

# **Source Water Assessment**

A Hydrogeologic Susceptibility and Vulnerability Assessment for Wasilla Water System – East Susitna Well Public Drinking Water System, Wasilla, Alaska PWSID# 224646.006

DRINKING WATER PROTECTION REPORT #1857

Alaska Department of Environmental Conservation

February, 2011

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### DRINKING WATER PROTECTION REPORT #1857

The Drinking Water Protection (DWP) team of the Drinking Water 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. It is anticipated this assessment will be updated every five years to reflect any changes in the vulnerability and/or susceptibility of public drinking water source. If you have any additional information that may affect the results of this assessment, please contact DWP staff at #1-866-956-7656.

February, 2011

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#### **Drinking Water Protection**

#### Alaska Department of Environmental Conservation

#### **EXECUTIVE SUMMARY**

The public water system for Wasilla Water System is a Community Water System (CWS) consisting of nine wells (five active and four back-up). The well addressed by this report (East Susitna Well - WL009), is located at the Village Heights Subdivision, Tract D, Wasilla, Alaska. An assessment of the susceptibility of the wellhead and aquifer to contamination, and the vulnerability of the public water system to potential and existing contamination were evaluated as of February, 2011. The wellhead received a susceptibility rating of Low and the aquifer received a susceptibility rating of Low. Combining these two ratings produces a Low rating for the natural susceptibility of the well. Identified potential and existing sources of contamination for the Wasilla Water System - East Susitna Well public drinking water system include large capacity septic systems, roads, residential areas, residential septic systems and various commercial activities. These are considered sources of bacteria and viruses, nitrates and/or nitrites, volatile organic chemicals (VOCs), heavy metals, cyanide, and other inorganic chemicals, synthetic organic chemicals (SOCs), and other organic chemicals (OOCs). Additionally, presumably natural sources of nitrates and arsenic are also present.

Combining the natural susceptibility of the well with the six (6) contaminant risk categories, the public water system for Wasilla Water System – East Susitna Well received an overall vulnerability rating of **Medium** for bacteria and viruses, nitrates and/or nitrites, VOCs, heavy metals, cyanide, and other inorganic chemicals, and OOCs and **Low** for SOCs.

### WASILLA WATER SYSTEM –EAST SUSITNA WELL PUBLIC DRINKING WATER SYSTEM

Wasilla Water System – East Susitna Well public water system is a Community Water System. The system consists of nine wells (five active and four back-up); the well evaluated in this report is located on 1150 East Susitna Avenue (Village Heights Subdivision, Tract D), Wasilla, Alaska (See Map 1 of Appendix A). Wasilla is located north of Anchorage in the Matanuska-Susitna Borough which is in Southcentral Alaska. Wasilla lies in a flat-floored valley formed by the merging of the Matanuska and Knik valleys at the eastern end of Knik Arm. The southern edge of the valley is bound by the Chugach Mountains and the northern edge by the Talkeetna Mountains. (Trainer, F.W., 1956) (Please see the inset of Map 1 in Appendix A for location). The Borough's current population is approximately 84,314, and Wasilla's current population is approximately 7,245 (ADCCED 2009). Communities located within the Borough include: Big Lake, Buffalo Soapstone, Butte, Chase, Chickaloon, Farm Loop, Fishhook, Gateway, Glacier View, Houston, Knik River, Knik-Fairview, Lake Louise, Lakes, Lazy Mountain, Meadow Lakes, Palmer, Petersville, Point MacKenzie, Skwentna, Susitna, Sutton-Alpine, Talkeetna, Tanaina, Trapper Creek, Wasilla, Willow and Y (ADCCED 2009). The majority of homes use individual water wells and septic systems, although the City operates a piped water and sewer system (ADCCED 2009). Refuse collection is provided by a private company, for disposal in the Mat-Su Borough landfill. Residents also drop refuse at the Borough landfill in Palmer (ADCCED 2009).

A lake covered the Susitna River valley lowland during glacial times. The deposition of glacial silts and clays played an important part in the makeup of the soils of the area.

Most of the soils in the area provide good sources of sand, gravel and topsoil. The deposition of silt, clay and organic "muck" in old lakes and depressions means that some areas have soil conditions that vary over relatively short distances. The U.S. Soil Conservation Service has mapped several soil associations in and around Wasilla.

The Homestead, Kalambach and Knik soil types predominate the Wasilla area, with smaller areas of Coal Creek, Jacobsen, Salamatof, and Slikok soil types. Wasilla Water System – East Susitna Well is located within the Kalambach Silt Loam soil type.

According to the well log for this water system source, the depth of the well is estimated at 302 feet below land surface (bls). The well was then backfilled to 191 feet bls and screened from 173 feet to 183.25 feet bls. Other wells in this area are screened in a combination of sand and gravel and the well log indicates that this well is also. This well was drilled on 07/15/2005 and penetrated approximately 140 feet of silt-sand-gravel

mixture. The aquifer appears to be under hydrostatic pressure based on a high static water level relative to the depth of the aquifer. Based on this, the well is assumed to be completed in a confined aquifer, or an aquifer under hydrostatic pressure.

The Wasilla Water System serves approximately 10,099 non-transient and 7,773 residents through 1,338 approved service connections as of 2008.

#### WASILLA WATER SYSTEM – EAST SUSITNA WELL DRINKING WATER PROTECTION AREA

The pathways most likely for surface contamination to reach the groundwater are identified as the first step in determining a drinking water system's risk. 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 drinking water protection area. The drinking water protection area is the area circling the well (the area influenced by pumping) and also the area upgradient of the well, usually forming a parabola shape. Because releases of contaminants within the protection area are most likely to impact the well, this area will serve as the focus for voluntary protection efforts.

There are many different methods for calculating the size of protection areas. Drinking Water Protection (DWP) uses a combination of two simple groundwater flow equations, the Thiem and uniform flow equations for all groundwater wells screened in unconsolidated material. The orientation of the protection zone is then drawn using a water table elevation map (if available) or a land surface elevation map of the area. The protection zone calculated by the DWP is an estimate using the available information and resources, and may differ slightly from the actual capture zone. Because of uncertainties and changing site conditions, a factor of safety is added to the protection zone to form the drinking water protection area for the well.

The parameters used to calculate the shape of this protection area are general for the Matanuska-Susitna lowlands and were obtained from various United States Geological Survey (USGS) reports, area well logs, and the Groundwater textbook by Freeze and Cherry (1979).

The drinking water protection areas (DWPAs) established for wells by the DEC are usually separated into two 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 protection area. The input parameters describing the attributes of the aquifer in this calculation were adopted from the State of Alaska Department of Water Resources (*Jokela et. al.*, 1991).

The confined aquifer levels in the area of the Wasilla Water System – East Susitna Well water system are not well-understood, but are likely primarily influenced by regional recharge from the Talkeetna Mountains and the Matanuska River valley. The protection areas were drawn based on the regional topography. Groundwater in the confined aquifer of this area likely generally flows west to south.

Because of uncertainties and changing site conditions, a factor of safety is added to the drinking water protection area for the well.

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 two protection area zones for wells and the calculated time-of-travel for each:

#### Table 1. Definition of Zones

Zone	Definition
А	Several months time-of-travel
В	Less than the 2 year time-of-travel

The DWPA for the Wasilla Water System – East Susitna Well found on Map 1 of Appendix A will serve as the focus for voluntary protection efforts.

# INVENTORY OF POTENTIAL AND EXISTING CONTAMINANT SOURCES

Drinking Water Protection (DWP) has completed an inventory of potential and existing sources of contamination within the Wasilla Water System – East Susitna Well 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 Community public water system assessments, the following six categories of drinking water contaminants were inventoried:

- 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 Map 2 of 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 each 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 combination of toxicity and volume associated with that source. Rankings include:

- Low
- Medium
- High
- Very High

The time-of-travel for contaminants within the water varies and is dependent on the physical and chemical characteristics of each contaminant.

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

#### VULNERABILITY OF WASILLA WATER SYSTEM – EAST SUSITNA WELL PUBLIC DRINKING WATER SYSTEM

The vulnerability of public drinking water systems to regulated contaminants is determined by assessing the susceptibility of the wellhead, the susceptibility of the aquifer and the potential contaminant sources identified within the DWPA.

Drinking Water Protection staff developed a vulnerability assessment tool that assigns a vulnerability risk ranking based upon various factors associated with the well, aquifer and potential and existing contaminants identified within the DWPA.

Factors contributing to the susceptibility of the wellhead are: whether the sanitary seal in place, protection from flooding, and if the well casing is properly grouted.

The wellhead for the Wasilla Water System – East Susitna Well received a **Low** susceptibility rating. The well is capped with a sanitary seal, the land surface is sloped away from the well, and the well is properly grouted. A sanitary seal prevents potential contaminants from entering the well while sloping of the land surface and grouting help to prevent potential contaminants from traveling down the outside of the well casing.

Factors contributing to the susceptibility of the aquifer are: whether the aquifer is confined or unconfined, whether the well is completed in unconsolidated or fractured bedrock, whether other wells and bore holes are penetrating the aquifer and, if applicable, and the characteristics of the confining layer.

The aquifer that the Wasilla Water System – East Susitna Well is completed in received a **Medium** susceptibility rating. The aquifer is confined by approximately one-hundred-forty (140) cumulative feet of confining layers (silty, sandy gravel). Confining layers may help inhibit transport of contaminants to the aquifer. There are several wells penetrating the vadose zone in the protection area. The presence of other wells penetrating the vadose zone of the protection area can allow contaminants to travel into the shared aquifer with precipitation and runoff.

Table 2 summarizes the susceptibility scores and ratings for Wasilla Water System – East Susitna Well.

#### Table 2. Susceptibility

	Rating	
Susceptibility of the	Low	
Wellhead		
Susceptibility of the	Low	
Aquifer		
Natural Susceptibility	Low	

The Contaminant Risk was derived from an evaluation of the routine sampling results of the water system and the presence of potential sources of contamination. Contaminant risks to a drinking water source depend on the type and distribution of contaminant sources.

Table 3 summarizes the Contaminant Risks for each category of drinking water contaminants.

#### Table 3. Contaminant Risks

Category	Rating
Bacteria and Viruses	Very High
Nitrates and/or Nitrites	Very High
Volatile Organic Chemicals	Very High
Heavy Metals, Cyanide, and	
Other Inorganic Chemicals	Very High
Synthetic Organic Chemicals	High
Other Organic Chemicals	Very High

Finally, an overall vulnerability is determined for each water system by combining each of the contaminant risk scores with the natural susceptibility score:

Natural Susceptibility + Contaminant Risks =

Vulnerability of the Drinking Water Source to Contamination

Table 4 contains the overall ratings for each of the six categories of drinking water contaminants.

### Table 4. Overall Vulnerability

Category	Rating
Bacteria and Viruses	Medium
Nitrates and Nitrites	Medium
Volatile Organic Chemicals	Medium
Heavy Metals, Cyanide, and	
Other Inorganic Chemicals	Medium
Synthetic Organic Chemicals	Low
Other Organic Chemicals	Medium

#### **Bacteria and Viruses**

The large-capacity septic systems, sewer lines and medical facilities in the protection area represent the greatest risk for bacteria and viruses to the drinking water well.

Only a small amount of bacteria and viruses are required to endanger public health. Coliform bacteria are found naturally in the environment and although they aren't necessarily a health threat, it is an indicator of other potentially harmful bacteria in the water, more specifically, fecal coliform bacteria and E. coli which only come from human and animal fecal waste (EPA, 2002). Harmful bacteria can cause diarrhea, cramps, nausea, headaches, or other symptoms (EPA, 2002). No total coliform or fecal coliform have been detected for this well. After combining the contaminant risk for bacteria and viruses with the natural susceptibility of the well, the overall vulnerability of the well to contamination is **Medium**.

#### **Nitrates and Nitrites**

The large-capacity septic systems and sewer lines in the protection area and natural sources represent the greatest risk for nitrates and nitrites to this source of public drinking water.

Nitrates are very mobile, moving at approximately the same rate as water. Sampling history for the Wasilla Waster System – East Susitna Well indicates that low concentrations of have been detected. On 05/04/2010, 0.320 mg/L of nitrate and/or nitrite was detected. This is 3% of the Maximum Contaminant Level (MCL) of 10 mg/L. The MCL is the maximum contaminant level

of contaminant that is allowed to exist in drinking water and still be consumed by humans. Nitrate concentrations in uncontaminated groundwater are typically less than 2 milligrams per liter (mg/L) and are derived primarily from the decomposition of organic matter in soils (Wang, Strelakos, Jokela, 2000). The levels detected are very low and are considered safe to drink.

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**

A dry cleaner, printers/publishers, gasoline stations, motor vehicle disposal wells, underground diesel tanks, and contaminated sites represent the greatest risk for volatile organic chemicals (VOCs) to the well.

VOCs have not been detected within 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 **Medium**.

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

Motor vehicle waste disposal wells and junk or salvage yards in the protection area and natural sources represent the greatest risk for inorganic chemicals to the well.

Heavy metals and other inorganic chemicals were collected on 07/21/2010. Barium, chromium and thallium were detected well below their respective maximum contaminant levels (MCLs). Arsenic was detected at 71% of the MCL (7.1 µg/L). Arsenic has no man-made source in this area and is presumed to be naturally occurring.

After combining the contaminant risk for heavy metals, cyanide and other inorganic chemicals with the natural susceptibility of the well, the overall vulnerability of the well to contamination is **Medium**.

#### Synthetic Organic Chemicals

The railroad corridors and junk yard represent the greatest risk for synthetic organic chemicals (SOCs) to the well.

Wasilla Water System – East Susitna Well has not sampled for synthetic organic chemicals. After combining the contaminant risk for SOCs with the natural susceptibility of the well, the overall vulnerability of the well to contamination is **Low**.

#### **Other Organic Chemicals**

The motor vehicle repair shops and its disposal wells, salvage or junk yard and bus maintenance failities

represent the greatest risk for other organic chemicals (OOCs) to the well.

OOCs have not been sampled from this well. After combining the contaminant risk for OOCs with the natural susceptibility of the well, the overall vulnerability of the well to contamination is **Medium**.

#### Using the Source Water Assessment

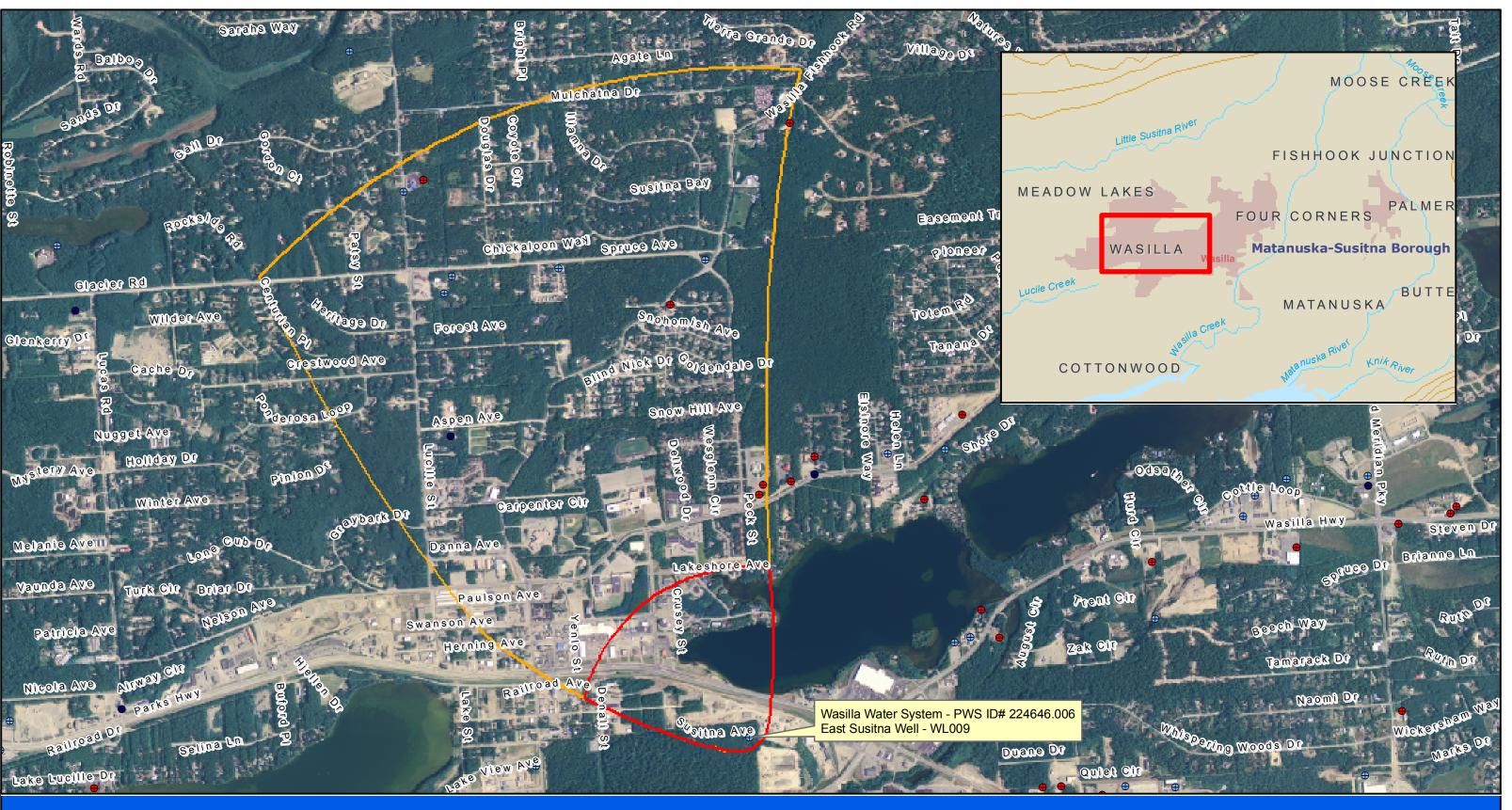
This assessment of contaminant risks can be used as a foundation for local voluntary protection efforts as well as a basis for the continuous efforts on the part of Wasilla Water System – East Susitna Well to protect public health. It is anticipated that Source Water Assessments will be updated every five years to reflect any changes in the vulnerability and/or susceptibility of the Wasilla Water System – East Susitna Well drinking water source.

### REFERENCES

- Community Information Summaries Wasilla, Retrieved on February 16, 2011 from the Alaska Division of Community and Regional Affairs: URL <a href="http://www.commerce.state.ak.us/dca/commdb/CF\_CIS.htm">http://www.commerce.state.ak.us/dca/commdb/CF\_CIS.htm</a>
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- Drinking Water Contaminants, Retrieved on February 16, 2011 from the United States Environmental Protection Agency: URL <u>http://www.epa.gov/safewater/contaminants/index.html</u>

# **APPENDIX A**

# Wasilla Water System – East Susitna Well Drinking Water Protection Area Location Map (Map 1)



# Map 1 - Wasilla Water System - East Susitna Well







1:18,000 Inset: 1:250,000

### Public Water Systems

Class B Water Systems (TNC)

# PWS ID# 224646.006

#### **Drinking Water Protections Areas** 1,000-foot buffer from shoreline of source and its tributaries for surface sources

Class A Water Systems (C/NTNC)

#### Class C Water Systems (State Regula

Immediate watershed for shallow groundwater sources completed in fractured bedrock 1,000-foot radial distance for unclassified spring sources. 1-mile buffer from shoreline of source and its tributaries for surface sources Adjacent watershed for deep groundwater sources completed in fractured bedrock 1-mile radial distance for unclassified spring sources.

Roads (large scale)

# **APPENDIX B**

# Contaminant Source Inventory and Risk Ranking for Wasilla Water System – East Susitna Well (Tables 1-7)

# Contaminant Source Inventory for WASILLA WATER SYSTEM - East Susitna Well

Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Map Number	Comments
Dry cleaners	C10	C10-01	А	2	Wasilla Wash Day Laundry & Dry@ 745 Westpoint Dr., Wasilla, AK 99654.
Florists	C12	C12-01	А	2	Floral Expressions by Carrs @ 595 E Parks Hwy, Wasilla, AK 99654.
Hardware stores	C17	C17-01	А	2	Alaska Rubber & Supply @ 651 E Railroad Ave., Wasilla, AK 99654.
Motor/motor vehicle supplies stores	C28	C28-01	А	2	NAPA Auto Parts @ 791 Westpoint Dr., Wasilla, AK 99654.
Motor /motor vehicle repair shops	C31	C31-01	А	2	Alaska Rubber & Supply @ 651 Railroad Ave., Wasilla, AK 99654.
Motor /motor vehicle repair shops	C31	C31-02	А	2	Don's Auto & Radiator @ 440 Denali St., Wasilla, AK 99654. Past Producer, current business at this location is North Country Builders of Alaska, Inc.
Motor /motor vehicle repair shops	C31	C31-03	А	2	Mida's Auto Systems Experts @ 101 N Crusey St., Wasilla, AK 99654.
Motor /motor vehicle repair shops	C31	C31-04	А	2	Mr Lube @ 721 Westpoint Dr., Wasilla, AK 99654.
Pharmacies (with on-site wastewater disposal)	C35	C35-01	А	2	Various medical and dental offices at this address.
Printers, publishers, copiers	C37	C37-01	А	2	L & B Color Printing @ 590 E Railroad Ave., Wasilla, AK 99654.
Welding shops	C43	C43-01	А	2	Alaska Rubber & Supply @ 651 E Railroad Ave., Wasilla, AK 99654.
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D01-01-11	А	2	Identified 11 sewerlines (main) in Zone A.
Residential Areas	R01	R01	А	2	Approximately 1 acre of residential area within Zone A.
Septic systems (serves one single-family home)	R02	R02-01	А	2	
Highways and roads, paved (cement or asphalt)	X20	X20-01-18	А	2	Identified 18 roads in Zone A.
Rail corridors	X30	X30-01	А	2	Alaska Railroads.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-01	А	2	Various medical offices in this building @ 701 E Parks Hwy #209, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-02	А	2	Medical office building @ 935 Westpoint Dr., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-03	А	2	Lakeview Prof Bldg - various medical offices in the building @ 851 Westpoint Dr., Wasilla, AK 99654.
Body shops (automotive)	C05	C05-01	В	2	Flag Circle Auto Body @ 2001 Wasilla Fishhook Rd., Wasilla, AK 99654.
Construction trade areas and materials	C09	C09-01	В	2	Taylored Restoration @ 276 E Danna Ave., Wasilla, AK 99654.
Florists	C12	C12-02	В	2	Flowers by Louise @ 290 Yenlo St., Wasilla, AK 99654.

Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Map Number	Comments
Gasoline stations (without repair shop)	C15	C15-01	В	2	Mapco - Express #5005 @ 491 E Parks Hwy, Wasilla, AK 99654. Past Producer.
Gasoline stations (without repair shop)	C15	C15-02	В	2	Tesoro Alaska Company @ 211 Main St., Wasilla, AK 99654.
Gasoline stations (with repair shop)	C16	C16-01	В	2	Holiday Stationstore @ 225 N Boundary St., Wasilla, AK 99654.
Jewelers	C19	C19-01	В	2	Alaskan Gold Rush Jewelers @ 212 N Boundary St., Wasilla, AK 99654.
Motor /motor vehicle repair shops	C31	C31-05	В	2	E & E Automotive Repair @ 2300 Wasilla Fishhook Rd., Wasilla, AK 99654. Business at this location is now called Fishhook Tire & Auto.
Pharmacies (with on-site wastewater disposal)	C35	C35-02	В	2	MyDoktor's Pharmacy @ 950 Bogard Rd., Wasilla, AK 99654
Printers, publishers, copiers	C37	C37-02	В	2	PostNet @ 490 N Main St., Wasilla, AK 99654
Welding shops	C43	C43-02	В	2	Motor Kool Radiator Svc. @ 1051 Lucille St., Wasilla, AK 99654.
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D01-12-26	В	2	Identified 15 sewerlines (main) in Zone B.
Injection wells (Class V) Large-Capacity Septic System (Drainfield Disposal Method)	D10	D10-01-132	В	2	Identified 132 Drainfield Septic Systems in Zone B.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-01	В	2	E & E Automotive Repair (now called Fishhook Tire & Auto) @ 2300 Wasilla Fishhook Rd., Wasilla, AK 99654.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-02	В	2	Motor kool Radiator Svc. @ 1051 Lucille St., Wasilla, AK 99654.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-03	В	2	Flag Circle Auto Body @ 2001 Wasilla Fishhook Rd., Wasilla, AK 99654.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-04	В	2	Durgeloh's Truck & Salvage @ 2200 N Wasilla-Fishhook Rd., Wasilla, AK 99654.
Recycling and waste reduction facilities	D57	D57-01	В	2	Durgeloh's Truck Salvage @ 2200 Wasilla Fishhook Rd., Wasilla, AK 99654.
Scrap, salvage, or junk yards	D59	D59-01	В	2	Durgeloh's Truck Salvage @ 2200 N Wasilla-Fishhook Rd., Wasilla, AK 99654 (North of Wasilla-Fishhook Rd.) Hundreds of junk cars in yard.
Residential Areas	R01	R01	В	2	Approximately 606 acreas of residential area within Zone B.
Septic systems (serves one single-family home)	R02	R02-02-379	В	2	Identified 378 Drainfield Septic Systems in Zone B.
Tanks, diesel (underground)	T08	T08-01	В	2	Holiday Stationstore @ 225 N Boundary St, Wasilla, AK 99654
Tanks, diesel (underground)	T08	T08-02	В	2	Tesoro Alaska Company @ 211 Main St., Wasilla, AK 99654
Tanks, gasoline (underground)	T12	T12-01	В	2	Holiday Stationstore @ 225 N Boundary St., Wasilla, AK 99654.
Tanks, gasoline (underground)	T12	T12-02	В	2	Holiday Stationstore @ 225 N Boundary St., Wasilla, AK 99654.
Tanks, gasoline (underground)	T12	T12-03	В	2	Tesoro Food Mart Northstore #12 @ 211 N main St., Wasilla, AK 99654.
Tanks, gasoline (underground)	T12	T12-04	В	2	Tesoro Food Mart Northstore #12 @ 211 N Main St., Wasilla, AK 99654.

Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Map Number	Comments
Tanks, gasoline (underground)	T12	T12-05	В	2	Tesoro Food Mart Northstore #12 @ 211 N Main St., Wasilla, AK 99654.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-01	В	2	Hazard ID# 955. Lot 2, Iditaway Park Subdivision. Status: Cleanup Complete. Contaminant: TPH. Heating oil tank leaked unknown amount of fuel to soils.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-02	В	2	Hazard ID# 962. Wasilla City - Dorothy Page Museum. Status: Cleanup Complete. Contaminant: TPH. During excavation of UST, some contaminated soils were encountered.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-03	В	2	Hazard ID# 3027. Children's House. Status: Active. Contaminant: DRO. CSP ETM: Future Exposure as of 12/25/2008.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-04	В	2	Valley Hydraulics @ 651 Railroad Avenue, Wasilla, AK 99654. Petroluem products.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-05	В	2	MEA Herning Substation @ 600 E Susitna Drive, Wasilla, AK. Transformer oil release during repair work to a substation. Soil samples recovered by MEA and results pending. Contamination excavated except under the transformer pad.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-01	В	2	Wasilla Refuse Inc. Shop, Hazard ID# 23434. CSP ETM Initial Ranking for Groundwater Ingestion is HIGH POTENTIAL EXPOSURE as of 12/13/2006.
Closed Leaking Underground Fuel Storage Tank (LUST) Sites	U08	U08-01	В	2	Hazard ID# 23263. Wasilla Public Safety Building. Status: Cleanup Complete. Contaminant: Petroleum.
Closed Leaking Underground Fuel Storage Tank (LUST) Sites	U08	U08-02	В	2	Hazard ID# 23305. Holiday Station Store #605 - former Williams Express Store #5005. Status: Cleanup Complete - Institutional Controls. CSP ETM: Future Exposure to De Minimis Exposure.
Closed Leaking Underground Fuel Storage Tank (LUST) Sites	U08	U08-03	В	2	Hazard ID# 23103. Tesoro Northstore #12. Status: Cleanup Complete. Contaminant: DRO and GRO. CSP ETM: Pathway Incomplete as of 08/21/2009.
Closed Leaking Underground Fuel Storage Tank (LUST) Sites	U08	U08-04	В	2	Hazard ID# 23470. Williams Express Store #5005. Status: Cleanup Complete. Quarterly GW monitoring sampling underway.
Closed Leaking Underground Fuel Storage Tank (LUST) Sites	U08	U08-05	В	2	Hazard ID# 23623. Tundra Tours - Wasilla Bus Barn. Status: Active. Contaminated soils discovered during excavation of diesel and gasoline USTs. ETM on hold as there is not enough info for CSP to give meaningful ranking.
Closed Leaking Underground Fuel Storage Tank (LUST) Sites	U08	U08-06	В	2	Valley Country Store II @ 1101 Bogard Rd., Wasilla, AK 99654, Hazard ID# 23625. Status: Cleanup Complete. Contaminants of concern are Gasoline, Benzene and BTEX.
Bus maintenance facilities	X16	X16-01	В	2	Buckeye Transit @ 2001 Wasilla Fishhook Rd., Wasilla, AK 99654.
Bus maintenance facilities	X16	X16-02	В	2	Laidlaw Transit Inc. @ 276 Danna Ave., Wasilla, AK 99654.
Highways and roads, paved (cement or asphalt)	X20	X20-19-105	В	2	Identified 105 roads in Zone B.
Motor vehicle/general storage yards/facilities	X27	X27-01	В	2	Wasilla Business Park -Storage @ 190 Paulson Ave. #4, Wasilla, AK 99654.
Rail corridors	X30	X30-02	В	2	Alaska Railroads.
Firehouses	X38	X38-01	В	2	Wasilla-Lakes Fire Department @ 401 E herning Ave., Wasilla, AK 99654.

Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Map Number	Comments
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-04	В	2	Valley Hospital @ 950 E Bogard Rd., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-05	В	2	Alpha Counseling & Education @ 500 N Main St. #B, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-06	В	2	Gianopoulos Steven G DDS @ 500 N Main St. #G, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-07	В	2	Alaska Center for Dentistry @ 418 N Main St., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-08	В	2	Alaskan Family Dental Ctr. @ 281 N main St. #201, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-09	В	2	Life Quest Comprehensive Svc @ 230 Paulson Ave., #68, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-10	В	2	Godnig Edward OD @ 390 N Main St., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-11	В	2	Matanuska Health Care Assoc. @ 291 E Swanson Ave #100, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-12	В	2	Neighbor to Neighbor Health @ 201 E Swanson Ave. #15, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-13	В	2	Valley Chiropractic Clinic @ 400 N Main St., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-14	В	2	Medical Office Building @ 950 Bogard Rd., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-15	В	2	Valley Medical Supply @ 281 N Main St., #101, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-16	В	2	Medical Office Building @ 951 Bogard Rd. Wasilla, AK 99654.
Swimming pools (public)	X44	X44-01	В	2	Wasilla High School Pool @ 701 Bogard Rd., Wasilla, AK 99654.

Table 2

# Contaminant Source Inventory and Risk Ranking for WASILLA WATER SYSTEM - East Susitna Well

### PWSID 224646.006

# Sources of Bacteria and Viruses

Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Risk Ranking for Analysis	Map Number	Comments
Dry cleaners	C10	C10-01	А	Low	2	Wasilla Wash Day Laundry & Dry@ 745 Westpoint Dr., Wasilla, AK 99654.
Pharmacies (with on-site wastewater disposal)	C35	C35-01	А	Low	2	Various medical and dental offices at this address.
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D01-01-11	А	Medium	2	Identified 11 sewerlines (main) in Zone A.
Residential Areas	R01	R01	А	Low	2	Approximately 1 acre of residential area within Zone A.
Septic systems (serves one single-family home)	R02	R02-01	А	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-01-18	А	Low	2	Identified 18 roads in Zone A.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-01	А	Medium	2	Various medical offices in this building @ 701 E Parks Hwy #209, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-02	А	Medium	2	Medical office building @ 935 Westpoint Dr., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-03	А	Medium	2	Lakeview Prof Bldg - various medical offices in the building @ 851 Westpoint Dr., Wasilla, AK 99654.
Pharmacies (with on-site wastewater disposal)	C35	C35-02	В	Low	2	MyDoktor's Pharmacy @ 950 Bogard Rd., Wasilla, AK 99654
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D01-12-26	В	Medium	2	Identified 15 sewerlines (main) in Zone B.
Injection wells (Class V) Large-Capacity Septic System (Drainfield Disposal Method)	D10	D10-01-132	В	High	2	Identified 132 Drainfield Septic Systems in Zone B.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-01	В	Low	2	E & E Automotive Repair (now called Fishhook Tire & Auto) @ 2300 Wasilla Fishhook Rd.,Wasilla, AK 99654.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-02	В	Low	2	Motor kool Radiator Svc. @ 1051 Lucille St., Wasilla, AK 99654.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-03	В	Low	2	Flag Circle Auto Body @ 2001 Wasilla Fishhook Rd., Wasilla, AK 99654.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-04	В	Low	2	Durgeloh's Truck & Salvage @ 2200 N Wasilla-Fishhook Rd., Wasilla, AK 99654.
Residential Areas	R01	R01	В	Low	2	Approximately 606 acreas of residential area within Zone B.

# Contaminant Source Inventory and Risk Ranking for WASILLA WATER SYSTEM - East Susitna Well

#### PWSID 224646.006

# Sources of Bacteria and Viruses

Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Risk Ranking for Analysis	Map Number	Comments
Septic systems (serves one single-family home)	R02	R02-02-379	В	Low	2	Identified 378 Drainfield Septic Systems in Zone B.
Highways and roads, paved (cement or asphalt)	X20	X20-19-105	В	Low	2	Identified 105 roads in Zone B.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-04	В	Medium	2	Valley Hospital @ 950 E Bogard Rd., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-05	В	Medium	2	Alpha Counseling & Education @ 500 N Main St. #B, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-06	В	Medium	2	Gianopoulos Steven G DDS @ 500 N Main St. #G, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-07	В	Medium	2	Alaska Center for Dentistry @ 418 N Main St., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-08	В	Medium	2	Alaskan Family Dental Ctr. @ 281 N main St. #201, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-09	В	Medium	2	Life Quest Comprehensive Svc @ 230 Paulson Ave., #68, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-10	В	Medium	2	Godnig Edward OD @ 390 N Main St., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-11	В	Medium	2	Matanuska Health Care Assoc. @ 291 E Swanson Ave #100, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-12	В	Medium	2	Neighbor to Neighbor Health @ 201 E Swanson Ave. #15, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-13	В	Medium	2	Valley Chiropractic Clinic @ 400 N Main St., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-14	В	Medium	2	Medical Office Building @ 950 Bogard Rd., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-15	В	Medium	2	Valley Medical Supply @ 281 N Main St., #101, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-16	В	Medium	2	Medical Office Building @ 951 Bogard Rd. Wasilla, AK 99654.

Table 3

# Contaminant Source Inventory and Risk Ranking for WASILLA WATER SYSTEM - East Susitna Well

### PWSID 224646.006

# Sources of Nitrates/Nitrites

Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Risk Ranking for Analysis	Map Number	Comments
Dry cleaners	C10	C10-01	А	Low	2	Wasilla Wash Day Laundry & Dry@ 745 Westpoint Dr., Wasilla, AK 99654.
Florists	C12	C12-01	А	Low	2	Floral Expressions by Carrs @ 595 E Parks Hwy, Wasilla, AK 99654.
Hardware stores	C17	C17-01	А	Low	2	Alaska Rubber & Supply @ 651 E Railroad Ave., Wasilla, AK 99654.
Pharmacies (with on-site wastewater disposal)	C35	C35-01	А	Low	2	Various medical and dental offices at this address.
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D01-01-11	А	Medium	2	Identified 11 sewerlines (main) in Zone A.
Residential Areas	R01	R01	А	Low	2	Approximately 1 acre of residential area within Zone A.
Septic systems (serves one single-family home)	R02	R02-01	А	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-01-18	А	Low	2	Identified 18 roads in Zone A.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-01	А	Low	2	Various medical offices in this building @ 701 E Parks Hwy #209, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-02	А	Low	2	Medical office building @ 935 Westpoint Dr., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-03	А	Low	2	Lakeview Prof Bldg - various medical offices in the building @ 851 Westpoint Dr., Wasilla, AK 99654.
Florists	C12	C12-02	В	Low	2	Flowers by Louise @ 290 Yenlo St., Wasilla, AK 99654.
Pharmacies (with on-site wastewater disposal)	C35	C35-02	В	Low	2	MyDoktor's Pharmacy @ 950 Bogard Rd., Wasilla, AK 99654
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D01-12-26	В	Medium	2	Identified 15 sewerlines (main) in Zone B.
Injection wells (Class V) Large-Capacity Septic System (Drainfield Disposal Method)	D10	D10-01-132	В	High	2	Identified 132 Drainfield Septic Systems in Zone B.
Residential Areas	R01	R01	В	Low	2	Approximately 606 acreas of residential area within Zone B.
Septic systems (serves one single-family home)	R02	R02-02-379	В	Low	2	Identified 378 Drainfield Septic Systems in Zone B.
Highways and roads, paved (cement or asphalt)	X20	X20-19-105	В	Low	2	Identified 105 roads in Zone B.

# Contaminant Source Inventory and Risk Ranking for WASILLA WATER SYSTEM - East Susitna Well

#### PWSID 224646.006

# Sources of Nitrates/Nitrites

Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Risk Ranking for Analysis	Map Number	Comments
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-04	В	Low	2	Valley Hospital @ 950 E Bogard Rd., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-05	В	Low	2	Alpha Counseling & Education @ 500 N Main St. #B, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-06	В	Low	2	Gianopoulos Steven G DDS @ 500 N Main St. #G, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-07	В	Low	2	Alaska Center for Dentistry @ 418 N Main St., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-08	В	Low	2	Alaskan Family Dental Ctr. @ 281 N main St. #201, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-09	В	Low	2	Life Quest Comprehensive Svc @ 230 Paulson Ave., #68, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-10	В	Low	2	Godnig Edward OD @ 390 N Main St., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-11	В	Low	2	Matanuska Health Care Assoc. @ 291 E Swanson Ave #100, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-12	В	Low	2	Neighbor to Neighbor Health @ 201 E Swanson Ave. #15, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-13	В	Low	2	Valley Chiropractic Clinic @ 400 N Main St., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-14	В	Low	2	Medical Office Building @ 950 Bogard Rd., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-15	В	Low	2	Valley Medical Supply @ 281 N Main St., #101, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-16	В	Low	2	Medical Office Building @ 951 Bogard Rd. Wasilla, AK 99654.

Table 4

# Contaminant Source Inventory and Risk Ranking for WASILLA WATER SYSTEM - East Susitna Well Sources of Volatile Organic Chemicals

Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Risk Ranking for Analysis	Map Number	Comments
Dry cleaners	C10	C10-01	А	High	2	Wasilla Wash Day Laundry & Dry@ 745 Westpoint Dr., Wasilla, AK 99654.
Hardware stores	C17	C17-01	А	Low	2	Alaska Rubber & Supply @ 651 E Railroad Ave., Wasilla, AK 99654.
Motor/motor vehicle supplies stores	C28	C28-01	А	Low	2	NAPA Auto Parts @ 791 Westpoint Dr., Wasilla, AK 99654.
Motor /motor vehicle repair shops	C31	C31-01	А	Medium	2	Alaska Rubber & Supply @ 651 Railroad Ave., Wasilla, AK 99654.
Motor /motor vehicle repair shops	C31	C31-02	А	Medium	2	Don's Auto & Radiator @ 440 Denali St., Wasilla, AK 99654. Past Producer, current business at this location is North Country Builders of Alaska, Inc.
Motor /motor vehicle repair shops	C31	C31-03	А	Medium	2	Mida's Auto Systems Experts @ 101 N Crusey St., Wasilla, AK 99654.
Motor /motor vehicle repair shops	C31	C31-04	А	Medium	2	Mr Lube @ 721 Westpoint Dr., Wasilla, AK 99654.
Printers, publishers, copiers	C37	C37-01	А	High	2	L & B Color Printing @ 590 E Railroad Ave., Wasilla, AK 99654.
Welding shops	C43	C43-01	А	Medium	2	Alaska Rubber & Supply @ 651 E Railroad Ave., Wasilla, AK 99654.
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D01-01-11	А	Low	2	Identified 11 sewerlines (main) in Zone A.
Residential Areas	R01	R01	А	Low	2	Approximately 1 acre of residential area within Zone A.
Septic systems (serves one single-family home)	R02	R02-01	А	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-01-18	А	Low	2	Identified 18 roads in Zone A.
Rail corridors	X30	X30-01	А	Medium	2	Alaska Railroads.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-01	А	Low	2	Various medical offices in this building @ 701 E Parks Hwy #209, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-02	А	Low	2	Medical office building @ 935 Westpoint Dr., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-03	А	Low	2	Lakeview Prof Bldg - various medical offices in the building @ 851 Westpoint Dr., Wasilla, AK 99654.
Body shops (automotive)	C05	C05-01	В	Medium	2	Flag Circle Auto Body @ 2001 Wasilla Fishhook Rd., Wasilla, AK 99654.

# Contaminant Source Inventory and Risk Ranking for WASILLA WATER SYSTEM - East Susitna Well Sources of Volatile Organic Chemicals

Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Risk Ranking for Analysis	Map Number	Comments
Construction trade areas and materials	C09	C09-01	В	Low	2	Taylored Restoration @ 276 E Danna Ave., Wasilla, AK 99654.
Gasoline stations (without repair shop)	C15	C15-01	В	High	2	Mapco - Express #5005 @ 491 E Parks Hwy, Wasilla, AK 99654. Past Producer.
Gasoline stations (without repair shop)	C15	C15-02	В	High	2	Tesoro Alaska Company @ 211 Main St., Wasilla, AK 99654.
Gasoline stations (with repair shop)	C16	C16-01	В	High	2	Holiday Stationstore @ 225 N Boundary St., Wasilla, AK 99654.
Jewelers	C19	C19-01	В	Low	2	Alaskan Gold Rush Jewelers @ 212 N Boundary St., Wasilla, AK 99654.
Motor /motor vehicle repair shops	C31	C31-05	В	Medium	2	E & E Automotive Repair @ 2300 Wasilla Fishhook Rd., Wasilla, AK 99654. Business at this location is now called Fishhook Tire & Auto.
Printers, publishers, copiers	C37	C37-02	В	High	2	PostNet @ 490 N Main St., Wasilla, AK 99654
Welding shops	C43	C43-02	В	Medium	2	Motor Kool Radiator Svc. @ 1051 Lucille St., Wasilla, AK 99654.
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D01-12-26	В	Low	2	Identified 15 sewerlines (main) in Zone B.
Injection wells (Class V) Large-Capacity Septic System (Drainfield Disposal Method)	D10	D10-01-132	В	Low	2	Identified 132 Drainfield Septic Systems in Zone B.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-01	В	High	2	E & E Automotive Repair (now called Fishhook Tire & Auto) @ 2300 Wasilla Fishhook Rd., Wasilla, AK 99654.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-02	В	High	2	Motor kool Radiator Svc. @ 1051 Lucille St., Wasilla, AK 99654.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-03	В	High	2	Flag Circle Auto Body @ 2001 Wasilla Fishhook Rd., Wasilla, AK 99654.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-04	В	High	2	Durgeloh's Truck & Salvage @ 2200 N Wasilla-Fishhook Rd., Wasilla, AK 99654.
Scrap, salvage, or junk yards	D59	D59-01	В	Low	2	Durgeloh's Truck Salvage @ 2200 N Wasilla-Fishhook Rd., Wasilla, AK 99654 (North of Wasilla-Fishhook Rd.) Hundreds of junk cars in yard.
Residential Areas	R01	R01	В	Low	2	Approximately 606 acreas of residential area within Zone B.
Septic systems (serves one single-family home)	R02	R02-02-379	В	Low	2	Identified 378 Drainfield Septic Systems in Zone B.

# Contaminant Source Inventory and Risk Ranking for WASILLA WATER SYSTEM - East Susitna Well Sources of Volatile Organic Chemicals

Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Risk Ranking for Analysis	Map Number	Comments
Tanks, diesel (underground)	T08	T08-01	В	High	2	Holiday Stationstore @ 225 N Boundary St, Wasilla, AK 99654
Tanks, diesel (underground)	T08	T08-02	В	High	2	Tesoro Alaska Company @ 211 Main St., Wasilla, AK 99654
Tanks, gasoline (underground)	T12	T12-01	В	High	2	Holiday Stationstore @ 225 N Boundary St., Wasilla, AK 99654.
Tanks, gasoline (underground)	T12	T12-02	В	High	2	Holiday Stationstore @ 225 N Boundary St., Wasilla, AK 99654.
Tanks, gasoline (underground)	T12	T12-03	В	High	2	Tesoro Food Mart Northstore #12 @ 211 N main St., Wasilla, AK 99654.
Tanks, gasoline (underground)	T12	T12-04	В	High	2	Tesoro Food Mart Northstore #12 @ 211 N Main St., Wasilla, AK 99654.
Tanks, gasoline (underground)	T12	T12-05	В	High	2	Tesoro Food Mart Northstore #12 @ 211 N Main St., Wasilla, AK 99654.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-01	В	Low	2	Hazard ID# 955. Lot 2, Iditaway Park Subdivision. Status: Cleanup Complete. Contaminant: TPH. Heating oil tank leaked unknown amount of fuel to soils.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-02	В	Low	2	Hazard ID# 962. Wasilla City - Dorothy Page Museum. Status: Cleanup Complete. Contaminant: TPH. During excavation of UST, some contaminated soils were encountered.
Contaminated sites, DEC recognized, non- Superfund, non-RCRA	U04	U04-03	В	High	2	Hazard ID# 3027. Children's House. Status: Active. Contaminant: DRO. CSP ETM: Future Exposure as of 12/25/2008.
Contaminated sites, DEC recognized, non- Superfund, non-RCRA	U04	U04-04	В	Low	2	Valley Hydraulics @ 651 Railroad Avenue, Wasilla, AK 99654. Petroluem products.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-05	В	Low	2	MEA Herning Substation @ 600 E Susitna Drive, Wasilla, AK. Transformer oil release during repair work to a substation. Soil samples recovered by MEA and results pending. Contamination excavated except under the transformer pad.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-01	В	Very High	2	Wasilla Refuse Inc. Shop, Hazard ID# 23434. CSP ETM Initial Ranking for Groundwater Ingestion is HIGH POTENTIAL EXPOSURE as of 12/13/2006.
Closed Leaking Underground Fuel Storage Tank (LUST) Sites	U08	U08-01	В	Low	2	Hazard ID# 23263. Wasilla Public Safety Building. Status: Cleanup Complete. Contaminant: Petroleum.
Closed Leaking Underground Fuel Storage Tank (LUST) Sites	U08	U08-02	В	Low	2	Hazard ID# 23305. Holiday Station Store #605 - former Williams Express Store #5005. Status: Cleanup Complete - Institutional Controls. CSP ETM: Future Exposure to De Minimis Exposure.

# Contaminant Source Inventory and Risk Ranking for WASILLA WATER SYSTEM - East Susitna Well Sources of Volatile Organic Chemicals

Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Risk Ranking for Analysis	Map Number	Comments
Closed Leaking Underground Fuel Storage Tank (LUST) Sites	U08	U08-03	В	Low	2	Hazard ID# 23103. Tesoro Northstore #12. Status: Cleanup Complete. Contaminant: DRO and GRO. CSP ETM: Pathway Incomplete as of 08/21/2009.
Closed Leaking Underground Fuel Storage Tank (LUST) Sites	U08	U08-04	В	Low	2	Hazard ID# 23470. Williams Express Store #5005. Status: Cleanup Complete. Quarterly GW monitoring sampling underway.
Closed Leaking Underground Fuel Storage Tank (LUST) Sites	U08	U08-05	В	Medium	2	Hazard ID# 23623. Tundra Tours - Wasilla Bus Barn. Status: Active. Contaminated soils discovered during excavation of diesel and gasoline USTs. ETM on hold as there is not enough info for CSP to give meaningful ranking.
Closed Leaking Underground Fuel Storage Tank (LUST) Sites	U08	U08-06	В	Low	2	Valley Country Store II @ 1101 Bogard Rd., Wasilla, AK 99654, Hazard ID# 23625. Status: Cleanup Complete. Contaminants of concern are Gasoline, Benzene and BTEX.
Bus maintenance facilities	X16	X16-01	В	Medium	2	Buckeye Transit @ 2001 Wasilla Fishhook Rd., Wasilla, AK 99654.
Bus maintenance facilities	X16	X16-02	В	Medium	2	Laidlaw Transit Inc. @ 276 Danna Ave., Wasilla, AK 99654.
Highways and roads, paved (cement or asphalt)	X20	X20-19-105	В	Low	2	Identified 105 roads in Zone B.
Motor vehicle/general storage yards/facilities	X27	X27-01	В	Low	2	Wasilla Business Park -Storage @ 190 Paulson Ave. #4, Wasilla, AK 99654.
Rail corridors	X30	X30-02	В	Medium	2	Alaska Railroads.
Firehouses	X38	X38-01	В	Low	2	Wasilla-Lakes Fire Department @ 401 E herning Ave., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-04	В	Low	2	Valley Hospital @ 950 E Bogard Rd., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-05	В	Low	2	Alpha Counseling & Education @ 500 N Main St. #B, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-06	В	Low	2	Gianopoulos Steven G DDS @ 500 N Main St. #G, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-07	В	Low	2	Alaska Center for Dentistry @ 418 N Main St., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-08	В	Low	2	Alaskan Family Dental Ctr. @ 281 N main St. #201, Wasilla, AK 99654.

# Contaminant Source Inventory and Risk Ranking for WASILLA WATER SYSTEM - East Susitna Well

#### PWSID 224646.006

Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Risk Ranking for Analysis	Map Number	Comments
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-09	В	Low	2	Life Quest Comprehensive Svc @ 230 Paulson Ave., #68, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-10	В	Low	2	Godnig Edward OD @ 390 N Main St., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-11	В	Low	2	Matanuska Health Care Assoc. @ 291 E Swanson Ave #100, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-12	В	Low	2	Neighbor to Neighbor Health @ 201 E Swanson Ave. #15, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-13	В	Low	2	Valley Chiropractic Clinic @ 400 N Main St., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-14	В	Low	2	Medical Office Building @ 950 Bogard Rd., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-15	В	Low	2	Valley Medical Supply @ 281 N Main St., #101, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-16	В	Low	2	Medical Office Building @ 951 Bogard Rd. Wasilla, AK 99654.

Sources of Volatile Organic Chemicals

Table 5

## Contaminant Source Inventory and Risk Ranking for WASILLA WATER SYSTEM - East Susitna Well Sources of Heavy Metals, Cyanide and Other Inorganic Chemicals

Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Risk Ranking for Analysis	Map Number	Comments
Florists	C12	C12-01	А	Low	2	Floral Expressions by Carrs @ 595 E Parks Hwy, Wasilla, AK 99654.
Hardware stores	C17	C17-01	А	Low	2	Alaska Rubber & Supply @ 651 E Railroad Ave., Wasilla, AK 99654.
Motor/motor vehicle supplies stores	C28	C28-01	А	Low	2	NAPA Auto Parts @ 791 Westpoint Dr., Wasilla, AK 99654.
Motor /motor vehicle repair shops	C31	C31-01	А	Medium	2	Alaska Rubber & Supply @ 651 Railroad Ave., Wasilla, AK 99654.
Motor /motor vehicle repair shops	C31	C31-02	А	Medium	2	Don's Auto & Radiator @ 440 Denali St., Wasilla, AK 99654. Past Producer, current business at this location is North Country Builders of Alaska, Inc.
Motor /motor vehicle repair shops	C31	C31-03	А	Medium	2	Mida's Auto Systems Experts @ 101 N Crusey St., Wasilla, AK 99654.
Motor /motor vehicle repair shops	C31	C31-04	А	Medium	2	Mr Lube @ 721 Westpoint Dr., Wasilla, AK 99654.
Pharmacies (with on-site wastewater disposal)	C35	C35-01	А	Low	2	Various medical and dental offices at this address.
Printers, publishers, copiers	C37	C37-01	А	Medium	2	L & B Color Printing @ 590 E Railroad Ave., Wasilla, AK 99654.
Welding shops	C43	C43-01	А	Low	2	Alaska Rubber & Supply @ 651 E Railroad Ave., Wasilla, AK 99654.
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D01-01-11	А	Low	2	Identified 11 sewerlines (main) in Zone A.
Residential Areas	R01	R01	А	Low	2	Approximately 1 acre of residential area within Zone A.
Septic systems (serves one single-family home)	R02	R02-01	А	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-01-18	А	Low	2	Identified 18 roads in Zone A.
Rail corridors	X30	X30-01	А	Low	2	Alaska Railroads.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-01	А	Low	2	Various medical offices in this building @ 701 E Parks Hwy #209, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-02	А	Low	2	Medical office building @ 935 Westpoint Dr., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-03	А	Low	2	Lakeview Prof Bldg - various medical offices in the building @ 851 Westpoint Dr., Wasilla, AK 99654.

# Contaminant Source Inventory and Risk Ranking for WASILLA WATER SYSTEM - East Susitna Well Sources of Heavy Metals, Cyanide and Other Inorganic Chemicals

Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Risk Ranking for Analysis	Map Number	Comments
Body shops (automotive)	C05	C05-01	В	Medium	2	Flag Circle Auto Body @ 2001 Wasilla Fishhook Rd., Wasilla, AK 99654.
Construction trade areas and materials	C09	C09-01	В	Low	2	Taylored Restoration @ 276 E Danna Ave., Wasilla, AK 99654.
Florists	C12	C12-02	В	Low	2	Flowers by Louise @ 290 Yenlo St., Wasilla, AK 99654.
Gasoline stations (without repair shop)	C15	C15-01	В	Low	2	Mapco - Express #5005 @ 491 E Parks Hwy, Wasilla, AK 99654. Past Producer.
Gasoline stations (without repair shop)	C15	C15-02	В	Low	2	Tesoro Alaska Company @ 211 Main St., Wasilla, AK 99654.
Gasoline stations (with repair shop)	C16	C16-01	В	Low	2	Holiday Stationstore @ 225 N Boundary St., Wasilla, AK 99654.
Jewelers	C19	C19-01	В	Low	2	Alaskan Gold Rush Jewelers @ 212 N Boundary St., Wasilla, AK 99654.
Motor /motor vehicle repair shops	C31	C31-05	В	Medium	2	E & E Automotive Repair @ 2300 Wasilla Fishhook Rd., Wasilla, AK 99654. Business at this location is now called Fishhook Tire & Auto.
Pharmacies (with on-site wastewater disposal)	C35	C35-02	В	Low	2	MyDoktor's Pharmacy @ 950 Bogard Rd., Wasilla, AK 99654
Printers, publishers, copiers	C37	C37-02	В	Medium	2	PostNet @ 490 N Main St., Wasilla, AK 99654
Welding shops	C43	C43-02	В	Low	2	Motor Kool Radiator Svc. @ 1051 Lucille St., Wasilla, AK 99654.
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D01-12-26	В	Low	2	Identified 15 sewerlines (main) in Zone B.
Injection wells (Class V) Large-Capacity Septic System (Drainfield Disposal Method)	D10	D10-01-132	В	Low	2	Identified 132 Drainfield Septic Systems in Zone B.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-01	В	High	2	E & E Automotive Repair (now called Fishhook Tire & Auto) @ 2300 Wasilla Fishhook Rd., Wasilla, AK 99654.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-02	В	High	2	Motor kool Radiator Svc. @ 1051 Lucille St., Wasilla, AK 99654.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-03	В	High	2	Flag Circle Auto Body @ 2001 Wasilla Fishhook Rd., Wasilla, AK 99654.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-04	В	High	2	Durgeloh's Truck & Salvage @ 2200 N Wasilla-Fishhook Rd., Wasilla, AK 99654.

# Contaminant Source Inventory and Risk Ranking for WASILLA WATER SYSTEM - East Susitna Well Sources of Heavy Metals, Cyanide and Other Inorganic Chemicals

Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Risk Ranking for Analysis	Map Number	Comments
Recycling and waste reduction facilities	D57	D57-01	В	High	2	Durgeloh's Truck Salvage @ 2200 Wasilla Fishhook Rd., Wasilla, AK 99654.
Scrap, salvage, or junk yards	D59	D59-01	В	High	2	Durgeloh's Truck Salvage @ 2200 N Wasilla-Fishhook Rd., Wasilla, AK 99654 (North of Wasilla-Fishhook Rd.) Hundreds of junk cars in yard.
Residential Areas	R01	R01	В	Low	2	Approximately 606 acreas of residential area within Zone B.
Septic systems (serves one single-family home)	R02	R02-02-379	В	Low	2	Identified 378 Drainfield Septic Systems in Zone B.
Tanks, gasoline (underground)	T12	T12-01	В	Medium	2	Holiday Stationstore @ 225 N Boundary St., Wasilla, AK 99654.
Tanks, gasoline (underground)	T12	T12-02	В	Medium	2	Holiday Stationstore @ 225 N Boundary St., Wasilla, AK 99654.
Tanks, gasoline (underground)	T12	T12-03	В	Medium	2	Tesoro Food Mart Northstore #12 @ 211 N main St., Wasilla, AK 99654.
Tanks, gasoline (underground)	T12	T12-04	В	Medium	2	Tesoro Food Mart Northstore #12 @ 211 N Main St., Wasilla, AK 99654.
Tanks, gasoline (underground)	T12	T12-05	В	Medium	2	Tesoro Food Mart Northstore #12 @ 211 N Main St., Wasilla, AK 99654.
Bus maintenance facilities	X16	X16-01	В	Low	2	Buckeye Transit @ 2001 Wasilla Fishhook Rd., Wasilla, AK 99654.
Bus maintenance facilities	X16	X16-02	В	Low	2	Laidlaw Transit Inc. @ 276 Danna Ave., Wasilla, AK 99654.
Highways and roads, paved (cement or asphalt)	X20	X20-19-105	В	Low	2	Identified 105 roads in Zone B.
Rail corridors	X30	X30-02	В	Low	2	Alaska Railroads.
Firehouses	X38	X38-01	В	Low	2	Wasilla-Lakes Fire Department @ 401 E herning Ave., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-04	В	Low	2	Valley Hospital @ 950 E Bogard Rd., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-05	В	Low	2	Alpha Counseling & Education @ 500 N Main St. #B, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-06	В	Low	2	Gianopoulos Steven G DDS @ 500 N Main St. #G, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-07	В	Low	2	Alaska Center for Dentistry @ 418 N Main St., Wasilla, AK 99654.

# Contaminant Source Inventory and Risk Ranking for WASILLA WATER SYSTEM - East Susitna Well Sources of Heavy Metals, Cyanide and Other Inorganic Chemicals

Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Risk Ranking for Analysis	Map Number	Comments
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-08	В	Low	2	Alaskan Family Dental Ctr. @ 281 N main St. #201, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-09	В	Low	2	Life Quest Comprehensive Svc @ 230 Paulson Ave., #68, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-10	В	Low	2	Godnig Edward OD @ 390 N Main St., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-11	В	Low	2	Matanuska Health Care Assoc. @ 291 E Swanson Ave #100, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-12	В	Low	2	Neighbor to Neighbor Health @ 201 E Swanson Ave. #15, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-13	В	Low	2	Valley Chiropractic Clinic @ 400 N Main St., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-14	В	Low	2	Medical Office Building @ 950 Bogard Rd., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-15	В	Low	2	Valley Medical Supply @ 281 N Main St., #101, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-16	В	Low	2	Medical Office Building @ 951 Bogard Rd. Wasilla, AK 99654.

Table 6

# Contaminant Source Inventory and Risk Ranking for WASILLA WATER SYSTEM - East Susitna Well Sources of Synthetic Organic Chemicals

Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Risk Ranking for Analysis	Map Number	Comments
Printers, publishers, copiers	C37	C37-01	А	Low	2	L & B Color Printing @ 590 E Railroad Ave., Wasilla, AK 99654.
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D01-01-11	А	Low	2	Identified 11 sewerlines (main) in Zone A.
Residential Areas	R01	R01	А	Low	2	Approximately 1 acre of residential area within Zone A.
Septic systems (serves one single-family home)	R02	R02-01	А	Low	2	
Rail corridors	X30	X30-01	А	Medium	2	Alaska Railroads.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-01	А	Low	2	Various medical offices in this building @ 701 E Parks Hwy #209, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-02	А	Low	2	Medical office building @ 935 Westpoint Dr., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-03	А	Low	2	Lakeview Prof Bldg - various medical offices in the building @ 851 Westpoint Dr., Wasilla, AK 99654.
Printers, publishers, copiers	C37	C37-02	В	Low	2	PostNet @ 490 N Main St., Wasilla, AK 99654
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D01-12-26	В	Low	2	Identified 15 sewerlines (main) in Zone B.
Injection wells (Class V) Large-Capacity Septic System (Drainfield Disposal Method)	D10	D10-01-132	В	Low	2	Identified 132 Drainfield Septic Systems in Zone B.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-01	В	Low	2	E & E Automotive Repair (now called Fishhook Tire & Auto) @ 2300 Wasilla Fishhook Rd.,Wasilla, AK 99654.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-02	В	Low	2	Motor kool Radiator Svc. @ 1051 Lucille St., Wasilla, AK 99654.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-03	В	Low	2	Flag Circle Auto Body @ 2001 Wasilla Fishhook Rd., Wasilla, AK 99654.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-04	В	Low	2	Durgeloh's Truck & Salvage @ 2200 N Wasilla-Fishhook Rd., Wasilla, AK 99654.
Scrap, salvage, or junk yards	D59	D59-01	В	Medium	2	Durgeloh's Truck Salvage @ 2200 N Wasilla-Fishhook Rd., Wasilla, AK 99654 (North of Wasilla-Fishhook Rd.) Hundreds of junk cars in yard.

# Contaminant Source Inventory and Risk Ranking for WASILLA WATER SYSTEM - East Susitna Well Sources of Synthetic Organic Chemicals

Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Risk Ranking for Analysis	Map Number	Comments
Residential Areas	R01	R01	В	Low	2	Approximately 606 acreas of residential area within Zone B.
Septic systems (serves one single-family home)	R02	R02-02-379	В	Low	2	Identified 378 Drainfield Septic Systems in Zone B.
Rail corridors	X30	X30-02	В	Medium	2	Alaska Railroads.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-04	В	Low	2	Valley Hospital @ 950 E Bogard Rd., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-05	В	Low	2	Alpha Counseling & Education @ 500 N Main St. #B, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-06	В	Low	2	Gianopoulos Steven G DDS @ 500 N Main St. #G, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-07	В	Low	2	Alaska Center for Dentistry @ 418 N Main St., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-08	В	Low	2	Alaskan Family Dental Ctr. @ 281 N main St. #201, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-09	В	Low	2	Life Quest Comprehensive Svc @ 230 Paulson Ave., #68, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-10	В	Low	2	Godnig Edward OD @ 390 N Main St., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-11	В	Low	2	Matanuska Health Care Assoc. @ 291 E Swanson Ave #100, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-12	В	Low	2	Neighbor to Neighbor Health @ 201 E Swanson Ave. #15, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-13	В	Low	2	Valley Chiropractic Clinic @ 400 N Main St., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-14	В	Low	2	Medical Office Building @ 950 Bogard Rd., Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-15	В	Low	2	Valley Medical Supply @ 281 N Main St., #101, Wasilla, AK 99654.
Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes)	X40	X40-16	В	Low	2	Medical Office Building @ 951 Bogard Rd. Wasilla, AK 99654.

## Contaminant Source Inventory and Risk Ranking for WASILLA WATER SYSTEM - East Susitna Well Sources of Synthetic Organic Chemicals

Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Risk Ranking for Analysis	Map Number	Comments
Swimming pools (public)	X44	X44-01	В	Low	2	Wasilla High School Pool @ 701 Bogard Rd., Wasilla, AK 99654.

Table 7

# Contaminant Source Inventory and Risk Ranking for WASILLA WATER SYSTEM - East Susitna Well Sources of Other Organic Chemicals

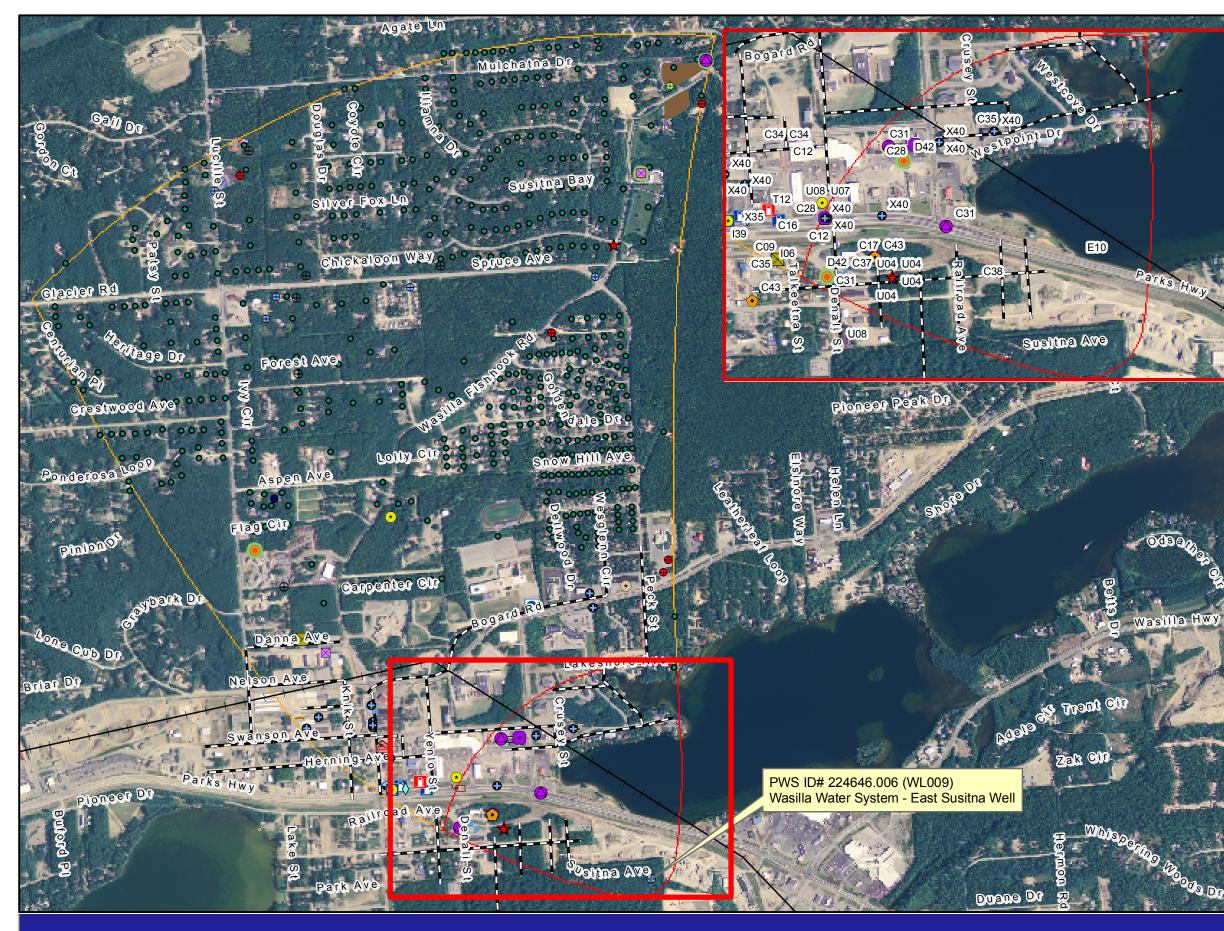
Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Risk Ranking for Analysis	Map Number	Comments
Hardware stores	C17	C17-01	А	Low	2	Alaska Rubber & Supply @ 651 E Railroad Ave., Wasilla, AK 99654.
Motor /motor vehicle repair shops	C31	C31-01	А	Medium	2	Alaska Rubber & Supply @ 651 Railroad Ave., Wasilla, AK 99654.
Motor /motor vehicle repair shops	C31	C31-02	А	Medium	2	Don's Auto & Radiator @ 440 Denali St., Wasilla, AK 99654. Past Producer, current business at this location is North Country Builders of Alaska, Inc.
Motor /motor vehicle repair shops	C31	C31-03	А	Medium	2	Mida's Auto Systems Experts @ 101 N Crusey St., Wasilla, AK 99654.
Motor /motor vehicle repair shops	C31	C31-04	А	Medium	2	Mr Lube @ 721 Westpoint Dr., Wasilla, AK 99654.
Welding shops	C43	C43-01	А	Low	2	Alaska Rubber & Supply @ 651 E Railroad Ave., Wasilla, AK 99654.
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D01-01-11	А	Low	2	Identified 11 sewerlines (main) in Zone A.
Residential Areas	R01	R01	А	Low	2	Approximately 1 acre of residential area within Zone A.
Septic systems (serves one single-family home)	R02	R02-01	А	Low	2	
Highways and roads, paved (cement or asphalt)	X20	X20-01-18	А	Low	2	Identified 18 roads in Zone A.
Rail corridors	X30	X30-01	А	Low	2	Alaska Railroads.
Body shops (automotive)	C05	C05-01	В	Medium	2	Flag Circle Auto Body @ 2001 Wasilla Fishhook Rd., Wasilla, AK 99654.
Construction trade areas and materials	C09	C09-01	В	Low	2	Taylored Restoration @ 276 E Danna Ave., Wasilla, AK 99654.
Gasoline stations (without repair shop)	C15	C15-01	В	Low	2	Mapco - Express #5005 @ 491 E Parks Hwy, Wasilla, AK 99654. Past Producer.
Gasoline stations (without repair shop)	C15	C15-02	В	Low	2	Tesoro Alaska Company @ 211 Main St., Wasilla, AK 99654.
Gasoline stations (with repair shop)	C16	C16-01	В	Medium	2	Holiday Stationstore @ 225 N Boundary St., Wasilla, AK 99654.
Motor /motor vehicle repair shops	C31	C31-05	В	Medium	2	E & E Automotive Repair @ 2300 Wasilla Fishhook Rd., Wasilla, AK 99654. Business at this location is now called Fishhook Tire & Auto.
Welding shops	C43	C43-02	В	Low	2	Motor Kool Radiator Svc. @ 1051 Lucille St., Wasilla, AK 99654.

# Contaminant Source Inventory and Risk Ranking for WASILLA WATER SYSTEM - East Susitna Well Sources of Other Organic Chemicals

Contaminant Source Type	Contaminant Source ID	CS ID tag	Zone	Risk Ranking for Analysis	Map Number	Comments
Domestic wastewater collection systems (sewer lines or lift stations)	D01	D01-12-26	В	Low	2	Identified 15 sewerlines (main) in Zone B.
Injection wells (Class V) Large-Capacity Septic System (Drainfield Disposal Method)	D10	D10-01-132	В	Low	2	Identified 132 Drainfield Septic Systems in Zone B.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-01	В	Medium	2	E & E Automotive Repair (now called Fishhook Tire & Auto) @ 2300 Wasilla Fishhook Rd.,Wasilla, AK 99654.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-02	В	Medium	2	Motor kool Radiator Svc. @ 1051 Lucille St., Wasilla, AK 99654.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-03	В	Medium	2	Flag Circle Auto Body @ 2001 Wasilla Fishhook Rd., Wasilla, AK 99654.
Injection wells (Class V) Motor Vehicle Waste Disposal Well	D42	D42-04	В	Medium	2	Durgeloh's Truck & Salvage @ 2200 N Wasilla-Fishhook Rd., Wasilla, AK 99654.
Scrap, salvage, or junk yards	D59	D59-01	В	High	2	Durgeloh's Truck Salvage @ 2200 N Wasilla-Fishhook Rd., Wasilla, AK 99654 (North of Wasilla-Fishhook Rd.) Hundreds of junk cars in yard.
Residential Areas	R01	R01	В	Low	2	Approximately 606 acreas of residential area within Zone B.
Septic systems (serves one single-family home)	R02	R02-02-379	В	Low	2	Identified 378 Drainfield Septic Systems in Zone B.
Bus maintenance facilities	X16	X16-01	В	Medium	2	Buckeye Transit @ 2001 Wasilla Fishhook Rd., Wasilla, AK 99654.
Bus maintenance facilities	X16	X16-02	В	Medium	2	Laidlaw Transit Inc. @ 276 Danna Ave., Wasilla, AK 99654.
Highways and roads, paved (cement or asphalt)	X20	X20-19-105	В	Low	2	Identified 105 roads in Zone B.
Motor vehicle/general storage yards/facilities	X27	X27-01	В	Low	2	Wasilla Business Park -Storage @ 190 Paulson Ave. #4, Wasilla, AK 99654.
Rail corridors	X30	X30-02	В	Low	2	Alaska Railroads.

# **APPENDIX C**

Wasilla Water System – East Susitna Well Drinking Water Protection Area and Potential and Existing Contaminant Sources (Map 2)



Map 2 - Wasilla Water System - East Susitna Well PWS ID# 224646.006



Alaska Department of Environmental Conservation

Public	Water Systems Class A Water Systems (C/NTNC)								
ĕ	Class B Water Systems (TNC)								
Drinkir	Class C Water Systems (State Regulated) ing Water Protections Areas								
	Zone A: Several-month time-of-travel for groundwater sources.								
Potent	Zone B: Two-year time-of-travel for groundwater sources. ial Sources of Contamination selection								
	Body shops (automotive) (C05)								
$\ge$	Construction trade areas and materials (C09)								
le No	Dry cleaners (C10)								
5,5	Florists (C12)								
	Gasoline stations (without repair shop) (C15)								
	Gasoline stations (with repair shop) (C16)								
~	Hardware stores (C17)								
	Jewelers (C19)								
	Motor/motor vehicle supplies stores (C28)								
	Motor /motor vehicle repair shops (C31)								
	Pharmacies (with on-site wastewater disposal) (C35) Printers, publishers, copiers (C37)								
$\mathbf{\bullet}$	Welding shops (C43)								
	Injection wells (Class V) Motor Vehicle Waste Disposal Well (D42)								
$\overline{\phi}$	Recycling and waste reduction facilities (D57)								
-	Tanks, diesel (underground) (T08)								
•	Tanks, gasoline (underground) (T12)								
	Contaminated sites, DEC recognized, non-Superfund, non-RCRA (U04)								
*	Open Leaking Underground Fuel Storage Tank (LUST) Sites (U07)								
<ul><li>★</li><li>▼</li></ul>	Closed Leaking Underground Fuel Storage Tank (LUST) Sites (U08) Bus maintenance facilities (X16)								
<u>~</u>	Motor vehicle/general storage yards/facilities (X27)								
	Firehouses (X38)								
•	Medical/veterinary facilities (doctor or dentist offices, hospitals, nursing homes) (X40)								
0	Swimming pools (public) (X44)								
⊕	Private Wells (W09)								
-	Septic Systems (R02) Sewerlines, (D01)								
	Alaska Railroad (X30)								
_	Scrap, salvage, or junk yards (D59)								
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