SFUND RECORDS CTR
2368225

CONFIDENTIAL/PREDECISIONAL

PA SCORESHEETS

PRELIMINARY ASSESSMENT

CERCLIS IDENTIFICATION NUMBER	
STATE	SITE NUMBER
CA	CAD983566472

SITE LOCATION

SITE NAME: Legal, common or descriptive name of site
East 14th Street Auto Wreckers

STREET ADDRESS, ROUTE or SPECIFIC LOCATION IDENTIFIER
16552 E. 14th Street

CITY	STATE	ZIP CODE	TELEPHONE
Ashland (unincorporated)	CA	94578	( ) none

COORDINATES: LATITUDE and LONGITUDE	TOWNSHIP, RANGE, and SECTION
LAT: 37° 41' 35.0" N LONG: 122° 6' 38.0" W	R2W T3S

OWNER/OPERATOR IDENTIFICATION

OWNER	OPERATOR
Duane Carlson	(same as owner)
OWNER ADDRESS: 19677 Betrose Court	OPERATOR ADDRESS
CITY: Castro Valley	CITY
STATE: CA; ZIP CODE: 94546; TELEPHONE: (415) 886-3085	STATE; ZIP CODE; TELEPHONE ( )

TYPE OF OWNERSHIP	OWNER/OPERATOR NOTIFICATION ON FILE
☑ PRIVATE	☑ NONE
☐ FEDERAL: Agency name _____	☐ CERCLA 103 C, UNCONTROLLED WASTE SITE DATE: _____
☐ STATE	☐ RCRA 3001 DATE: _____
☐ COUNTY	
☐ MUNICIPAL	
☐ OTHER: _____	
☐ NOT SPECIFIED	

SITE STATUS	YEARS OF OPERATION	APPROXIMATE SIZE OF SITE
☑ ACTIVE	BEGINNING YEAR: prior to 1946	31,320 ft.^{2}
☐ INACTIVE	ENDING YEAR: ongoing	
☐ UNKNOWN	☐ UNKNOWN	

SITE EVALUATION

AGENCY / ORGANIZATION
Bechtel Environmental, Inc.

INVESTIGATOR
Jan Whittington

CONTACT
Susan Naughton

ADDRESS
50 Beale St., San Francisco

TELEPHONE
(415) 768-8389

DATE
10 September 1991

Site Name: East 14th St. Auto Wreckers
Date: 8 November 91

GENERAL INFORMATION

Site Description and Operational History:

The site is an active 31,320 square foot auto wrecking yard located along a 4-lane traffic artery adjacent to a single family residential neighborhood. The land has been in operation with the same use since prior to 1946. Portions of the property are used for selling used vehicles, dismantling and open storage of wrecked vehicles, and interior and exterior storage of used parts.

Adjacent to the site extending to the east are single family residences. Immediately to the north there are residences, and extending to the north there is an auto parts center and a motorcycle sales and repair business. To the south across 166th Avenue there is a residence and a used car dealership. To the west across 14th Street there is an auto body repair and paint shop, a music store, and a carpet cleaning business. All of these establishments exist within a 200 foot radius of the site.

Drinking water for the area is obtained through distribution systems that rely on imported water sources from outside the watershed.

Drainage on the site flows initially to low points in the topography of the site, as identified on the site map. Storm water or other runoff would travel to the gutter of 166th Avenue and to the storm drain located in the gutter of 14th Street at the corner of 166th Avenue.

According to a former employee, in 1990 soil samples of the site have been taken. As a result, the owner allegedly rented earth moving equipment, scrapped off an unkown amount of the ground surface, and covered the exposed surface with an unknown amount of fill. The soil that was removed was transported away from the site. The site visit confirmed the presence of fill across the exposed (non-concrete or asphalt) surfaces of the site.

Probable Contaminants of Concern:
(Previous investigations; analytical data)

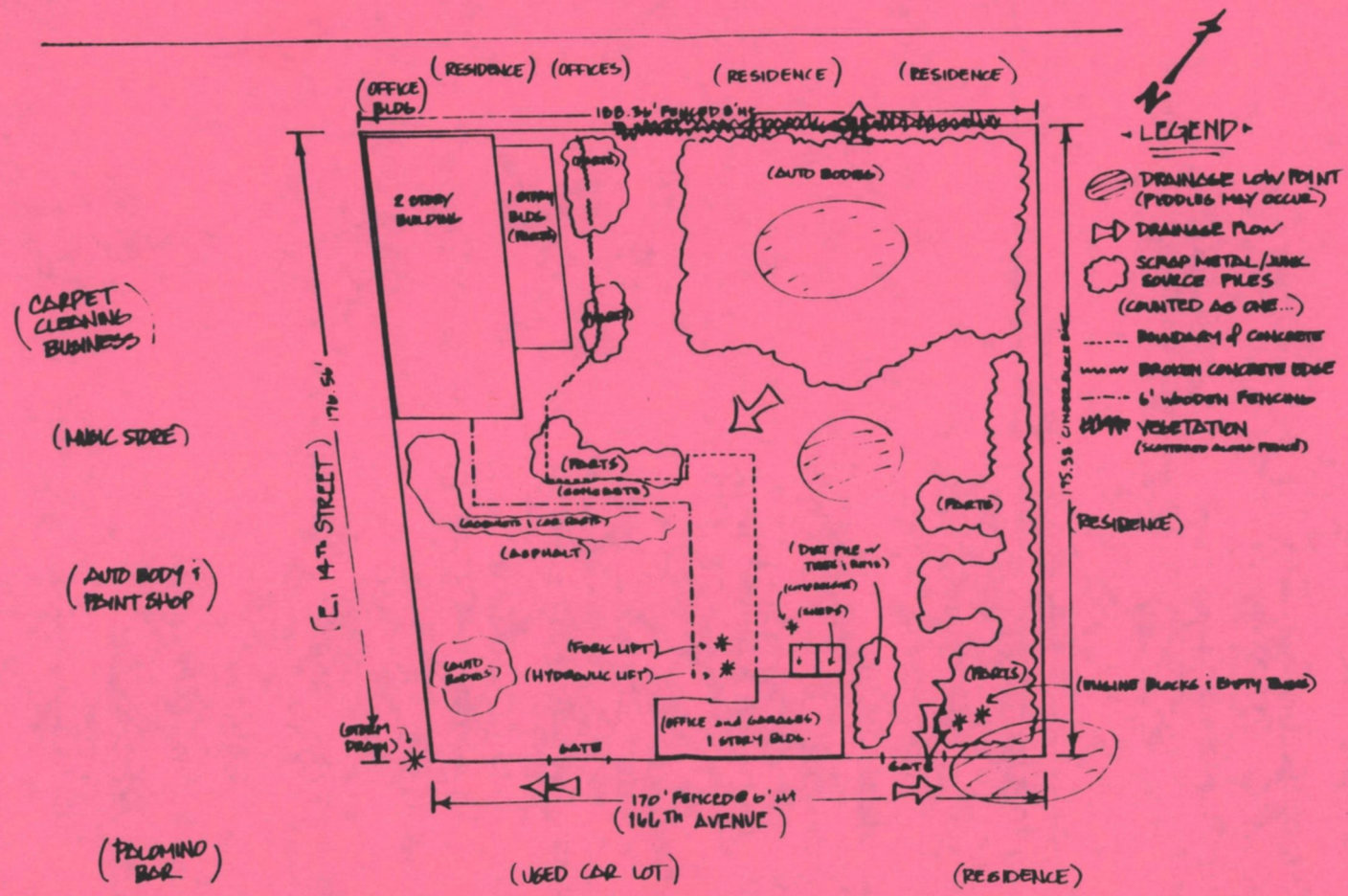
The fluids and solids containing hazardous substances typically located at auto wrecking yards for british sports cars would be engine oil, antifreeze, bearing grease, braking fluid, manual and power steering fluid, transmission fluids, differential oil, battery acids, brake linings, catalytic converters, aluminum parts, shock absorber fluids (similar to motorcycle fork oil), old mufflers, and anodized coatings. Solvents for cleaning would include carburetor cleaners, motor cleaners, and engine dunking tank acids.

The suspected contaminants from these fluids and solids would be lead, chromium, cadmium, zinc, copper, hydrocarbons, trichloroethylene, carbon tetrachloride, sulfuric acid, ethylene glycol, aluminum, antimony, bismuth, tin, arsenic, and asbestos.

Site Name: East 14th St. Auto Wreckers
Date: 8 November 91

GENERAL INFORMATION (continued)

Site Sketch:



Site Name: East 14th St. Auto Wreckers
Date: 8 November 91

GENERAL INFORMATION (continued)

Source Descriptions:

Scrap Metal or Junk Pile: Counted approximately 100 auto bodies, and 20 plywood boxes filled with auto parts.

Contaminated Soil: Area of site where soil was exposed, or asphalt or concrete was stained, approximately 75% of the area.

Drums: Scattered about the open areas of the site, and set inside the two metal sheds were several 55 gallon drums (metal and plastic), each empty, not labeled, and not rinsed clean.

Waste Characteristics (WC) Calculations:
(See PA Table 1, page 5)

Scrap Metal or Junk Pile:

Auto Bodies:
5'width x 2'height x 10'length = 100 $ft.^3$ per car
100 $ft.^3$ per car ÷ 27 = 3.7 $yd.^3$ per car
3.7 $yd.^3$ per car x 100 cars = 370 $yd.^3$ of auto bodies

Auto Parts:
4'width x 4'length x 2'height = 32 $ft.^3$ per box
32 $ft.^3$ per box ÷ 27 = 1.185 $yd.^3$ per box
1.185 $yd.^3$ x 20 boxes = 23.7 $yd.^3$ of auto parts

370 $yd.^3$ + 23.7 $yd.^3$ = 393.7 $yd.^3$ of scrap metal/junk pile
393.7 $yd.^3$ ÷ 2.5 value = 157.48 value of scrap metal/junk pile

Contaminated Soil:

Total site area = 31,320 ft.2
31,320 ft.2 x 75% = 23,490 ft. 2 area of contaminated soil
23,490 ft.2 ÷ 34,000 value = 0.69 value of contaminated soil

Drums:

10 drums ÷ 10 value = 1 value of drums

Waste Characteristic Value:

157.48 scrap metal/junk pile + 0.69 cont. soil + 1 drums =

159.17 WQ Total = WC Score of 32

WC = 32

Site Name: East 14th St. Auto Wreckers
Date: 8 November 91

GROUND WATER PATHWAY
GROUND WATER USE DESCRIPTION

Describe Ground Water Use Within 4-miles of the Site:
(Provide generalized stratigraphy; information on aquifers, municipal, and or private wells)

Did not identify any private wells used for drinking water within a 4 mile radius of the site. Maps of the water distribution system administered by the East Bay Municipal Utility District (EBMUD) show that approximately 95% of all parcels in the residential and commercial areas in the vicinity of the site have service connections. 98% of all water in their distribution system is from the Mokelumne River and the Pardee Reservoir. The water travels by aqueduct from the Sierra Nevada Mountains. The other 2% is rainfall to the Reservoir. There are no municipal wells connected to their water distribution system.

Show calculations of ground water drinking water populations:

GROUND WATER PATHWAY CRITERIA LIST

East 14th St. Auto Wreckers
8 November 91

This chart provides guidelines to assist you in hypothesizing the presence of a suspected release and identifying primary targets. It is expected th not all of this information will be available during the PA. Also, these criteria are not all-inclusive; list any other criteria you use to hypothesize suspected release or to identify primary targets. This chart will record your professional judgment in evaluating these factors.

The "Suspected Release" section of the chart guides you through evaluation of some site, source, and pathway conditions to help hypothesi whether a release from the site is likely. If a release is suspected, use the "Primary Targets" section to guide you through evaluation of sor conditions that will help identify targets likely to be exposed to hazardous substances. You may use this section of the chart more than onc depending on the number of targets you feel may be considered "primary." In the "Primary Targets" section on this sheet, record the respons for the well that you feel has the highest probability of being exposed to hazardous substances.

Check the boxes to indicate a "yes", "no", or "unknown" answer to each question. If you check the "Suspected Release" box as "yes", make su that you assign a Likelihood of Release value of 550 for the pathway.

GROUND WATER PATHWAY

SUSPECTED RELEASE

Yes	No	Unknown	
☑	☐	☐	Are sources poorly contained?
☑	☐	☐	Is the source a type likely to contribute to ground water contamination (e.g., wet lagoon)?
☐	☑	☐	Is waste quantity particularly large?
☐	☑	☐	Is precipitation heavy and infiltration rate high?
☐	☑	☐	Is the site located in an area of karst terrain?
☐	☐	☑	Is the subsurface highly permeable or conductive?
☐	☑	☐	Is drinking water drawn from a shallow aquifer?
☐	☐	☑	Are suspected contaminants highly mobile in ground water?
☐	☐	☑	Does any circumstantial evidence of ground water or drinking water contamination exist?
☐	☐		Other criteria? _____
☑	☐		**SUSPECTED RELEASE?**

PRIMARY TARGETS

Yes	No	Unknown	
☐	☐	☑	Is any drinking-water well nearby?
☐	☐	☑	Is any nearby drinking-water well closed?
☐	☐	☑	Has foul-tasting or foul-smelling water been reported by any nearby drinking-water users?
☐	☐	☑	Do any nearby wells have a large drawdown or high production rate?
☐	☐	☑	Are drinking-water wells located between the site and other wells that are suspected to be exposed to hazardous substances?
☐	☑	☐	Does any circumstantial evidence of ground water or drinking water contamination exist?
☐	☐	☑	Does any drinking-water well warrant sampling?
☐	☐		Other criteria? _____
☐	☑		**PRIMARY TARGET(S) IDENTIFIED?**

Summarize the rationale for suspected release (attach an additional page if necessary):

SOURCES are poorly contained, releases to soil are suspected, there are shallow aquifers. Therefore a release to groundwater is suspected.

Summarize the rationale for Primary Targets (attach an additional page if necessary):

Drinking water for the area is imported from outside the watershed by East Bay Municipal Utilities District. Shallow aquifers are only commonly used for irrigation. No Targets were identified.

Site Name: East 14th St. Auto Wreckers
Date: 8 November 91

GROUND WATER PATHWAY SCORESHEET

Pathway Characteristics		
Do you suspect a release (see Ground Water Pathway Criteria List, page 7)?	Yes X	No ___
Is the site located in karst terrain?	Yes ___	No X
Depth to aquifer:	_____ ft	
Distance to the nearest drinking-water well:	_____ ft	

LIKELIHOOD OF RELEASE

	A *Suspected Release*	B *No Suspected Release*	*Reference*
1. SUSPECTED RELEASE: If you suspect a release to ground water (see page 7), assign a score of 550, and use only column A for this pathway.	(550) 550		1
2. NO SUSPECTED RELEASE: If you do not suspect a release to ground water, and the site is in karst terrain or the depth to aquifer is 70 feet or less, assign a score of 500; otherwise, assign a score of 340. Use only column B for this pathway.		(500 or 340)	
LR =	550		

TARGETS

3. PRIMARY TARGET POPULATION: Determine the number of people served by drinking water from wells that you suspect have been exposed to hazardous substances from the site (see Ground Water Pathway Criteria List, page 7). _____ people x 10 =	0		2
4. SECONDARY TARGET POPULATION: Determine the number of people served by drinking water from wells that you do NOT suspect have been exposed to hazardous substances from the site, and assign the total population score from PA Table 2. Are any wells part of a blended system? Yes ___ No ___ If yes, attach a page to show apportionment calculations.	0		3
5. NEAREST WELL: If you have identified any Primary Targets for ground water, assign a score of 50; otherwise, assign the highest Nearest Well score from PA Table 2. If no drinking-water wells exist within 4 miles, assign a score of zero.	(50, 20, 10, 9, 6, 3, 2, or 0) 0	(20, 10, 9, 6, 3, 2, or 0)	4
6. WELLHEAD PROTECTION AREA (WHPA): Assign a score of 20 if any portion of a designated WHPA is within ¼ mile of the site; assign 5 if from ¼ to 4 miles.	(20, 5, or 0)	(20, 5, or 0)	
7. RESOURCES: A score of 5 is assigned.	(5) 5	(5) 5	
T =	5		

WASTE CHARACTERISTICS

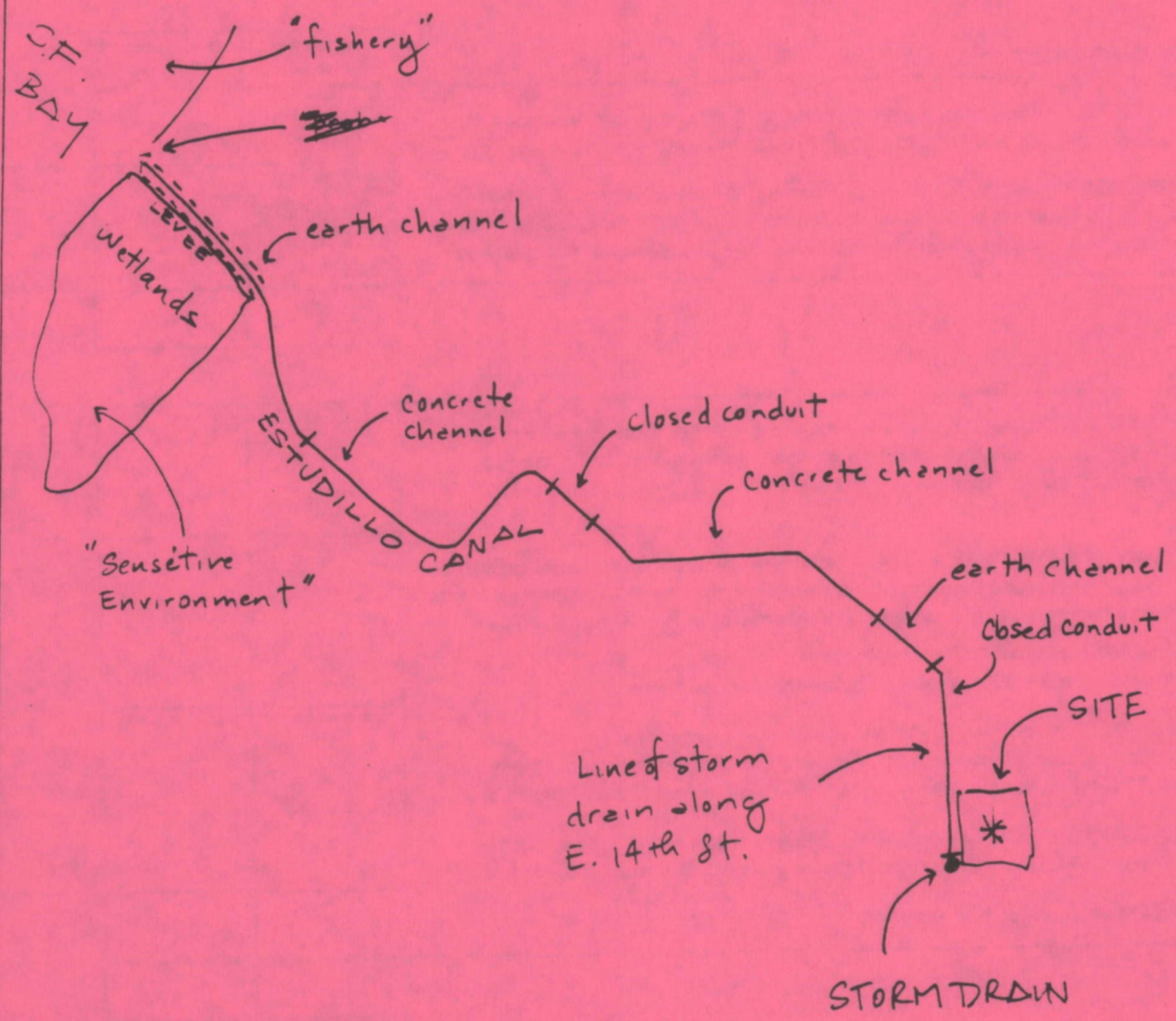
8. A. If you have identified any Primary Targets for ground water, assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.	(100 or 32)		
B. If you have NOT identified any Primary Targets for ground water, assign the waste characteristics score calculated on page 4.	(100, 32, or 18) 32	(100, 32, or 18)	
WC =	32		

GROUND WATER PATHWAY SCORE: $\frac{LR \times T \times WC}{82{,}500}$ = (Indicate to a maximum of 100) 1.067

Site Name: East 14th St. Auto Wreckers
Date: 8 November 91

SURFACE WATER PATHWAY
MIGRATION ROUTE SKETCH

Provide a Sketch of the Surface Water Migration Route:
(include runoff route, probable point of entry, 15-mile target distance limit, intakes, fisheries, and sensitive environments)



TOTAL DISTANCE
SITE TO BAY = ≈ 5 miles
SITE TO WETLANDS = 4.5 miles
no drinking water intakes enroute.
this system serves as discharge route to many other industries and manufacturers.

SURFACE WATER PATHWAY CRITERIA LIST

East 14th St. Auto Wreckers
8 November 91

This chart provides guidelines to assist you in hypothesizing the presence of a suspected release and identifying primary targets. It is expected th not all of this information will be available during the PA. Also, these criteria are not all-inclusive; list any other criteria you use to hypothesize suspected release or to identify primary targets. This chart will record your professional judgment in evaluating these factors.

The "Suspected Release" section of the chart guides you through evaluation of some site, source, and pathway conditions to help hypothesiz whether a release from the site is likely. If a release is suspected, use the "Primary Targets" section to guide you through evaluation of som conditions that will help identify targets likely to be exposed to hazardous substances. You may use this section of the chart more than onc depending on the number of targets you feel may be considered "primary." In the "Primary Targets" section on this sheet, record the response for the target that you feel has the highest probability of being exposed to hazardous substances.

Check the boxes to indicate a "yes", "no", or "unknown" answer to each question. If you check the "Suspected Release" box as "yes", make sur that you assign a Likelihood of Release value of 550 for the pathway.

SURFACE WATER PATHWAY

SUSPECTED RELEASE

Yes	No	Unknown	
☐	☑	☐	Is surface water nearby?
☐	☑	☐	Is waste quantity particularly large?
☐	☑	☐	Is the drainage area large?
☐	☐	☑	Is precipitation heavy or infiltration rate low?
☑	☐	☐	Are sources poorly contained or prone to runoff or flooding?
☐	☑	☐	Is a runoff route well defined (e.g., ditch or channel leading to surface water)?
☑	☐	☐	Is vegetation stressed along the probable runoff path?
☐	☐	☑	Are suspected contaminants highly persistent in surface water?
☐	☐	☑	Are sediments/water unnaturally discolored?
☐	☑	☐	Is wildlife unnaturally absent?
☑	☐	☐	Has deposition of waste into surface water been observed?
☐	☑	☐	Is ground water discharge to surface water likely?
☑	☐	☐	Is there any circumstantial evidence of surface water contamination?
☑	☐		Other criteria? witness
☑	☐		**SUSPECTED RELEASE?**

PRIMARY TARGETS

Yes	No	Unknown	
☑	☐	☐	Is any target nearby? If yes:
			☐ Drinking-water intake
			☑ Fishery
			☐ Sensitive environment
☐	☑	☐	Has an intake, fishery, or recreational area been closed?
☐	☑	☐	Is there any circumstantial evidence of surface water contamination at or downstream of a target?
☐	☑	☐	Does any target warrant sampling? If yes:
			☐ Drinking-water intake
			☐ Fishery
			☐ Sensitive environment
☐	☐		Other criteria? _____
☐	☑		**PRIMARY INTAKE(S) IDENTIFIED?**
☑	☐		**PRIMARY FISHERY IDENTIFIED?**
☐	☑		**PRIMARY SENSITIVE ENVIRONMENT(S) IDENTIFIED?**

Summarize the rationale for suspected release (attach an additional page if necessary):

A neighbor to the facility has observed oily film in the surface water runoff from the site. A release is suspected.

Summarize the rationale for Primary Targets (attach an additional page if necessary):

The storm water runoff from the site drains into a storm drain at the south west corner of the site. Fishery would be SF Bay.

Site Name: East 14th St. Auto Wreckers 1.
Date: 8 November 91

SURFACE WATER PATHWAY
LIKELIHOOD OF RELEASE AND DRINKING WATER THREAT SCORESHEET

Pathway Characteristics	
Do you suspect a release (see Surface Water Pathway Criteria List, page 11)?	Yes X No ___
Distance to surface water:	_____ ft
Flood Frequency:	_____ yrs
What is the downstream distance to the nearest drinking-water intake? 0 miles	
nearest fishery? 5 miles nearest sensitive environment? _____ miles	

LIKELIHOOD OF RELEASE

	A Suspected Release	B No Suspected Release	Reference
1. SUSPECTED RELEASE: If you suspect a release to surface water (see page 11), assign a score of 550, and use only column A for this pathway.	(550) 550		5
2. NO SUSPECTED RELEASE: If you do not suspect a release to surface water, and the distance to surface water is 2,500 feet or less, assign a score of 500; otherwise, assign a score from the table below. Use only column B for this pathway.		(500,400,300 or 100)	
LR =	(550) 550	(500,400,300 or 100)	

Floodplain	Score
Site in annual or 10-yr floodplain	500
Site in 100-yr floodplain	400
Site in 500-yr floodplain	300
Site outside 500-yr floodplain	100

DRINKING WATER THREAT TARGETS

	A	B	Reference
3. Determine the water body types, flows (if applicable), and number of people served by all drinking-water intakes within the 15-mile target distance limit. If there are no drinking-water intakes within the target distance limit, assign a total Targets score of 5 at the bottom of this page (Resources only) and proceed to page 14.			
4. PRIMARY TARGET POPULATION: If you suspect any drinking-water intake listed above has been exposed to hazardous substances from the site (see Surface Water Pathway Criteria List, page 11), list the intake name(s) and calculate the factor score based on the number of people served. _____, _____, _____ people x 10 =	0		1
5. SECONDARY TARGET POPULATION: Determine the Secondary Target Population score from PA Table 3 based on the populations using drinking-water from intakes that you do NOT suspect have been exposed to hazardous substances from the site. Are any intakes part of a blended system? Yes ___ No X If yes, attach a page to show apportionment calculations.	0		7
6. NEAREST INTAKE: If you have identified any Primary Targets for the drinking water threat (Factor 4), assign a score of 50; otherwise, assign the Nearest Intake score from PA Table 3. If no drinking-water intake exists within the 15-mile target distance limit, assign a score of zero.	(50,20,10,2,1, or 0) 0	(20,10,2,1, or 0)	5
7. RESOURCES: A score of 5 is assigned.	(5) 5	(5) 5	
	5		

Site Name: East 14th St. Auto Wreckers
Date: 8 November 91

SURFACE WATER PATHWAY (continued)
HUMAN FOOD CHAIN THREAT SCORESHEET

	A Suspected Release	B No Suspected Release	Referen
LIKELIHOOD OF RELEASE			
Enter the Surface Water Likelihood of Release score from page 12. LR =	[550] 550	[500,400,300 or 100]	
HUMAN FOOD CHAIN THREAT TARGETS			
8. Determine the water body types and flows (if applicable) for all fisheries within the 15-mile target distance limit. If there are no fisheries within the target distance limit, assign a Targets score of 0 at the bottom of this page and proceed to page 15.			
9. PRIMARY FISHERIES: If you suspect any fishery listed above has been exposed to hazardous substances from the site (see Surface Water Criteria List, page 11), assign a score of 300 and do not evaluate Factor 10. List the Primary Fisheries: San Francisco Bay, _____, _____, _____.	[300 or 0] 300		9
10. SECONDARY FISHERIES: If you have not identified any Primary Fisheries, assign a Secondary Fisheries score from the table below using the LOWEST flow at any fishery within the 15-mile target distance limit.	[210,30,12 or 0] 0	[210,30,12, or 0]	10
T =	[300,210,30,12 or 0] 300	[210,30,12 or 0]	

Fishery Name	Water Body Type	Flow
San Francisco Bay	Bay	N/A cfs
		cfs
		cfs
		cfs
		cfs

Lowest Flow	Secondary Fisheries Score
< 10 cfs	210
10 to 100 cfs	30
>100 cfs, coastal tidal waters, oceans, or Great Lakes	12

Site Name: East 14th St. Auto Wreckers
Date: 8 November 91

SURFACE WATER PATHWAY (continued)
ENVIRONMENTAL THREAT SCORESHEET

	A Suspected Release	B No Suspected Release	Referer
LIKELIHOOD OF RELEASE			
Enter the Surface Water Likelihood of Release score from page 12. LR =	550		
ENVIRONMENTAL THREAT TARGETS			
11. Determine the water body types and flows (if applicable) for all surface water sensitive environments within the 15-mile target distance limit (see PA Tables 4 and 5). If there are no sensitive environments within the 15-mile target distance limit, assign a Targets score of 0 at the bottom of this page, and proceed to page 17.			
12. PRIMARY SENSITIVE ENVIRONMENTS: If you suspect any sensitive environment listed above has been exposed to hazardous substances from the site (see Surface Water Criteria List, page 11), assign a score of 300 and do not evaluate Factor 13. List the Primary Sensitive Environments:	0		11
13. SECONDARY SENSITIVE ENVIRONMENTS:			
Sum =	0		
B. If NO Secondary Sensitive Environments are located on surface water bodies with flows of 100 cfs or less, assign a score of 10.	10		12
T =	10		

Environment Name	Water Body Type	Flow
		cfs
		cfs
		cfs
		cfs
		cfs

A. For Secondary Sensitive Environments on surface water bodies with flows of 100 cfs or less, assign scores as follows, and do not evaluate part B of this factor:

Flow	Dilution Weight (PA Table 4)	Environment Type and Value (PA Tables 5 and 6)	Total
cfs	x	=	
cfs	x	=	
cfs	x	=	
cfs	x	=	
cfs	x	=	

Site Name: East 14th St. Auto Wreckers
Date: 8 November 91

SURFACE WATER PATHWAY (concluded)
WASTE CHARACTERISTICS, THREAT, AND PATHWAY SCORE SUMMARY

WASTE CHARACTERISTICS

	A *Suspected Release*	B *No Suspected Release*
14. A. If you have identified ANY Primary Targets for surface water (pages 12, 14, or 15), assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.	(100 or 32) 32	
B. If you have NOT identified any Primary Targets for surface water, assign the waste characteristics score calculated on page 4.	(100,32, or 18)	(100,32, or 18)
WC =	32	

SURFACE WATER PATHWAY THREAT SCORES

Threat	*Likelihood of Release (LR) Score (from page 12)*	*Targets (T) Score*	*Pathway Waste Characteristics (WC) Score (determined above)*	*Threat Score LR x T x WC / 82,500*
Drinking Water	550	5	32	(adjusted to a maximum of 100) 1.067
Human Food Chain	550	300	32	(adjusted to a maximum of 100) 64
Environmental	550	10	32	(adjusted to a maximum of 60) 2.13

SURFACE WATER PATHWAY SCORE
(Drinking Water Threat + Human Food Chain Threat + Environmental Threat)

(adjusted to a maximum of 100)
67

SOIL EXPOSURE PATHWAY CRITERIA LIST

Site N
Date: East 14th St. Auto Wreckers
8 November 91

This chart provides guidelines to assist you in hypothesizing the presence of a resident population. It is expected that not all of this informatio will be available during the PA. Also, these criteria are not all-inclusive; list any other criteria you use to hypothesize resident populations. Th chart will record your professional judgment in evaluating this factor.

Use the resident population section to guide you through evaluation of some site and source conditions that will help identify targets likely to b exposed to hazardous substances. You may use this section of the chart more than once, depending on the number of nearby people you feel ma be considered part of a resident population. Record the responses for the resident population target that you feel has the highest probability of bein exposed to hazardous substances.

Check the boxes to indicate a "yes", "no", or "unknown" answer to each question.

SOIL EXPOSURE PATHWAY				
SUSPECTED CONTAMINATION	*RESIDENT POPULATION*			
	Yes	No	Unknown	
Surficial contamination is assumed.	☑	☐	☐	Are there residences, schools, or day care facilities on or within 200 feet of areas of suspected contamination?
	☐	☑	☐	Are residences, schools, or day care facilities located on adjacent land previously owned or leased by the site owner/operator?
	☑	☐	☐	Is there an overland migration route that might spread hazardous substances near residences, schools, or day care facilities?
	☐	☐	☑	Are there any reports of adverse health effects from onsite or adjacent residents or students, exclusive of apparent drinking water or air contamination problems?
	☑	☐	☐	Does any offsite property warrant sampling?
	☐	☑		Other criteria? _____
	☑	☐		**RESIDENT POPULATION IDENTIFIED?**

Summarize the rationale for resident population (attach an additional page if necessary):

Alameda County 1990 Population = 1,279,182
Housing Units 1990 Alameda County = 504,109

1,279,182 / 504,109 = 2.5 residents per household

10 residences@ 2.5 residents per household = 25 residents

Site Name: East 14th St. Auto Wreckers
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SOIL EXPOSURE PATHWAY SCORESHEET

Pathway Characteristics		
Do any people live on or within 200 ft of areas of suspected contamination?	Yes ✓	No ___
Do any people attend school or day care on or within 200 ft of areas of suspected contamination?	Yes ___	No ✓
Is the facility active? Yes ✓ No ___ If yes, estimate the number of workers: 1		

		A Suspected Contamination	B No Suspected Contamination	Refers
LIKELIHOOD OF EXPOSURE				
1. SUSPECTED CONTAMINATION: Surficial contamination is assumed. A score of 550 is assigned.	LE =	(550) 550		13
RESIDENT POPULATION THREAT TARGETS				
2. RESIDENT POPULATION: Determine the number of people occupying residences or attending school or day care on or within 200 feet of areas of suspected contamination (see Soil Exposure Pathway Criteria List, page 18). 25 people x 10 =		250		14
3. RESIDENT INDIVIDUAL: If you have identified any Resident Population (Factor 2), assign a score of 50; otherwise, assign a score of 0.		(50 or 0) 50		15
4. WORKERS: Assign a score from the following table based on the total number of workers at the facility and nearby facilities with suspected contamination:		(15, 10, 5, or 0) 5		16
5. TERRESTRIAL SENSITIVE ENVIRONMENTS: Assign a value from PA Table 7 for each terrestrial sensitive environment that is located on an area of suspected contamination:	Sum =	0		17
6. RESOURCES: A score of 5 is assigned.		(5) 5		
	T =	305		
WASTE CHARACTERISTICS				
7. Assign the waste characteristics score calculated on page 4.	WC =	(100, 32, or 18) 32		

Number of Workers	Score
0	0
1 to 100	5
101 to 1,000	10
>1,000	15

Terrestrial Sensitive Environment Type	Value
~~0~~	

RESIDENT POPULATION THREAT SCORE: $\frac{LE \times T \times WC}{82.500}$ = 65.067

NEARBY POPULATION THREAT SCORE: 2
Assign a score of 2

SOIL EXPOSURE PATHWAY SCORE: 67
Resident Population Threat + Nearby Population Threat

AIR PATHWAY CRITERIA LIST

East 14th St. Auto Wreckers
8 November 91

This chart provides guidelines to assist you in hypothesizing the presence of a suspected release. It is expected that not all of this information w be available during the PA. Also, these criteria are not all-inclusive; list any other criteria you use to hypothesize a suspected release. This cha will record your professional judgment in evaluating this factor.

The "Suspected Release" section of the chart guides you through evaluation of some conditions to help hypothesize whether a release from t site is likely. For the Air Pathway, if a release is suspected, "Primary Targets" are any residents, workers, students, or sensitive environments with ¼ mile of the site.

Check the boxes to indicate a "yes", "no", or "unknown" answer to each question. If you check the "Suspected Release" box as "yes", make su that you assign a Likelihood of Release value of 550 for the pathway.

AIR PATHWAY

SUSPECTED RELEASE				*PRIMARY TARGETS*
Yes	No	Unknown		
☐	☑	☐	Have odors been reported?	*If you suspect a release to air, evaluate all populations and sensitive environments within ¼ mile (including those onsite) as Primary Targets.*
☑		☐	Has a release of hazardous substances to the air been directly observed?	
☐	☐	☑	Are there any reports of adverse health effects (e.g., headaches, nausea, dizziness) potentially resulting from migration of hazardous substances through the air?	
	☑	☐	Is there any circumstantial evidence of an air release?	
☐	☑		Other criteria? _____	
☐	☑		**SUSPECTED RELEASE?**	

Summarize the rationale for suspected release (attach an additional page if necessary):

A neighbor to the site has reported dust clouds from the site. However, this event is not an ongoing, and was not sampled. Therefore, there is no suspected release.

Site Name: East 14th St. Auto Wreckers
Date: 8 November 91

AIR PATHWAY SCORESHEET

Pathway Characteristics	
Do you suspect a release (see Air Pathway Criteria List, page 21)?	Yes ___ No ✓
Distance to the nearest individual:	0 ft

	A *Suspected Release*	B *No Suspected Release*	Referen
LIKELIHOOD OF RELEASE			
1. SUSPECTED RELEASE: If you suspect a release to air (see page 21), assign a score of 550, and use only column A for this pathway.	(550)		
2. NO SUSPECTED RELEASE: If you do not suspect a release to air, assign a score of 500, and use only column B for this pathway.		(500) 500	18
LR =		500	
TARGETS			
3. PRIMARY TARGET POPULATION: Determine the number of people subject to exposure from a release of hazardous substances through the air (see Air Pathway Criteria List, page 21). ____ people x 10 =			
4. SECONDARY TARGET POPULATION: Determine the number of people within the 4-mile target distance limit, and assign the total population score from PA Table 8.			19
5. NEAREST INDIVIDUAL: If you have identified any Primary Targets for the air pathway, assign a score of 50; otherwise, assign the highest Nearest Individual score from PA Table 8.	(50, 20, 7, 2, 1, or 0)	(20, 7, 2, 1, or 0) 20	20
6. PRIMARY SENSITIVE ENVIRONMENTS: Sum the sensitive environment values (PA Table 5) and wetland acreage values (PA Table 9) for environments subject to exposure from air hazardous substances (see Air Pathway Criteria List, page 21).			
Sum =			
7. SECONDARY SENSITIVE ENVIRONMENTS: Use PA Table 10 to determine the score for secondary sensitive environments.			21
8. RESOURCES: A score of 5 is assigned.	(5) 5	(5) 5	
T =		25	
WASTE CHARACTERISTICS			
9. A. If you have identified any Primary Targets for the air pathway, assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.	(100 or 32)		
B. If you have NOT identified any Primary Targets for the air pathway, assign the waste characteristics score calculated on page 4.	(100, 32, or 18)	(100, 32, or 18) 32	
WC =		32	

AIR PATHWAY SCORE: $\frac{LR \times T \times WC}{82,500}$ (Indicate to a maximum of 100) 4.8

Site Name:

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SITE SCORE CALCULATION

	S	S^2
GROUND WATER PATHWAY SCORE (S_{gw}):	1	1
SURFACE WATER PATHWAY SCORE (S_{sw}):	67	4489
SOIL EXPOSURE PATHWAY SCORE (S_{se}):	67	4489
AIR PATHWAY SCORE (S_a):	4	16
SITE SCORE: $\sqrt{\frac{S_{gw}^2+S_{sw}^2+S_{se}^2+S_a^2}{4}}$ =		47.42

RECOMMENDATION

SUMMARY

	YES	NO
1. Is there a high possibility of a threat to nearby drinking water wells by migration of hazardous substances in ground water?	☐	☑
A. If yes, identify the wells recommended for sampling during the SI.		
B. If yes, how many people are served by these threatened wells?		
2. Are any of the following suspected to have been exposed to hazardous substances through surface water migration from the site?		
A. Drinking water intake	☐	☑
B. Fishery	☑	–
C. Sensitive environment: wetland, critical habitat, others	☐	☑
D. If yes, identify the targets recommended for sampling during the SI. San Francisco Bay would be the target, however, attribution to the site will be difficult		
3. Do people reside or attend school or day care on or within 200 ft of any area of suspected contamination?	☑	–
4. Are there public health concerns at this site that are not addressed by PA scoring considerations? If yes, explain:	☐	☑

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PA Scoresheet
References/Rationale

1. Sources are poorly contained, releases to soil are suspected, there is a shallow aquifer, therefore a release is suspected.

2. Shallow aquifer water is commonly used for irrigation. No drinking water wells were identified.

3. No drinking water wells were identified.

4. No drinking water wells were identified.

5. Sources are poorly contained, and a neighbor to the site observed an oily film on surface water runoff.

6. There are no drinking water intakes along the surface water path.

7. There are no drinking water intakes along the surface water path.

8. There are no drinking water intakes along the surface water path.

9. San Francisco Bay fisheries may have been exposed to contamination in surface water runoff.

10. Primary fisheries were identified.

11. No primary target sensitive environments were identified.

12. The only secondary sensitive environment would be San Francisco Bay, which is above 100 cfs.

13. Surficial contamination is assumed because:

    - the soils at the site were unconsolidated fill, to an unknown depth,
    - there was evidence of removal activities with no supporting documentation,
    - a neighbor to the site recalls the removal activities, and
    - a former employee told the neighbor that soil samples were taken in preparation for the sale of the property that showed contamination.

14. The site is adjacent to a residential neighborhood.

15. With a resident population the score is automatically 50.

16. According to the neighbor the site is active. Therefore at least one person works there at any one time.

17. There are no sensitive environments at the area of suspected contamination.

18. A neighbor to the site has reported dust clouds from the site. However, this event is not an ongoing, and was not sampled. Therefore, there is no suspected release.

19. Population data was not compiled. There has been no air sampling, and the earth-moving at the site was a one-time event.

20. There is at least one worker onsite.

21. Sensitive environment data was not compiled. There has been no air sampling, and the earth-moving at the site was a one-time event.