Property Transfer Investigation (December 9, 1988) – 2753 Utah Avenue South

CLV Review

ESDOS

PROPERTY TRANSFER INVESTIGATION
SEARS, ROEBUCK AND COMPANY PROPERTY
76 S. LANDER ST., SEATTLE, WASHINGTON

December 9, 1988

Prepared by Chemical Processors, Inc.
2203 Airport Way S., Suite 400
Seattle, WA 98134

for Sabey Corporation

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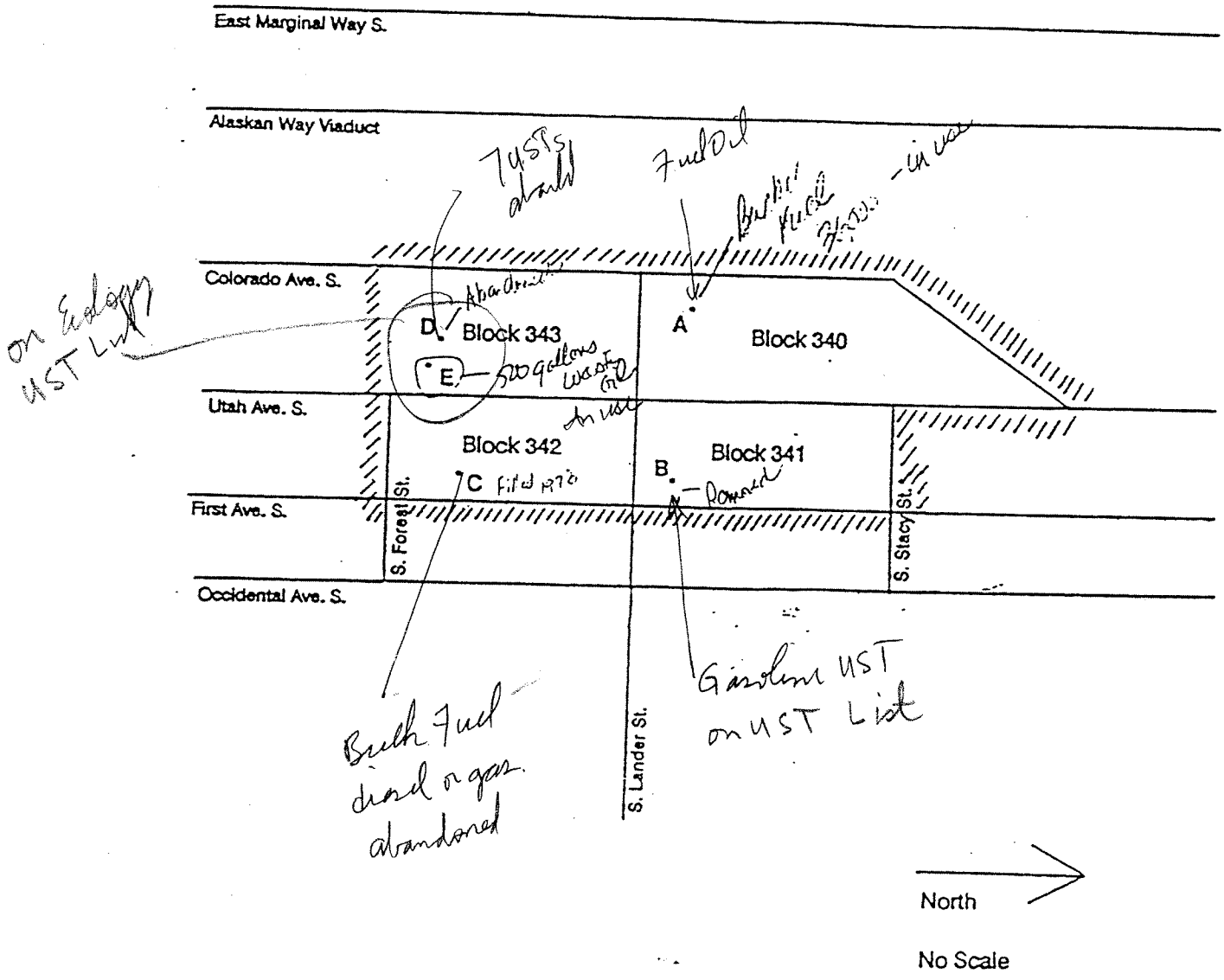
1.0 INTRODUCTION

This study was conducted at the request of Sabey Corporation, which is considering acquisition of the Sears, Roebuck and Co. (Sears) property located at 1st Avenue S. and S. Lander St. (see Figure 1-1). The Sears property consists of 4 blocks or parcels on a total of 16.3 acres. The parcels are identified as blocks 340, 341, 342 and 343.

The study's objective was to determine the existence of any hazardous waste contamination which could result in a need for cleanup on the sale property. Past land uses were identified through review of historic aerial photos, conversations with long-time employees, review of agency records, and site visits. The research was conducted between late November 1988 and mid-December 1988. Evaluation of soil and groundwater samples taken from the property is discussed in a separate report prepared concurrently by Sweet-Edwards/EMCON, Inc..

This report describes known information on current and past land uses at the site, highlighting practices involving known or suspected use of hazardous wastes or hazardous substances. All dates cited in this report are approximate, and are based on review of historic aerial photos and discussions with Sears personnel.



Key

////// Sears Property Boundary

• B Former or Current Underground Storage Tank Location (See Section 2.0 and Table 2-1).

Figure 1-1
Location Map

Sears Property
Seattle, WA

2.0 CURRENT CONDITIONS

The sections which follow describe current land use for each of the blocks within the Sears property. Additional information on former or current underground storage tanks is also included in each section. Where applicable, information on known or suspected use of other hazardous wastes or hazardous substances is included.

A review of agency files (Seattle Department of Construction and Land Use, Seattle Fire Department, Washington Department of Ecology, and U.S. Environmental Protection Agency) revealed no information on underground storage tank installation or removal at the Sears property. The Sears building superintendent reported that he was told by state and federal personnel that agency notification was not required because most tanks had been closed more than 10 years prior to 1986, and the tanks currently in use were under 1,000 gallons capacity. This interpretation was incorrect, but to date no action has been taken by Sears or by the agencies. All information on underground tanks described in this report was obtained from a review of historic aerial photos and discussions with Sears personnel.

2.1 Block 340

Block 340 is currently occupied by the main Sears building, a large structure varying in height from 6 to 9 floors. The southern half of the building is used as a retail store outlet. The remainder of the building was formerly used as a catalog merchandise distribution center and warehouse, but is no longer occupied. Receiving docks are located at the southwest and north ends of the building.

USTs (A)

A three-celled underground storage tank is located in the vicinity of the southwest receiving dock, and is still in use providing fuel oil to 2 boilers in the main Sears building. Information on this tank is presented in Table 2-1; the tank's approximate location is shown as Location A on Figure 1-1.

The three-celled underground storage tank leaked an estimated 2,000 to 3,000 gallons of PS-300 diesel fuel during the summer of 1985. The leak was first noted in June 1985 when fuel was discovered in the floor drains and sump in the basement of the Sears building, in the vicinity of the boiler room. An automatic sump pump in the building transferred the spilled material directly into the city sewer system. The leaking tank cell was pumped to remove 9,100 gallons of diesel fuel which had not spilled. The pumped material was then stored elsewhere and sold.

An outside consultant hired by Sears, Roebuck and Company conducted soil and groundwater sampling to evaluate the spill's impacts on the area. The consultant's report concluded that much of the spilled material was collected by the site's drainage system and subsequently pumped to the sewer. Analysis of soil samples in the immediate vicinity of the leaking tank indicated that some petroleum product was being retained in the lower two feet of the soil's vadose (unsaturated) zone in an area of approximately 1,100 square feet immediately surrounding the underground tank. Relatively low concentrations of oil and grease were measured in water samples from monitoring wells, and it was suspected that little or no free liquid hydrocarbon product was present atop the ground water table.

An undetermined quantity of broken or damaged hand tools (hammers, screwdrivers, drills, etc.) are reportedly buried on the north side of the property, under the site of the 1966 and 1975 building additions. The exact location of tool disposal sites, and the years during which this practice was common, could not be determined during this study. Sears sold Craftsman hand tools with a guaranteed replacement policy for broken or damaged tools. Returned tools were occasionally taken to an iron smelter for recycling, but Sears had to pay the smelter for this service and frequently chose the less expensive disposal method. Tools buried on the north side of the property were eventually covered with soil and sand, and a concrete slab was poured over the top during construction of the building additions.

asbestos

The Sears buildings on Block 340 contain approximately 20,000 linear feet of asbestos insulation wrapping on supply and return steam lines to the boiler, and on some hot water circulation lines. Another 3,000 square feet of asbestos insulation (2 to 3 inches thick) has been placed around water tanks and boilers. The insulation is unencapsulated, has been in place a long time, and some is thought to be in a friable state. After 1956, Sears switched to using fiberglass insulation on pipes and other equipment.

PCBs

Six transformers owned by Seattle City Light are located in vaults in the vicinity of the southwest receiving dock. The transformers have not been tested for PCB content, but can be scheduled for testing if desired. Tests conducted by City Light on other transformers nearby have shown one part per million (ppm) PCBs or less, far below the 50 ppm level used to determine whether transformer replacement is advisable. A City Light representative indicated the six transformers on the Sears property may show PCB levels similar to those found in other transformers nearby.

PCBs

All transformers within the Sears building itself are reportedly air-cooled, with no PCBs present, and are owned by Sears. PCBs are reportedly present in the Sears building only as ballast in older fluorescent lights.

A boiler room was originally located on south side of the oldest main building, prior to relocation of the boiler room in the 1920-era building addition. The existing boiler room has 3 boilers. One runs year-round on natural gas, and provides heat for the building's hot water system. Two run on bunker C oil: one is used for winter heating needs, and one is reserved as a backup system. A 450-ton compressor is used for cooling in the 1966 building addition.

2.2 Block 341

This block is currently used as a parking lot for the main Sears building. An underground gasoline tank was used on site between approximately 1936 (or earlier) to 1960, when a gasoline station occupied the southern portion of the property. The tank was removed between 1956 and 1960, when it was determined that the tank was leaking and water was entering the tank. Information on this tank is presented in Table 2-1; the tank's approximate location is shown as Location B on Figure 1-1.

USTs (B)

2.3 Block 342

This block is currently occupied by industrial/commercial buildings, parking lots, and two vacant buildings. A restaurant and surplus clothing store are located at the northern end of the block, adjacent to a Sears employee parking lot. Two buildings in the central portion of the block are used by industrial/commercial firms, including an industrial tooling company and a music/video game vending machine company. Another parking lot is located between these buildings and two vacant buildings at the end of the block, referred to as the Argo 1 and 2 buildings. The industrial/commercial buildings are currently owned by other interests, but the remainder of the block is owned by Sears.

An underground fuel tank was used on site between approximately 1946 and 1960 (or later), when a bulk fuel breakdown and distribution center occupied the site now used as a parking lot on the southern portion of the block. The tank was emptied and filled with sand and gravel in 1973, about the time the site began to be used as a parking lot. Information on this tank is presented in Table 2-1; the tank's approximate location is shown as Location C on Figure 1-1. A small service station is known to have occupied the

USTs (C)

northeast corner of the site in 1947, but no additional information on the use or removal of tanks at this site was obtained during this study.

The Argo 1 building was heated by a boiler in the basement, via an above-ground oil tank which is no longer in place. The Argo 2 building was heated by natural gas or electric space heaters. The heating sources for other buildings on site were not determined during this study.

Asbestos cement board siding may be present on the Argo 1 building, covering all of the south side and 2/3 of the west side of the building. This type of siding has been available for use since the 1940s. An abandoned boiler in one of the Argo buildings is wrapped with asbestos insulation which has been in place for an undetermined length of time. The condition of the asbestos insulation was not inspected as part of this study, and is unknown.

2.4 Block 343

Block 343 is currently occupied by the Sears Arcade building, a large parking lot, and the Sears Auto Service Center.

Approximately 7 underground tanks are located under a concrete slab in the vicinity of the auto service center's parts room. The tanks formerly contained unused petroleum oils (product) to be placed in cars being serviced on site. Use of the tanks ended sometime prior to 1974, and the tanks were emptied and filled with sand between 1974 and 1976. Information on these tanks is presented in Table 2-1; the approximate location of the tanks is shown as Location D on Figure 1-1.

USI (D)

Used or junk batteries are collected at the auto service center and periodically removed by Johnson Controls Company. The batteries are transported to a recycling facility in California.

Used antifreeze is drained from car radiators in the south auto service center parking lot, and flows across the asphalt paving to storm drains spaced along the center of the parking lot. The antifreeze mixes with other surface water runoff and is eventually deposited in the Municipality of Metropolitan Seattle (Metro) sewer system. Improvement of the auto service center's drainage system and sewer hookup is proposed as part of a Metro trunk line installation scheduled for completion in mid-1989.

Waste oil is collected at the auto service center in a portable receptacle (less than 55 gallons) and periodically drained into an underground tank via an access point in the asphalt parking lot south of the auto service center. The tank contents are periodically removed by Spencer Environmental Service. Information on this tank is presented in Table 2-1; the tank's approximate location is shown as Location E on Figure 1-1.

During a site visit conducted for this study, antifreeze and waste oil were visible in run-off from the parking lot south of the auto service center, draining into storm sewer vaults under the parking lot. The vaults are pumped annually to remove accumulations of silt and debris. Overflow pipes within the drainage vaults connect to the Metro storm sewer system.

Two small aboveground receptacles holding approximately 5 gallons of solvent each are located in the auto service center. The solvent is used for cleaning auto parts, and is periodically recycled and replaced by an outside company.

The Arcade building and auto service center are heated by separate natural gas heating systems. The Arcade building was formerly connected via two steam pipes to the former boiler room in the original Sears building prior to approx. 1920. The two steam pipes are now used as conduit for phone lines to the building.

The Arcade building and Sears Auto Center contain an unknown amount of asbestos insulation wrapping on heating system pipes. As with the asbestos insulation used in the main Sears building, the insulation is unencapsulated, has been in place a long time, and some is thought to be in a friable state. After 1956, Sears switched to using fiberglass insulation on pipes and other equipment.

TABLE 2-1. UNDERGROUND STORAGE TANKS
SEARS PROPERTY, SEATTLE, WA.

LOCATION AND USE INFORMATION	(A) 3-celled UST BLOCK 340	(B) BLOCK 341 on UST List
Street Address:	76 S. Lander or 2465 Utah Avenue S.	2400, 2500 or 2600 block of 1st Ave. S.
Location:	Approx. 20' south of loading dock in southwest receiving area	South end of block, near former service station site
Size	3-celled tank, approx. 12,000 gallons per cell. Total = 36,000 gallons	Unknown
Use:	~~Bunker C~~ heating oil in two cells. Third cell (east side) is empty: formerly held PS-300 diesel fuel.	Gasoline
Installed For:	Sears	Sears
Occupancy:	Retail store, distribution center and warehouse	Service Station
Use Dates:	Unknown: approx. ~~1920~~ to present.	Installation date unknown. In use approx. 1936 (or earlier) to 1960.
Status:	~~2 cells~~ in use storing Bunker C heating oil; 1 cell empty	~~R~~emoved by 1960.
Comments:	Third cell leaked 2,000 to 3,000 gallons diesel fuel in summer 1985. Majority of fuel migrated to on-site drainage system and then into city sewer. Some material retained in soil around leaking tank.	Removed because tank was leaking and water from high water table in vicinity was entering the tank.
Source of Information:	Sears Building Supt. SCS Report (1985)	Sears Building Supt. Aerial photos

TABLE 2-1. UNDERGROUND STORAGE TANKS
SEARS PROPERTY, SEATTLE, WA.

LOCATION AND USE INFORMATION	(C) BLOCK 342 1 UST	(D) BLOCK 343 on UST list 7 USTs
Street Address:	2700 block of 1st Avenue S.	2700 block of Utah Avenue S.
Location:	Vicinity of lots 8 and 9, now occupied by parking lot north of Argo 1 and 2 bldgs	Sears Auto Center, under room now used for parts storage
Size	Unknown	Seven tanks, unknown size. All possibly under 1,000 gallons each
Use:	Bulk fuel storage (diesel or gas/)	New petroleum oils (product)
Installed For:	Unknown	Sears Auto Center
Occupancy:	Fuel distribution/ breakdown center	Auto service center
Use Dates:	Approx. 1946 (or earlier) to 1960 (or later)	Installation date unknown; in use until early 1970s
Status:	Abandoned. Filled with sand and gravel in 1973.	Abandoned. Tanks emptied and filled with sand between 1974 and 1976.
Comments:	Out of service after 1960.	May have been located outside auto center before additions to bldg's south side were completed by 1960.
Source of Information:	Sears Building Supt. Aerial photos	Sears Building Supt. Aerial photos

TABLE 2-1. UNDERGROUND STORAGE TANKS
SEARS PROPERTY, SEATTLE, WA.

LOCATION AND USE INFORMATION	(E) BLOCK 343 on UST list, 1 UST
Street Address:	2700 block of Utah Avenue S.
Location:	Sears Auto Center, outside south side of building
Size	Approx. 500 gallons
Use:	Waste oil collection
Installed For:	Sears Auto Center
Occupancy:	Auto service center
Use Dates:	Installation date unknown. ✓
Status:	In use at present. ✓
Comments:	Accumulated waste oil is removed by Spencer Environmental Service
Source of Information:	Sears Building Supt. and Auto Center Manager

3.0 PREVIOUS USE OF THE PROPERTY

Land in the industrial area west of Beacon Hill was created by filling portions of Elliott Bay and the Duwamish River in the early 1900s. Portions of the area were still dotted with swamps until the 1940s. In general, surrounding land uses have changed very little since the early 1900s: extensive railroad tracks west of the Sears property, and commercial, industrial, and manufacturing uses on all other sides.

No data were available for review of uses of the Sears property prior to 1936, with the exception of information on construction of the main Sears building on Block 340 beginning in 1910. In general, the Sears property has been used exclusively for industrial and commercial activities, with portions of the property vacant, used for railroad activities, or used for parking at various times through the years.

Information on previous uses of the property is summarized in Tables 3-1 (Block 340), 3-2 (Block 341), 3-3 (Block 342) and 3-4 (Block 343). Aerial photos of the Sears property are included as Attachment A to this report, covering the years 1936, 1946, 1960, 1974 and 1985.

TABLE 3-1. SUMMARY OF HISTORICAL LAND USES, BLOCK 340 SEARS PROPERTY, SEATTLE, WA.

LAND USES	OCCUPANTS	COMMENTS/FINDINGS
Time Period: 1913 to Mid-1970s		
Commercial Industrial Transportation	1. Main Sears Bldg 2. Sears Tire Store (NE of main bldg) 3. Railroad Roundhouse, Repair Bldg and Cafeteria (north end of block) 4. Sears Wire Shop (SW of main bldg until 1950s)	Sears leased main store from railroad, 1913 - 1923. Purchased same property in 1924. 1936 aerial photo shows rail tracks into receiving area on north side of Sears building, and to wire shop on SW corner of original Sears building. Very little paved area at this time. Additions to main Sears bldg constructed in 1915-20, 1946-47, 1955, 1966 and 1975. Wire shop removed prior to 1960. Tire shop, railroad roundhouse and related buildings removed prior to 1974; area used for parking lot until 1975 main building addition.
Time Period: Mid-1970s to Present		
Commercial Industrial	Sears retail, catalog merchandise distribution center, and warehouse	Pedestrian footbridge across railroad tracks to west was present from 1936 (or earlier) to 1978. Linked Sears area to E. Marginal Way/ Duwamish Waterway area. Damaged by train and removed in 1978. All except retail portions of building were emptied by March 1987, and are now vacant.

TABLE 3-2. SUMMARY OF HISTORICAL LAND USES, BLOCK 341 SEARS PROPERTY, SEATTLE, WA.

LAND USES	OCCUPANTS	COMMENTS/FINDINGS
Time Period: 1910s		
Vacant	Vacant	Block appears as a swamp or marsh in photos from the early 1910s. The lot was reportedly used for ice skating and baseball games during this time.
Time Period: 1930s to Mid-1960s		
Commercial Manufac - turing Parking Lot Gas Station	1. Carriage or Buggy Shop 2. Stacy St. Hotel and Bar 3. Smith's Alaska Cannery 4. Sears Parking Lot 5. Gas Station	Parking lot and gas station property purchased by Sears in 1930 and 1932. Remainder of block purchased by Sears between late 1940s and 1964. Tree-lined walkway present middle of block in 1930s, as entrance to Sears bldg on Block 340. Gas station relocated and expanded on SE corner of block by 1946. Removed between 1956 - 1960 because high water table allowed water to leak into underground gas tanks. South portion of parking lot used after 1960 for discount sales events (known as parking lot or tent sales). Temporary structure for this purpose is visible in 1960 aerial photo.
Time Period: Mid-1960s to Present		
Parking Lot	Sears Parking Lot	Cannery property purchased by Sears in 1964. Reinforced concrete structure was demolished; some demolition debris used to fill in basement on site. Hotel, bar, and carriage shop purchased prior to this date, but not demolished until 1968. Whole block was paved for parking lot by 1974.

TABLE 3-3. SUMMARY OF HISTORICAL LAND USES, BLOCK 342
SEARS PROPERTY, SEATTLE, WA.

LAND USES	OCCUPANTS	COMMENTS/FINDINGS
Time Period: 1936 to 1946		
Commercial Manufac- turing Vacant	Unknown	Entire block covered with bldgs, except lots 8 and 9: only a small bldg on these lots.
Time Period: 1946 to Early 1970s		
Commercial Manufac- turing	1. Service Station 2. Food Market 3. Restaurant 4. Fuel Distribution Center 5. Others Unknown	1946 aerial photo shows larger building on west half of lots 8 and 9, removed by time of 1974 aerial photo. Coincides with time period when fuel distribution center was thought to have operated on site. 1947 site plan shows small service station on NE corner of block: present location of restaurant. Small addition to this building is evident in 1960 aerial photo. Argo 1 and 2 buildings may have been used as a wheel balancing center and small-scale steel fabricating shop during this time.
Time Period: Early 1970s to Present		
Commercial Manufac- turing Parking Lots	1. Surplus Clothing Store 2. Restaurant 3. Other Commercial and Manufacturing 4. Vacant Buildings 5. Parking Lots	Lots 2, 3, 4, 5, 8 and 9 purchased by Sears in 1974. All vacant and paved for parking at that time, same as present conditions. Sears rented Argo 1 and 2 bldgs (lots 10 and 11) from West Transfer Co. in 1973; purchased the lots between 1977 and 1980. Argo 1 and 2 bldgs have been vacant since that time.

TABLE 3-4. SUMMARY OF HISTORICAL LAND USES, BLOCK 343
SEARS PROPERTY, SEATTLE, WA.

LAND USES	OCCUPANTS	COMMENTS/FINDINGS
Time Period: 1930s to Mid-1940s		
Industrial Vacant	1. Steel Handling 2. Other Uses Unknown	M. Barde and Sons Steel Co. present on north portion of site. Not known to have been used for steel mftg, but may have involved fabrication or machining. Served by rail spur on west side of bldg. Addition constructed prior to 1946, near future site of Sears farm store. Remainder of block unpaved and empty, except for one other bldg on site (use unknown). This bldg was no longer present by time of 1946 aerial photo.
Time Period: Mid 1940s to Early 1960s		
Commercial Industrial	1. Steel Handling 2. Sears Farm Store 3. Transfer Company (prior to mid-1940s) 4. Sears Auto Center (after mid-1940s)	Arcade bldg property purchased by Sears in 1944; farm store built on site in 1945. Auto service center appears in 1946 aerial photo, plus 2 bldgs immed. NE and SE of service center. Rail tracks to service center and bldg immed. NE are also visible. Bldgs may have been used as transfer company warehouse prior to mid-1940s. Sears rented auto service center in 1940s, and purchased bldg and surrounding property from Seattle Iron & Metal Corp. in 1947. Portion of Forest St. on south side of block vacated in late 1950s, and purchased by Sears in 1958.

TABLE 3-4. (Concluded)

LAND USES	OCCUPANTS	COMMENTS/FINDINGS
Time Period: Mid 1940s to Early 1960s (Continued)		
		1960 aerial photo shows all vacant areas of block paved for parking, and bldg. immed. SE of auto center no longer present. Small addition to south side of auto center also visible. Barde Steel property purchased by Sears in 1963; Barde facilities demolished soon after. Farm store remodelled into present Arcade bldg. and skywalk added between Arcade bldg and main Sears store.
Time Period: Early 1960s to Present		
Commercial Parking Lot	1. Sears Arcade Bldg 2. Sears Auto Service Center 3. Parking Lot	1974 aerial photo shows another addition to south side of service center. Bldg immed. NE of service center was removed by this date and replaced with parking area.

4.0 SUMMARY AND RECOMMENDATIONS

4.1 Summary of Current and Previous Site Conditions

The 16.3 acre Sears, Roebuck and Co. property located at First Avenue S. and S. Lander St. (see Figure 1-1) is currently occupied by the main Sears building, two other Sears buildings, several vacant or separately owned commercial/industrial buildings, and several parking lots. Review of available historic data indicates that the property has been used for industrial and commercial activities since the early 1900s, with portions of the property vacant, used for railroad activities, or used for parking at various times through the years.

Current and notable former uses of the property are summarized below. Relevant information on former or current underground tank locations is included, along with information on other practices involving known or suspected use of hazardous wastes or hazardous substances.

Block 340

Currently occupied by main Sears building, consisting of a retail store and former catalog distribution center and warehouse. A Sears tire shop and a railroad roundhouse and related buildings were present on the north end of the block from approximately 1910 to the mid-1970s.

A three-celled underground storage tank is still in use on site, storing boiler fuel. One cell of the tank leaked 2,000 to 3,000 gallons of PS-300 diesel fuel in summer 1985, was pumped out, and remains empty at the present time. A majority of the spilled material was collected by the site's drainage system and subsequently pumped to the city sewer. Some petroleum product was retained in the soil immediately surrounding the underground tank.

asbestos

Approximately 20,000 linear feet of unencapsulated and (in some areas) friable asbestos insulation is present on pipes in the main Sears building, along with approximately 3,000 square feet of asbestos insulation on water tanks and boilers.

PCBs

Six transformers owned by Seattle City Light are present in vaults underneath the southwest receiving dock area in Block 340. The transformers have not been tested for PCB content, but are presumed by City Light to be similar to other transformers in the area which have PCB contents measured at 1 ppm or less. All transformers within the Sears building itself are owned

by Sears and are reportedly air-cooled; PCBs are thought to be present only as ballast in older fluorescent lights.

An undetermined quantity of broken or damaged hand tools (hammers, screwdrivers, drills, etc.) are reportedly buried on the north side of the property, under the site of the 1966 and 1975 building additions.

Block 341

Currently occupied by parking lot.

An underground gasoline tank was used on site between approximately 1936 (or earlier) to 1960, when a gasoline station occupied the southern portion of the property. The tank was removed between 1956 and 1960, when it was determined that the tank was leaking and water was entering the tank.

Block 342

Currently occupied by industrial/commercial buildings (including two vacant buildings) and parking lots.

An underground fuel tank was used on site between approximately 1946 and 1960 (or later), when a bulk fuel breakdown and distribution center occupied the site now used as a parking lot on the southern portion of the block. The tank was emptied and filled with sand and gravel in 1973. A small service station is known to have occupied the northeast corner of the site in 1947, but no additional information on the use or removal of tanks at this site was obtained during this study.

Asbestos cement board siding may be present on the Argo 1 building, covering all of the south side and 2/3 of the west side of the building. An abandoned boiler in one of the Argo buildings is wrapped with asbestos insulation which has been in place for an undetermined length of time.

Block 343

Currently occupied by Sears Arcade building, parking lot, and Sears Auto Service Center. A steel handling facility was present on the north portion of the site from approximately the 1930s through early 1960s.

Approximately 7 underground tanks are located under a concrete slab in the vicinity of the auto service center's parts room. The tanks formerly contained unused petroleum oils (product) to be placed in cars being serviced on site. Use of the tanks ended sometime prior to 1974, and the tanks were emptied and filled with sand between 1974 and 1976.

Used or junk batteries are collected at the auto service center and periodically transported to a recycling facility in California. Two small aboveground receptacles holding approximately 5 gallons of solvent each are located in the auto service center, and are used for cleaning auto parts. The solvent is periodically recycled and replaced by an outside company.

Used antifreeze is drained from car radiators in the south auto service center parking lot, and flows across the asphalt paving to storm drains spaced along the center of the parking lot. The antifreeze mixes with other surface water runoff and is eventually deposited in the Municipality of Metropolitan Seattle (Metro) sewer system.

Waste oil is collected at the auto service center in a portable receptacle (less than 55 gallons) and periodically drained into an underground tank on site. The tank contents are periodically removed and the waste oil is recycled.

asbestos

The Arcade building and Sears Auto Center contain an unknown amount of unencapsulated and friable asbestos insulation wrapping on heating system pipes.

4.2 Recommendations

1. It is recommended that a decision regarding removal or continued operation of all underground storage tanks on site be made prior to December 22, 1988. Federal regulations published September 23, 1988 (Federal Register 37082) will require more stringent notification and site assessment (i.e., sampling and analysis) for underground storage tanks removed after December 22, 1988. Underground storage tanks still in use after December 22, 1988 will be subject to more stringent operating requirements and release detection, reporting, and response requirements.

   Underground tanks still present but not in use on site include the ~~3-celled boiler fuel tank in Block 340;~~ the abandoned fuel distribution tank in Block 342, and the

~~waste oil tank and~~ 7 abandoned oil tanks in Block 343. Underground storage tanks still in use on site include the 3-celled boiler fuel tank and the waste oil tank.

2. Records documenting underground tank installation, abandonment, and removal were not discovered in Sears and agency files during this study. This lack of documentation results in a greater possibility that additional underground storage tanks may be present on site, or that the condition of tanks known to be present on site may be different than reported in the recollections of Sears personnel.

asbestos

3. Friable asbestos insulation on pipes, water tanks, and boilers should be encapsulated or removed to prevent further exposure. Exterior siding on the Argo 1 building should be checked to determine whether it contains asbestos, and encapsulated or removed if friable asbestos is present.

4. Antifreeze disposal practices at the Sears auto service center should be modified to prevent uncontained runoff in the service center's south parking lot. Improvement of the service center's drainage system and sewer hookup is proposed as part of a Metro trunk line installation scheduled for completion in mid-1989. Modified disposal practices at the auto service center could include collection of used antifreeze at the time it is drained from autos, and disposal of used antifreeze via drains or sumps within the service center building.

5.0 INFORMATION SOURCES

Conversations with Don Patrick, Sears building superintendent, and Pat O'Brien, Sears Auto Service Center manager.

Aerial photos dated 1936, 1946, 1960, 1974 and 1985 from Walker & Associates, Seattle, WA.

Additional aerial photographs and drawings covering periods between 1913 and present, reviewed at Sears building superintendent's office.

Telephone conversations and/or follow-up correspondence with the following agency representatives:

Seattle City Light, Environmental Affairs
Curtis Durrant

U.S. EPA, Region 10, Seattle, WA
Freedom of Information Act Officer
Mary Nielsen

Washington Dept. of Ecology
Jeanne Witt
Underground Storage Tank Program
Olympia, WA

Review of relevant files at the following agencies:

Seattle Fire Dept.
records of underground tank removal
(occupancy files)

City of Seattle Dept. of Construction and Land Use
records of underground tank installation

Review of the following soils and geologic reports:

SCS Engineers with Rittenhouse-Zeman & Associates: Soil and Groundwater Quality Study, Sears Retail and Distribution Facility, Seattle, Washington. October 1985.

Dames & Moore: Report of Soils and Foundation Investigation, Proposed Addition to Sears Catalog Order Plant, Seattle, Washington. March 1974.

Dames & Moore: Report of Foundation Investigation, Proposed Parking Garage, Sears Catalog Order Plant, Seattle, Washington. October 1972.

ATTACHMENT 1

AERIAL PHOTOS

SEARS PROPERTY, SEATTLE, WA.

ANALYTICAL RESOURCES, INC.
Inorganic Laboratory Data Report
12/12/88
12:56:53

Client: SWEET EDWARDS
Contact: D. GOLDMAN
Project: CHEMPRO-SEARS
ID number: CS1288-EC
Description:
Sampled: / /
Matrix: WATER

ARI job number: 2327
ARI sample number: F

Released by: NRW

A N A L Y T I C A L R E S U L T S

CAS Number	Analyte	Concentration	C	Prep	M
7440-38-2	Arsenic	0.19 mg/L		TWN	ICP
7440-41-7	Beryllium	0.004 mg/L		TWN	ICP
7440-43-9	Cadmium	0.002 mg/L		TWN	ICP
7440-47-3	Chromium	0.352 mg/L		TWN	ICP
7440-50-8	Copper	0.549 mg/L		TWN	ICP
7439-92-1	Lead	0.27 mg/L		TWN	ICP
7439-97-6	Mercury	0.0012 mg/L		TMM	CVA
7440-02-0	Nickel	0.27 mg/L		TWN	ICP
7440-66-6	Zinc	1.05 mg/L		TWN	ICP