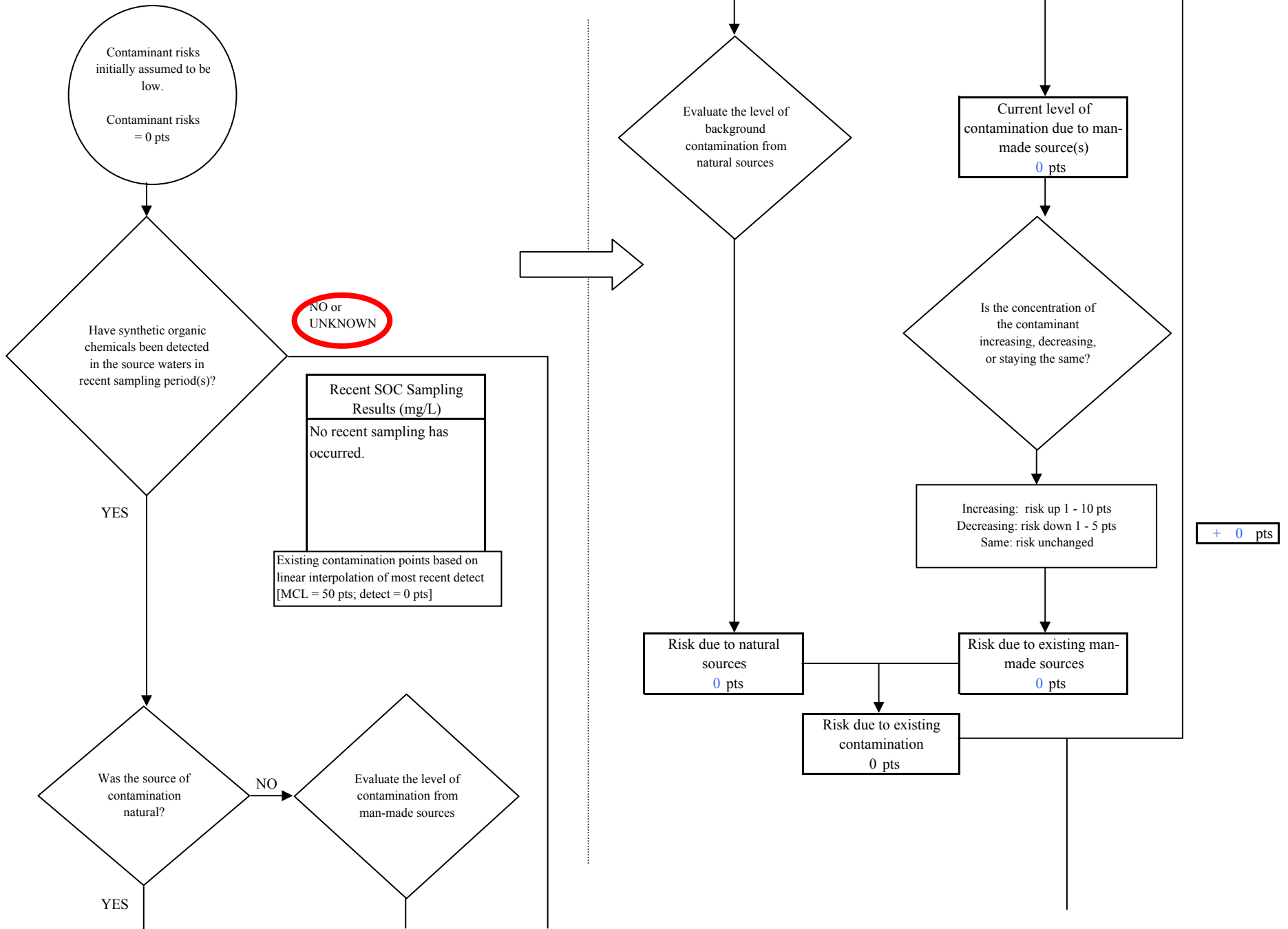
**Chart 9. Contaminant risks for Penland Park Mobile Home Park- Heavy Metals, Cyanide and Other Inorganic Chemicals**



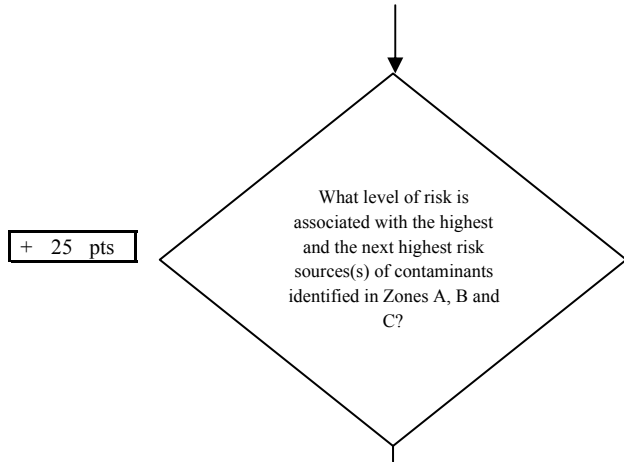
**Chart 10. Vulnerability analysis for Penland Park Mobile Home Park- Heavy Metals, Cyanide and Other Inorganic Chemicals**



**Chart 11. Contaminant risks for Penland Park Mobile Home Park- Synthetic Organic Chemicals**



**Chart 11. Contaminant risks for Penland Park Mobile Home Park- Synthetic Organic Chemicals**

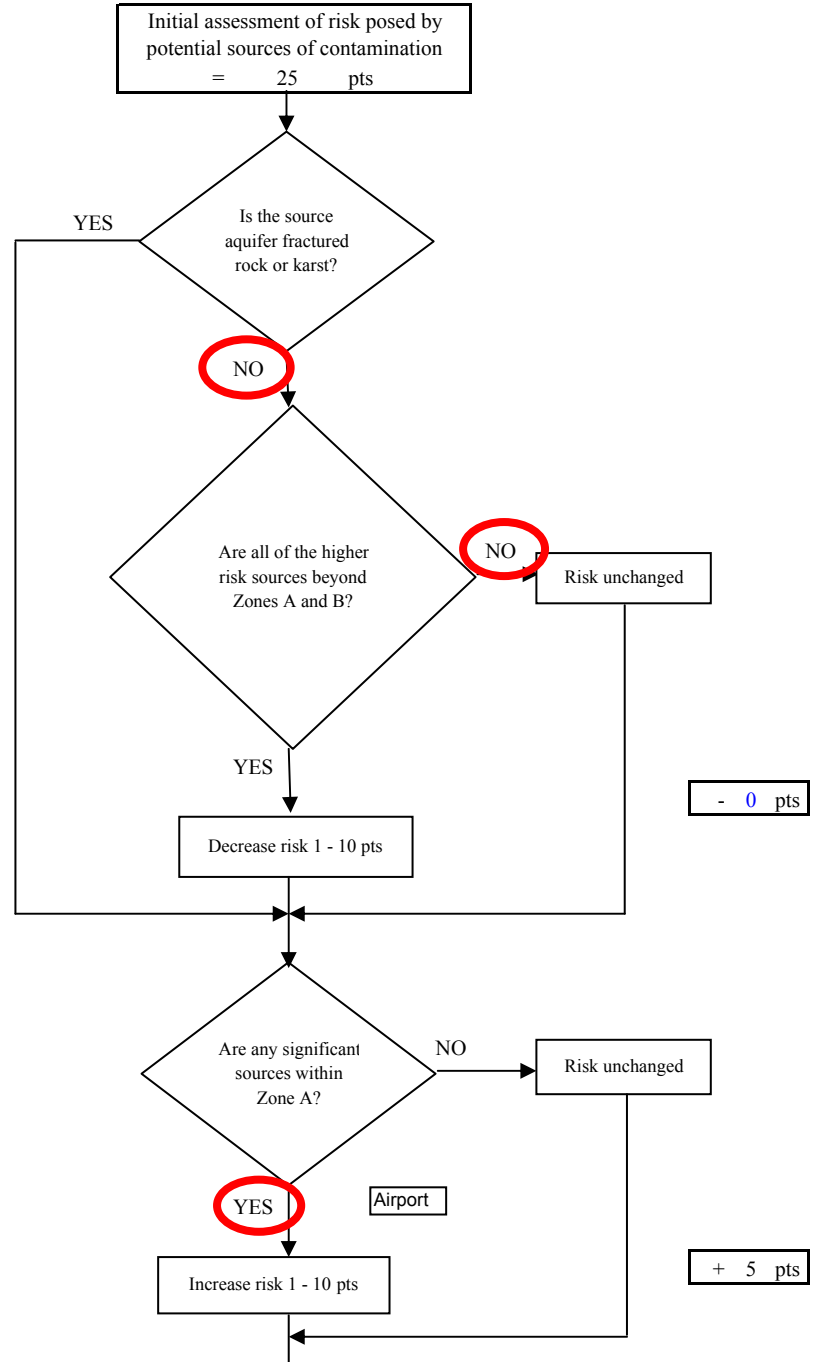
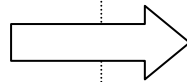


Risk Levels for Contaminant Sources identified in Zones A, B and C			
	Zone A	Zones B&C	Total
Very High(s)	0	0	0
High(s)	0	0	0
Medium(s)	1	0	1
Low(s)	4	15	19

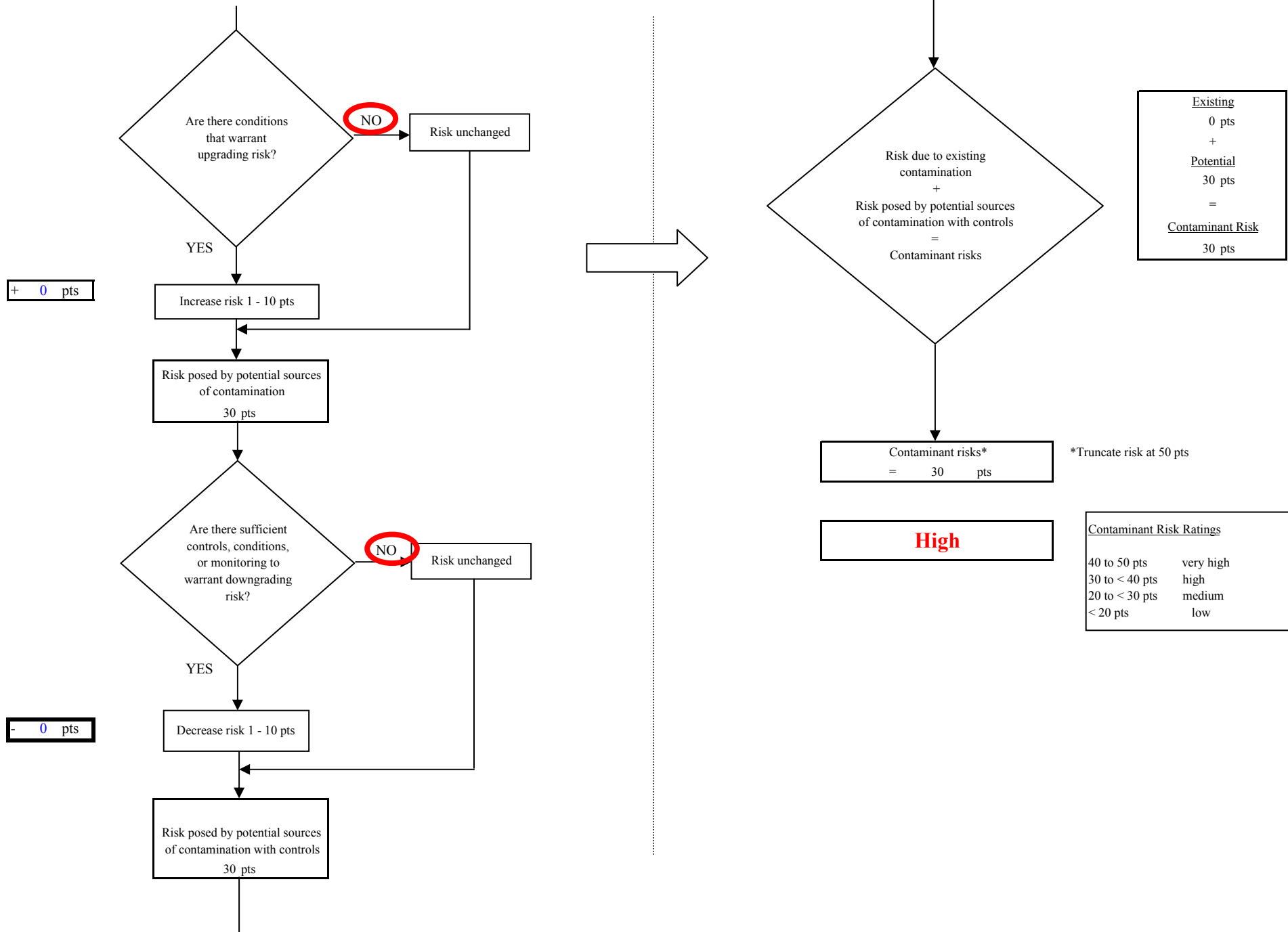
	LOW 10 pts	MEDIUM 20 pts	HIGH 30 pts	VERY HIGH 40 pts
LOW	≥ 10 sources + 10 pts	≥ 10 sources + 5 pts	≥ 20 sources + 5 pts	---
MEDIUM	---	≥ 2 sources + 5 pts	≥ 5 sources + 5 pts	≥ 10 sources + 5 pts
HIGH	---	---	≥ 1 source + 10 pts	≥ 2 sources + 10 pts
VERY HIGH	---	---	---	≥ 1 source + 10 pts

Matrix Score 25

Note: Septic systems, sewerlines, and roads are each assigned a risk ranking for each individual contaminant source in the CSI. The VA, however, counts these contaminant sources as a group and assigns a calculated number of either "lows" or "mediums" based on the density.

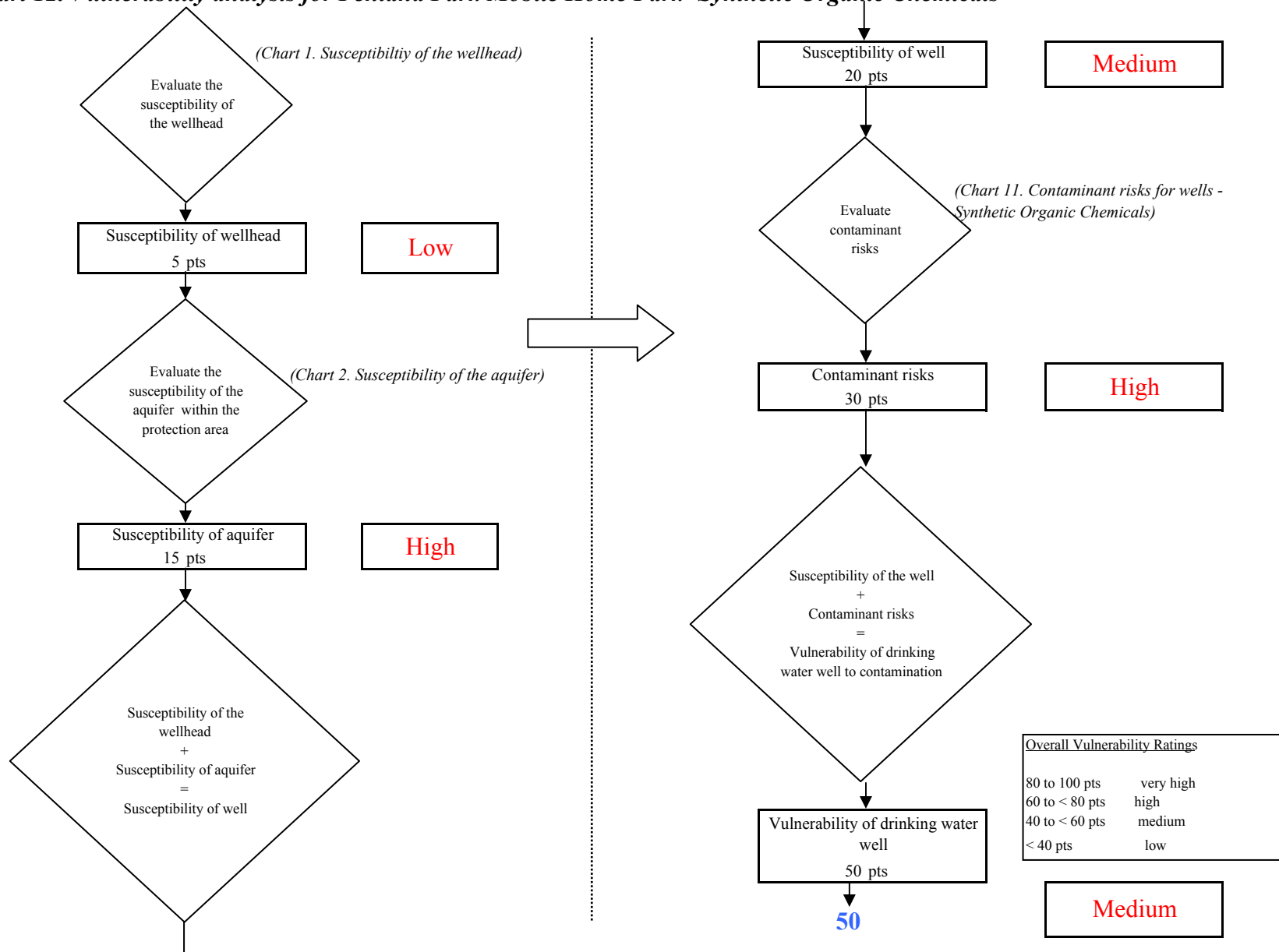


**Chart 11. Contaminant risks for Penland Park Mobile Home Park- Synthetic Organic Chemicals**





**Chart 12. Vulnerability analysis for Penland Park Mobile Home Park- Synthetic Organic Chemicals**



**Chart 13. Contaminant risks for Penland Park Mobile Home Park- Other Organic Chemicals**

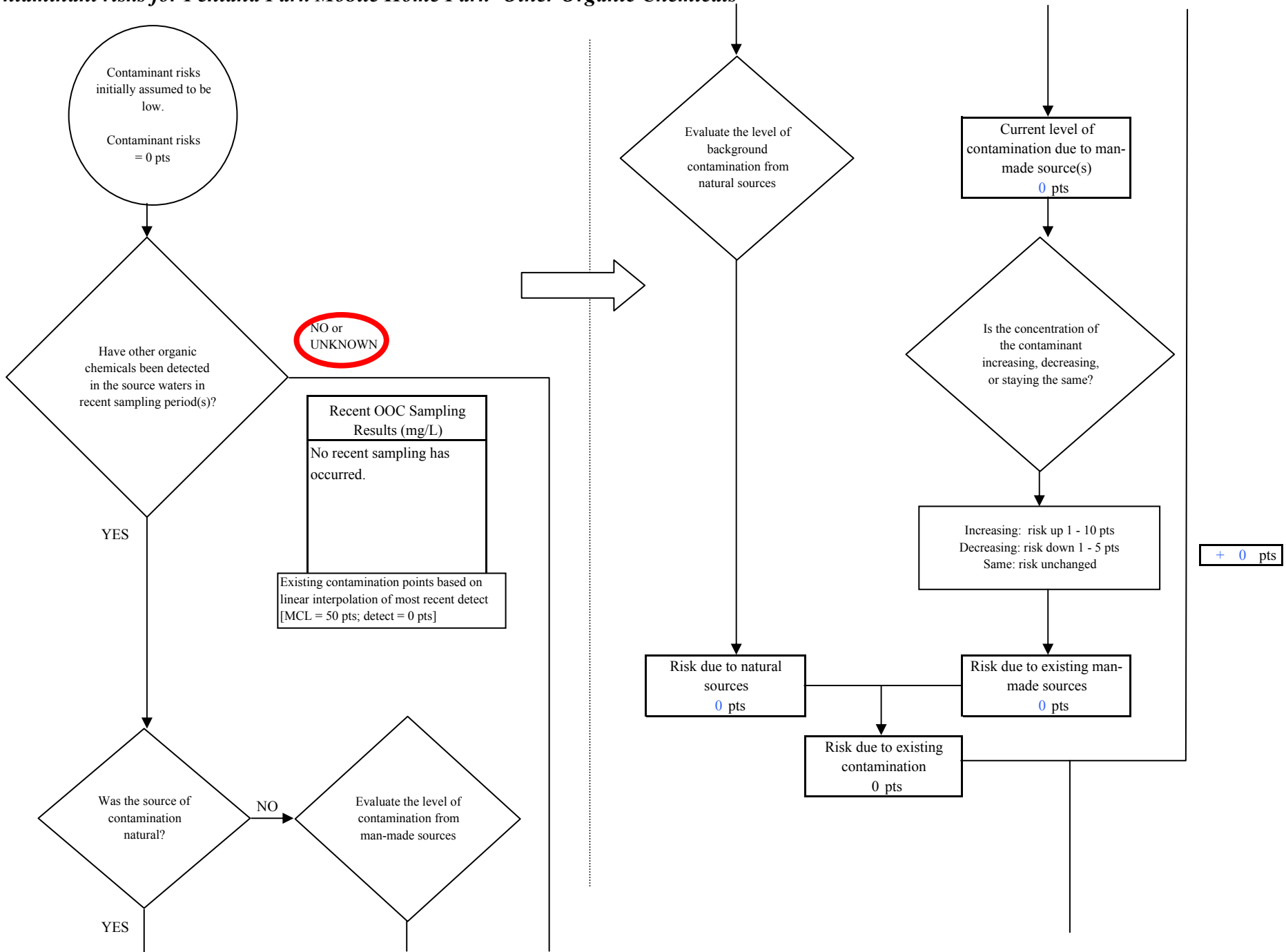
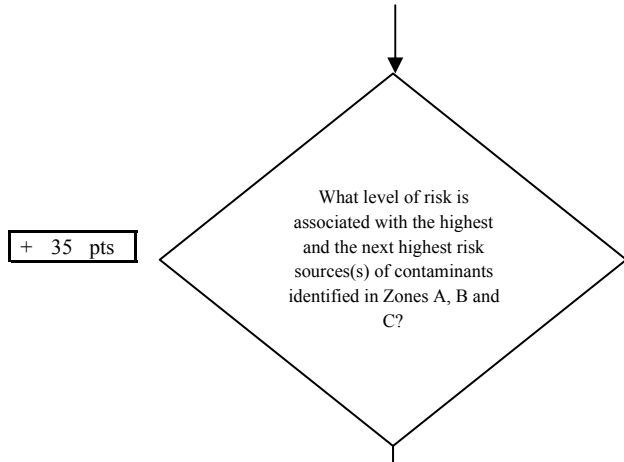


Chart 13. Contaminant risks for Penland Park Mobile Home Park- Other Organic Chemicals

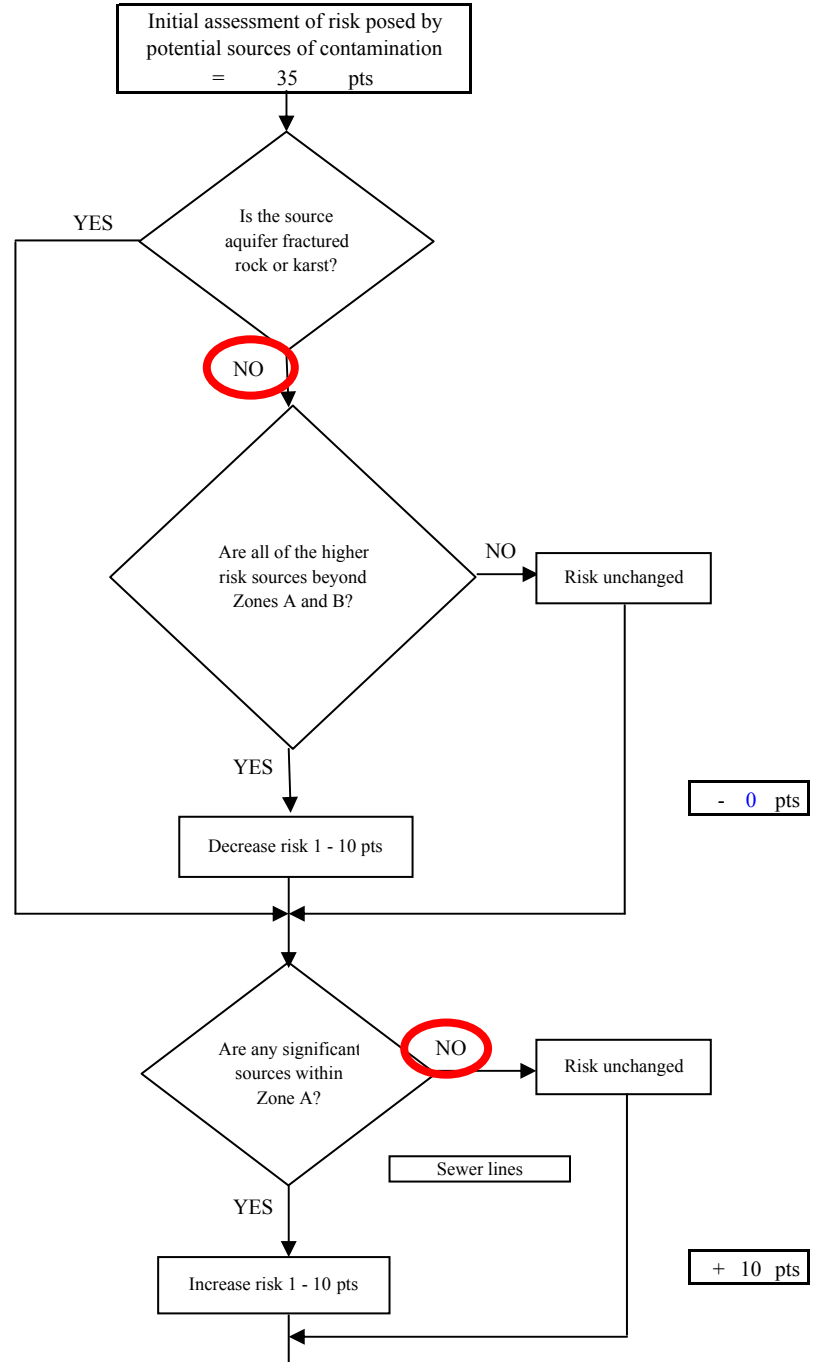
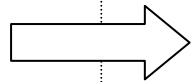


Risk Levels for Contaminant Sources identified in Zones A, B and C			
	Zone A	Zones B&C	Total
Very Highs(s)	0	0	0
High(s)	0	1	1
Medium(s)	5	11	16
Low(s)	4	12	16

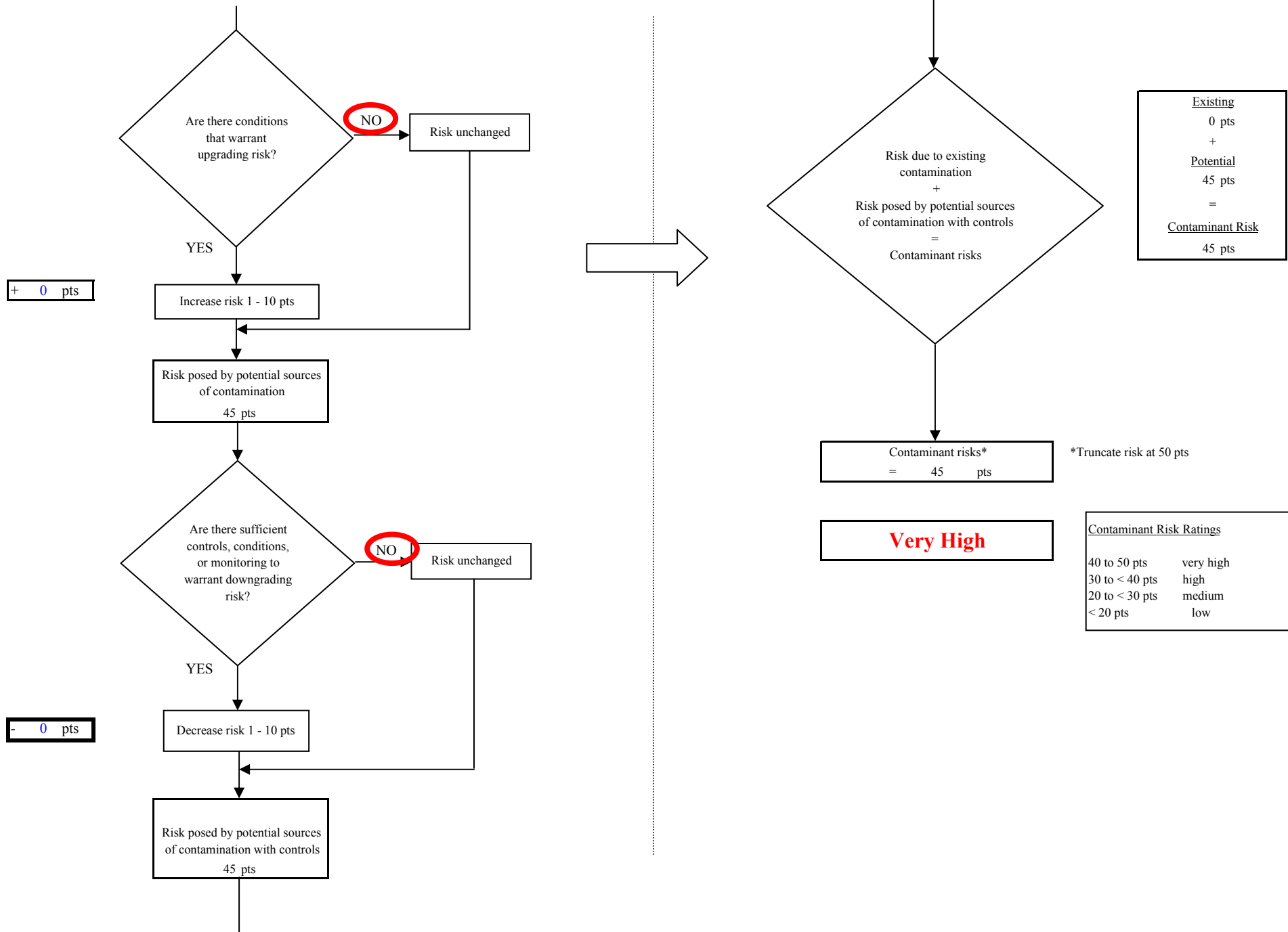
	LOW 10 pts	MEDIUM 20 pts	HIGH 30 pts	VERY HIGH 40 pts
LOW	≥ 10 sources + 10 pts	≥ 10 sources + 5 pts	≥ 20 sources + 5 pts	----
MEDIUM	----	≥ 2 sources + 5 pts	≥ 5 sources + 5 pts	≥ 10 sources + 5 pts
HIGH	----	----	≥ 1 source + 10 pts	≥ 2 sources + 10 pts
VERY HIGH	----	----	----	≥ 1 source + 10 pts

Matrix Score 35

Note: Septic systems, sewerlines, and roads are each assigned a risk ranking for each individual contaminant source in the CSI. The VA, however, counts these contaminant sources as a group and assigns a calculated number of either "lows" or "mediums" based on the density.



**Chart 13. Contaminant risks for Penland Park Mobile Home Park- Other Organic Chemicals**



**Chart 14. Vulnerability analysis for Penland Park Mobile Home Park- Other Organic Chemicals**

