Source Water Assessment

A Hydrogeologic Susceptibility and Vulnerability Assessment for USAF Eareckson

Shemya Station, Alaska

PWSID #260511.001

July 2004

Drinking Water Protection Program Report #1459

Alaska Department of Environmental Conservation

Source Water Assessment for USAF Eareckson

Shemya Station, Alaska

PWSID# 260511.001

July 2004

Drinking Water Protection Program Report #1459

The Drinking Water Protection Program (DWPP) 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 (EPA), the 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 that 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 the Program Coordinator of DWPP, (907) 269-7521.

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Source Water Assessment for the USAF Eareckson Water System, Shemya Station, Alaska

Drinking Water Protection Program
Alaska Department of Environmental Conservation

EXECUTIVE SUMMARY

The public water system for USAF Eareckson is a Class A infiltration gallery that collects water from shallow groundwater from a drainage basin. Water flows by gravity to the sump below the raw water pump station, which provides 20,100-gallons of storage at the approximate high water level of 10.5 feet above the sump floor. Three submersible pumps pump water from the infiltration gallery to the water treatment building. The drinking water is treated with greensand filtration, air stripping, and chlorine disinfection. Finished water is stored in two 300,000-gallon tanks, and one 400,000-gallon tank.

The USAF Eareckson protection area is approximately 5 square miles in size and has received a susceptibility rating of **High**. *A rating of High to Very High is typical for all systems with surface water intakes*. Potential and existing sources of the following contaminants were evaluated for the Source Water Assessment: bacteria and viruses, nitrates and/or nitrites, heavy metals, cyanide, and other inorganic chemicals, synthetic organic chemicals, volatile organic chemicals, and other organic chemicals.

Known potential contaminant sources are located within the infiltration gallery protection area and include: domestic wastewater sludge land application areas, a domestic wastewater treatment plant disposal pond/lagoon, an injection well, underground fuel tanks, ADEC recognized contaminated sites and LUST sites, a fire burn pit, and government vehicle maintenance facilities. These sources may affect drinking water at the source and could potentially influence sampling results. Samples were collected from post-treated water. Contaminant sources identified within the infiltration gallery protection area for this public water system have been considered in order to provide the most conservative evaluation.

This evaluation included all available water sampling data submitted to the Alaska Department of Environmental Conservation (ADEC) by the system operator. As stated previously, the samples were collected from post-treated water. Vulnerability ratings for the water system have been determined by combining the susceptibility of the infiltration gallery with the contaminant risks. The system received a vulnerability rating of **Very High** in three of the six source water assessment categories: nitrates and nitrites, volatile organic chemicals, and heavy metals, cyanide and other inorganic; and a vulnerability rating of **Low** in three of the six source water assessment categories: bacteria and viruses, synthetic organic chemicals, and other organic chemicals.

DRINKING WATER SYSTEM AND AREA OVERVIEW

Shemya Station (Sec. 14, T86S, R257W, Seward Meridian) is located on Shemya Island, on the western end of the Aleutian chain (ADCED, 2003). Average annual precipitation in Shemya Station is 21 inches, including approximately 41 inches of snowfall. Temperatures range from 11 to 65°F.

The public water system is a Class A infiltration gallery that operates year-round and collects water from shallow groundwater from a drainage basin. The group quarters facility is connected to a piped water and sewer system (ADCED, 2003).

Shemya Station receives its electrical power from the USAF. Power generating facilities are fueled by diesel. The USAF operates the local landfill (ADCED, 2003).

Information acquired from ADEC indicated that the infiltration gallery is adequately constructed. The water intake is screened and protected against siltation. The drinking water filtration system is designed to treat up to 180-gallons per minute, or 260,000-gallons per day.

Shemya Island is situated near the western end of the Aleutian Island Archipelago. The island is approximately 4.5 miles long and 2 miles wide.

The terrain on Shemya Island consists of a gently rolling plain that slopes from north to south and is covered with tundra vegetation. Elevation is greatest along the north side of the island, reaching about 250 feet at its highest point and dropping sharply to sea level along the north shoreline.

The Aleutian Island Archipelago is a volcanic arc, formed at the boundary between the North American and Pacific tectonic plates, where the Pacific plate is being subducted beneath the North American plate. Shemya Island lacks volcanic peaks but is composed

largely of fractured hornblende andesite porphyry and basalt bedrock. Sedimentary rocks are also found on the island. Overlying the bedrock, a ubiquitous layer of silt, sand, and gravel is present, as well as some thicker deposits of gravel and sand dunes. The sedimentary material may have originated as glacial till or eolian, or marine deposits. Deposits of peat and clay occur sporadically on the island (URS Corporation, 2000).

USAF EARECKSON DRINKING WATER PROTECTION AREA

Identifying the pathways most likely for surface contamination to reach infiltration gallery areas is the first step in determining the water system's risk. These pathways are initially determined by looking at the drainage area contributing overland water flow to a infiltration gallery source intake. The entire drainage area is also known as the "drinking water protection area." Please refer to pages 10-11 of the "Guidance Manual for Class A Public Water Systems" for additional information.

The protection area established for surface water sources by the ADEC is usually separated into three zones. These zones correspond to the overland-flow distance that water travels to get to the source. The ADEC Drinking Water Protection Program's Technical Advisory Committee developed guidelines for derivation of these zones in 1998. The following is a summary of the three protection area zones:

Table 1. Definition of Zones

Zone	Definition
A	Areas within 1000-ft of lakes or streams
B	Areas within 1-mile of lakes or streams
C	The watershed boundary

The protection area for the USAF Eareckson infiltration gallery includes each of these Zones (See Map A of Appendix A).

INVENTORY OF POTENTIAL AND EXISTING CONTAMINANT SOURCES

The Drinking Water Protection Program has completed an inventory of potential and existing sources of contamination within the USAF Eareckson infiltration gallery protection area. This inventory was completed through a search of agency records and other publicly available information. There is a wide array of potential contamination sources to surface water. These contaminants are found within agricultural, residential, commercial, and industrial areas, but can also occur within areas that have little or no development.

For 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.

Numerous contaminant sources were identified in the USAF Eareckson protection area as displayed on Map C of Appendix C and in Table 1 of Appendix B.

RANKING OF CONTAMINANT RISKS

Once potential and existing sources of contamination have been identified, they are assigned a ranking according to what category and level of risk they represent. Ranking of contaminant risks for "potential" or "existing" sources of contamination is a function of the toxicity and the volume of specific contaminants associated with that source. Rankings include:

- Low;
- Medium;
- High; and
- Very High.

The time-of-travel for contaminants within the water is dependent on the physical and chemical characteristics of each contaminant. Bacteria and Viruses are only inventoried in Zone A because of their short life span. Only "Very High" and "High" rankings are inventoried within Zones B and C due to the probability of contaminant dilution by the time the contaminants reach the infiltration gallery.

The remaining tables 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, cyanide, and other inorganic chemicals, synthetic organic chemicals, and other organic chemicals.

VULNERABILITY OF THE DRINKING WATER SYSTEM

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

- Surface Water Susceptibility and
- Contaminant risks.

Appendix D contains 13 charts, which together form the 'Vulnerability Analysis' for the public drinking water Source Water Assessment. Chart 1 analyzes the 'Susceptibility of the Surface Water Source' to contamination by looking at the climate, terrain, and intake location. Chart 2 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 intake area. Chart 3 contains the 'Vulnerability Analysis for Bacteria and Viruses,' which is a composite score of the Vulnerability Analysis and the overall Susceptibility. Charts 4 through 13 repeat the Contaminant Risks and Vulnerability Analyses for nitrates and nitrites, volatile organic chemicals, heavy metals, cyanide, and other inorganic chemicals, synthetic organic chemicals, and other organic chemicals, respectively.

A score for the Surface Water Susceptibility of the source is reached by considering the properties of the water intake and the surrounding area. The derivation of this information is presented below and the data for this source is shown in Chart 1 of Appendix D.

Susceptibility of the Surface Water Source – always considered to be "high" (30 points)

+

Adequate Construction of the Intake (0 – 5 Points)

+

Runoff Potential Within Zone B (0 – 5 Points)

+

Dilution Capacity of the Surface Water (0 – 10 Points)

=

Natural Susceptibility
(0 – 50 Points)

A ranking is assigned for the Surface Water Susceptibility according to the point score:

Surface Water Source Susceptibility Ratings	
40 to 50 pts	Very High
30 to < 40 pts	High

Table 2. Susceptibility of the Water Source

	Score	Rating
Minimum Allowable Susceptibility	30	
Intake Construction Adequate	0	
Runoff Potential	2	
Dilution Capacity	5	
Overall Susceptibility	***37***	***High***

For contaminants, risks to a drinking water source depend on the type, number or density, and distribution of the contaminant sources. The Contaminant Risk score has been derived from an examination of existing, and historical contamination sources that have been detected in the protection area through routine sampling. It also evaluates potential sources of contamination. Flow charts are used to assign a point score, and ratings are assigned in the same way as the susceptibility:

Contaminant Risk Ratings	
40 to 50 pts	Very High
30 to < 40 pts	High
20 to < 30 pts	Medium
< 20 pts	Low

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

Table 3. USAF Eareckson Contaminant Risks

Category	Score	Rating
Bacteria and Viruses	0	Low
Nitrates and/or Nitrites	45	Very High
Volatile Organic Chemicals	50	Very High
Heavy Metals, Cyanide, and Other Inorganic Chemicals	50	Very High
Synthetic Organic Chemicals	0	Low
Other Organic Chemicals	2	Low

Finally, an overall vulnerability score is assigned for each contaminant type by combining each of the contaminant risk scores with the susceptibility score:

Susceptibility of the Surface Water Source

(0 – 50 points)

+

Contaminant Risks (0 – 50 points)

=

Vulnerability of the
Drinking Water Source to Contamination (0 – 100).

Again, rankings are assigned according to a point score:

Overall Vulnerability Ratings	
80 to 100 pts	Very High
60 to < 80 pts	High
40 to < 60 pts	Medium
< 40 pts	Low

Table 4 contains the overall vulnerability scores and ratings for each of the six categories of drinking water contaminants. Note: scores are rounded off to the nearest five.

Table 4. USAF Eareckson Water System Overall Vulnerability

Category	Score	Rating
Bacteria and Viruses	35	Low
Nitrates and Nitrites	80	Very High
Volatile Organic Chemicals	90	Very High
Heavy Metals, Cyanide, and Other Inorganic Chemicals	90	Very High
Synthetic Organic Chemicals	35	Low
Other Organic Chemicals	35	Low

Bacteria and Viruses

The contaminant risk for bacteria and viruses is **Low**. The contaminant risk for bacteria and viruses is primarily attributed to the lack of contaminant sources in Zone A (see Table 2 – Appendix B).

Coliforms (a bacteria) are found naturally in the environment and although they aren't necessarily a health threat, they are an indicator of other potentially harmful bacteria in the water, more specifically, fecal coliforms and E. coli, which only come from human and animal fecal waste. Harmful bacteria can cause diarrhea, cramps, nausea, headaches, or other symptoms (EPA, 2003). Positive samples increase the overall vulnerability of the drinking water source, indicating that the source is susceptible to bacteria and virus contamination. Typically, coliform detection in raw water samples collected from surface water sources is normal. (See Chart 2 – Contaminant Risks for Bacteria and Viruses in Appendix D).

No positive bacteria counts were reported in recent (previous 5 years) sampling events.

After combining the contaminant risk for bacteria and viruses with the natural susceptibility of the source, the overall vulnerability of the source to bacteria and virus contamination is **Low**.

Nitrates and Nitrites

The contaminant risk for nitrates and nitrites is **Very High** (See Chart 4 - Contaminant Risks for Nitrates and/or Nitrites in Appendix D). Several potential contaminant risk sources for nitrates were identified in the protection area for this public water system. The contaminate risk is primary attributed to the presence of domestic wastewater sludge land application areas, a domestic wastewater treatment plant disposal pond/lagoon, and an injection well in Zones B and C (see Table 3 – Appendix B). Nitrates are very mobile, moving at approximately the same rate as water.

The Maximum Contaminant Level (MCL) for nitrates is 10 milligrams per liter (mg/L). The MCL is the maximum level of contaminant that is allowed to exist in drinking water and still be consumed by humans without harmful health effects (EPA, 2003).

Although low concentrations of nitrates have been reported in recent sampling history, none of the concentrations exceed the MCL of 10 mg/L.

After combining the contaminant risk for nitrates and nitrites with the natural susceptibility of the source, the overall vulnerability of the source to contamination remains **Very High**.

Volatile Organic Chemicals

The contaminant risk for volatile organic chemicals is **Very High** (See Chart 6 – Contaminant Risks for Volatile Organic Chemicals in Appendix D). Numerous potential contaminant sources for volatile organic chemicals were identified in the protection area for this public water system (See Table 4 – Appendix B). The contaminate risk is primary attributed to the presence of numerous underground fuel tanks, and ADEC recognized contaminated sites and LUST sites in Zone C.

Detectable concentrations of trihalomethanes were reported in sampling events for this public water system. The detected concentration of trihalomethanes reported in 2003 was above the MCL of 0.08 mg/L. Trihalomethanes are considered byproducts of the water treatment process and are not from the source waters. Since the reported concentration of TTHM's in recent

sampling events exceeded the applicable MCL, risk points were retained.

Aside from being byproducts of the drinking water treatment process, possible sources of volatile organic chemicals include facilities with automobiles, residential areas, fuel tanks, roads, and airports. See Table 4 in Appendix D for a complete listing.

After combining the contaminant risk for volatile organic chemicals with the natural susceptibility of the source, the overall vulnerability of the source to contamination remains **Very High**.

Heavy Metals, Cyanide, and Other Inorganic Chemicals

The contaminant risk for heavy metals is **Very High**. Numerous contaminant sources for heavy metals, cyanide, and other inorganic chemicals were identified in the protection area for this public water system. The contaminate risk is primary attributed to the presence of domestic wastewater sludge land application areas, an injection well, and underground fuel tanks in Zones B and C (see Table 5 – Appendix B).

Based on review of recent sampling records for this public water system, high levels of copper and lead have been detected, and lead has been detected at the MCL of 0.015 mg/L (see Chart 8 – Contaminant Risks for Heavy Metals, Cyanide, and Other Inorganic Chemicals in Appendix D).

The reported concentrations of copper and lead in recent sampling events are not likely to be representative of source water conditions. These two analytes are likely attributed to either the water treatment process or water distribution network; however, because the MCL for lead was met, risk points were assigned based on the presence of this analyte.

After combining the contaminant risk for heavy metals with the natural susceptibility of the source, the overall vulnerability of the well to contamination remains **Very High**.

Synthetic Organic Chemicals

The contaminant risk for synthetic organic chemicals is **Low**. Numerous contaminant sources for synthetic organic chemicals were identified in the protection area for this public water system. The contaminant risk is primary attributed to the lack of contaminant sources in Zone A.

All recent sampling data for SOCs were below detection levels for USAF Eareckson.

After combining the contaminant risk with the natural susceptibility of the source, the overall vulnerability to synthetic organic chemicals of the source remains **Low** (See Chart 11 – Contaminant Risks for Synthetic Organic Chemicals in Appendix D).

Other Organic Chemicals

The contaminant risk for other organic chemicals is **Low**. Several contaminant risk sources for other organic chemicals were identified in the protection area. The contaminate risk is primary attributed to the lack of contaminant sources in Zone A (see Table 7 – Appendix B).

No recent OOC sampling data was available in ADEC records for USAF Eareckson.

After combining the contaminant risk with the natural susceptibility of the source, the overall vulnerability to other organic chemicals of the source remains **Low** (See Chart 13 – Contaminant Risks for Other Organic Chemicals in Appendix D).

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 the USAF 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 drinking water source.

REFERENCES

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URS Corporation, 2000. Draft Corrective Action Plan, Eareckson Air Station, Alaska.

United States Environmental Protection Agency (EPA), 2003 [WWW document]. URL: http://www.epa.gov/safewater/mcl.html.

APPENDIX A

Drinking Water Protection Area Location Map
(Map A)

APPENDIX B

Contaminant Source Inventory and Risk Ranking (Tables 1-7)

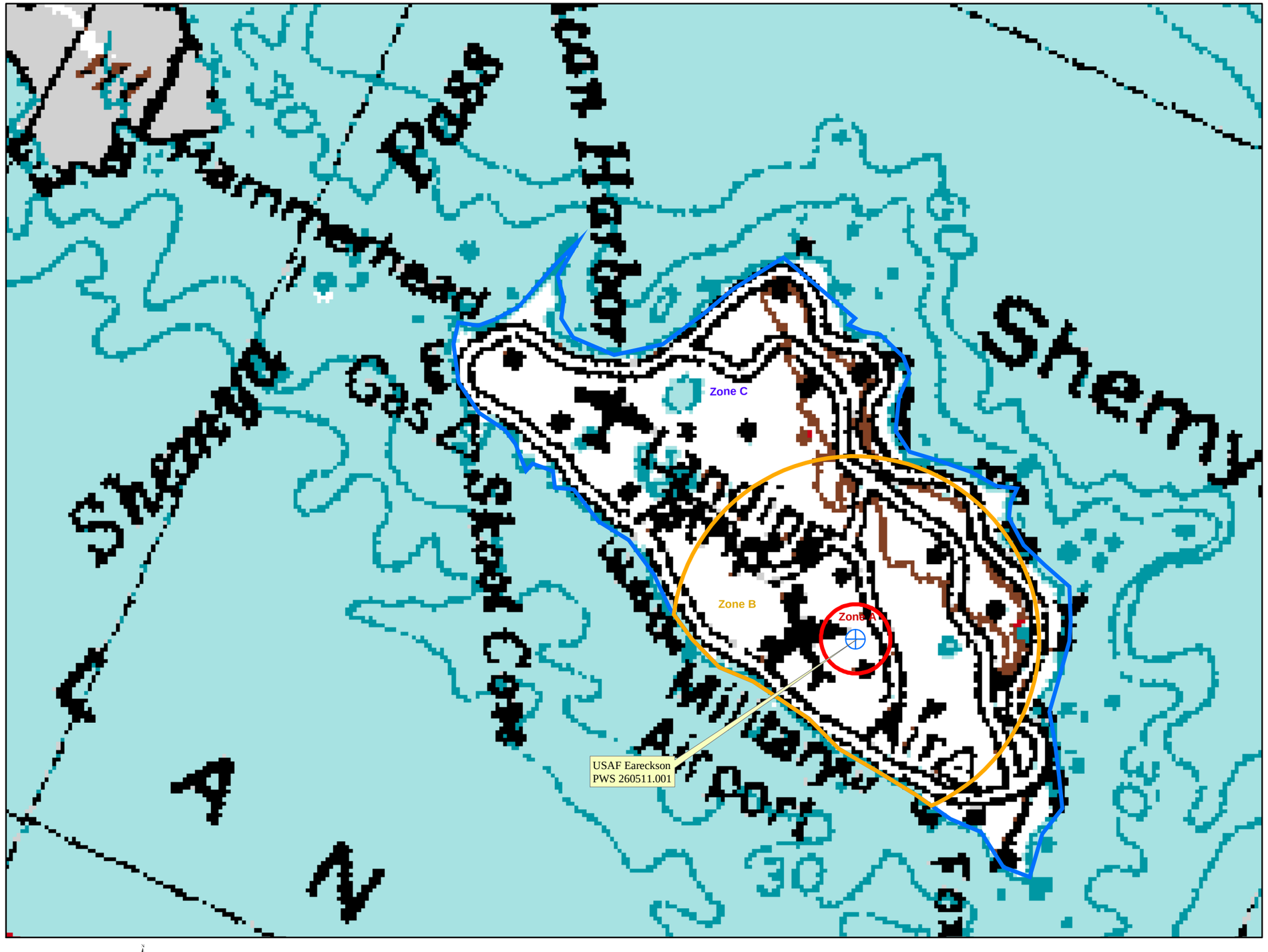
APPENDIX C

Drinking Water Protection Area
and Potential and Existing Contaminant Sources
(Map C)

APPENDIX D

Vulnerability Analysis for Public Drinking Water Source (Charts 1-13)

Public Water Well System for PWS #260511.001 USAF Eareckson



LEGEND

Public Water System Well

Hydrography/Physical

- Parcels
- Stream
- Lake or Pond
- Contours
- Watershed Boundary

Transportation

- Primary Route (Class 1)
- Secondary Route (Class 2)
- Road (Class 3)
- Road (Class 4)
- Road (Class 5, Four-wheel drive)

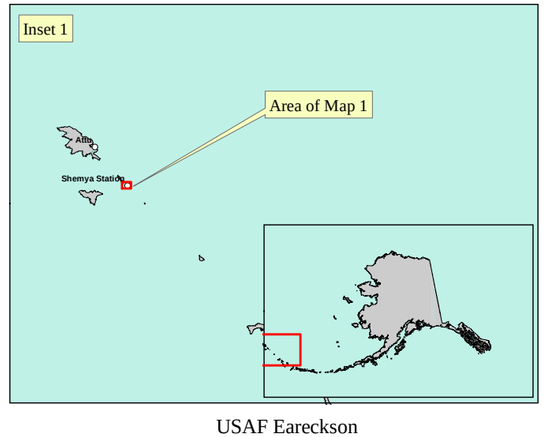
Surfacewater Protection Zones

- Zone A Protection Area– 1000 Feet from Surface Water
- Zone B Protection Area– 1 Mile from Surface Water
- Zone C Protection Area– Watershed Boundary

Data Sources:
- Contaminant Sources, Public Water System Wells, Contours
  Alaska Department of Environmental Conservation (ADEC)
- Critical Facilities, Federal Emergency Management Agency (FEMA)

All other data:
- United States Geological Survey (USGS)
- Drinking Water Protection Areas based on "Alaska Drinking Water Protection Program - Guidance Manual for Class A Public Water Systems" published by ADEC

URS Corporation does not guarantee the accuracy or validity of the data provided.



USAF Eareckson
PWS 260511.001
Appendix A Map A

Table 1

Contaminant Source Inventory for ***USAF Eareckson***

PWSID 260511.001

Contaminant Source Type	*Contaminant Source ID*	*CS ID tag*	*Zone*	*Map Number*	*Comments*
Domestic wastewater sludge land application areas	D04	D04-01	B	C	Shemya Landfill #2
Domestic wastewater treatment plant disposal ponds/lagoons	D02	D02-01	C	C	Shemya Sewage Lagoon
Domestic wastewater sludge land application areas	D04	D04-02	C	C	Shemya Landfill #1
Injection wells (Class V) Industrial Drainage Wells	D39	D39-01	C	C	AGE Fuel Spill / Old Building 729 USTs.
Tanks, diesel (underground)	T08	T08-01	C	C	Suspected petroleum release from a UST.
Tanks, diesel (underground)	T08	T08-02	C	C	
Tanks, diesel (underground)	T08	T08-03	C	C	
Tanks, diesel (underground)	T08	T08-04	C	C	
Tanks, diesel (underground)	T08	T08-05	C	C	
Closed tanks, diesel (underground)	T09	T09-01	C	C	
Closed tanks, diesel (underground)	T09	T09-02	C	C	
Closed tanks, diesel (underground)	T09	T09-03	C	C	
Closed tanks, diesel (underground)	T09	T09-04	C	C	
Closed tanks, diesel (underground)	T09	T09-05	C	C	
Closed tanks, diesel (underground)	T09	T09-06	C	C	
Tanks, gasoline (underground)	T12	T12-01	C	C	
Tanks, heating oil, nonresidential (underground)	T16	T16-01	C	C	
Tanks, heating oil, nonresidential (underground)	T16	T16-02	C	C	
Tanks, heating oil, nonresidential (underground)	T16	T16-03	C	C	
Tanks, heating oil, nonresidential (underground)	T16	T16-04	C	C	
Tanks, heating oil, nonresidential (underground)	T16	T16-05	C	C	

Contaminant Source Type	*Contaminant Source ID*	*CS ID tag*	*Zone*	*Map Number*	*Comments*
Closed tanks, heating oil, nonresidential (underground)	T17	T17-01	C	C	
Closed tanks, heating oil, nonresidential (underground)	T17	T17-02	C	C	
Tanks, lubricants or other petroleum products (underground)	T20	T20-01	C	C	
Tanks, lubricants or other petroleum products (underground)	T20	T20-02	C	C	
Tanks, lubricants or other petroleum products (underground)	T20	T20-03	C	C	
Closed tanks, lubricants or other petroleum products (undergrou	T21	T21-01	C	C	
Closed tanks, lubricants or other petroleum products (undergrou	T21	T21-02	C	C	
Closed tanks, lubricants or other petroleum products (undergrou	T21	T21-03	C	C	
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-01	C	C	Vehicle Maintenance Shop. POLs and waste oil.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-02	C	C	Air Force ACE/Drum Removal.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-03	C	C	Wood Dump/Burn Area.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-04	C	C	AGE Fuel Spill / Old Building 729 USTs.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-05	C	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-06	C	C	USTs 600-1 and 600-4.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-07	C	C	USTs 504-1 and 504-2.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-08	C	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-09	C	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-10	C	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-11	C	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-12	C	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-13	C	C	Old Hospital Site. Metals and PCBs WWII era.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-14	C	C	Debris Dump. Miscellaneous debris and scrap metal.
Contaminated sites, DEC recognized, non-Superfund, non-RCRA	U04	U04-15	C	C	

Contaminant Source Type	*Contaminant Source ID*	*CS ID tag*	*Zone*	*Map Number*	*Comments*
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-01	C	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-02	C	C	Heating Oil UST closed on 7/24/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-03	C	C	UST closure 7/24/97.DRO contaminated soils found.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-04	C	C	UST closed 7/24/97, removed from ground.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-08	C	C	Soil contamination confirmed during UST removal.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-09	C	C	Soil contamination found during UST closure on 7/1.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-10	C	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-11	C	C	Contaminated soil found during UST decommissioning.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-12	C	C	UST removed from the ground on 7/12/97.DRO contamination.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-13	C	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-14	C	C	UST Site. Not eligible for IRP.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-15	C	C	Surface soils pathway, site workers are receptors.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-16	C	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-17	C	C	Contamination present in soils.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-18	C	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-19	C	C	
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-20	C	C	UST removed from the ground on 7/20/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-21	C	C	UST removed from the ground 7/18/97.DRO contamination.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-22	C	C	UST decommisioed on 7/13/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-23	C	C	UST clsoed, removed from the ground 7/24/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-24	C	C	UST removed from the ground on 7/25/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-25	C	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-26	C	C	DRO contaminated soil found during UST closure.

Contaminant Source Type	*Contaminant Source ID*	*CS ID tag*	*Zone*	*Map Number*	*Comments*
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-27	C	C	UST removed from the from the ground on 7/31/97.\L
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-28	C	C	UST closed removed from the ground 9/3/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-29	C	C	HOT UST close 9/4/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-30	C	C	
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-31	C	C	UST removed from the ground 7/23/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-32	C	C	UST removed from the ground on 7/23/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-33	C	C	UST removed from the groung 7/20/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-34	C	C	UST removed from the ground on 7/25/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-35	C	C	UST removed from ground on 7/20/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-36	C	C	UST closed, removed from the ground on 7/13/97.
Fire burn pits	X06	X06-01	C	C	Wood Dump/Burn Area.
Government vehicle maintenance facilities	X19	X19-01	C	C	Vehicle Maintenance Shop. POLs and waste oil.
Government vehicle maintenance facilities	X19	X19-02	C	C	Suspected petroleum release from a UST.
Government vehicle maintenance facilities	X19	X19-03	C	C	Suspected petroleum release from a UST.

Table 2

Contaminant Source Inventory and Risk Ranking for USAF Eareckson
Sources of Bacteria and Viruses

PWSID 260511.001

Contaminant Source Type	*Contaminant Source ID*	*CS ID tag*	*Zone*	*Risk Ranking for Analysis*	*Map Number*	*Comments*
Domestic wastewater sludge land application areas	D04	D04-01	B	High	C	Shemya Landfill #2
Domestic wastewater treatment plant disposal ponds/lagoons	D02	D02-01	C	High	C	Shemya Sewage Lagoon
Domestic wastewater sludge land application areas	D04	D04-02	C	High	C	Shemya Landfill #1
Injection wells (Class V) Industrial Drainage Wells	D39	D39-01	C	Medium	C	AGE Fuel Spill / Old Building 729 USTs.

Table 3

Contaminant Source Inventory and Risk Ranking for USAF Eareckson
Sources of Nitrates/Nitrites

PWSID 260511.001

Contaminant Source Type	*Contaminant Source ID*	*CS ID tag*	*Zone*	*Risk Ranking for Analysis*	*Map Number*	*Comments*
Domestic wastewater sludge land application areas	D04	D04-01	B	High	C	Shemya Landfill #2
Domestic wastewater treatment plant disposal ponds/lagoons	D02	D02-01	C	High	C	Shemya Sewage Lagoon
Domestic wastewater sludge land application areas	D04	D04-02	C	High	C	Shemya Landfill #1
Injection wells (Class V) Industrial Drainage Wells	D39	D39-01	C	High	C	AGE Fuel Spill / Old Building 729 USTs.

Table 4

Contaminant Source Inventory and Risk Ranking for USAF Eareckson

Sources of Volatile Organic Chemicals

PWSID 260511.001

Contaminant Source Type	*Contaminant Source ID*	*CS ID tag*	*Zone*	*Risk Ranking for Analysis*	*Map Number*	*Comments*
Domestic wastewater sludge land application areas	D04	D04-01	B	Low	C	Shemya Landfill #2
Domestic wastewater treatment plant disposal ponds/lagoons	D02	D02-01	C	Low	C	Shemya Sewage Lagoon
Domestic wastewater sludge land application areas	D04	D04-02	C	Low	C	Shemya Landfill #1
Injection wells (Class V) Industrial Drainage Wells	D39	D39-01	C	Medium	C	AGE Fuel Spill / Old Building 729 USTs.
Tanks, diesel (underground)	T08	T08-01	C	High	C	Suspected petroleum release from a UST.
Tanks, diesel (underground)	T08	T08-02	C	High	C	
Tanks, diesel (underground)	T08	T08-03	C	High	C	
Tanks, diesel (underground)	T08	T08-04	C	High	C	
Tanks, diesel (underground)	T08	T08-05	C	High	C	
Closed tanks, diesel (underground)	T09	T09-01	C	Medium	C	
Closed tanks, diesel (underground)	T09	T09-02	C	Medium	C	
Closed tanks, diesel (underground)	T09	T09-03	C	Medium	C	
Closed tanks, diesel (underground)	T09	T09-04	C	Medium	C	
Closed tanks, diesel (underground)	T09	T09-05	C	Medium	C	
Closed tanks, diesel (underground)	T09	T09-06	C	Medium	C	
Tanks, gasoline (underground)	T12	T12-01	C	High	C	
Tanks, heating oil, nonresidential (underground)	T16	T16-01	C	Low	C	
Tanks, heating oil, nonresidential (underground)	T16	T16-02	C	Low	C	
Tanks, heating oil, nonresidential (underground)	T16	T16-03	C	Low	C	
Tanks, heating oil, nonresidential (underground)	T16	T16-04	C	Low	C	

Contaminant Source Inventory and Risk Ranking for USAF Eareckson

Sources of Volatile Organic Chemicals

Contaminant Source Type	*Contaminant Source ID*	*CS ID tag*	*Zone*	*Risk Ranking for Analysis*	*Map Number*	*Comments*
Tanks, heating oil, nonresidential (underground)	T16	T16-05	C	Low	C	
Closed tanks, heating oil, nonresidential (underground)	T17	T17-01	C	Medium	C	
Closed tanks, heating oil, nonresidential (underground)	T17	T17-02	C	Medium	C	
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-01	C	High	C	Vehicle Maintenance Shop. POLs and waste oil.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-02	C	High	C	Air Force ACE/Drum Removal.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-03	C	High	C	Wood Dump/Burn Area.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-04	C	High	C	AGE Fuel Spill / Old Building 729 USTs.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-05	C	High	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-06	C	High	C	USTs 600-1 and 600-4.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-07	C	High	C	USTs 504-1 and 504-2.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-08	C	High	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-09	C	High	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-10	C	High	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-11	C	High	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-12	C	High	C	Suspected petroleum release from a UST.

Contaminant Source Inventory and Risk Ranking for USAF Eareckson

Sources of Volatile Organic Chemicals

Contaminant Source Type	*Contaminant Source ID*	*CS ID tag*	*Zone*	*Risk Ranking for Analysis*	*Map Number*	*Comments*
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-13	C	High	C	Old Hospital Site. Metals and PCBs WWII era.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-14	C	High	C	Debris Dump. Miscellaneous debris and scrap metal.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-15	C	High	C	
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-01	C	High	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-02	C	High	C	Heating Oil UST closed on 7/24/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-03	C	High	C	UST closure 7/24/97.DRO contaminated soils found.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-04	C	High	C	UST closed 7/24/97, removed from ground.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-08	C	High	C	Soil contamination confirmed during UST removal.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-09	C	High	C	Soil contamination found during UST closure on 7/1.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-10	C	High	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-11	C	High	C	Contaminated soil found during UST decommissioning.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-12	C	High	C	UST removed from the ground on 7/12/97.DRO contamination.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-13	C	High	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-14	C	High	C	UST Site. Not eligible for IRP.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-15	C	High	C	Surface soils pathway, site workers are receptors.

Contaminant Source Type	*Contaminant Source ID*	*CS ID tag*	*Zone*	*Risk Ranking for Analysis*	*Map Number*	*Comments*
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-16	C	High	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-17	C	High	C	Contamination present in soils.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-18	C	High	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-19	C	High	C	
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-20	C	High	C	UST removed from the ground on 7/20/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-21	C	High	C	UST removed from the ground 7/18/97.DRO contamination.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-22	C	High	C	UST decommisioed on 7/13/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-23	C	High	C	UST clsoed, removed from the ground 7/24/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-24	C	High	C	UST removed from the ground on 7/25/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-25	C	High	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-26	C	High	C	DRO contaminated soil found during UST closure.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-27	C	High	C	UST removed from the from the ground on 7/31/97.\L
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-28	C	High	C	UST closed removed from the ground 9/3/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-29	C	High	C	HOT UST close 9/4/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-30	C	High	C	

Contaminant Source Inventory and Risk Ranking for USAF Eareckson

Sources of Volatile Organic Chemicals

Contaminant Source Type	*Contaminant Source ID*	*CS ID tag*	*Zone*	*Risk Ranking for Analysis*	*Map Number*	*Comments*
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-31	C	High	C	UST removed from the ground 7/23/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-32	C	High	C	UST removed from the ground on 7/23/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-33	C	High	C	UST removed from the groung 7/20/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-34	C	High	C	UST removed from the ground on 7/25/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-35	C	High	C	UST removed from ground on 7/20/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-36	C	High	C	UST closed, removed from the ground on 7/13/97.
Fire burn pits	X06	X06-01	C	Low	C	Wood Dump/Burn Area.
Government vehicle maintenance facilities	X19	X19-01	C	Medium	C	Vehicle Maintenance Shop. POLs and waste oil.
Government vehicle maintenance facilities	X19	X19-02	C	Medium	C	Suspected petroleum release from a UST.
Government vehicle maintenance facilities	X19	X19-03	C	Medium	C	Suspected petroleum release from a UST.

Table 5

Contaminant Source Inventory and Risk Ranking for USAF Eareckson

PWSID 260511.001

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*
Domestic wastewater sludge land application areas	D04	D04-01	B	Medium	C	Shemya Landfill #2
Domestic wastewater treatment plant disposal ponds/lagoons	D02	D02-01	C	Low	C	Shemya Sewage Lagoon
Domestic wastewater sludge land application areas	D04	D04-02	C	Medium	C	Shemya Landfill #1
Injection wells (Class V) Industrial Drainage Wells	D39	D39-01	C	Medium	C	AGE Fuel Spill / Old Building 729 USTs.
Tanks, gasoline (underground)	T12	T12-01	C	Medium	C	
Tanks, heating oil, nonresidential (underground)	T16	T16-01	C	Low	C	
Tanks, heating oil, nonresidential (underground)	T16	T16-02	C	Low	C	
Tanks, heating oil, nonresidential (underground)	T16	T16-03	C	Low	C	
Tanks, heating oil, nonresidential (underground)	T16	T16-04	C	Low	C	
Tanks, heating oil, nonresidential (underground)	T16	T16-05	C	Low	C	
Tanks, lubricants or other petroleum products (underground)	T20	T20-01	C	Medium	C	
Tanks, lubricants or other petroleum products (underground)	T20	T20-02	C	Medium	C	
Tanks, lubricants or other petroleum products (underground)	T20	T20-03	C	Medium	C	
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-01	C	Low	C	Vehicle Maintenance Shop. POLs and waste oil.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-02	C	Low	C	Air Force ACE/Drum Removal.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-03	C	Low	C	Wood Dump/Burn Area.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-04	C	Low	C	AGE Fuel Spill / Old Building 729 USTs.

Contaminant Source Type	*Contaminant Source ID*	*CS ID tag*	*Zone*	*Risk Ranking for Analysis*	*Map Number*	*Comments*
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-05	C	Low	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-06	C	Low	C	USTs 600-1 and 600-4.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-07	C	Low	C	USTs 504-1 and 504-2.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-08	C	Low	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-09	C	Low	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-10	C	Low	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-11	C	Low	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-12	C	Low	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-13	C	Low	C	Old Hospital Site. Metals and PCBs WWII era.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-14	C	Low	C	Debris Dump. Miscellaneous debris and scrap metal.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-15	C	Low	C	
Fire burn pits	X06	X06-01	C	Low	C	Wood Dump/Burn Area.
Government vehicle maintenance facilities	X19	X19-01	C	Low	C	Vehicle Maintenance Shop. POLs and waste oil.
Government vehicle maintenance facilities	X19	X19-02	C	Low	C	Suspected petroleum release from a UST.
Government vehicle maintenance facilities	X19	X19-03	C	Low	C	Suspected petroleum release from a UST.

Table 6

Contaminant Source Inventory and Risk Ranking for USAF Eareckson

Sources of Synthetic Organic Chemicals

PWSID 260511.001

Contaminant Source Type	*Contaminant Source ID*	*CS ID tag*	*Zone*	*Risk Ranking for Analysis*	*Map Number*	*Comments*
Domestic wastewater sludge land application areas	D04	D04-01	B	Low	C	Shemya Landfill #2
Domestic wastewater treatment plant disposal ponds/lagoons	D02	D02-01	C	Low	C	Shemya Sewage Lagoon
Domestic wastewater sludge land application areas	D04	D04-02	C	Low	C	Shemya Landfill #1
Injection wells (Class V) Industrial Drainage Wells	D39	D39-01	C	Medium	C	AGE Fuel Spill / Old Building 729 USTs.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-01	C	Low	C	Vehicle Maintenance Shop. POLs and waste oil.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-02	C	Low	C	Air Force ACE/Drum Removal.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-03	C	Low	C	Wood Dump/Burn Area.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-04	C	Low	C	AGE Fuel Spill / Old Building 729 USTs.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-05	C	Low	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-06	C	Low	C	USTs 600-1 and 600-4.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-07	C	Low	C	USTs 504-1 and 504-2.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-08	C	Low	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-09	C	Low	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-10	C	Low	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-11	C	Low	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-12	C	Low	C	Suspected petroleum release from a UST.

Contaminant Source Inventory and Risk Ranking for USAF Eareckson

Sources of Synthetic Organic Chemicals

Contaminant Source Type	*Contaminant Source ID*	*CS ID tag*	*Zone*	*Risk Ranking for Analysis*	*Map Number*	*Comments*
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-13	C	Low	C	Old Hospital Site. Metals and PCBs WWII era.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-14	C	Low	C	Debris Dump. Miscellaneous debris and scrap metal.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-15	C	Low	C	
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-01	C	Low	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-02	C	Low	C	Heating Oil UST closed on 7/24/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-03	C	Low	C	UST closure 7/24/97.DRO contaminated soils found.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-04	C	Low	C	UST closed 7/24/97, removed from ground.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-08	C	Low	C	Soil contamination confirmed during UST removal.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-09	C	Low	C	Soil contamination found during UST closure on 7/1.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-10	C	Low	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-11	C	Low	C	Contaminated soil found during UST decommissioning.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-12	C	Low	C	UST removed from the ground on 7/12/97.DRO contamination.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-13	C	Low	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-14	C	Low	C	UST Site. Not eligible for IRP.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-15	C	Low	C	Surface soils pathway, site workers are receptors.

Contaminant Source Type	*Contaminant Source ID*	*CS ID tag*	*Zone*	*Risk Ranking for Analysis*	*Map Number*	*Comments*
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-16	C	Low	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-17	C	Low	C	Contamination present in soils.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-18	C	Low	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-19	C	Low	C	
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-20	C	Low	C	UST removed from the ground on 7/20/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-21	C	Low	C	UST removed from the ground 7/18/97.DRO contamination.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-22	C	Low	C	UST decommisioed on 7/13/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-23	C	Low	C	UST clsoed, removed from the ground 7/24/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-24	C	Low	C	UST removed from the ground on 7/25/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-25	C	Low	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-26	C	Low	C	DRO contaminated soil found during UST closure.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-27	C	Low	C	UST removed from the from the ground on 7/31/97.\L
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-28	C	Low	C	UST closed removed from the ground 9/3/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-29	C	Low	C	HOT UST close 9/4/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-30	C	Low	C	

Contaminant Source Inventory and Risk Ranking for USAF Eareckson

Sources of Synthetic Organic Chemicals

Contaminant Source Type	*Contaminant Source ID*	*CS ID tag*	*Zone*	*Risk Ranking for Analysis*	*Map Number*	*Comments*
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-31	C	Low	C	UST removed from the ground 7/23/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-32	C	Low	C	UST removed from the ground on 7/23/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-33	C	Low	C	UST removed from the groung 7/20/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-34	C	Low	C	UST removed from the ground on 7/25/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-35	C	Low	C	UST removed from ground on 7/20/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-36	C	Low	C	UST closed, removed from the ground on 7/13/97.

Table 7

Contaminant Source Inventory and Risk Ranking for USAF Eareckson

Sources of Other Organic Chemicals

PWSID 260511.001

Contaminant Source Type	*Contaminant Source ID*	*CS ID tag*	*Zone*	*Risk Ranking for Analysis*	*Map Number*	*Comments*
Domestic wastewater sludge land application areas	D04	D04-01	B	Low	C	Shemya Landfill #2
Domestic wastewater treatment plant disposal ponds/lagoons	D02	D02-01	C	Low	C	Shemya Sewage Lagoon
Domestic wastewater sludge land application areas	D04	D04-02	C	Low	C	Shemya Landfill #1
Injection wells (Class V) Industrial Drainage Wells	D39	D39-01	C	Medium	C	AGE Fuel Spill / Old Building 729 USTs.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-01	C	Low	C	Vehicle Maintenance Shop. POLs and waste oil.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-02	C	Low	C	Air Force ACE/Drum Removal.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-03	C	Low	C	Wood Dump/Burn Area.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-04	C	Low	C	AGE Fuel Spill / Old Building 729 USTs.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-05	C	Low	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-06	C	Low	C	USTs 600-1 and 600-4.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-07	C	Low	C	USTs 504-1 and 504-2.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-08	C	Low	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-09	C	Low	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-10	C	Low	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-11	C	Low	C	Suspected petroleum release from a UST.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-12	C	Low	C	Suspected petroleum release from a UST.

Sources of Other Organic Chemicals

Contaminant Source Type	*Contaminant Source ID*	*CS ID tag*	*Zone*	*Risk Ranking for Analysis*	*Map Number*	*Comments*
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-13	C	Low	C	Old Hospital Site. Metals and PCBs WWII era.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-14	C	Low	C	Debris Dump. Miscellaneous debris and scrap metal.
Contaminated sites, DEC recognized, non-Superfun non-RCRA	U04	U04-15	C	Low	C	
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-01	C	Low	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-02	C	Low	C	Heating Oil UST closed on 7/24/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-03	C	Low	C	UST closure 7/24/97.DRO contaminated soils found.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-04	C	Low	C	UST closed 7/24/97, removed from ground.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-08	C	Low	C	Soil contamination confirmed during UST removal.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-09	C	Low	C	Soil contamination found during UST closure on 7/1.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-10	C	Low	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-11	C	Low	C	Contaminated soil found during UST decommissioning.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-12	C	Low	C	UST removed from the ground on 7/12/97.DRO contamination.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-13	C	Low	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-14	C	Low	C	UST Site. Not eligible for IRP.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-15	C	Low	C	Surface soils pathway, site workers are receptors.

Sources of Other Organic Chemicals

Contaminant Source Type	*Contaminant Source ID*	*CS ID tag*	*Zone*	*Risk Ranking for Analysis*	*Map Number*	*Comments*
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-16	C	Low	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-17	C	Low	C	Contamination present in soils.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-18	C	Low	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-19	C	Low	C	
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-20	C	Low	C	UST removed from the ground on 7/20/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-21	C	Low	C	UST removed from the ground 7/18/97.DRO contamination.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-22	C	Low	C	UST decommisioed on 7/13/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-23	C	Low	C	UST clsoed, removed from the ground 7/24/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-24	C	Low	C	UST removed from the ground on 7/25/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-25	C	Low	C	Suspected petroleum release from a UST.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-26	C	Low	C	DRO contaminated soil found during UST closure.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-27	C	Low	C	UST removed from the from the ground on 7/31/97.\L
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-28	C	Low	C	UST closed removed from the ground 9/3/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-29	C	Low	C	HOT UST close 9/4/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-30	C	Low	C	

Sources of Other Organic Chemicals

Contaminant Source Type	*Contaminant Source ID*	*CS ID tag*	*Zone*	*Risk Ranking for Analysis*	*Map Number*	*Comments*
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-31	C	Low	C	UST removed from the ground 7/23/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-32	C	Low	C	UST removed from the ground on 7/23/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-33	C	Low	C	UST removed from the groung 7/20/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-34	C	Low	C	UST removed from the ground on 7/25/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-35	C	Low	C	UST removed from ground on 7/20/97.
Open Leaking Underground Fuel Storage Tank (LUST) Sites	U07	U07-36	C	Low	C	UST closed, removed from the ground on 7/13/97.
Fire burn pits	X06	X06-01	C	High	C	Wood Dump/Burn Area.
Government vehicle maintenance facilities	X19	X19-01	C	Medium	C	Vehicle Maintenance Shop. POLs and waste oil.
Government vehicle maintenance facilities	X19	X19-02	C	Medium	C	Suspected petroleum release from a UST.
Government vehicle maintenance facilities	X19	X19-03	C	Medium	C	Suspected petroleum release from a UST.

Public Water Well System for PWS #260511.001 USAF Eareckson
Potential and Existing Sources of Contamination

LEGEND

Public Water System Well

Hydrography/Physical

- Parcels
- Stream
- Lake or Pond
- Contours
- Watershed Boundary

Transportation

- Primary Route (Class 1)
- Secondary Route (Class 2)
- Road (Class 3)
- Road (Class 4)
- Road (Class 5, Four-wheel drive)

Surfacewater Protection Zones

- Zone A Protection Area– 1000 Feet from Surface Water
- Zone B Protection Area– 1 Mile from Surface Water
- Zone C Protection Area– Watershed Boundary

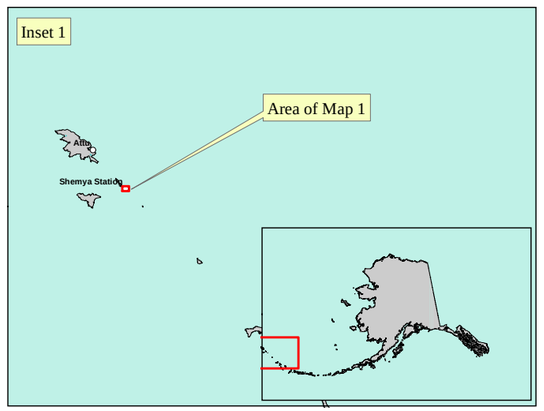
Existing or Potential Contaminant Sources

- Injection Wells (Class V) Industrial Drainage Well (D39)
- Tanks, diesel (underground) (T08)
- Closed tanks, diesel (underground) (T09)
- Tanks, gasoline (underground) (T12)
- Tanks, heating oil, non-residential (underground) (T16)
- Closed tanks, heating oil, non-residential (underground) (T17)
- Tanks, lubricants or other petroleum products (underground) (T20)
- Closed tanks, lubricants or other petroleum products (underground) (T21)
- Contaminated sites, DEC recognized, non-Superfund, non-RCRA (U04)
- Open Leaking Underground Storage Tank (LUST) (lubricants or other petroleum products) (U07)
- Closed Leaking Underground Storage Tank (LUST) (aviation) (U12)
- Fire burn pits (X06)
- Government vehicle maintenance facility (X19)
- Domestic Wastewater Treatment pond or lagoon (D02)
- Domestic Wastewater sludge land application areas (D04)

Data Sources:
- Contaminant Sources, Public Water System Wells, Contours Alaska Department of Environmental Conservation (ADEC)
- Critical Facilities, Federal Emergency Management Agency (FEMA)

All other data:
- United States Geological Survey (USGS)
- Drinking Water Protection Areas based on "Alaska Drinking Water Protection Program - Guidance Manual for Class A Public Water Systems" published by ADEC

URS Corporation does not guarantee the accuracy or validity of the data provided.



0 0.2 0.4 0.8 1.2 1.6 Miles

USAF Eareckson
PWS 260511.001
Appendix C Map C

Chart 1. Susceptibility of the Surface Water Source - USAF Eareckson (PWS No. 260511.001)

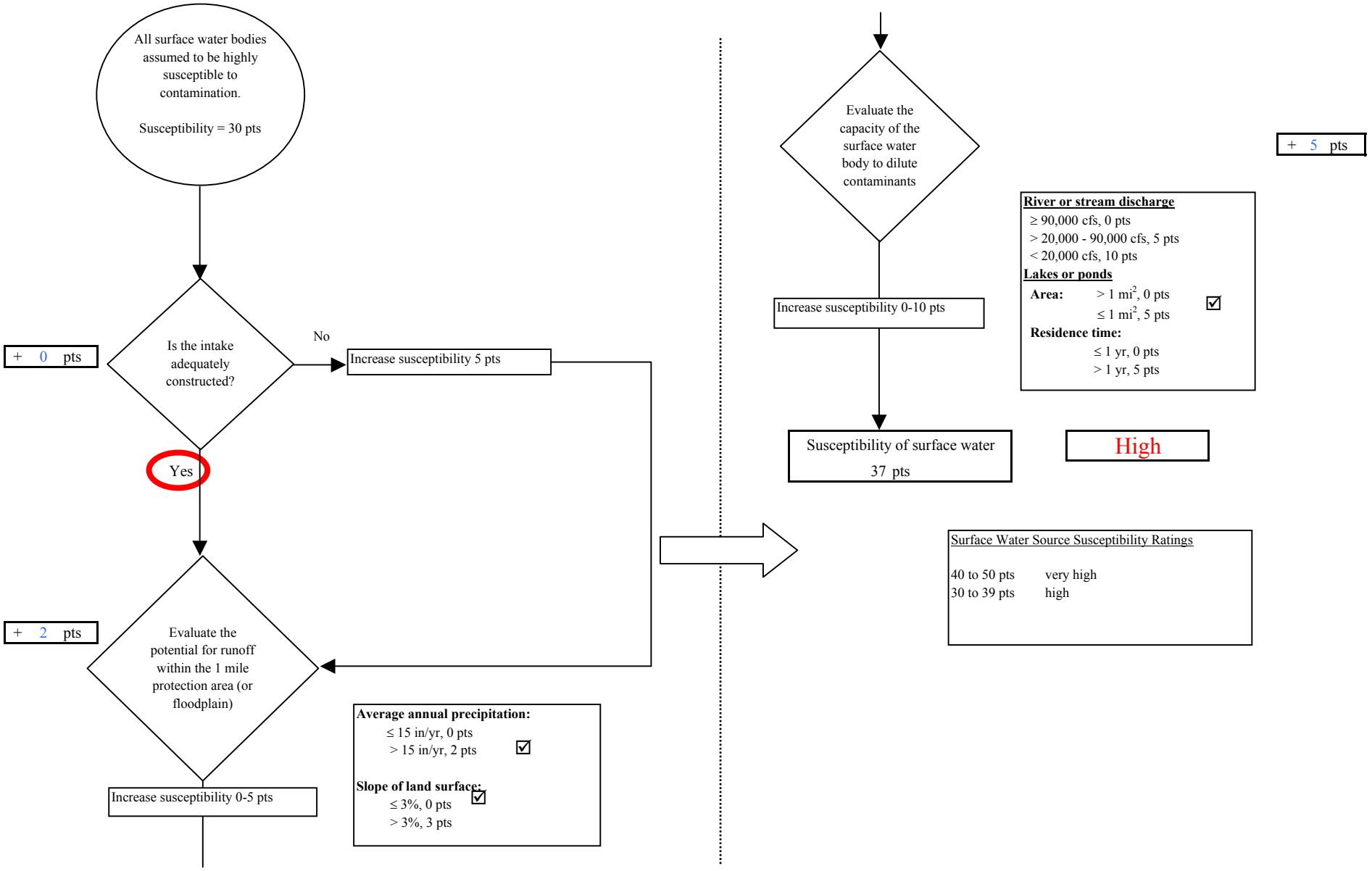
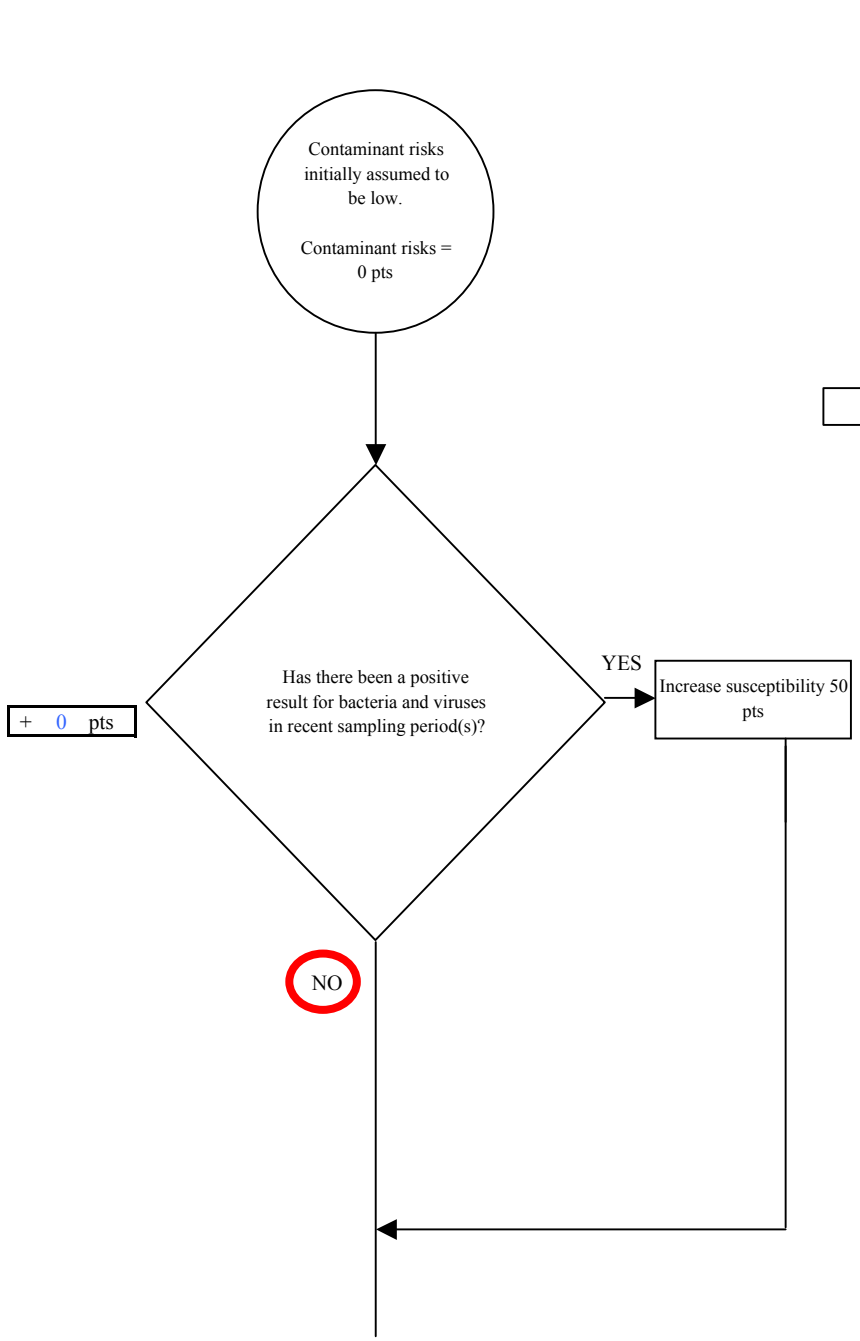
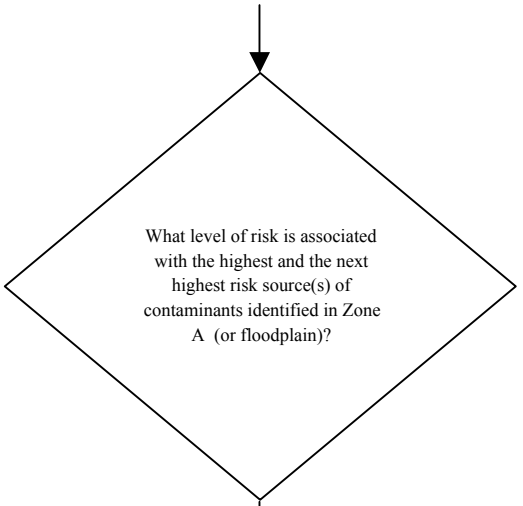


Chart 2. Contaminant risks for USAF Eareckson (PWS No. 260511.001) - Bacteria & Viruses





+ 0 pts

Risk Rankings for Bacteria/Virus Contaminant Sources Identified

	Zone A	Total
Very Highs(s)	0	0
High(s)	0	0
Medium(s)	0	0
Low(s)	0	0

	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 0

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 2. Contaminant risks for USAF Eareckson (PWS No. 260511.001) - Bacteria & Viruses

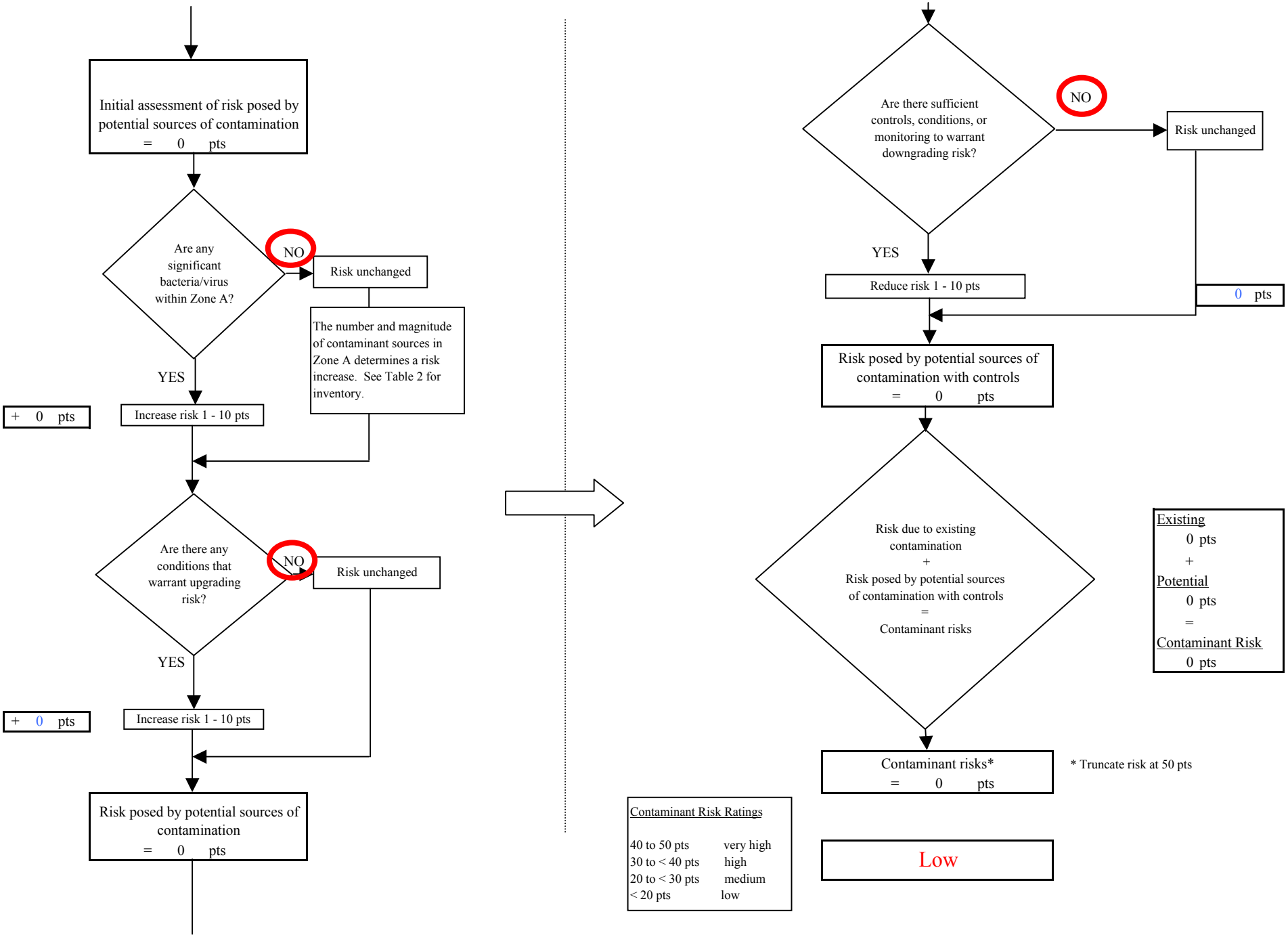


Chart 3. Vulnerability analysis for USAF Eareckson (PWS No. 260511.001) - Bacteria & Viruses

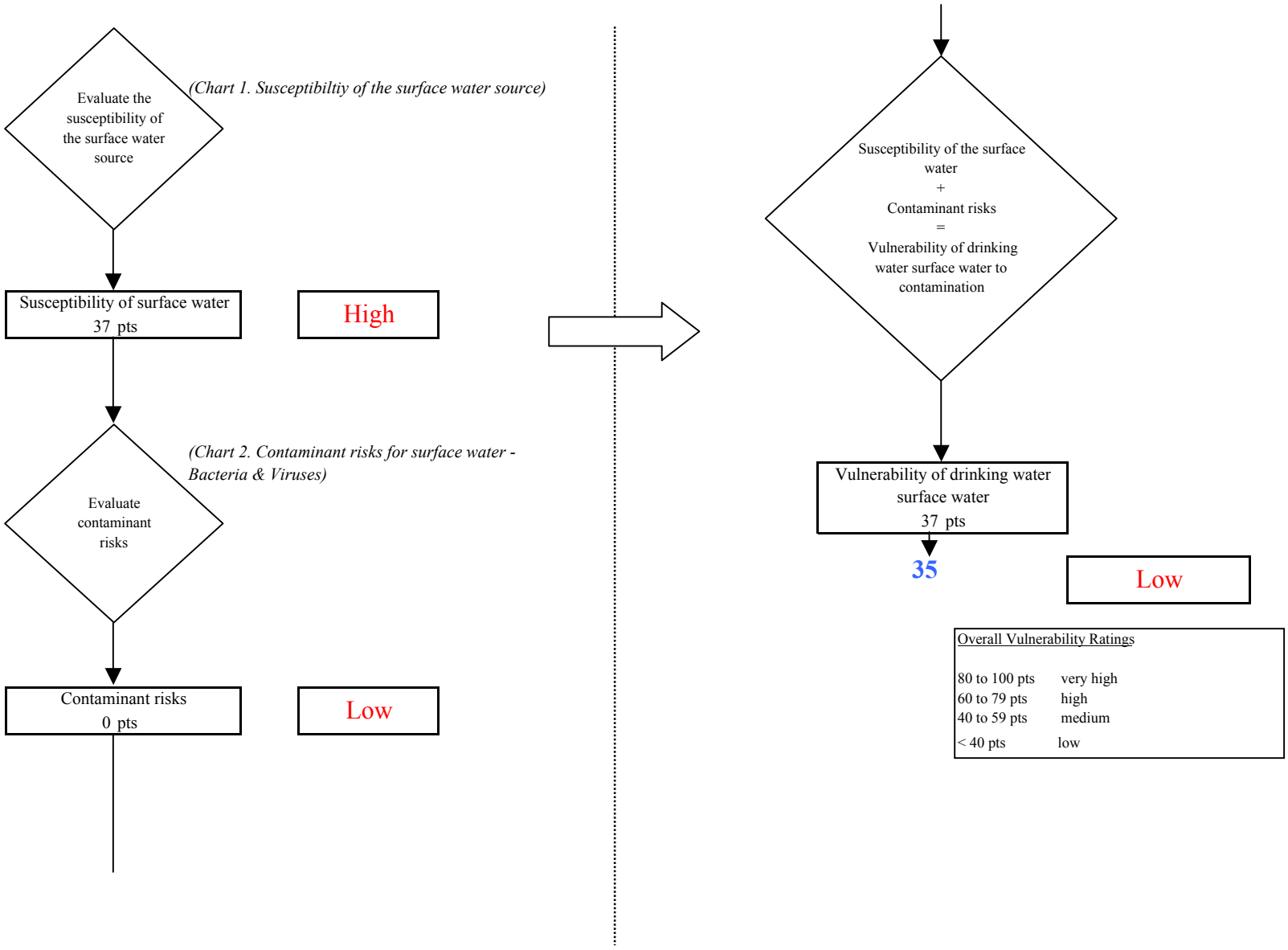


Chart 4. Contaminant risks for USAF Eareckson (PWS No. 260511.001) - Nitrates and Nitrites

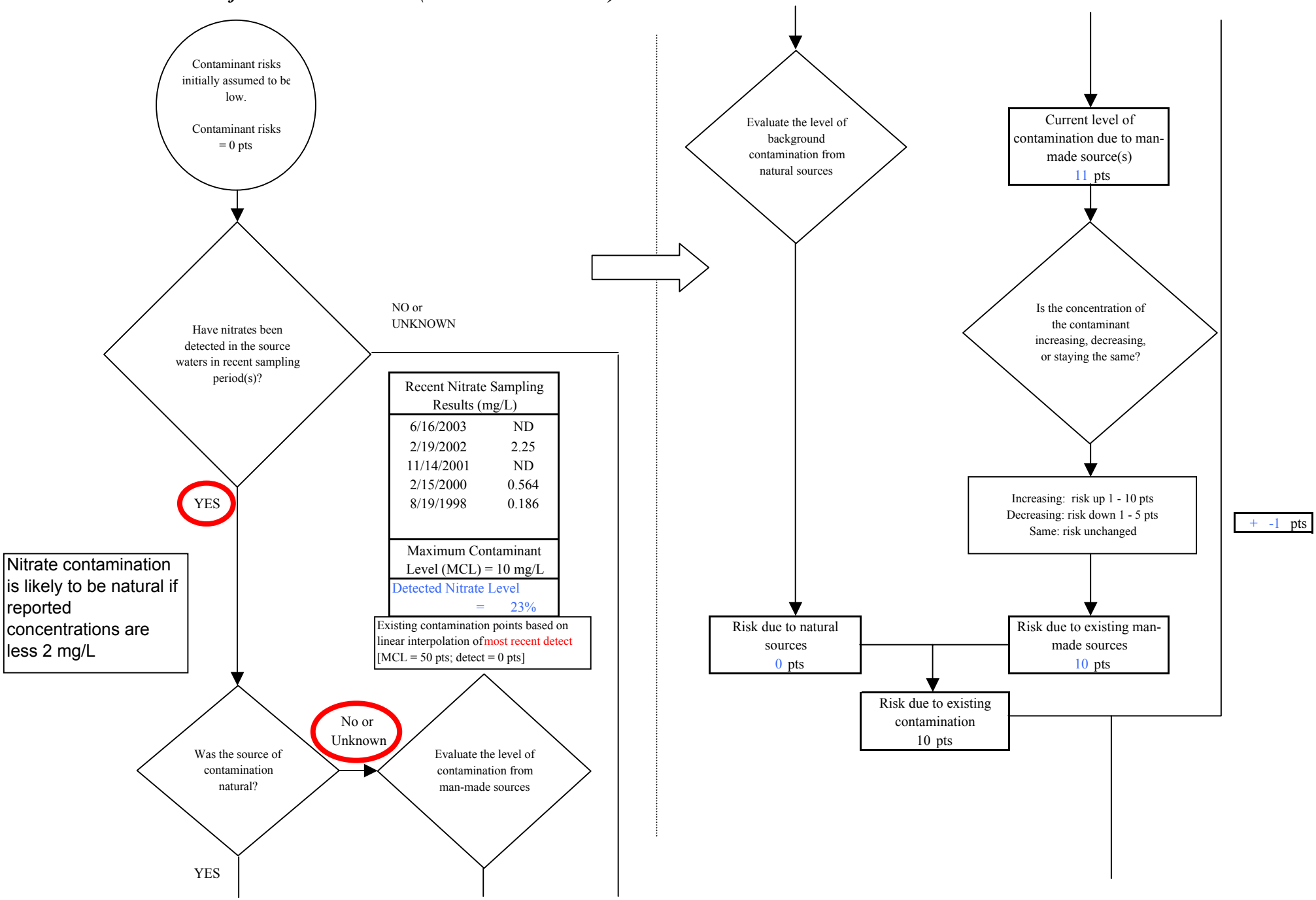


Chart 4. Contaminant risks for USAF Eareckson (PWS No. 260511.001) - Nitrates and Nitrites

+ 30 pts

What level of risk is associated with the highest and the next highest risk sources(s) of contaminants identified in Zones A and B? (see Risk Matrix below)

Risk Levels for Nitrate/Nitrite Sources identified in Zones A and B

	Zone A	Zone B	Total
Very Highs(s)	0	0	0
High(s)	0	1	1
Medium(s)	0		0
Low(s)	0		0

	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 30

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.

Initial assessment of risk posed by potential sources of contamination = 30 pts

Are any significant nitrate/nitrite sources in Zone A?

NO

Risk unchanged

The number and magnitude of contaminant sources in Zone A determines a risk increase. See Table 3 for inventory.

YES

Increase risk 1 - 10 pts

+ 0 pts

Chart 4. Contaminant risks for USAF Eareckson (PWS No. 260511.001) - Nitrates and Nitrites

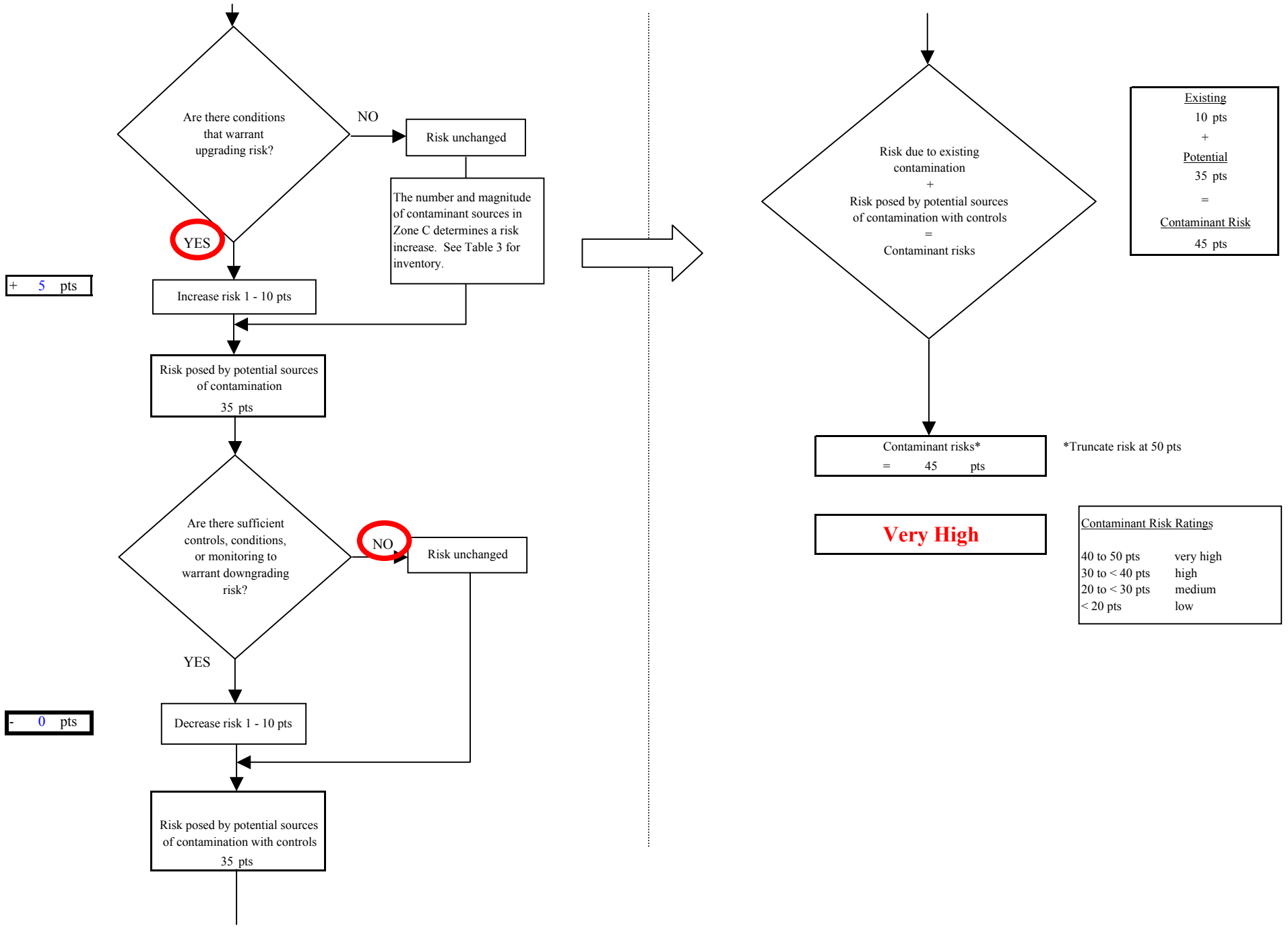


Chart 5. Vulnerability analysis for USAF Eareckson (PWS No. 260511.001) - Nitrates and Nitrites

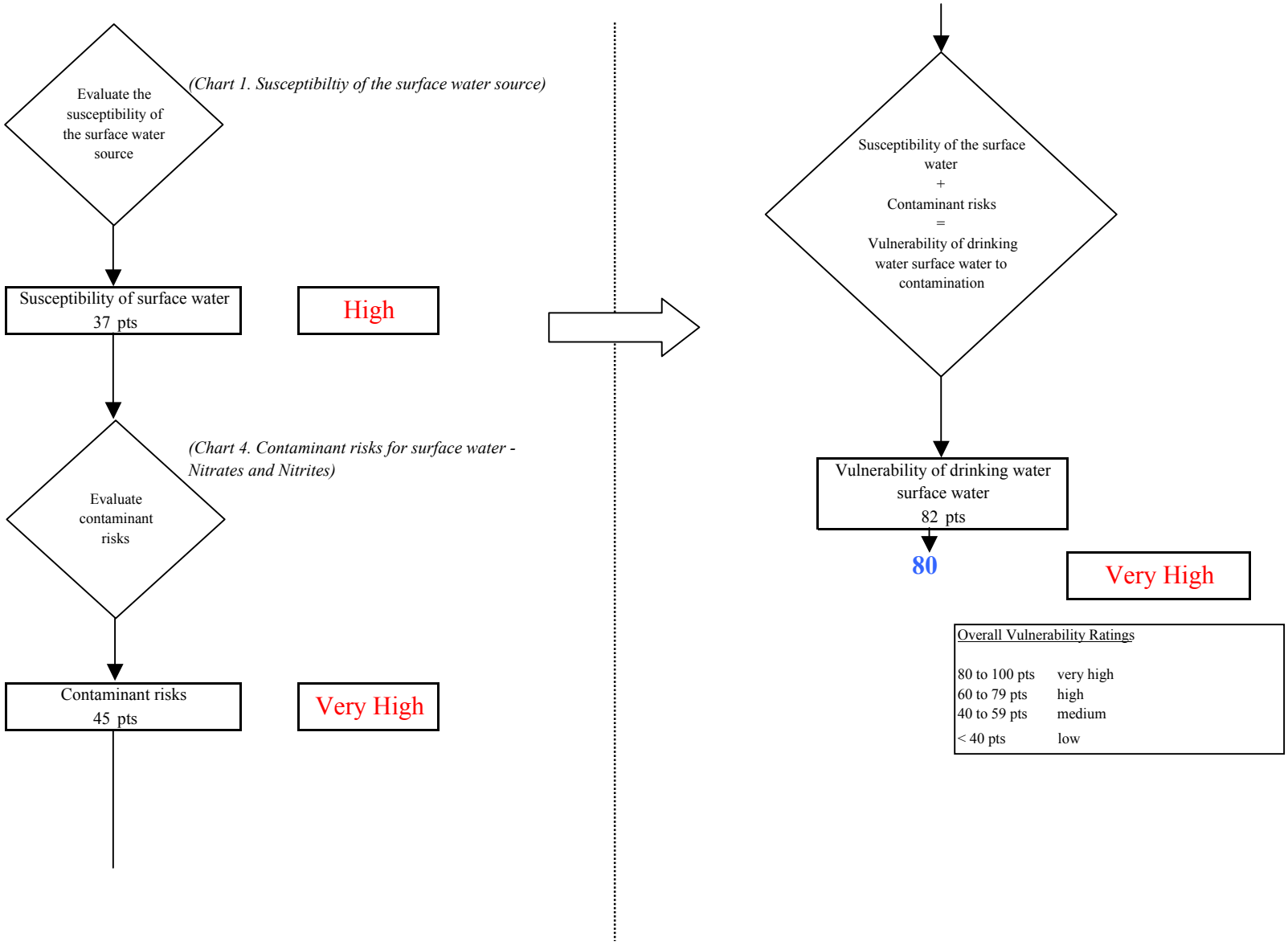


Chart 6. Contaminant risks for USAF Eareckson (PWS No. 260511.001) - Volatile Organic Chemicals

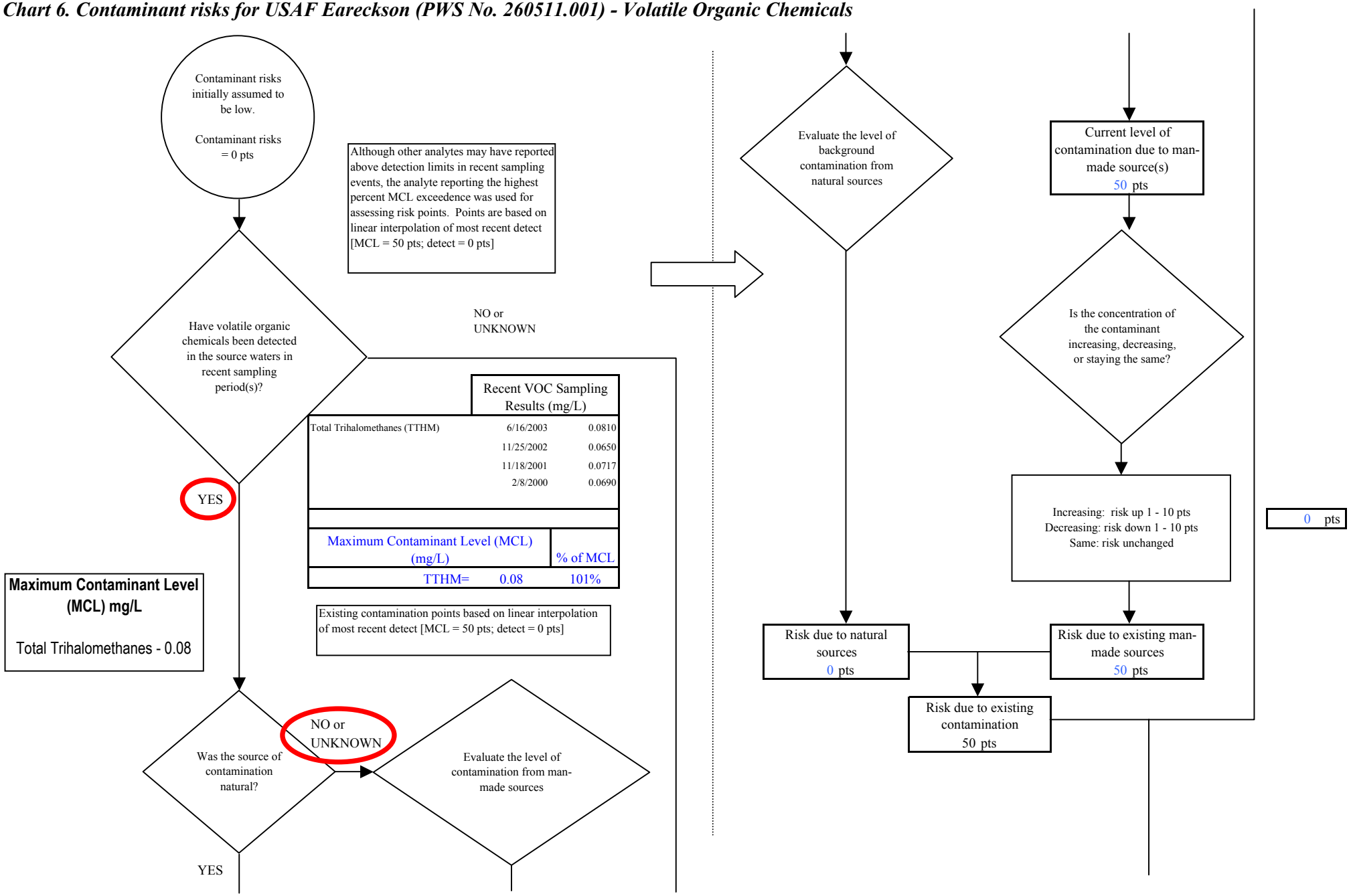


Chart 6. Contaminant risks for USAF Eareckson (PWS No. 260511.001) - Volatile Organic Chemicals

+ 0 pts

What level of risk is associated with the highest and the next highest risk sources(s) of contaminants identified in Zones A and B? (see Risk Matrix below)

Risk Levels for VOC Sources identified in Zones A and B			
	Zone A	Zone B	Total
Very Highs(s)	0	0	0
High(s)	0	0	0
Medium(s)	0		0
Low(s)	0		0

	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 0

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.

Initial assessment of risk posed by potential sources of contamination = 0 pts

Are any significant VOC sources in Zone A?

NO

Risk unchanged

The number and magnitude of contaminant sources in Zone A determines a risk increase. See Table 4 for inventory.

YES

Increase risk 1 - 10 pts

+ 0 pts

Chart 6. Contaminant risks for USAF Eareckson (PWS No. 260511.001) - Volatile Organic Chemicals

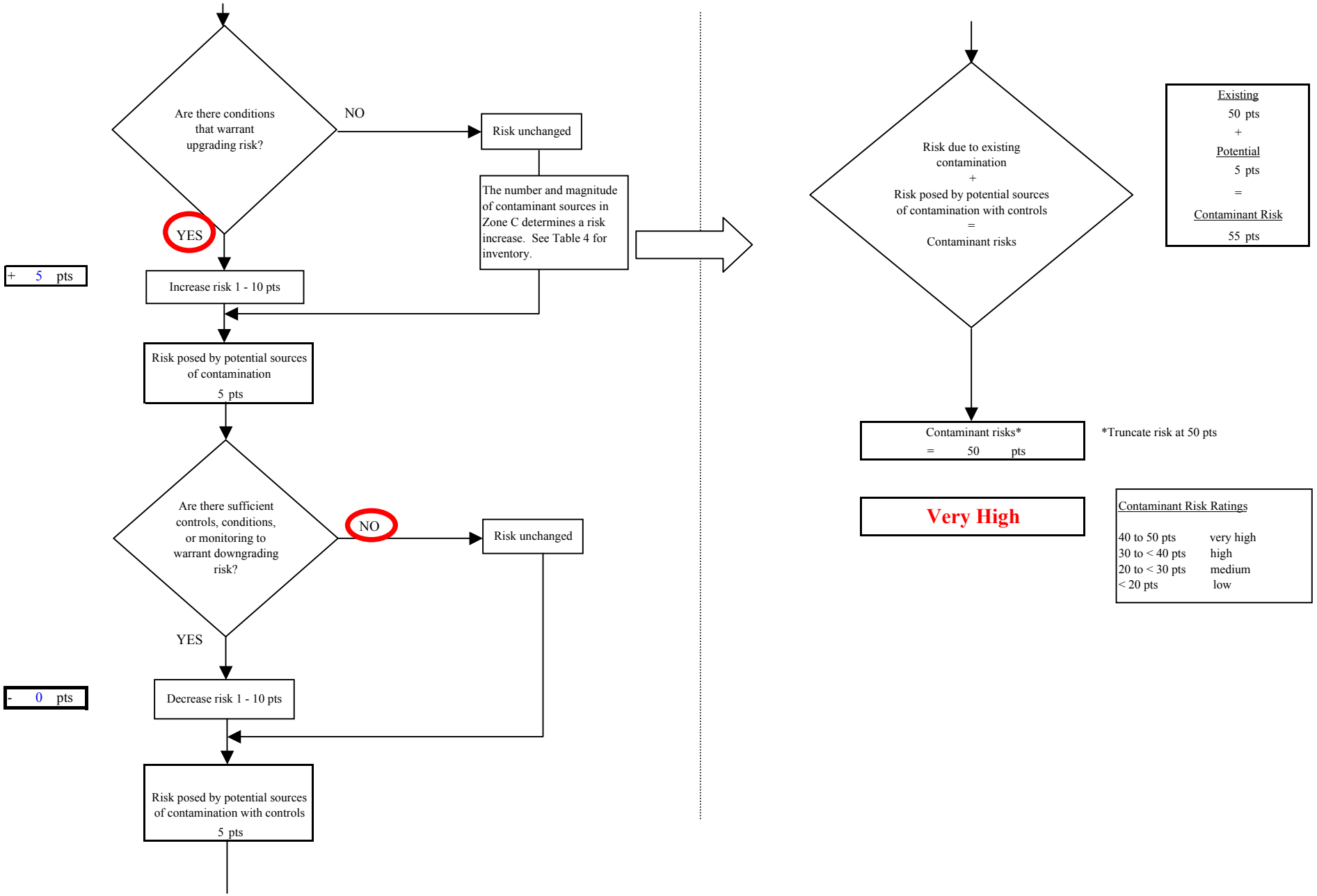


Chart 7. Vulnerability analysis for USAF Eareckson (PWS No. 260511.001) - Volatile Organic Chemicals

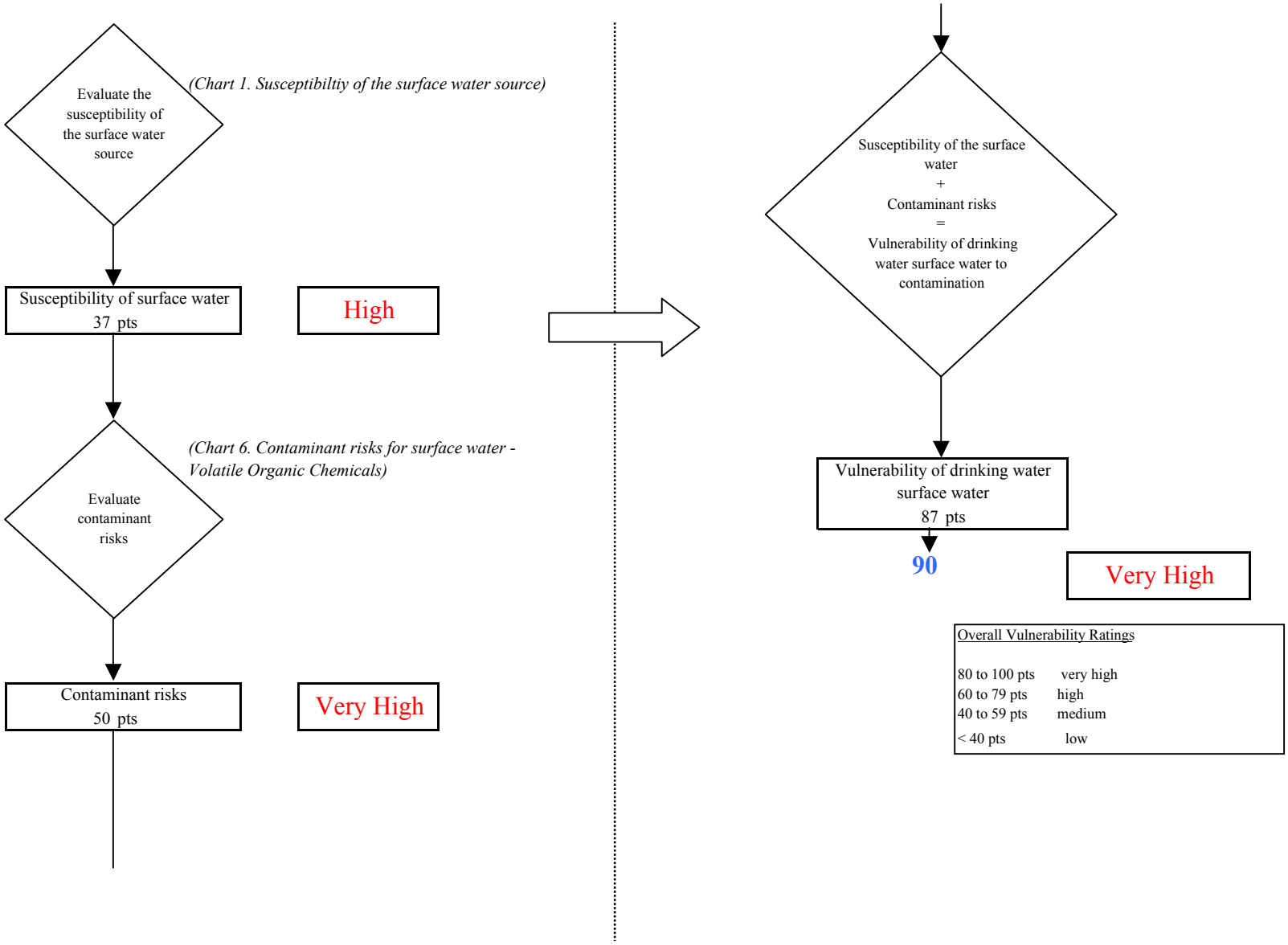


Chart 8. Contaminant risks for USAF Eareckson (PWS No. 260511.001) - Heavy Metals, Cyanide and Other Inorganic Chemicals

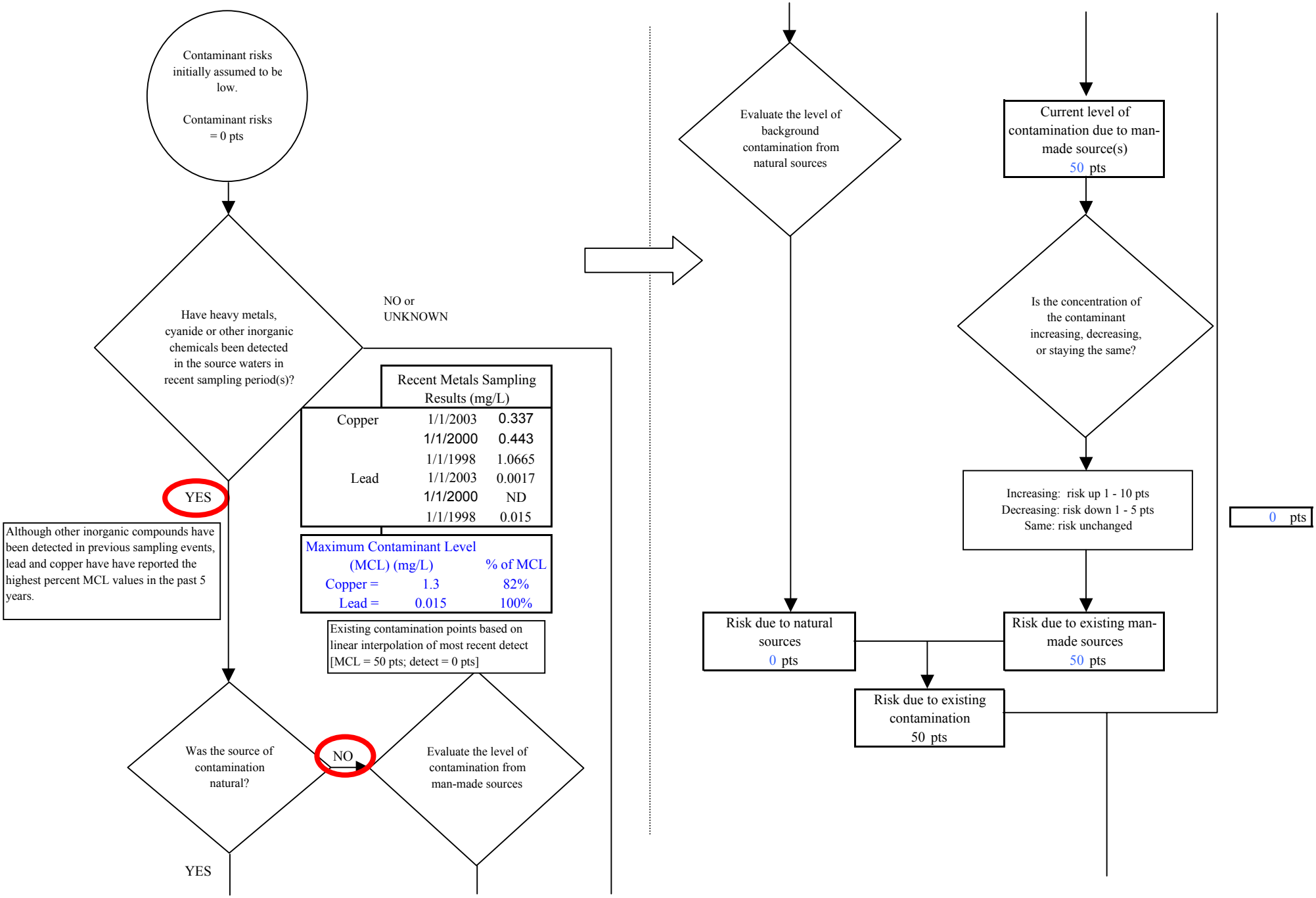
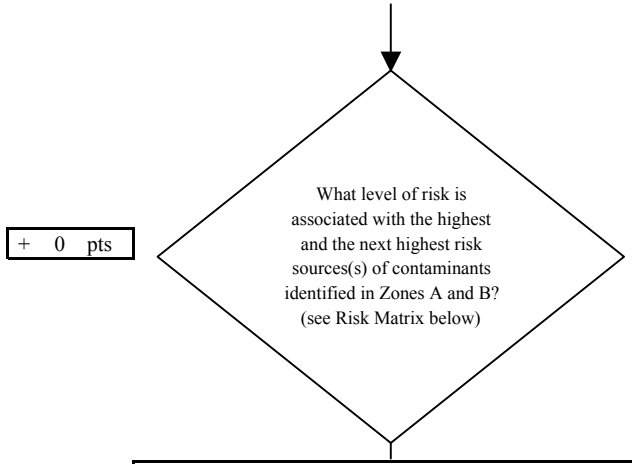


Chart 8. Contaminant risks for USAF Eareckson (PWS No. 260511.001) - Heavy Metals, Cyanide and Other Inorganic Chemicals



+ 0 pts

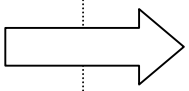
Risk Levels for HM, Cyanide, or OIC Sources identified in Zones A and B

	Zone A	Zone B	Total
Very Highs(s)	0	0	0
High(s)	0	0	0
Medium(s)	0		0
Low(s)	0		0

	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 0

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.



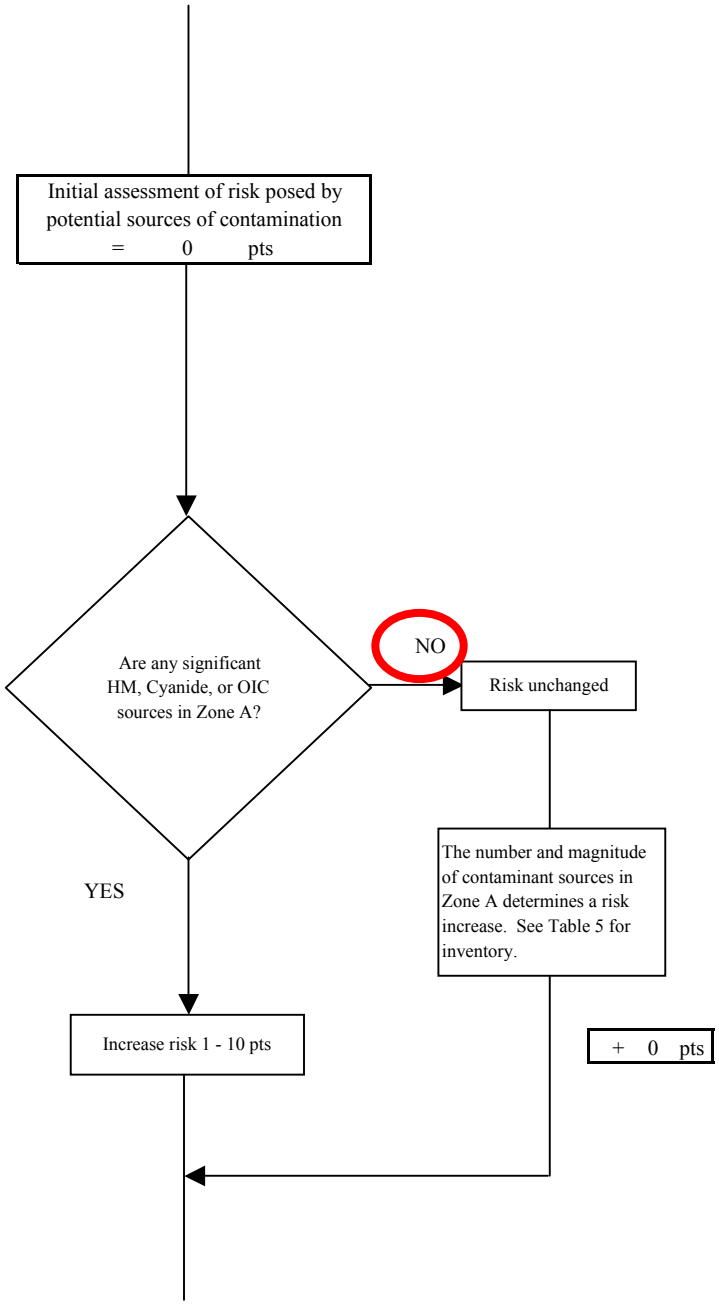


Chart 8. Contaminant risks for USAF Eareckson (PWS No. 260511.001) - Heavy Metals, Cyanide and Other Inorganic Chemicals

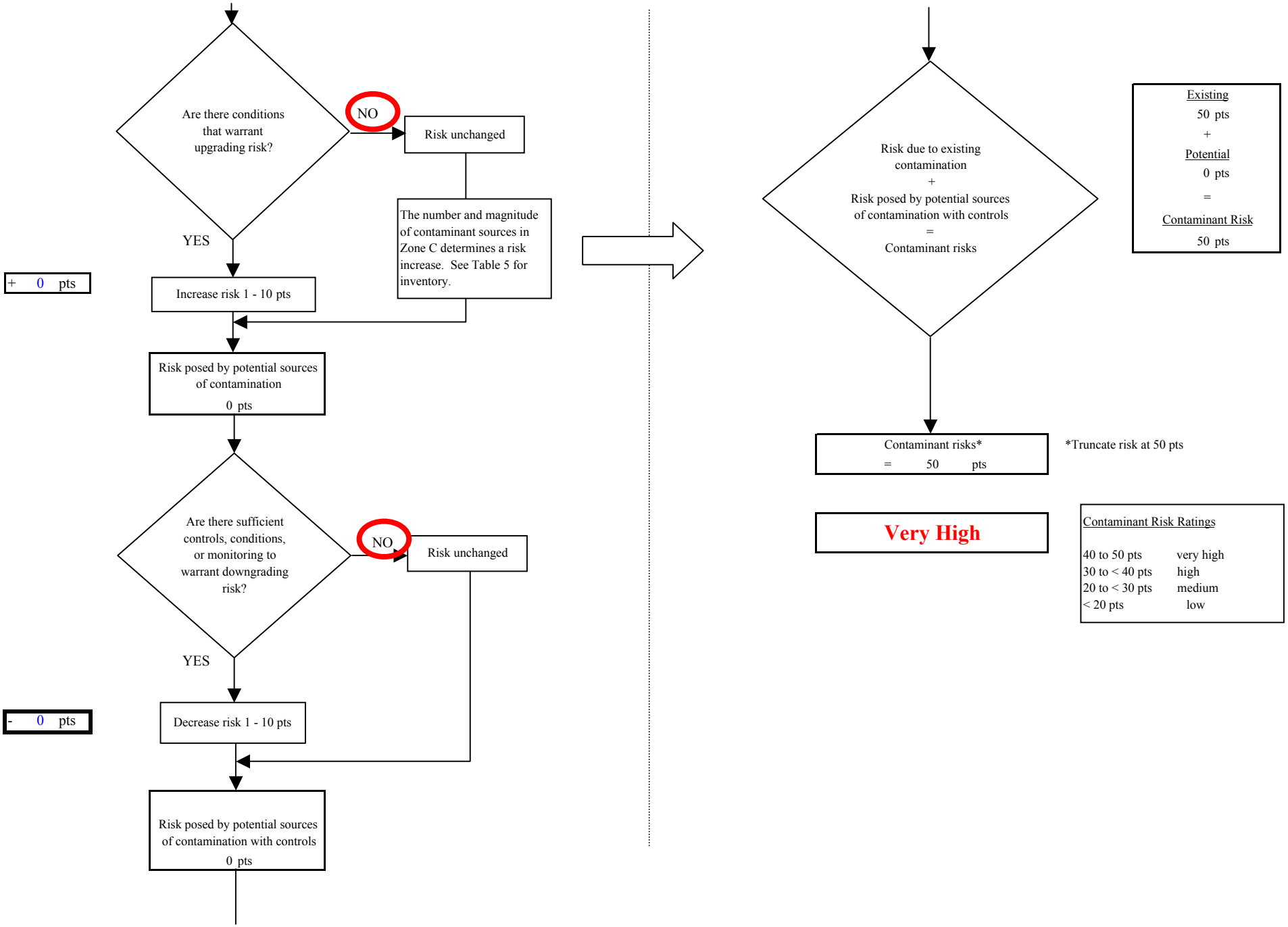


Chart 9. Vulnerability analysis for USAF Eareckson (PWS No. 260511.001) - Heavy Metals, Cyanide and Other Inorganic Chemicals

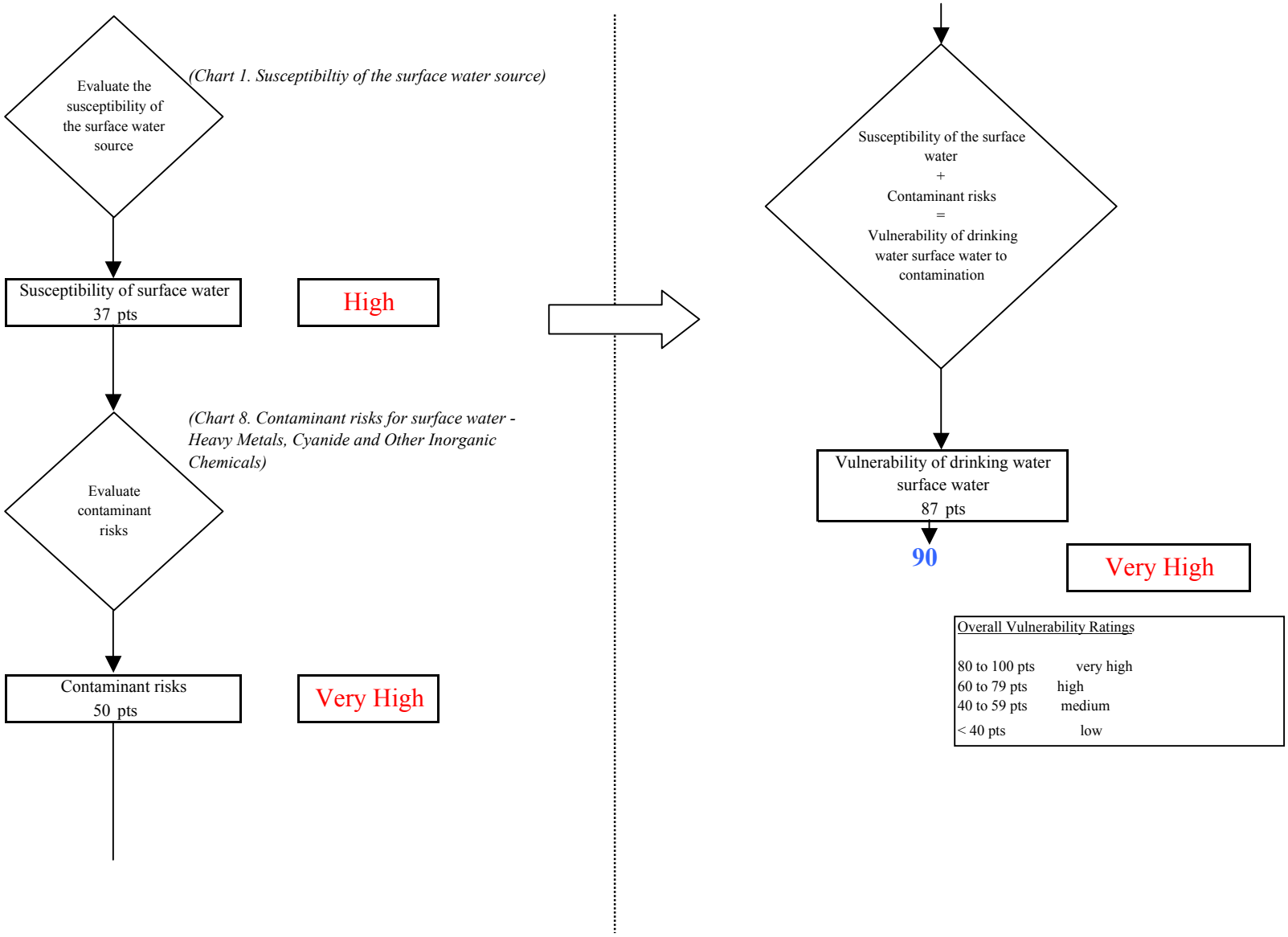


Chart 10. Contaminant risks for USAF Eareckson (PWS No. 260511.001) - Synthetic Organic Chemicals

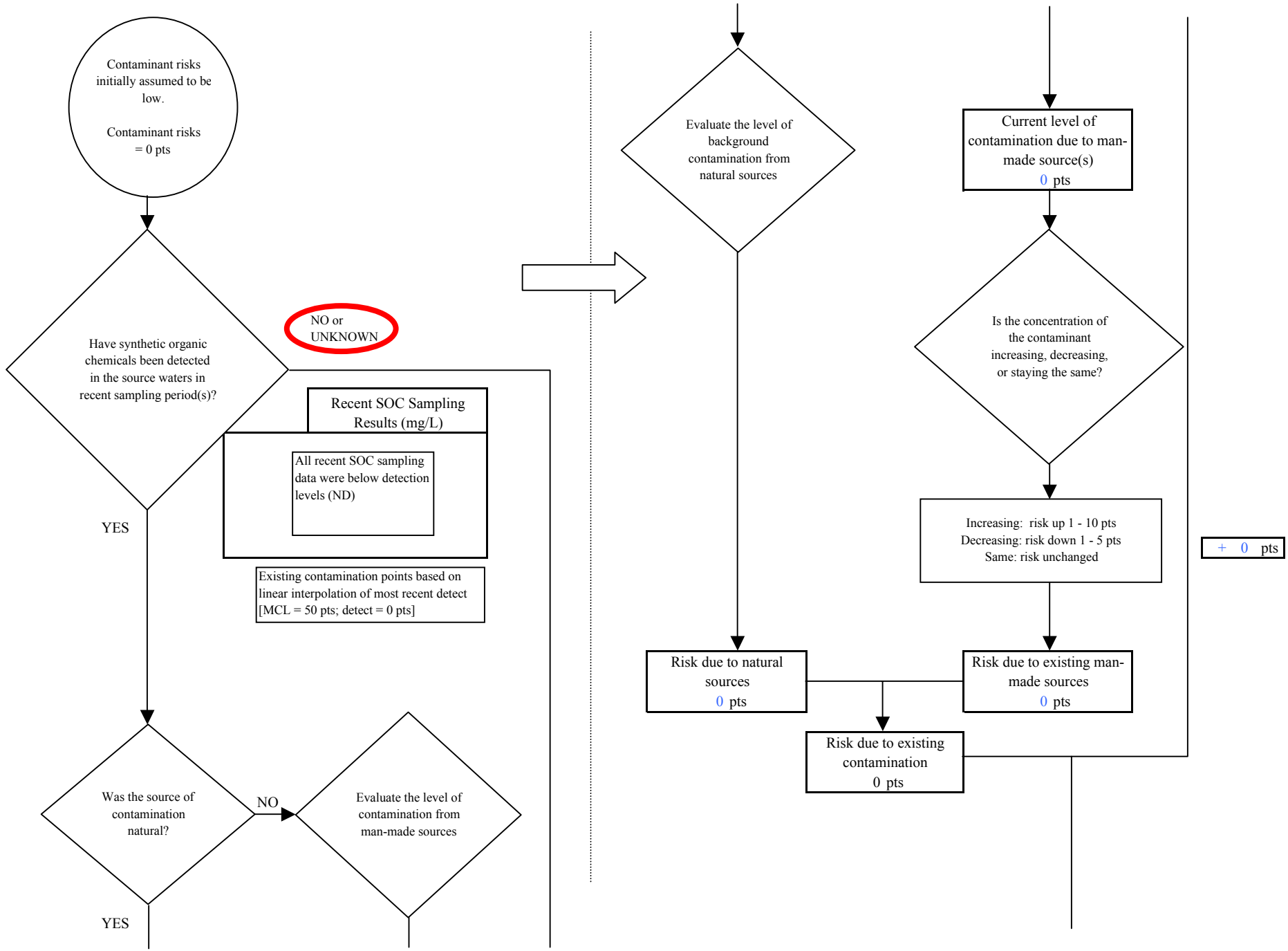
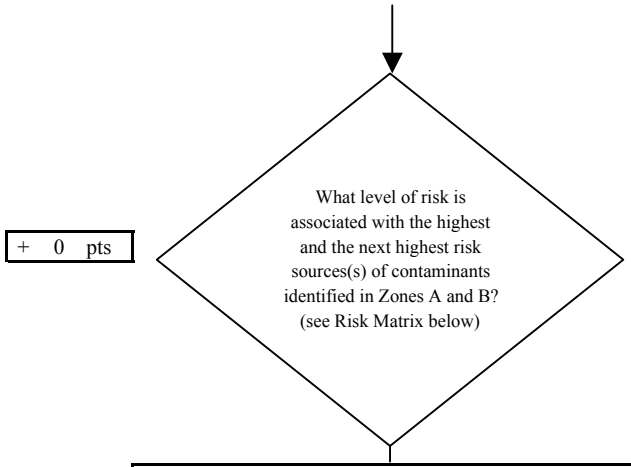


Chart 10. Contaminant risks for USAF Eareckson (PWS No. 260511.001) - Synthetic Organic Chemicals



+ 0 pts

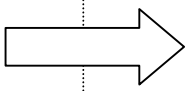
Risk Levels for SOC Sources identified in Zones A and C

	Zone A	Zone B	Total
Very Highs(s)	0	0	0
High(s)	0	0	0
Medium(s)	0	0	0
Low(s)	0	0	0

	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 0

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.



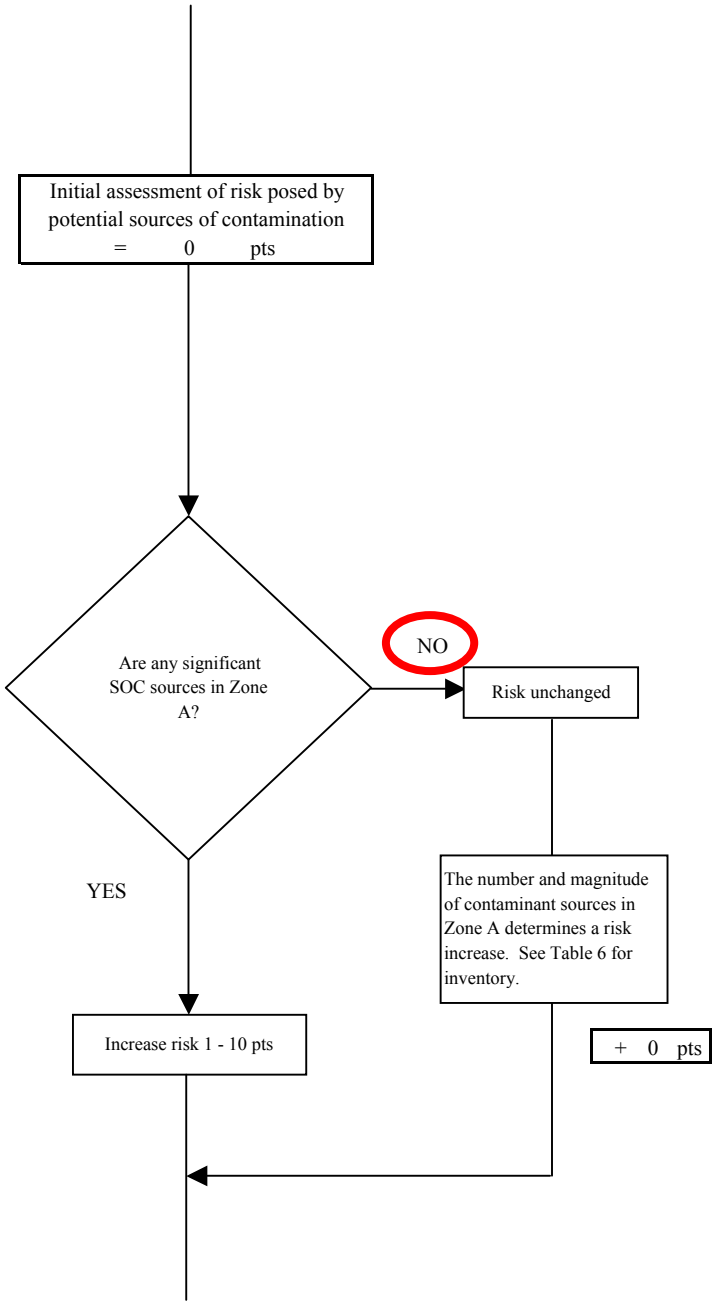


Chart 10. Contaminant risks for USAF Eareckson (PWS No. 260511.001) - Synthetic Organic Chemicals

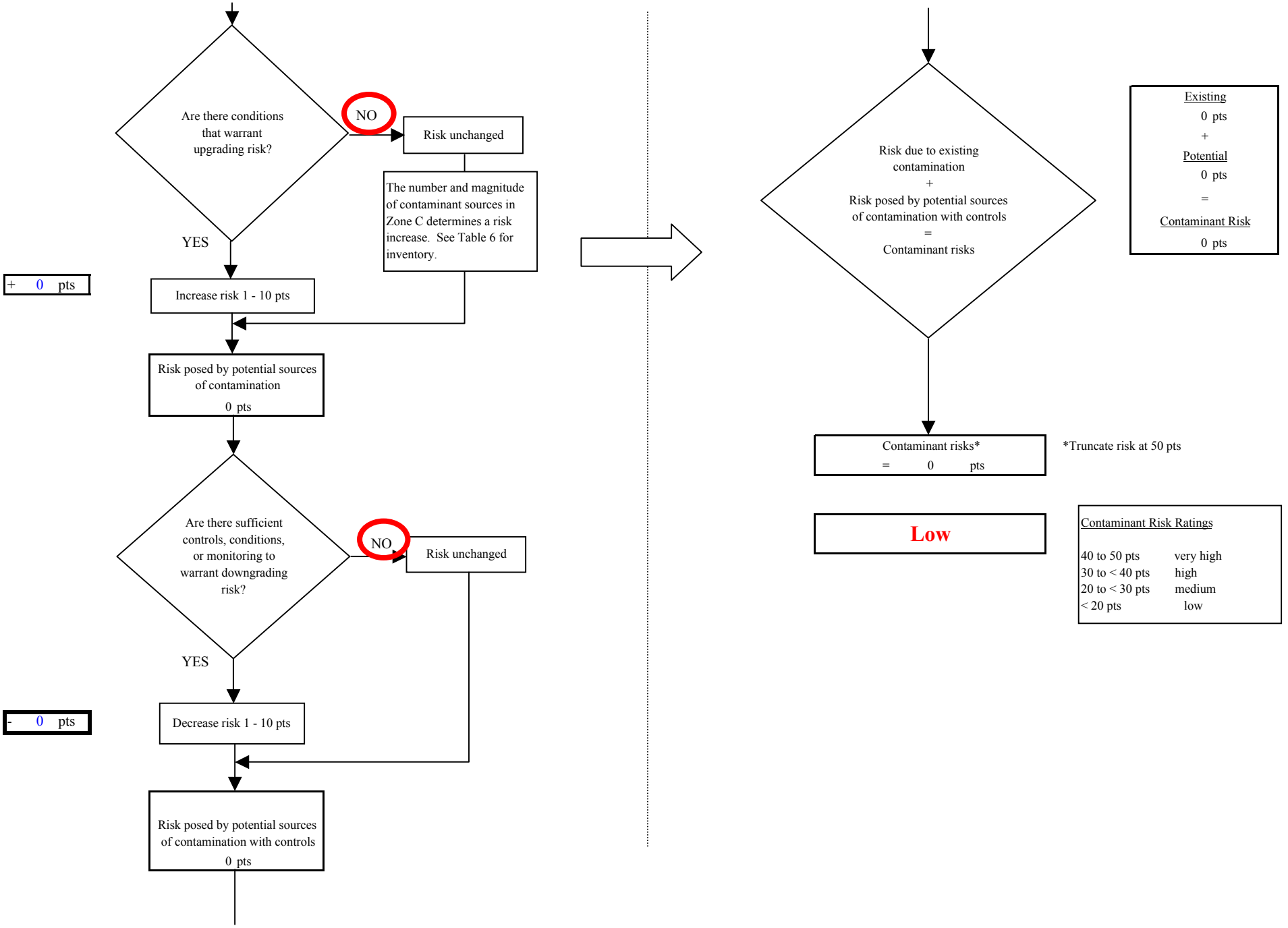


Chart 11. Vulnerability analysis for USAF Eareckson (PWS No. 260511.001) - Synthetic Organic Chemicals

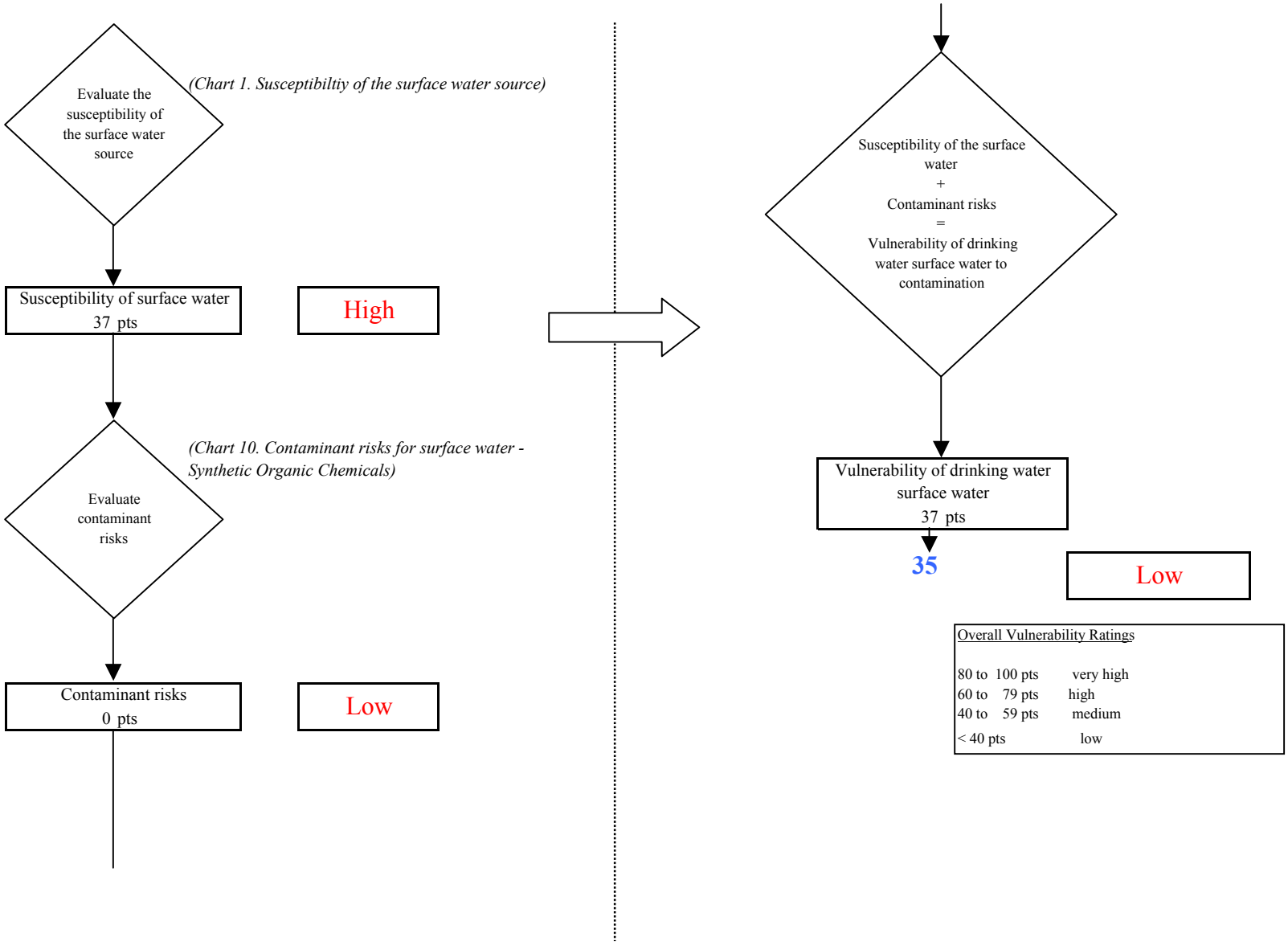


Chart 12. Contaminant risks for USAF Eareckson (PWS No. 260511.001) - Other Organic Chemicals

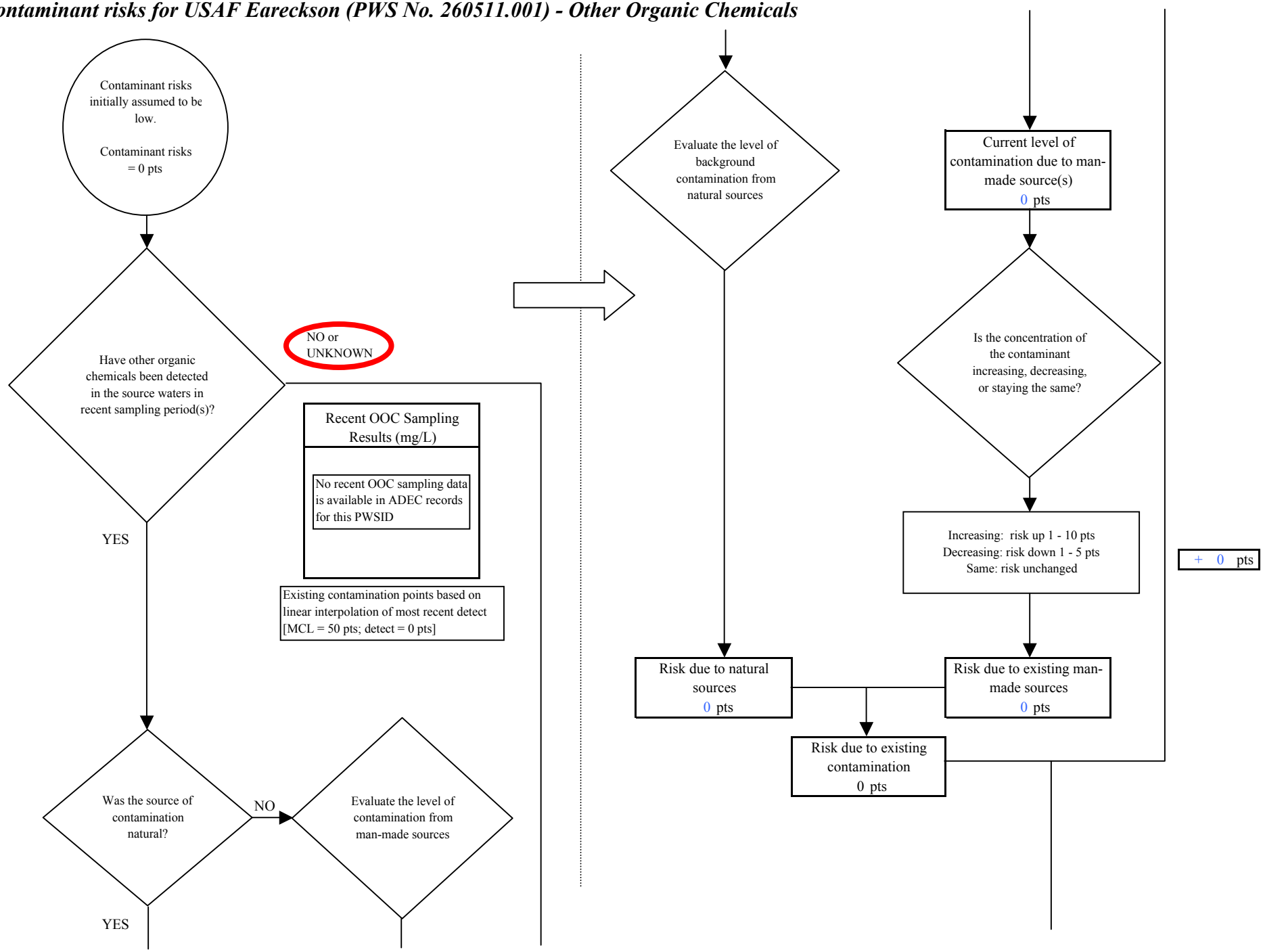
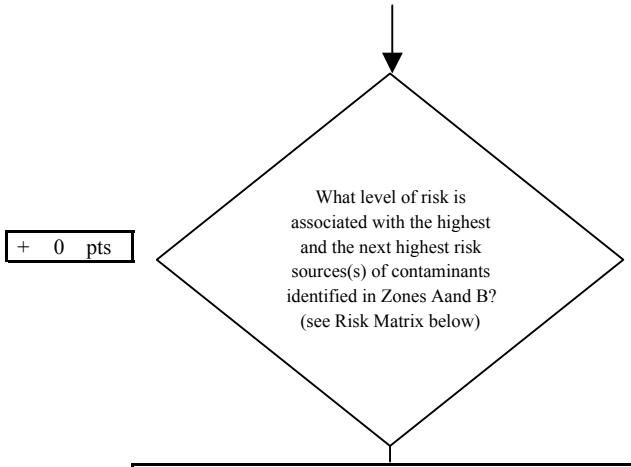


Chart 12. Contaminant risks for USAF Eareckson (PWS No. 260511.001) - Other Organic Chemicals



+ 0 pts

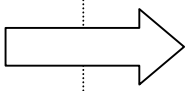
Risk Levels for OOC Sources identified in Zones A and B

	Zone A	Zone B	Total
Very Highs(s)	0	0	0
High(s)	0	0	0
Medium(s)	0	0	0
Low(s)	0	0	0

	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 0

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.



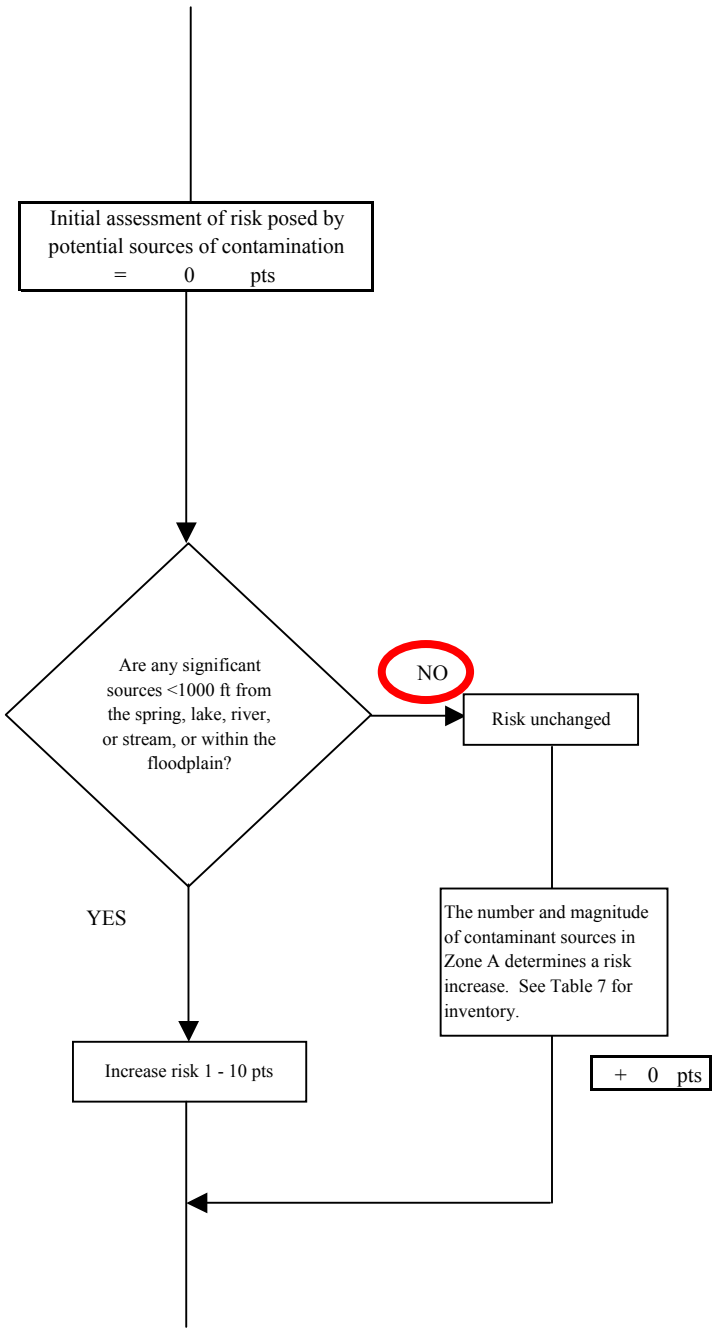


Chart 12. Contaminant risks for USAF Eareckson (PWS No. 260511.001) - Other Organic Chemicals

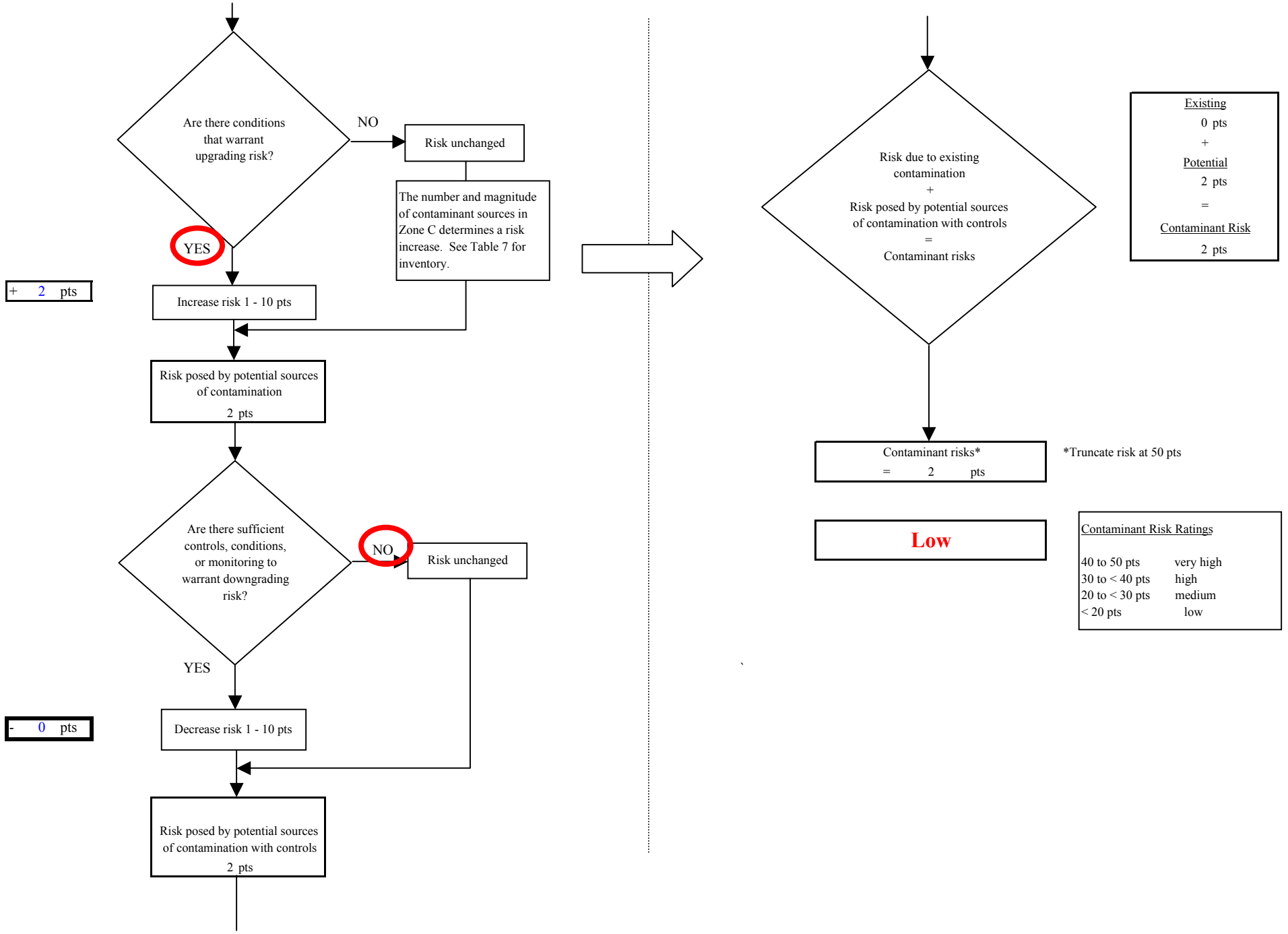


Chart 13. Vulnerability analysis for USAF Eareckson (PWS No. 260511.001) - Other Organic Chemicals