

COUNTY: Thurston

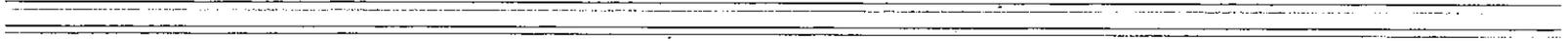
SITE NAME: Old Olympia Municipal
Dump

FILE TYPE: Toxic Cleanup

YEARS ARCHIVED:

1993

1992



1993



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

7272 Cleanwater Lane, LU-11 • Olympia, Washington 98504-6811 • (206) 753-2353

August 18, 1993

Mr. Sandy Mackie
Owens, Davies, and Mackie
Post Office Box 187
Olympia, Washington 98507-0187

Dear Mr. Mackie:

You were notified previously of the hazard ranking assessed by the Department of Ecology for the Old Olympia Municipal Dump site. This ranking represented an estimation of the potential threat posed by this site to human health and the environment with 1 indicating the highest relative risk and 5 the lowest, out of a total of 338 sites assessed and ranked at that time.

This database has now been enlarged by an additional 52 assessed sites, resulting in changes in the relative rankings of some of the previously ranked sites. Your site was one of these, and now has a hazard ranking of 4 instead of 3 as indicated in our earlier notification.

Ecology will be publishing the ranking of this and other sites in the August 24, 1993 Site Register. If you have any questions or need additional information, please call me at (206) 586-8618.

Sincerely,

A handwritten signature in cursive script, appearing to read "Richard V. Heggen".

Richard Heggen
Site Assessor
Southwest Regional Office
Toxics Cleanup Program

RH:ak



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

7272 Cleanwater Lane, LU-11 • Olympia, Washington 98504-6811 • (206) 753-2353

August 18, 1993

Ms. Cindy Wilson
City of Olympia Planning Department
Post Office Box 1967
Olympia, Washington 98507-0967

Dear Ms. Wilson:

You were notified previously of the hazard ranking assessed by the Department of Ecology for the Old Olympia Municipal Dump site. This ranking represented an estimation of the potential threat posed by this site to human health and the environment with 1 indicating the highest relative risk and 5 the lowest, out of a total of 338 sites assessed and ranked at that time.

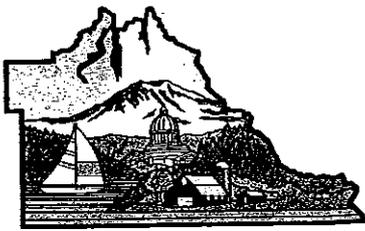
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Ecology will be publishing the ranking of this and other sites in the August 24, 1993 Site Register. If you have any questions or need additional information, please call me at (206) 586-8618.

Sincerely,

Richard Heggen
Site Assessor
Southwest Regional Office
Toxics Cleanup Program

RH:ak



THURSTON COUNTY
WASHINGTON
SINCE 1852

COUNTY COMMISSIONERS

Judy Wilson
District One

Diane Oberquell
District Two

Dick Nichols
District Three

PUBLIC HEALTH AND
SOCIAL SERVICES DEPARTMENT

Patrick M. Libbey, Director
Diana T. Yu, MD, MSPH
Health Officer

July 20, 1993

To: Gregg Grunenfelder

From: John Libby

Re: Data evaluation of characterized waste from West Olympia
Landfill to proposed High Risk Waste Guidelines

Data for evaluation was submitted by Parametrix from samples taken at the site in April 1992. Eight test pits were excavated and fifteen samples collected. From the constituent levels found in the samples, the following analytes exceeded levels for the proposed High Risk Waste Guidelines:

Total Petroleum Hydrocarbons (TPH) - proposed and current guidelines are the same which is 200 ppm. Ten of thirteen samples tested exceeded this level. Average TPH level for the thirteen samples was 1185 ppm.

Lead - the proposed guidelines are .5ppm TCLP for lead. Ten of fifteen samples exceeded this level for extractable lead.

Cadmium - the proposed guidelines are .1ppm TCLP for cadmium. Three of fifteen samples exceeded this level.

In addition, the other large question is the quantity of material for disposal. With 100,000 cu. yds. plus to be removed, this would have considerable physical and fiscal impacts to the Hawks Prairie Landfill.



Mary Riveland
~~XXXXXXXXXXXXXXXXXX~~
Director



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

7272 Cleanwater Lane, LU-11 • Olympia, Washington 98504-6811 • (206) 753-2353

February 19, 1993

Gregg Grunenfelder, Program Manager
Resource Protection Program
Thurston County Health Department
2000 Lakeridge Drive
Olympia, Washington 98502

RE: Additional sites on Hazardous Sites List in Thurston County

Dear Mr. Grunenfelder:

The Department of Ecology has recently placed one additional site in your Health District on the Hazardous Sites List as required under the Model Toxics Control Act (MTCOA). Sites are ranked based on an estimate of potential threat to human health and the environment relative to other sites in Washington State. The rankings are based on guidelines provided in the Washington Ranking Method and are assigned on a scale of 1 to 5 (1 = the highest risk). The ranked site is listed as follows:

<u>Site Name</u>	<u>Nearest City</u>	<u>Rank</u>	<u>Status</u>
Olympia Burn Site	Olympia	3	Awaiting RA*

* RA = Remedial Action

An updated Hazardous Sites List (including the above site) will be published in the March 9, 1993 edition of Ecology's Toxics Cleanup Program Site Register.

No additional site hazard assessments (SHA) (other than possibly some grant SHAs) are scheduled for the near future. For additional information, please contact Dick Heggen at (206) 586-8618.

Sincerely,

W. Thomas Todd
Unit Supervisor
Southwest Regional Office
Toxics Cleanup Program

WTT:ak

cc: Ron Langley
Richard Heggen

Mary Riveland
XXXXXXXXXXXXXXXXXXXX
Director



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

7272 Cleanwater Lane, 1U-11 • Olympia, Washington 98504-6811 • (206) 753-2353

February 16, 1993

Mr. Sandy Mackie
Owens, Davies, and Mackie
Post Office Box 187
Olympia, Washington 98507-0187

RE: Site Hazard Assessments for Site Register, March 9, 1993

Dear Mr. Mackie:

You were recently notified of the hazard ranking assessed by the Department of Ecology for the Olympia Burn Site (Old Olympia Landfill) site, which was to be published in the February 23, 1993 Site Register. In order to allow for sufficient response time for all owner/operators of these newly ranked sites, this date has been moved back to March 9, 1993.

Please ensure that any comments you may have concerning this ranking, along with any appropriate substantiating documentation, reaches this office prior to March 1, 1993. If you have any questions, please contact me at (206) 586-8618.

Sincerely,

Dick Heggen
Site Hazard Assessor
Southwest Regional Office
Toxics Cleanup Program

DH:ak

CHRISTINE O. GREGOIRE
Director



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

7272 Cleanwater Lane, LU-11 • Olympia, Washington 98504-6811 • (206) 753-2353

February 9, 1993

Ms. Cindy Wilson
City of Olympia
Planning Department
P.O. Box 1967
Olympia, WA 98507-1967

Dear Ms. Wilson:

The Department of Ecology (Ecology) has now assessed a hazard ranking for the Olympia Burn Site (Old Olympia Landfill) property as required by the Model Toxics Control Act. This is an estimation of the potential threat of this site to human health and the environment, relative to other Washington State sites scored at this time. A ranking of 3 (with 1 being the highest relative risk and 5 being the lowest) has been calculated for this site.

For your information, Ecology will be publishing the ranking of this and other sites in the February 23, 1993 Site Register. The rankings will be used in conjunction with other considerations in determining Ecology's priority for future actions at sites. It is not anticipated this ranking will affect the current activities at the Olympia Burn Site (Old Olympia Landfill) property.

A fact sheet on the ranking method and a copy of the Site Hazard Assessment summary are enclosed for your information.

For further information, please contact me at (206) 586-8618.

Sincerely,

Richard Heggen
Site Hazard Assessor, Southwest Region
Toxics Cleanup Program

RH:le
Enclosure

cc: Steve Hall
Mark Erickson
Don Caspell
Johanna Richter
Cindy Wilson

XC Mark Erickson
Butch Dunlap



~~CHRISTINE O. GREGOIRE~~
Director

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

7272 Cleanwater Lane, LU-11 • Olympia, Washington 98504-6811 • (206) 753-2353

February 9, 1993

Mr. Sandy Mackie
Owens, Davies, and Mackie
P.O. Box 187
Olympia, WA 98507-0187

Dear Mr. Mackie:

This letter is to inform you, as the site representative for Thompson Properties Inc., that the Department of Ecology (Ecology) has now assessed a hazard ranking for the Olympia Burn Site (Old Olympia Landfill) property as required by the Model Toxics Control Act. This is an estimation of the potential threat of this site to human health and the environment, relative to other Washington State sites scored at this time. A ranking of 3 (with 1 being the highest relative risk and 5 being the lowest) has been calculated for this site.

For your information, Ecology will be publishing the ranking of this and other sites in the February 23, 1993 Site Register. The rankings will be used in conjunction with other considerations in determining Ecology's priority for future actions at sites. It is not anticipated this ranking will affect the current activities at the Olympia Burn Site (Old Olympia Landfill) property.

A fact sheet on the ranking method and a copy of the Site Hazard Assessment summary are enclosed for your information.

For further information, please contact me at (206) 586-8618.

Sincerely,

A handwritten signature in cursive script, appearing to read "Richard Heggen".

Richard Heggen
Site Hazard Assessor, Southwest Region
Toxics Cleanup Program

RH:le
Enclosure

WASHINGTON RANKING METHOD

ROUTE SCORES SUMMARY AND RANKING CALCULATION SHEET

For Sites With No Sediment Route Migration Pathways

Old Olympia Municipal Dump

Site name: Olympia Burn Site Region: SWRO

Street, city, county: Olympia, Thurston

This site was () ranked, (X) re-ranked, on August 11, 1993 based on quintile values from a total of 390 assessed/scored sites.

Pathway	Route Score(s)	Quintile Group number(s)	Priority scores:
SW-HH	<u>14.2</u>	<u>2</u>	$\frac{16 + 4 + 0}{8} = \frac{20}{8} = 2.5 = 3$
Air-HH	<u>N/S</u>	<u>0</u>	
GW-HH	<u>58.2</u>	<u>4</u>	
SW-En	<u>20.0</u>	<u>2</u>	$\frac{4 + 0}{7} = \frac{4}{7} = .6 = 1$
Air-En	<u>N/S</u>	<u>0</u>	

Use the matrix presented to the right, along with the two priority scores, to determine the site ranking. N/A refers to where there is no applicable pathway.

Human Health	Environment				
	5	4	3	2	1 N/A
5	1	1	1	1	1
4	1	2	2	2	3
→ 3	1	2	3	4	④ 5
2	2	3	4	4	5
1	2	3	4	5	5
N/A	3	4	5	5	5 N/A

DRAFT / FINAL

Matrix ("bin") Ranking: 4, or No Further Action

CONFIDENCE LEVEL: The relative position of this site within this bin is:
 almost into the next higher bin.
X right in the middle, unlikely to ever change.
 almost into the next lower bin.

1/31/93

WORKSHEET 1
SUMMARY SCORE SHEET

Note: This document currently has no provision for sediment route scoring.

Site Name/Location (City, County, Section Township/Range):

Olympia Burn Site
Black Lake Boulevard and Highway 101
Olympia, Washington

Thurston County
Section 21, Township 18 North, Range 2 West WM.

Site Description (Include management areas, compounds of concern, and quantities):

The Olympia Burn Site (Old Olympia Landfill) property is located adjacent to Highway 101 near the intersection of Cooper Point Road, and Black Lake Boulevard. Currently, much of the property is covered with vegetation. The site was operated by the City of Olympia as an active landfill from approximately the mid to late 1950's until about 1968. The landfill covers about 10 acres. The practice during the years of operation was to burn the garbage then, when the debris was about 10 to 15 feet deep, the area was backfilled with gravel. Prior to the official years of operation the site was used by local residents as a dumping area. Several reports have been produced since 1984 describing the physical and toxic characteristics of the site (see reports listed under sources used for scoring).

An Ecology site reconnaissance was conducted on September 11, 1992.

Site scoring will be based toxic substances confirmed in the on-site soil above MTCA cleanup standards as follows: arsenic, cadmium, chromium, lead, mercury, polychlorinated biphenyls (PCBs). Arsenic, lead, and chromium were found above MTCA ground water cleanup standards in monitoring well MW-2, located at the south edge of the old refuse fill area.

Special Considerations (Include limitations in site file data or data which cannot be accommodated in the model, but which are important in evaluating the risk associated with the site, or any other factor(s) over-riding a decision of no further action for the site):

Petroleum Hydrocarbons were also found in the soil, however will not be incorporated in the site scoring since the EPA 418.1 TPH analysis is not specific enough to determine TPH toxicity values. Methane (10 % by volume) has also been detected at this site at levels up to twice the lower explosive limit using soil probes. No toxic values have been assigned for methane in the WARM Toxicology Database, therefore it will not be considered for use in the air pathway scoring. Due to the significant gravel cover and the nature of the known contamination, the air pathways will not be scored.

ROUTE SCORES:

Surface Water/Human Health: 14.2

Surface Water/Environ.: 20.0

Air/Human Health: N/S

Air/Environmental: N/S

Ground Water/Human Health: 58.2

OVERALL RANK: 3

Rev. 5/31/91

WORKSHEET 2
ROUTE DOCUMENTATION

1. SURFACE WATER ROUTE

List substances to be considered for scoring:

Source: 1-3

Arsenic, cadmium, chromium, lead, mercury, and PCB.

Explain basis for choice of substance(s) to be used in scoring.

All confirmed in on-site soil above MTCA cleanup standards.

List management units to be considered in scoring:

Source: 1-3

Contaminated on-site soil.

Explain basis for choice of unit used in scoring.

Documented contamination in the on-site soil as a potential source to contaminate surface water. The site is covered by several feet of gravel and elevated above some of the surrounding land. This fact, combined with a porous nature of the cover material, gives this site a potential to leach contaminants.

2. AIR ROUTE

List substances to be considered for scoring:

Source: 1-3

Not scored.

Explain basis for choice of substance(s) to be used in scoring.

N/S

List management units to be considered in scoring:

Source: 1-3

N/S

Explain basis for choice of unit used in scoring.

N/S

WORKSHEET 2 (CONTINUED)
ROUTE DOCUMENTATION

3. GROUND WATER ROUTE

List substances to be considered for scoring:

Source: 1-3

Arsenic, cadmium, chromium, lead, mercury, and PCB.

Explain basis for choice of substance(s) to be used in scoring.

All confirmed in on-site soil above MTCA cleanup standards; with arsenic, chromium, and lead confirmed the ground water from an on-site monitoring well (MW-2).

List management units to be considered in scoring:

Source: 1-3

Contaminated soil.

Explain basis for choice of unit used in scoring.

Documented contamination in on-site soil and on-site ground water sampling.

WORKSHEET 4
SURFACE WATER ROUTE

1.0 SUBSTANCE CHARACTERISTICS

1.1 Human Toxicity

Substance	Drinking Water Standard (ug/l)		Acute Toxicity (mg/kg-bw)		Chronic Toxicity (mg/kg/day)		Carcinogenicity (WOE PF*)	
	Val.		Val.		Val.		Val.	
1. arsenic	50	6	763	5	0.001	5	1.75	7
2. cadmium	5	8	225	5	0.0005	5	x	x
3. chromium	100	6	x	x	1	1	x	x
4. lead	5	8	x	x	x	x	x	x
5. mercury	2	8	x	x	0.0003	5	x	x
6. PCB	0.5	10	1,315	3	x	x	7.7	6

*Potency Factor

Source: 5
Highest Value: 10
+2 Bonus Points? 2
Final Toxicity Value 12

1.2 Environmental Toxicity

Substance	Fresh Water Acute Criteria (ug/l)		Non-human Mammalian Acute Toxicity (mg/kg)		Source: <u>3</u>	Value: <u>8</u>
	Value		Value			
1. arsenic	360	4	763	5		
2. cadmium	3.9	8	225	5		
3. chromium	1,700	2	x	x		
4. lead	82	6	x	x		
5. mercury	2.4	8	x	x		
6. PCB	2	8	1,315	3		

1.3 Substance Quantity

Source: 1-4 Value: 9

Explain basis: Surface Area of the contaminated soil is estimated at about 500 x 500 feet = 250,000 square feet.

WORKSHEET 4 (CONTINUED)
SURFACE WATER ROUTE

2.0 MIGRATION POTENTIAL

- 2.1 Containment none Source: 1-4 Value: 5
Explain basis: Table SW-7A, unmaintained cover
with relatively porous material. No run-on/
run-off controls.
- 2.2 Surface Soil Permeability: till beneath the refuse Source: 1-3 Value: 3
consists of silty sand with some gravel and cobble
- 2.3 Total Annual Precipitation: 45.9 inches Source: 6 Value: 3
- 2.4 Max. 2-Yr/24-hour Precipitation: 2.5 - 3.0 inches Source: 7 Value: 3
- 2.5 Flood Plain: Site is not in a flood plain. Source: 8 Value: 0
- 2.6 Terrain Slope: ~0.8 % Source: 9 Value: 1

3.0 TARGETS

- 3.1 Distance to Surface Water: about 3,000 feet to Source: 9 Value: 4
Percival Creek.
- 3.2 Population Served within 2 miles: √pop.= 0 Source: 10 Value: 0
- 3.3 Area Irrigated within 2 miles: 0.75√no. acres=13.8 Source: 10 Value: 14
(191 acres)
- 3.4 Distance to Nearest Fishery Resource: ~ 3,000 ft. Source: 11 Value: 6
to Percival Creek; steelhead and salmon spawning
- 3.5 Distance to, and Name(s) of, Nearest Sensitive
Environment(s) ~ 3,000 feet to palustrine wetlands Source: 12 Value: 6
located along the drainage of a tributary to
Percival Creek.

4.0 RELEASE

Explain basis for scoring a release to surface
water: None confirmed Source: 1-4 Value: 0

WORKSHEET 6
GROUND WATER ROUTE

1.0 SUBSTANCE CHARACTERISTICS

1.1 Human Toxicity

Substance	Drinking Water Standard		Acute Toxicity		Chronic Toxicity		Carcinogenicity	
	(ug/l)	Val.	(mg/kg-bw)	Val.	(mg/kg/day)	Val.	WOE	PF* Val.
1. arsenic	50	6	763	5	0.001	5	1.75	7
2. cadmium	5	8	225	5	0.0005	5	x	x
3. chrysene	0.02	10	x	x	x	x	11.5	7
4. lead	5	8	x	x	x	x	x	x
5. mercury	2	8	x	x	0.0003	5	x	x
6. PCB	0.5	10	1,315	3	x	x	7.7	6

*Potency Factor

Source: 3
Highest Value: 10
+2 Bonus Points? 2
Final Toxicity Value 12

1.2 Mobility (Use numbers to refer to above listed substances)

Cations/Anions 1=3, 2=3, 4=2, 5=3 Source: 3,5 Value: 3

OR

Solubility(mg/l) 3=0, 6=0

1.3 Substance Quantity

Explain basis: Contaminated soil = approx. 500' x 500 ft. = 250,000 sq. feet by about 12.5' deep = 3,125,000 cu. feet = 115,740 cu. yards.

Source: 1-3 Value: 7

2.0 MIGRATION POTENTIAL

2.1 Containment = none

Explain basis: Documented release of arsenic, lead, cadmium, and chromium to ground water from contaminated soil.

Source: 1-3 Value: 10

2.2 Net Precipitation: 29.9 inches

Source: 6 Value: 3

2.3 Subsurface Hydraulic Conductivity: >10⁻³ = silty sand with some gravel and cobble.

Source: 1-3 Value: 4

2.4 Vertical Depth to Ground Water: 0 feet, based on metals confirmed in on-site ground water.

Source: 1 Value: 8

WORKSHEET 6 (CONTINUED)
GROUND WATER ROUTE

3.0 TARGETS

- 3.1 Ground Water Usage: Private w/ alternate hookups Source: 14,15 Value: 4
- 3.2 Distance to Nearest Drinking Water Well: ~2,250 ft. Source: 14,15 Value: 3
- 3.3 Population Served within 2 Miles: $\sqrt{\text{population}}=29.1$ Source: 14,15 Value: 29
(total # served = 846)
- 3.4 Area Irrigated by (Groundwater) Wells 191 acres
within 2 miles: $0.75\sqrt{\text{no. acres}}=10.36$ Source: 10 Value: 10

4.0 RELEASE

Explain basis for scoring a release to ground water: Documented release of arsenic, lead, cadmium, chromium to ground water. Source: 2 Value: 5

SOURCES USED IN SCORING

1. Dames and Moore, Report of Geotechnical Services, City of Olympia Landfill, Olympia, Washington for the City of Olympia, September 17, 1984.
2. Hart Crowser, Groundwater and Methane Evaluations, 27-Acre Site, Black Lake Blvd. and Cooper Point Road, Olympia, Washington, Prepared for Briar Development, June 24, 1987.
3. Parametrix, Inc., Analytical Results - West Olympia Landfill Test Pit Samples, June 3, 1992.
4. Site Reconnaissance, Richard Heggen, Ecology, September 11, 1992.
5. SAIC Toxicology Database.
4. US Dept. of Interior, National Wetlands Inventory Map, Tumwater, Wash.
5. Washington Ranking Method Scoring Manual, April 1990, revised April 1992.
6. NOAA/USDA Washington Climate, October 1964.
7. NOAA Atlas 2, Volume IX, Isopluvials of 24-hour Precipitation.
8. Flood Insurance Maps, Panel # 530191 0003B, February 17, 1982.
9. USGS 7.5 minute quadrangle map, Tumwater Wash., 1959, photorevised 1981.
10. Ecology Water Rights Information Records.
11. A Catalog of Streams and Salmon Utilization, Vol. 1, Washington State Department of Fisheries.
12. US Dept. of Interior, National Wetlands Inventory Maps.
13. US Census Bureau Statistics, Tiger Files - Ecology Arc Info System, 1990 data.
14. Ecology Well logs, SWRO.
15. Wash. State Dept. of Health, Public Water Supply Listing.

Memorandum

TO: Old Olympia Landfill File (West Olympia Landfill)

FROM: Jane Hedges

RE: Meeting with City of Olympia

On Friday, January 15, 1993 a meeting was held at the request of the City of Olympia to discuss the Old Olympia Landfill adjacent to the Top Foods Grocery Store. The meeting was predicated on a letter from Pat Libby to Dick Cushing regarding the Health Department's concerns about disposal of the site materials. Present at the meeting were: Dick Cushing, Olympia City Manager, Marc Erickson, Olympia City Attorney, Dan Durig, Thurston County (TC) Public Works Director, Dave Merrill, TC Solid Waste Manager, Tom Fitzsimmons, TC Chief Administrative Officer, Sandy Mackie and Mick Phillips, Owens, Davies, Mackie Attorneys, Pat Libby Public Health and Social Services Director and myself.

Dan Durig began the meeting by indicating from the County's perspective there were two issues regarding this site and the current proposal from City of Olympia and the developer (Thompson Properties) to dispose of the site waste at the Hawks Prairie Landfill, which needed to be addressed during the meeting. The issues were; one, the composition of the material and its relation to current and proposed TCHD High Risk Waste Guidelines and two, disposal at Hawkes Prairie for reduced or no cost. Dan then turned the meeting over to me to discuss the material composition and proper disposal.

I discussed the current High Risk Waste Guidelines and reiterated that based on the sampling done by Parametrix (PMX) the material could not be disposed within Thurston County including the Hawkes Prairie facility. Then I compared the material to the proposed guidelines which also eliminate the majority of the material from in-county disposal and discussed the time lines for the public process indicating that it would be unlikely that the policy would be revised in the short time frame apparently under consideration for this project. We discussed the reasons behind why the material may be somewhat different in characterization than current mixed MSW. Pat talked about why our guidelines were developed, about the lack of state criteria for disposal other than DW wastes. The City seemed to be somewhat confused about where the material could be disposed, this was also explained and statewide differences were discussed. We also tried to clarify that past practice would indicate that further delineation of the material in all likelihood would lead to less of the material being acceptable rather than more. We discussed the information about options, long haul, closure on site, monofill etc.

Dan and Dave then discussed the BOCC concerns that were voiced during the study session regarding the reduced tipping fee proposal and the lost life to the landfill. Sandy Mackie expressed concerns with the draft SW Plan which he felt prohibited out of county disposal. Dan clarified that the document is only in draft form and that those references had already undergone some language changes. Dan shared that the Board had expressed a willingness to consider piggy backing on their long haul contract to allow lower rates for Olympia.

Pat explained that if the site did go to clean up under a MTCA action that City of Olympia could qualify for grant funds for site clean up.

The meeting concluded about 5:30 p.m. with City of Olympia reviewing the information they had received during the meeting and Sandy Mackie proposing to have PMX review our proposed High Risk Guidelines to determine material suitability.

cc. Gregg Grunenfelder

John



THURSTON COUNTY
WASHINGTON
SINCE 1852

COUNTY COMMISSIONERS
~~George B. ...~~ July Wilson
District One
Diane Oberquell
District Two
~~Linda Medsall~~ Dick Nichols
District Three

**PUBLIC HEALTH AND
SOCIAL SERVICES DEPARTMENT**

January 7, 1993

Patrick M. Libbey - Director
Diana T. Yu, MD, MSPH
Health Officer

Dick Cushing, City Manager
City of Olympia
P.O. Box 1967
Olympia, WA 98507

Dear Mr. Cushing:

I am writing in regards to the old City of Olympia landfill in west Olympia and an apparent proposal to construct a new K-Mart store on that site. While our department has not been directly involved in the details of this proposal it is my understanding it will likely involve relocation of old solid waste disposed of at the site and transport of that waste to the Hawks Prairie landfill or other permitted facility.

The involvement of this department in the old landfill site will be from our role as the regulatory authority over solid waste in Thurston county. As you are well aware from our recent experience with LOTT dirt disposal, Thurston county has "high risk waste guidelines" which this department uses to judge the suitability of disposal options for contaminated materials. In regards to the K-Mart project, the proponents engineer, Parametrix, Inc. has evaluated waste samples from the site and concluded in a letter dated June 3, 1992 that most of the sample results exceed our high risk waste guidelines for disposal of the waste material inside Thurston County. Upon review of those sample results by Health Department staff we concur with the conclusions reached by Parametrix and judge from the information provided that only a small amount of the material at the old landfill would meet the criteria for disposal at the Hawks Prairie landfill.

Since the proponent for this project has been working with the City on this proposal I felt you should be aware of the constraints which exist in potentially relocating the materials from this site.

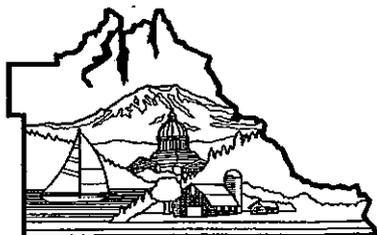
If you or any of your staff have any questions regarding this matter please contact Gregg Grunenfelder, Environmental Health Division Director, or Jane Hedges our Resource Protection Section Program Manager at 754-4111.

Sincerely,

A handwritten signature in cursive script that reads "Patrick M. Libbey". The signature is written in dark ink and is positioned above the typed name.

Patrick M. Libbey, Director

cc. Board of Health Members
Sandy Mackey
Tom Hill
Dan Durig



THURSTON COUNTY

WASHINGTON

Since 1852

COUNTY COMMISSIONERS

George L. Barner, Jr.

District One

Diane Oberquell

District Two

Les Eldridge

District Three

PUBLIC HEALTH AND SOCIAL SERVICES DEPARTMENT

January 5, 1993

Patrick M. Libbey, Director

Mr. Sandy Mackie
Owens, Davis and Mackie
P.O. Box 187
Olympia, Washington 98507

RE: Analytical Results - (Old) West Olympia Landfill

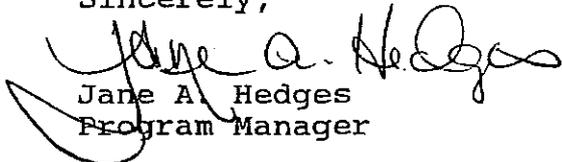
Dear Mr. Mackie:

This Department has reviewed the analytical results from the test pits at the (Old) West Olympia Landfill to determine compliance with the High Risk Waste Disposal Policy as requested in your letter of November 25, 1992. We delayed our written response at the request of your associate, Richard Phillips. Mr. Phillips had intended to set up a meeting with your clients, their technical consultant, Parametrix and our Department to discuss the issues and the policy implications. To date, this meeting has not been scheduled. We wanted to insure that you and your client were aware of our Department's concerns regarding disposal of the landfill materials.

We concur with the analysis of the sample results by Parametrix and the conclusions outlined by Butch Dunlap in his letter to you dated June 3, 1992. Based on our current guidelines, all the samples failed for barium, cadmium and lead. Ten samples exceeded our guidelines for total petroleum hydrocarbons (TPH). Other criteria were exceeded in portions of the other samples. As a result of this information, our determination is that the material could not be disposed within Thurston County including the Hawks Prairie Landfill. We are currently reviewing our High Risk Waste Policy and staff have developed a proposed revision to the policy which would result in some of the additional test samples passing, however, it would still be the minority of the material tested. Because of the public process which we intend to follow prior to any finalization of the Policy revision it is unlikely that those revisions will be in place in the near future. It is also very probable that even with the revisions, when additional samples of the material are collected and sampled, which would be required prior to actual disposal, that only a small percentage of the material would be acceptable for in-county disposal.

If you or your client would like additional information on our review of the data or our high risk waste guidelines please feel free to contact John Libby or myself at 754-4111.

Sincerely,



Jane A. Hedges
Program Manager

cc. John Libby
Gregg Grunenfelder
Dave Merrill

SPOKANE COUNTY / EASTERN REGION

Greenacres Landfill
Liberty Lake (15 miles east of Spokane)
Spokane 99019

Ecology has prepared a FINAL CLEANUP ACTION PLAN for cleanup at this National Priorities List (NPL) site. Key elements of the PLAN include construction of a landfill cover, indoor air sampling of nearby residences, institutional controls, and ground water monitoring.

Studies indicate releases from the landfill of low levels of volatile and semi-volatile organic compounds and metals to ground water.

The FINAL CLEANUP ACTION PLAN and RESPONSIVENESS SUMMARY are available for review at the following locations:

Spokane Public Library; W. 811 Main Ave.;
Spokane

Spokane County Library; E. 12004 Main Ave.;
Spokane

Department of Ecology; Eastern Regional
Office; N. 4601 Monroe; Suite 100; Spokane

Contact: Roxane Broadhead (509) 625-5190

U.S. Postal Service
Spokane Main Office - Vehicle Maintenance
Facility, E. 703 Trent Ave., Spokane 99202

INDEPENDENT FINAL CLEANUP REPORT received on this leaking underground storage tank site 12/21/92 indicated release of petroleum product to the soil.*

Title: Closure Report.

Contact: Debbie Charloe (509) 456-2834

THURSTON COUNTY / SOUTHWEST REGION

Old Olympia Landfill - Burn Site
Adjacent to Hwy 101 (near Black Lake Blvd.)
Olympia 98503

Ecology is currently conducting a SITE HAZARD ASSESSMENT (SHA) at this site. The site's Washington Ranking Method (WARM) Score will be available in the February 1993 Hazardous Sites List. This is not a HIGH PRIORITY SHA site.

Contact: Dick Heggen (206) 586-8618

WAHKIAKUM COUNTY / SOUTHWEST REGION

Weyerhaeuser - Grays River Shop Dump Site
Former Grays River Camp, Grays River

INDEPENDENT FINAL CLEANUP REPORT received on this site 12/14/92 indicated release of petroleum product to the soil.*

Title: Final Report - Independent Cleanup Action.

Contact: Mike Blum (206) 586-0364

WALLA WALLA COUNTY / EASTERN REGION

Walla Walla Airport Burn Pit
Route 4, Box 173, Walla Walla 99362

INDEPENDENT FINAL CLEANUP REPORT received on this site 12/21/92 indicated release of petroleum product to the soil.*

Title: Phase III Supplemental Environmental Site Assessment - Walla Walla Regional Airport Burn Pit.

Contact: Patti Carter (509) 456-6167

WHATCOM COUNTY / NORTHWEST REGION

Chevron Station - Border
608 Cherry St., Sumas 98295

INDEPENDENT INTERIM CLEANUP REPORT received on this leaking underground storage tank site 7/30/91 indicated release of petroleum product to the soil.*

Title: Petroleum Release Analytical Data.

Contact: Judy Fisher (206) 649-7239

Sudden Valley Area Z
2145 Lake Whatcom Blvd., Bellingham 98226

INDEPENDENT INTERIM CLEANUP REPORT received on this leaking underground storage tank site indicated release of petroleum product to the soil.*

Title: Multiple UST Removal.

Contact: Judy Fisher (206) 649-7239



THURSTON COUNTY
WASHINGTON
SINCE 1852

COUNTY COMMISSIONERS
George L. Barner, Jr.
District One
Diane Oberquell
District Two
Les Eldridge
District Three

PUBLIC HEALTH AND
SOCIAL SERVICES DEPARTMENT

Patrick M. Libbey, Director

THURSTON COUNTY ENVIRONMENTAL HEALTH

1-4-93

FAX TRANSMITTAL SHEET

FAX # 754-4682

FOR: *Dave Merrell*

FROM: THURSTON COUNTY ENVIRONMENTAL HEALTH

NAME: *John Libby*

There are a total of 3 pages, including this one.

If you have not received all pages please call: 754-4111.

Dave -
As per our conversation, here is a copy of
the letter written to Mr. Cushing regarding the
West Olympia Landfill.

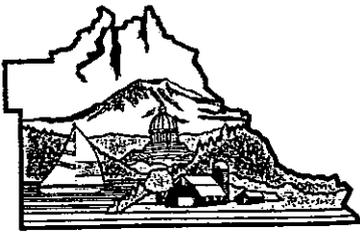
John

*** ACTIVITY REPORT ***

TRANSMISSION OK

TX/RX NO.	0428
CONNECTION TEL	97544682
CONNECTION ID,	THURSTON CO PW
START TIME	01/04 17:32
USAGE TIME	01'37
PAGES	3
RESULT	OK

1992



THURSTON COUNTY
WASHINGTON
SINCE 1852

COUNTY COMMISSIONERS
George L. Barner, Jr.
District One
Diane Oberquell
District Two
~~Linda Medema~~ Dick Nichols
District Three

**PUBLIC HEALTH AND
SOCIAL SERVICES DEPARTMENT**

December 22, 1992

Patrick M. Libbey, Director
Diana T. Yu, MD, MSPH
Health Officer

Dick Cushing, City Manager
City of Olympia
P.O. Box 1967
Olympia, WA 98507

Dear Mr. Cushing:

I am writing in regards to the old City of Olympia landfill in west Olympia and an apparent proposal to construct a new K-Mart store on that site. While our department has not been directly involved in the details of this proposal it is my understanding it will likely involve relocation of old solid waste disposed of at the site and transport of that waste to the Hawks Prairie landfill or other permitted facility.

The involvement of this department in the old landfill site will be from our role as the regulatory authority over solid waste in Thurston county. As you are well aware from our recent experience with LOTT dirt disposal, Thurston county has "high risk waste guidelines" which this department uses to judge the suitability of disposal options for contaminated materials. In regards to the K-Mart project, the proponents engineer, Parametrix, Inc. has evaluated waste samples from the site and concluded in a letter dated June 3, 1992 that most of the sample results exceed our high risk waste guidelines for disposal of the waste material inside Thurston County.

It is concerning to note that with the above information in hand the project proponent, Mr. Frank Weiss, is actively working with the City and the county Public Works department to obtain cost estimates for waste disposal at the Hawks Prairie landfill. While we have repeatedly tried to initiate discussion about the broader policy issue of the regulatory acceptability of this material at the landfill, that basic issue has not been pursued by the proponent. On December 9, 1992 we were invited by city staff to attend a presubmission conference on the K-Mart project. When the issue of waste relocation at the old landfill site was brought forward, Mr. Weiss would only respond that he was not prepared to discuss the issue.



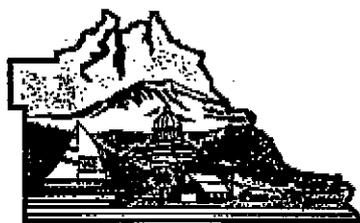
We view the waste disposal issue from the old landfill site to be a major unresolved issue. We would hate to see the applicant for this project spend many months progressing through a site plan review process while this very basic, and significant question goes unaddressed. The purpose of my letter to you is simply to inform you that this issue will need to be fully addressed at some time and that it is of such significance that the fate of the project proposal may well rest with the final determination on this issue.

If you or any of your staff have any questions regarding this matter please contact Gregg Grunenfelder, Environmental Health Division Director, or Jane Hedges our Resource Protection Section Program Manager at 754-4111.

Sincerely,

Patrick M. Libbey, Director

cc. Board of Health Members
Mark Erickson
Sandy Mackey
Tom Hill
Tom Fitzsimmons



THURSTON COUNTY
WASHINGTON
SINCE 1852

COUNTY COMMISSIONERS
George L. Barnett, Jr.
District One
Diane Oberquell
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**PUBLIC HEALTH AND
SOCIAL SERVICES DEPARTMENT**

Patrick M. Libbey, Director

THURSTON COUNTY ENVIRONMENTAL HEALTH

FAX TRANSMITTAL SHEET

FOR: *Richard Heggen* FAX# *206/753-8531*
Site Hazard Assessments

FROM: THURSTON COUNTY ENVIRONMENTAL HEALTH

NAME: *John Libby* FAX# *206/754-2954*

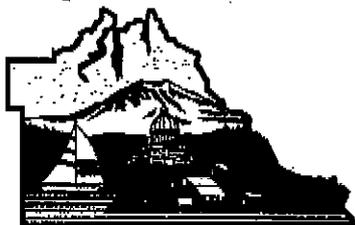
There are a total of 3 pages, including this one.

If you have not received all pages please call: 754-4111

Dick -

This is in regard to your SHA of the old Olympia landfill. You & I discussed this site a couple of months ago & I forwarded some previous engineering & site characteristic studies of the site. I ran across the letter which addresses the location and disposition of a drum of unknown substance. I thought you might like to have this for your files.

John Libby



THURSTON COUNTY
WASHINGTON
 SINCE 1852

COUNTY COMMISSIONERS

George L. Barner, Jr.
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**PUBLIC HEALTH AND
 SOCIAL SERVICES DEPARTMENT**

June 14, 1989

524-2200

Patrick M. Libbey, Director
 Gary M. Goldbaum, M.D.,
 Health Officer

Mr. Steve Pulliam
 Thompson Properties
 9709 Third Avenue NE, Suite 114
 Seattle, Washington 98115

Dear Mr. Pulliam;

As you are aware, Howard Godat and Associates was commissioned to perform an analysis of the former Olympia municipal dump property, of which you are a principal investor, to determine the structural suitability of the site for ultimate development. Last Wednesday Mr. Godat had his survey crew shoot ten different points within the landfill, which were subsequently excavated by a subcontractor (Dave Morris Construction) and classified according to soil composition and debris type. Mr. Godat called the day before the work began and invited me to visit the site to observe the process.

Wednesday, in addition to shooting photographs of the ten test holes, I conducted a visual inspection of those parts of the site that were accessible. Upon leaving the property, which was shortly after the backhoe operator had finished for the day, I was following a pathway blazed by the backhoe and encountered a 55 gallon drum that had been run over by the machine only minutes before. Since the drum was leaking an unidentified substance onto the ground, I called the Spill Response Team from the Department of Ecology. Mr. Jim Oberlander responded to the spill. On Thursday, Mr. Oberlander and I met with Mr. Godat and directed him to hire an environmental cleanup firm to deal with the potentially hazardous material correctly. The drum and surrounding contaminated soil were removed the following day by Northwest Enviroservice of Seattle.

During my visits to the site on Wednesday and Thursday last week, I noticed an assortment of other materials scattered around which were ostensibly disposed of after the landfill was officially closed. In addition to the aforementioned drum, I spotted at least one other 55 gallon barrel without any identifying label, a large pile of creosote and pressure treated timbers, numerous piles of yard debris (including some fairly fresh yard waste near the boundary with Friendly Village Mobile Home Park), various piles of demolition debris and some very large concrete sewer

Steve Pulliam - page two

pipe lengths (some of which contained cases of empty beer bottles and assorted other garbage). I also observed at least five different people walking through the property on their way to Top Foods from the mobile home park.

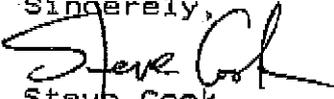
It is impossible to say with certainty who is responsible for the material dumped on your property after the dump was closed to the public. Regardless of who is responsible for any derelict dumping on your property, there appear to be some serious potential public health hazards on the site. It is impossible at this point to determine the extent of such a threat, since much of the property is thickly covered with vegetation. As such, I must ask you to submit a plan for accomplishing the following tasks:

1. A complete survey of the surface of the old landfill property to determine the extent and composition of illegal dumping occurring after the dump was closed to the public.
2. A plan for the removal and proper disposal of these materials.
3. A plan for restricting access through or onto the site to the general public.

In addition to the three tasks listed above, there is a groundwater monitoring well on the far west side of the landfill which was damaged by the backhoe operator. This will need to be repaired very soon to prevent potential contaminants from entering the groundwater. I have informed Howard Godat of this, so you may wish to coordinate the completion of this task with him, since the damage was done by his subcontractor.

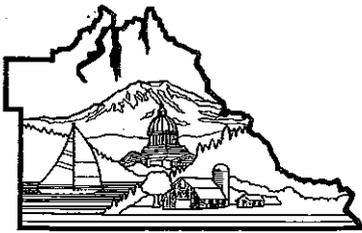
If you have any questions regarding any of these issues please don't hesitate to call me at 786-5461. I thank you in advance for your cooperation.

Sincerely,


Steve Cook
Resource Protection Program

cc: Gregg Grunenfelder, Resource Protection Program Manager
Jim Oberlander, DOE, Southwest Regional Office
Roland Ugochuku, DOE, Southwest Regional Office
Mike Wilson, DOE, Southwest Regional Office

SC/bldtp1



THURSTON COUNTY

WASHINGTON

SINCE 1852

COUNTY COMMISSIONERS

George L. Barner, Jr.

District One

Diane Oberquell

District Two

Linda Medcalf

District Three

DEPARTMENT OF PUBLIC WORKS

Daniel F. Durig, Director

MEMORANDUM

TO: Mark Erickson, City Attorney

FROM: Dan Durig, Director of Public Works *Dan Durig*

DATE: December 8, 1992

SUBJECT: WEST OLYMPIA DISPOSAL SITE

This memorandum is a follow-up to the recent meeting regarding transfer of refuse located at the Olympia Disposal site on the west side of Olympia into Hawks Prairie Landfill. At the conclusion of the meeting it was requested that we provide an estimate of the cost impact and resultant tipping fee that would be charged to dispose of the material at Hawks Prairie Landfill. Based on an analysis of the cost impact to the Solid Waste Program in Thurston County, the minimum tipping fee to be charged would be \$20.50 per ton including a 4.6% refuse tax.

It is our understanding that the total amount of refuse to be transferred is estimated to be 100,000 cubic yards. Based on an assumed density of 100 lbs per cubic foot, the total estimated costs would amount to \$2,767,500. Of course, the actual cost would be based on the scale weight when delivered to the landfill. For waste of this type and character, the normal tipping fee is \$66.53 per ton. Therefore, the amount quoted only represents the incremental cost impact to the landfill operations. Other cost elements such as the waste reduction/recycling program, transfer station operations, bottom liner design construction costs, bond retirement, moderate risk waste, etc. are not included. This results in a reduce rate from \$66.53 per ton to \$20.50.



The following items are not included in the \$20.50 per ton tipping fee and will be solely the responsibility of the developer:

1. County or Developer Legal Fees
2. County staff time for review and coordination of the project.
3. Environmental review and permitting process
4. Consultant fees for preparation of environmental review, design and construction documents for the required vertical expansion in lined area No. 1.
5. All costs for monitoring and testing of the refuse material at the site for conformance to regulatory requirements. This would include development of a approved sampling and monitoring protocol program by an environmental consultant.

We have no objections to the developer retaining the legal and technical assistance to complete the project. However, Thurston County reserves the right to make final approval on all documents associated with the project. Also, Thurston County could maintain a separate cost accounting system and charge the developer for all direct costs under item 2 above.

Based on the staff's preliminary analysis, the presettlement height limit for Lined Area No. 1 would need to be raised from an elevation of 265' to 285' or 20' in order to accommodate the additional refuse material from the Olympia disposal site.

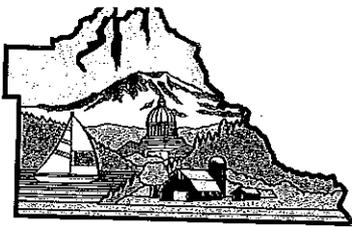
Finally, as discussed in the previous meeting there are other conditions which must be met in order to go forward with the project.

1. It is assumed that the City of Olympia would be an equally liable partner if any remedial work at Hawks Prairie Landfill would occur in the future.
2. There must be complete assurance that if granting of a permit to raise the height of the landfill proved unsuccessful, Thurston County would be reimbursed the full tipping fee (\$66.53 per ton) for all material delivered to the site. An appropriate credit would be granted for previous payments to the account. Also, the tipping fee would have to be adjusted for inflation if the process for granting approval of the vertical expansion lingered on for more than one year. This guarantee must be in the form of a financial assurance document acceptable to Thurston County.
3. Any additional design and construction requirements at Hawks Prairie Landfill which could be stipulated as the result of the environmental review and permitting process would be the responsibility of the developer. For example, unusual landscaping and other screening requirements.
4. Approval must be granted in writing by the applicable regulatory agencies before disposal into Hawks Prairie Landfill. This should be undertaken as soon as possible with Thurston County Environmental Health.

All of the above conditions are subject to approval by the Board of County Commissioners as well as review by County legal counsel. This memorandum should not be considered binding and is furnished only as a discussion item in response to your inquiry. A formal intergovernmental agreement will need to be drafted and entered into by all concerned parties.

If you have any questions regarding the information contained in this memorandum, please don't hesitate to call.

cc: Sandy Mackie, Owens, Davies and Mackie
Art O'Neil, Public Works Director, City of Olympia
Dick Cushing, City Manager, City of Olympia



THURSTON COUNTY
WASHINGTON
SINCE 1852

COUNTY COMMISSIONERS
George L. Barnett, Jr.
District One
Diane Oberquell
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Linda Medcalf
District Three

PUBLIC HEALTH AND
SOCIAL SERVICES DEPARTMENT

Patrick M. Libbey, Director
Diana T. Yu, M.D., MSPH
Health Officer

12-9-92

In formal meeting w/ Mick Phillips, Jane Hedger,
& I. Discuss parameters to West Olympia Landfill
disposal - he wants to have meeting w/ consultant,
health dept + other players involved. He will take
over much of the project for Sandy. JL

12-22-92

Spoke with Mick Phillips by phone - he stated that
private party + city of Olympia were discussing disposal costs.
Developer does not have enough money to do project on their own +
had asked for city participation. So far, city of Olympia has
articulated a willingness to assist. At this juncture, Mick
feels project is dead or dying. JL



THURSTON COUNTY
 WASHINGTON
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COUNTY COMMISSIONER
 George L. Barner, Jr.
 District One
 Diane Oberquell
 District Two
 Linda Medcalf
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**PUBLIC HEALTH AND
 SOCIAL SERVICES DEPARTMENT**

MEMORANDUM

Patrick M. Libbey, Director
 Diana T. Yu, MD, MSPH
 Health Officer

November 30, 1992

To: Gregg Grunenfelder

From: John Libby

Re: Old West Olympia Landfill

Gregg,

This is a quick note about the waste characterization of the solid waste material at the old Olympia landfill site. As per information supplied by the consultant, Parametrix, eight test holes were dug and fifteen samples collected. As per the consultants own narrative and perusing the data, many of the samples exceed Thurston County's High Risk Waste Guidelines. A breakdown of the constituents are as follows:

10 samples exceed guidelines for TPH		
2	"	PCBs
1	"	Arsenic(Total)
All	"	Barium(Total)
14	"	Cadmium(Total)
1	"	Chromium(Total)
14	"	Copper(Total)
All	"	Lead(Total)
All	"	Lead(TCLP)
3	"	Mercury(Total)
12	"	Silver(Total)
All	"	Zinc(Total)

The TPH's could be remediated at the site through thermal extraction or bioremediation. However, this would be an expensive remediation method and would not lower the metal levels. Another consideration would be to examine how this material may affect leachate constituency at the landfill. If certain metal levels were raised within the leachate, this may have a detrimental impact on LOTT's present NPDES permit.

Several samples also exceeded the MTCA levels and this poses questions as per DOE's approach in getting the county involved as a PRP if later mitigation issues arise,

OWENS DAVIES MACKIE
A PROFESSIONAL SERVICES CORPORATION

ATTORNEYS AT LAW

926 - 24TH WAY S.W.

POST OFFICE BOX 187

OLYMPIA, WASHINGTON 98507

(206) 943-8320

FRANK J. OWENS
ARTHUR L. DAVIES
JOHN V. LYMAN
ALEXANDER W. MACKIE*
RICHARD G. PHILLIPS, JR.
BRIAN L. BUDSBERG
MICHAEL W. MAYBERRY
ROBERT F. HAUTH, P.S.

BURTON R. JOHNSON (1970)

KIRK M. VEIS
CYNTHIA D. TURNER
MATTHEW B. EDWARDS

*ALSO ADMITTED IN WASHINGTON, D.C.

November 25, 1992

TELECOPIER
(206) 943-6150

John Libby
Solid Waste Division
Thurston County Health Dept.
2000 Lakeridge Drive SW, Bldg. 1
Olympia, WA 98502

RE: Old City Landfill Site

Dear John:

I am enclosing a copy of the materials from Parametrix, together with our letter to the City of Olympia. The proposal is to increase capacity at the Thurston County landfill by 130,000 ± tons, to accept the 130,000 tons of burned municipal waste located at a City of Olympia burn landfill immediately west of Top Foods.

The Parametrix letter describes the materials to be moved.

My question to you is whether these materials can be deposited in Thurston County's landfill under the solid waste guidelines instituted by the Health Department.

I appreciate your cooperation in this matter.

Sincerely yours,

OWENS DAVIES MACKIE



Alexander W. Mackie

AWM/kr

Enclosures

cc: Mark Erickson
Butch Dunlap
Kathy Thompson
Frank Weiss

11-25-92

Meeting in Sandy Markie

Jane Hedges + I

Discuss the Olympia Landfill site

Butch Dunlap - Parametrix - consultant to developer
remediated old landfill in battle for Metro bus barn

Sandy represents Thompson Properties
K-Mart wants to build on site
Weiss ~~is~~ developer

His client would like to expand height of present landfill
to accommodate approx 130K tons of material
would raise present cell by 7-10 ft

75/80% granular type material - 1/2" sieve

material test results were presented
client willing to do further testing

would this project fit TC-C5WMP?
engineering feasibility

Env Health - OK? constituents in landfill
THP, Pb, Cd high levels

performance bond by developer

City of Olympia may get back - timeframe
bond responsibility

old Olympia Landfill

Lot 3 / Subdivided
1984 / 1985

K-Mart

Mtg

performance bond - City of Olympia bears responsibility

Cost of modifications to landfill

current cell 15' or one cell 7½' + 2nd cell 7½'

Comment on general acceptability
leaching parameters

75% will pass ½" screen

Haul costs / tipping fee

clean-up
10% special case

LOTT dirt used at Oly dump site
leachate problems

Mark Eubank, Batch Develop

April - ideal
use now / build later / construction permits

11-25-92

Mtg w Sandy Mackie
Jane Hedger
(Jane's office)

OWENS DAVIES MACKIE

A PROFESSIONAL SERVICES CORPORATION

ATTORNEYS AT LAW

926 - 24TH WAY S.W.

POST OFFICE BOX 187

OLYMPIA, WASHINGTON 98507

(206) 943-8320

BURTON R. JOHNSON (1970)

JON E. CUSHMAN

KIRK M. VEIS

CYNTHIA D. TURNER

MATTHEW B. EDWARDS

*ALSO ADMITTED IN WASHINGTON, D.C.

FRANK J. OWENS
ARTHUR L. DAVIES
JOHN V. LYMAN
ALEXANDER W. MACKIE*
RICHARD G. PHILLIPS, JR.
BRIAN L. BUDSBERG
MICHAEL W. MAYBERRY
ROBERT F. HAUTH, P.S.

October 21, 1992

TELECOPIER
(206) 943-6150

Mark O. Erickson
City Attorney
City of Olympia
P.O. Box 1967
900 Plum Street S.E.
Olympia, WA 98507

RE: Old City Landfill Site

Dear Mark:

I have asked Parametrix to identify a potential modification in the landfill configuration permitted for cells 2 and 3 to permit the entire 100,000 ± yards of material from the old City landfill to be installed in the new County landfill, without causing the County to lose any of their planned capacity. He has identified a potential of delivering the material to the Hawks Prairie site with a total potential change to both cells of about five feet (potentially 10-15 feet if all in one cell—see letter from R. Dunlap attached).

Such an increase would require an amendment of the County solid waste permit with respect to final contours and may or may not require a new special use permit. The landfill is within the City of Lacey now, while all permits were issued while the site was in the County. If Lacey views the increase of five feet as a minor change in the special use permit, no new hearings would be required. One would expect Lacey to advise Weyerhaeuser, however, and Lacey may require new hearings.

It is not necessary to obtain the permits prior to hauling the material. If the County will commit to accepting the material while the permit processing is ongoing, the material could be delivered next spring. The solid waste permit could be amended within about 90 days, but if hearings were required, any required change to the special use permit could take somewhat longer.

Frank Weiss and company have committed to cover all on site costs in Olympia, including the excavation planning, excavation, and haul to the Hawks Prairie landfill. If the program proposed is acceptable, Mr. Weiss is prepared to submit a full site plan review proposal

Mark O. Erickson
October 20, 1992
Page 2

for the use of the site by December 1, 1992. All applicable building, grading, etc. permits would need to be issued by March 1, 1993. Commencement of excavation and haul would begin by mid April, 1993. It is estimated that the haul would take 90 days if done during the day, and six-eight weeks if the hauling can be done at night. In order to meet the scheduling needs of the tenant, the night schedule is required. The cost to excavate the material and haul it 12 miles to the Thurston County landfill is approximately the same as would have been incurred to haul it less than 3 miles and place it on other Thompson property.

Mr. Weiss' only condition is that his tenant, K Mart, commit to lease the site prior to the time that excavation begins. If the store does not commit, the project cannot proceed.

Thompson Properties is prepared to pay the balance due the City, \$470,853 plus interest, on the same day that Weiss closes with Thompson, which would be before any excavation begins.

We will need to delay the deadline originally set forth in the 10/18/90 agreement, which was modified by the 6/29/92 agreement. The present expiration date of December 31, 1992 will need to be changed to July 1, 1993 to permit such a simultaneous closing.

The City would undertake the costs of the needed modification at the landfill. From an engineering point of view none of the changes are structural and Parametrix would give to the City all of its work demonstrating the project feasibility.

The City would also undertake all permitting and tipping fee charges. The County has said that as an enterprise fund, not supported by tax revenues, it will have to charge some fee to at least cover its costs. In the proposed scenario the County's actual costs could be minimal, including possibly extra personnel costs for 6-8 weeks next spring if the hauling can be done at night, and some administration costs in the permit modification.

You should note that the first page of Section VI of the County's proposed comprehensive solid waste management plan speaks to solving Thurston County's problem locally and not exporting the problem elsewhere.

The solution meets a number of needs. The old City burn site gets eliminated permanently and the City will have no continuing liability. The City's costs of the program are properly chargeable to the City utility, as from all of the information we can gather, the dump was the City dump used by the City garbage disposal and its public utility crews almost exclusively.

Mark O. Erickson
October 20, 1992
Page 3

The City will receive in excess of \$470,000, together with the benefit of the excavation and hauling costs paid by Weiss. The City sheds all potential future liability for the old landfill and will gain a retail center, which should generate about \$20,000,000 retail sales annually, plus over 250 jobs. Fees charged by the County could possibly be paid through a revenue sharing agreement arranged between the City and the County to permit the County to benefit from the new store more than it otherwise would and reduce or eliminate any real county expense.

If the City is agreeable with this proposal, we should approach the County and the City of Lacey quickly. Dave Merrill, who heads the landfill for the County, indicated that the policy decisions would be made at a level "much higher than he," indicating at least the County Administrator level and possibly the County Commissioners.

Progress must be made swiftly if we are to be ready to proceed with site plan review by December 1.

Please call me when you have had an opportunity to read this letter. By separate cover I will transmit a copy of the Parametrix final report.

Sincerely yours,

OWENS DAVIES MACKIE



Alexander W. Mackie

AWM/kr
Enclosure

cc: Frank Weiss
Kathy Thompson
Steve Pulliam
Butch Dunlap

Post-It™ brand fax transmittal no. 10-7571		# of pages ▶
To <i>Sandy</i>	From <i>Butch</i>	
Co.	Co.	
Dept.	Phone #	
Fax # <i>943-6150</i>	Fax #	

mal Sciences

Parametrix, Inc.

P.O. Box 460 Sumner, WA 98390
206-863-5128 • 206-838-9810 • Fax: 206-863-0946

October 11, 1992
PMX #21-2158-02 (06)

Mr. Frank Weiss
The Weiss Company
600 B Street
San Diego, CA 92101

Re: West Olympia Landfill

Dear Mr. Weiss:

On Friday, October 8, I met with Dave Merrill, Solid Waste Manager with Thurston County Public Works. Dave had been briefed by Dan Durig, so he was prepared to discuss the key issues without delay. The following is a brief summary of our meeting:

1. We discussed opportunities to dispose of the West Olympia waste material in the Hawk's Prairie Landfill as one or more of the following:
 - Daily cover
 - Interim cover
 - Increased height over existing footprint
 - a. Thurston County uses approximately 15,000 cy of material annually as daily cover. They currently have a surplus of material onsite ± 500,000 cy; therefore, no additional cover material needed.
 - b. Thurston County does not use interim cover to any great extent. They do not plan to build a new cell or close the existing cell for several years.
 - c. The existing footprint is approximately 15 acres. The West Olympia material (100,000 cy±) would add approximately four to five feet of additional height to this cell if spread uniformly. However, due to the cell's grading plan, the maximum height addition would actually be between 10-15 feet.
2. Would additional permits be required? Yes
 - a. The Solid Waste Permit issued by Thurston County would require modification. This is probably not a big deal and could be obtained in 30-60 days.

Mr. Frank Weiss
October 11, 1992
Page 2

b. The Limited Use Permit issued by Thurston County Planning Department would require amendment. The amendment would address the height addition. Dave said their last LUP was hotly contested by the neighbors and required an EIS. If this LUP amendment required SEPA compliance, a Supplemental EIS could be required. Time required - four to nine months.

3. Would there be a charge to dispose of the material? Yes

Current tipping fee is approximately \$60.00/ton. This fee can be modified if the County benefits from such a modification (Ordinance ?). Dave said they would at least require their costs to be covered. I did not elaborate on this, but I would estimate them to be in the \$6-10/ton range.

4. Would you accept the material? Unknown

Dave said this decision will have to be made at a much higher level.

I thanked him for his time and effort and told him I would be reporting back to you and Sandy.

I will be back in my office on Thursday.

Sincerely,

PARAMETRIX, INC.



Richard A. Dunlap, P.E.
Principal

RAD:ke

Files

~~CHRISTINE G. GREGORY~~
Director



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

7272 Cleanwater Lane, LU-11 • Olympia, Washington 98504-6811 • (206) 753-2353

October 14, 1992

City of Olympia - Planning Department
2000 Lakeridge Drive SW
Olympia, WA 98502-6045

Dear Sir or Madam:

Re: Old Olympia Burn Site, Black Lake Boulevard and Highway 101, Olympia

I am writing to send you information the Washington Department of Ecology has gathered regarding the above-referenced property. Under the Model Toxics Control Act (Chapter 70.105D RCW), Ecology maintains a database of known or suspected contaminated sites. Based on available information, a report submitted to Ecology, and an inspection performed on September 3, 1992, I have added this property to our database.

Enclosed is a computer printout summarizing information which we believe reflects the current status of this site. I want to ensure that Ecology has accurate information, so I encourage you to carefully review this report. If you have any corrections, please send them and any supporting material to me at the above address. Two legends have also been enclosed to help you interpret this report.

Please note that inclusion in the database does not mean that Ecology has determined you are a potentially liable person under the Model Toxics Control Act or that action is needed at this time. Ecology may conduct a more detailed inspection of this property, including testing for possible contamination, in the future. After that, we will be able to assess whether action will be needed and establish a priority for this work.

It is Ecology's policy to work cooperatively with persons to accomplish prompt and effective cleanups. However, due to limited resources and requirements in state law, we are not always able to provide requested assistance. Furthermore, your cooperation with Ecology in planning or conducting a remedial action is not admission of guilt or liability. If you decide to proceed with work on your own, please be aware that there are requirements in the state law which must be adhered to.

Enclosed is a copy of Chapter 70.105D RCW and the implementing regulations, Chapter 173-340 WAC, which detail these requirements. If you have any questions, please call Dick Heggen at (206) 586-8618. Thank you for your cooperation.

Sincerely,

Edward Canapary
Edward Canapary
SMIS Coordinator
Southwest Regional Office

EC:dc
Enclosures

cc: Dick Heggen

Date of Last Update:

I. SITE ID

Region	S	SOUTHWEST
County	34	Thurston
Site No	6145	
Sub-Site No	000	

HWICP ID: S-34-6145-000 EPA ID: _____

Site Name Olympia Burn Site
 Alternate Name(s) Old City of Oly Municipal Dump

II. SITE STATUS (STATE)

Site Status _____ (P1=HWICP Program Plan)

Site Category: C1
 A = Federal Lead NPL C2= Potential Haz Wst Site M = No Haz Wst Found
 B = State Lead NPL D = RA Complete (70.105B/MTCA) N = RA Complete (Other Statutes)
 C1= Confirmed State Site L = Long Term Monitoring

III. LOCATION DESCRIPTION

Site Location Address: Black Lake Blvd and Hwy 101
 Olympia WA 98502
 Legislative District: 22 Congressional District: 03

Township/Range/Section: T18/R2W-21
 Latitude _____ Longitude _____

Geographic Location: _____ Codes: CBN = Comm Bay Nearshore HA = Hanford
 _____ N/A CBS = Comm Bay So Tacoma Chnl HI = Harbor Island
 EB = Elliot Bay PS = Other Puget Sound

IV. SITE STATUS (FEDERAL)

EPA HRS Score: _____
 NPL Dates: Nomination _____ Final _____ Deletion _____
 CERCLIS Status: _____ (A = Active, N = No Further Action)

VI. SITE DESCRIPTION

Facility Active? 1 Codes: A = Active M = Mixture
 I = Inactive U = Unknown

Ownership Type 1 Operator Type _____
 Codes: 1= Private 5= State 9= Unknown
 2= Municipal 6= Tribal 10= Public Ownership due to bankruptcy
 3= County 7= Multiple Sites/Ownership 11= Fincial Inst. owned due to bankruptcy
 4= Federal 8= Other

Standard Industrial Classification (SIC) Code(s):
 1. 4953G LANDFILL
 2. _____
 3. _____

Preliminary Assessment Rating: _____ N/A Site Inspection Recommendation: _____
 H = High N = None Codes: 1=No Further Action 3=Referred to Ecology
 M = Medium P = Pending 2=Referred to EPA for HRS Score 4=Follow-up S1
 L = Low Investigation

VII. WASTE DESCRIPTION

Waste Management Practice(s): Categories: Landfill
 1. LANDFILL Drug Lab Pesticide Application
 2. _____ Drum Pesticide Disposal
 3. _____ Impoundment Spill
 Improper Handling Storm Drain
 Land Application (proper) Tank

General Waste Categories: (S = Suspected, C = Confirmed, R = Remediated)

Halogenated Organic Compounds _____
 Metals-Priority Pollutants C
 Metals-Other _____
 Polychlorinated Bi-Phenyls (PCB) C
 Pesticides (incl. herbicides) _____

Petroleum Products C
 Phenolic Compounds _____
 Non-Chlorinated Solvents _____
 Dioxin _____
 Polynuclear Aromatic Hydrocarbons (PAH) C

Reactive Wastes _____
 Corrosive Wastes _____
 Radioactive Wastes _____
 Conventional Contaminants-Organic _____
 Conventional Contaminants-Inorganic _____
 Base/Neutral Organics _____

Contaminated Media:

Ground Water P Codes: _____ Drinking Water Type: _____
 Surface Water P T = True
 Air P P = Potential Codes:
 Soil T F = False 1 = Single-Family Residence
 Sediment _____ R = Remediated 2 = Community Water Supply
 Drinking Water U U = Unknown

F-ess

~~CHRISTINE K. GREGORY~~
Director



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

7272 Cleanwater Lane, LU-11 • Olympia, Washington 98504-6811 • (206) 753-2353

October 14, 1992

Alexander W. Mackie
Owens, Davies, Mackie
P.O. Box 187
Olympia, WA 98507-0187

Dear Mr. Mackie:

Re: Old Olympia Burn Site, Black Lake Boulevard and Highway 101, Olympia

I am writing to send you information the Washington Department of Ecology has gathered regarding the above-referenced property. Under the Model Toxics Control Act (Chapter 70.105D RCW), Ecology maintains a database of known or suspected contaminated sites. Based on available information, a report submitted to Ecology, and an inspection performed on September 3, 1992, I have added this property to our database.

Enclosed is a computer printout summarizing information which we believe reflects the current status of this site. I want to ensure that Ecology has accurate information, so I encourage you to carefully review this report. If you have any corrections, please send them and any supporting material to me at the above address. Two legends have also been enclosed to help you interpret this report.

Please note that inclusion in the database does not mean that Ecology has determined you are a potentially liable person under the Model Toxics Control Act or that action is needed at this time. Ecology may conduct a more detailed inspection of this property, including testing for possible contamination, in the future. After that, we will be able to assess whether action will be needed and establish a priority for this work.

It is Ecology's policy to work cooperatively with persons to accomplish prompt and effective cleanups. However, due to limited resources and requirements in state law, we are not always able to provide requested assistance. Furthermore, your cooperation with Ecology in planning or conducting a remedial action is not admission of guilt or liability. If you decide to proceed with work on your own, please be aware that there are requirements in the state law which must be adhered to.

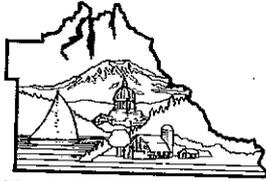
Enclosed is a copy of Chapter 70.105D RCW and the implementing regulations, Chapter 173-340 WAC, which detail these requirements. If you have any questions, please call Dick Heggen at (206) 586-8618. Thank you for your cooperation.

Sincerely,
Edward Canapary
Edward Canapary
SMIS Coordinator
Southwest Regional Office

EC:dc
Enclosures

cc: Dick Heggen

OWNER/OPERATOR SITE INFORMATION	WASHINGTON DEPARTMENT	ECOLOGY
Date of Last Update:		Page 1 of 1
I. SITE ID	Region S SOUTHWEST County 34 Thurston Site No 6145 Sub-Site No 000 HWICP ID: S-34-6145-000 EPA ID: _____	
Site Name Olympia Burn Site Alternate Name(s) Old City of Oly Municipal Dump		
II. SITE STATUS (STATE)	Site Status _____ (P1=HWICP Program Plan) Site Category: C1 A = Federal Lead NPL C2= Potential Haz Wst Site N = No Haz Wst Found B = State Lead NPL D = RA Complete (70.105B/MTCA) N = RA Complete (Other Statutes) C1= Confirmed State Site L = Long Term Monitoring	
III. LOCATION DESCRIPTION	Site Location Address: Black Lake Blvd and Hwy 101 Olympia WA 98502 Legislative District: 22 Congressional District: 03 Township/Range/Section: T18/R2W-21 Latitude _____ Longitude _____ Geographic Location: _____ Codes: CBN = Comm Bay Nearshore HA = Hanford N/A CBS = Comm Bay So Tacoma Chnl HI = Harbor Island EB = Elliot Bay PS = Other Puget Sound	
IV. SITE STATUS (FEDERAL)	EPA HRS Score: _____ NPL Dates: Nomination _____ Final _____ Deletion _____ CERCLIS Status: _____ (A = Active, N = No Further Action)	
VI. SITE DESCRIPTION	Facility Active? I _____ Codes: A = Active M = Mixture I = Inactive U = Unknown Ownership Type 1 Operator Type 2 Codes: 1= Private 5= State 9= Unknown 2= Municipal 6= Tribal 10= Public Ownership due to bankruptcy 3= County 7= Multiple Sites/Ownership 11= Fincial Inst. owned due to bankruptcy 4= Federal 8= Other Standard Industrial Classification (SIC) Code(s): 1. 4953G LANDFILL 2. _____ 3. _____ Preliminary Assessment Rating: _____ N/A Site Inspection Recommendation: _____ H = High M = None Codes: M = Medium P = Pending 1=No Further Action 3=Referred to Ecology L = Low Investigation 2=Referred to EPA for HRS Score 4=Follow-up S1	
VII. WASTE DESCRIPTION	Waste Management Practice(s): Categories: Landfill 1. LANDFILL Drug Lab Pesticide Application 2. _____ Drum Pesticide Disposal 3. _____ Impoundment Spill Improper Handling Storm Drain Land Application (proper) Tank General Waste Categories: (S = Suspected, C = Confirmed, R = Remediated) Halogenated Organic Compounds _____ Metals-Priority Pollutants C Metals-Other _____ Polychlorinated Bi-Phenyls (PCB) C Pesticides (incl. herbicides) _____ Petroleum Products C Phenolic Compounds _____ Non-Chlorinated Solvents _____ Dioxin _____ Polynuclear Aromatic Hydrocarbons (PAH) C Reactive Wastes _____ Corrosive Wastes _____ Radioactive Wastes _____ Conventional Contaminants-Organic _____ Conventional Contaminants-Inorganic _____ Base/Neutral Organics _____ Contaminated Media: Ground Water P Codes: _____ Drinking Water Type: _____ Surface Water P T = True Air P P = Potential Codes: Soil T F = False 1 = Single-Family Residence Sediment R = Remediated 2 = Community Water Supply Drinking Water U U = Unknown	



THURSTON COUNTY
WASHINGTON
SINCE 1852

Environmental Health Division

9-16-92

Dick -

As per our conversation,
please find enclosed copies of the
previous site characterization work
done at the old Westside Olympic
Dump. Hope this will help in your
site assessment. If you have further
inquiries, please contact me at 786-5461.

RECEIVED

'92 SEP 21 AIO:55

DEPARTMENT OF ENVIRONMENTAL HEALTH
S W REGIONAL OFFICE

John Libby

9-9-92

Phone conversation w Dick Heggen of DOE.
He had received a copy of Barametix report on
new characterization study of the old west Olympic
landfill. He will probably place site on ranking
list (Hazardous Site List) by February.
Information showed PCB's, PAH's, & some metals
above MTCA stds. He wanted comparative information
re Ramey & Moore report (1984) and Hart Crouser report
(1987).

Evidently, Sandy Mackie is representing
Thompson Properties, the owner.

DEPARTMENT OF ECOLOGY - SOUTHWEST REGIONAL OFFICE
COMPLAINT INVESTIGATION REPORT
PREPARED BY RICHARD HEGGEN

COUNTY: Thurston
DATE OF INVESTIGATION: 9/3/92
TIME ON SITE: 4:00 PM
WEATHER CONDITIONS: clear, 80 degrees F
INSPECTOR(S): Richard Heggen

CASE NO.: S6391
DATE OF REPORT: 9/11/92
OFF SITE: 4:30 PM

SITE NAME: Old (West) Olympia Burn Site
SITE LOCATION: Black Lake Boulevard and Highway 101
Olympia, WA

TYPE OF OPERATION: Old City of Olympia dump area used to burn and dispose refuse for (at this time) an unknown period of time. Currently inactive.

DIRECTIONS TO SITE: Go to Top Foods at the corner of Cooper Point Road and Black Lake Boulevard. Drive to the northwest edge of the parking lot adjacent to the southeast site boundary.

SITE REPRESENTATIVE: Thompson Properties
ENTITY (AV/PLP):

TITLE: owner
TELEPHONE NO.:

CONTACT PERSON: Sandy Mackie
ADDRESS: PO Box 187, Olympia 98507

TITLE: Attorney
TELEPHONE NO.: (206) 943-8320

PHOTOS TAKEN?: yes
PERMIT OR NOTIFIER?: ?

SAMPLES TAKEN?: none

ISSUE: This site is an old burn type landfill. Ecology received a report by Parametrix, sent through Sandy Mackie, indicating metals and PCBs above MTCA standards.

PURPOSE: Pre-SHA/Initial Investigation.

RECOMMENDATION: Conduct SHA based on existing data and reports.

INVESTIGATION:

PERSON(S) PRESENT: Richard Heggen

BACKGROUND INFO: (see attached report) Two other reports (Dames & Moore and Hart Crowser) will be sent to Ecology from the Thurston County Health Department (TCHD). I met with John Libby at TCHD on 9/11/92 to discuss the site and gather additional information.

The site representative declined to meet at the site. The site was mostly overgrown with blackberries, wild shrubs and trees. Some small piles of construction debris had been dumped on the site, but it was generally vegetated with gravel and dirt covering some bare areas. No sign of stressed vegetation was observed. A tent likely used by a transient was pitched in the center of the site, however no occupant was present. The locations of the test pits, etc. could not be determined. A new ditch and culvert is being installed parallel to Highway 101 to divert site drainage from the highway to the southwest. The final destination of the runoff is somewhat unclear, although Mr. Mackie mentioned something about the residents of Ken Lake being concerned about this situation.

ATTACHMENTS: See attached photos and report.

FOLLOW UP: Call city of Olympia to determine their involvement, if any, then proceed with an SHA unless a quick cleanup of the site would likely occur.

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TELEPHONE NO.:

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ADDRESS: PO Box 187, Olympia 98507

TITLE: Attorney
TELEPHONE NO.: (206) 943-8320

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PERMIT OR NOTIFIER?: ?

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DEPARTMENT OF ECOLOGY ENVIRONMENTAL REPORT

5 W R 0

RECORDER: TOM TOLL WEATHER: TIDE: WATERWAY: THURSTON

DATE: 08/05/92 TIME: 09:00:00 COUNTY: THURSTON WATERWAY: THURSTON

REPORTED BY: ALEXANDER MACKIE LOC DESC: OLYMPIA LANDFILL SITE NEAR TOP FOODS

BUS NAME: ADDRESS: 926 24TH WAY SW - POB 127 ON BLACK LAKE BLVD

CITY: OLYMPIA STATE: WA HOME PHONE: CITY: OLYMPIA

ZIP: 98507 BUS PHONE: (206)-943-8320

ANONYMOUS: BEST TIME TO CALL: ALLIAGED VIOLATOR: UNKNOWN

ADDRESS: ADDRESS: CITY: STATE: EXT: *Old Olympia Municipal*

CITY: ZIP: 98507 PHONE: PHONE: PHONE: *Dumps*

MEDIUM: SOIL MAT TYPE: MATERIAL: HAZ MATERIAL SOURCE: FIRE

QUANTITY: ACTUAL QUANTITY: PROGRAM: TOP SECTION HD WHITE INSPECTOR: HEGGEN

DATE INVEST: 9/3/92 DATE CLOSED: 9/11/92 IMPACT: NONPOINT: POINT: LUST: ACTION TAKEN: CAUSE:

REFERRED TO OUTSIDE ENTITY: ENTITY NAME: CONTACT: DATE REFERRED: / / PHONE ()

NARRATIVE: OLD "OLYMPIA BURM SITE" OR LANDFILL HAS BEEN FOUND TO BE CONTAMINATED. EXTENSIVE SAMPLE RESULTS RECEIVED ON ATTACHED LETTER.

ES: YES YES OR NO REPORT REQUESTED YES OR NO PICTURES YES OR NO

ID# 56371

copy on site file

Site Master File

County Thurston Site No. _____ (to be assigned by SMIS)
Site Name Old ~~City~~ Olympia ~~Municipal~~ ~~Dump~~ ~~site~~
Alias Name old city of Olympia Municipal Dump
Geographic Location _____ (CBN = Commencement Bay-Nearshore; CBS = Commencement Bay-South Tacoma Channel; EB = Elliott Bay; HA = Hanford; HI = Harbor Island; PS = Other Puget Sound; SRV = Spokane River Valley; NA = Not Applicable)

Site Description File

Location Address ^{near} Black Lake Blvd. - Highway 101
Closest City Olympia Zip Code 98502
Legislative District _____ Congressional District _____

Site Category _____ (A = NPL (fed.-lead); B = NPL (state-lead); C1 = State (confirmed contaminatn.); C2 = State (potential contaminatn.); D = RA completed (MTCA, fed. law); L = Long-term monitoring; M = NFA (no hazardous waste); N = RA completed (other statues))

Site Status _____ (P1 = HWICP Program Plan; P2 = Other Program Plan)

WARM Bin # Not yet (1, 2, 3, 4 or 5; 1 = Highest risk)

Legal Authority _____ (1 = RCW 70.105D [MTCA]; 2 = RCW 70.105 [Hazardous Waste]; 3 = RCW 70.94 [WA Clean Air Act]; 4 = RCW 70.95 [Solid Waste Mgmt.]; 5 = RCW 90.48 [Water Pollution Control]; 6 = RCRA; 7 = CERCLA Superfund; 8 = LUST; 9 = NPDES; 10 = TOSCA; 11 = CERCLA Federal Facility)

EPA HRS Score _____ CERCLIS Status _____ (A = Active; N = No Further Action)

NPL Dates: Nomination _____ Final _____ Deletion _____

Facility Active I (A = Active; I = Inactive; M = Mixture; U = Unknown)

Ownership Type 1 Operator Type 2
(1 = Private; 2 = Municipal; 3 = County; 4 = Federal; 5 = State; 6 = Tribal; 7 = Mixed; 8 = Other; 9 = Unknown; 10 = Publicly-Owned (bankrupt); 11 = Financial Institution-Owned (bankrupt))

Standard Industrial Classification (SIC) Codes:
1. _____ 2. _____ 3. _____

Waste Management Practice(s):
1. 5 2. _____ 3. _____
(1 = Drug Lab; 2 = Drum; 3 = Impoundment; 4 = Improper Handling; 5 = Landfill; 6 = Land Application; 7 = Pesticide Application; 8 = Pesticide Disposal; 9 = Spill; 10 = Storm Drain; 11 = Tank; 12 = Unknown)

PA Rating _____ (H = High; M = Medium; L = Low; N = None; P = Pending
Outcome of Investigation)

SI Recommendation _____ (1 = No Further Action; 2 = Refer to EPA for
HRS Score; 3 = State Follow-Up; 4 = Follow-Up SI)

General Waste Categories (S = Suspected; C = Confirmed; R = Remediated)
Base/Neutral Organic Compounds _____ Petroleum Products _____
Halogenated Organic Compounds _____ Phenolic Compounds _____
Metals-Priority Pollutants X Non-Chlorinated Solvents _____
Metals-Other _____ Dioxin _____
PCB's X PAH's X
Pesticides (including herbicides) _____

Reactive Wastes _____
Corrosive Wastes _____
Radioactive Wastes _____
Conventional Contaminants-Organic _____
Conventional Contaminants-Inorganic _____

Affected Media (T = True; F = False; P = Potential; R = Remediated; U =
Unknown)
Ground Water P Surface Water P Air P Soil T Sediment _____
Drinking Water ? Type ? (1 = Single-Family Residence; 2 = Community
Water)

EPA Contact Person _____ HWICP Site Mgr NONE

Reg'l Office Contact Dick Heggen Other Ecology Contact _____

Geographic Coordinates:
Township 18 N Range 2W E/W Section 21
Latitude: Degrees 47 Minutes 52 Seconds 30
Longitude: Degrees 122 Minutes 56 Seconds 30
State Plane (feet) X 390 600 Y 630 600

SITE ADDRESS FILE (There can be many addresses in this file. If you have
more than one, please ask for another form.)

Address Type 1 (1 = Current Owner; 2 = Current Operator; 3 = Current
Generator; 4 = Current Transporter; 5 = Former Owner; 6 = Former
Operator; 7 = Former Generator; 8 = Former Transporter)

Organization Thompson Properties Contact Person Sandy Mackie
of Owens, Davies, Mackie

Mailing Address (926 - 24th Way S.W.) - P.O. Box 187

Olympia WA 98507
206 State Zip

Telephone (~~425~~) 943-8320

Site Ownership: Beginning Date ? Ending Date ?

Site Responsibility: Owner/Operator PLP (Y = Yes; N = No; U =
Unknown)

Also - City of Olympia - Public Works Planning Dept.
2000 Lakewood Drive SW.

OWENS DAVIES MACKIE

A PROFESSIONAL SERVICES CORPORATION

ATTORNEYS AT LAW

926 - 24TH WAY S.W.

POST OFFICE BOX 187

OLYMPIA, WASHINGTON 98501

(206) 943-8320

BURTON R. JOHNSON (1970)

JON E. CUSHMAN

KIRK M. VEIS

CYNTHIA D. TURNER

MATTHEW B. EDWARDS

*ALSO ADMITTED IN WASHINGTON, D.C.

FRANK J. OWENS
ARTHUR L. DAVIES
JOHN V. LYMAN
ALEXANDER W. MACKIE*
RICHARD G. PHILLIPS, JR.
BRIAN L. BUDSBERG
MICHAEL W. MAYBERRY
ROBERT F. HAUTH, P.S.

RECEIVED

July 30, 1992 '92 ABB -3 P3:07

TELECOPIER
(206) 943-6150

COMMUNICATIONS SECTION

Meagan White
Department of Ecology
Southwest Regional Office
7272 Cleanwater Lane
Mail Stop 7775
P.O. Box 47775
Olympia, WA 98504-7775

RE: Thompson Properties—Old Olympia Burn Site

Dear Ms. White:

This office represents Thompson Properties in connection with the old Olympia burn site located just west of Top Foods on Black Lake Boulevard in the City of Olympia.

We have been exploring ways to have the site stabilized and closed or removed, and in that connection have had a significant number of tests run concerning the nature and quantity of material present. Most recently we asked Parametrix to do a scan for us which would identify whether any of the materials present would be above the Model Toxics threshold levels, and their answer was affirmative. I am enclosing a copy of the letter from them advising us of the results. I have had an opportunity to confirm with them verbally that the test results do in fact show that some of the constituents present exceed Model Toxics threshold levels.

This letter is intended to be the notice to the Department of Ecology which is required pursuant to the Act and its regulations.

We are taking steps to explore alternatives for removal of the materials from the site and exploring disposal alternatives. At this point there does not appear to be any groundwater contamination or any significant potential of migration offsite, although the site has not been fully characterized in that regard.

I will continue to keep you posted on steps that we are taking, and our progress in identifying a solution for the site.

Meagan White
July 30, 1992
Page 2

I would be happy to answer any further questions you may have concerning the site.

Sincerely yours,

OWENS DAVIES MACKIE

A handwritten signature in black ink, appearing to read "Alex Mackie", written in a cursive style.

Alexander W. Mackie

AWM/kr
Enclosure

cc: Frank Weiss
Kathy Thompson
Steve Pulliam
Mark Erickson

Parametrix, Inc.

Consultants in Engineering and Environmental Sciences

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Mr. Sandy Mackie
Owens, Davies, and Mackie
P.O. Box 187
Olympia, Washington 98507

June 3, 1992
21-2158-02 (05)

Re: Analytical Results - West Olympia Landfill Test Pit Samples

Dear Mr. Mackie:

Per our discussion with yourself and Frank Weiss on Friday, May 8, 1992, we are providing this advance draft copy of the summarized results from our recent work at the West Olympia Landfill for the Weiss Company. The purpose of this work was to characterize, sample and test the material at the site in order to determine disposal alternatives.

A total of eight test pits, identified as TP-1 through TP-8, were excavated at the site. Locations of the test pits are shown on the attached figure. Depths of the test pits ranged from eight feet at TP-7 to 18 feet at TP-2. Thickness of refuse ranged from 4 feet at TP-7 to 13 feet at TP-2. All of the test pits were excavated to underlying native soil. Refuse was generally observed to consist of a red-brown charred matrix (including ash, cinder, gravel, broken glass, metal, porcelain, brick, etc.) with considerable oversize material (> 3" diameter) including bottles, cans, wood, metal debris, concrete, etc. No buried drums were encountered at any of the test pits. However, one drum lid and several deteriorated 5-gallon metal buckets such as those used for paint and tar containers were observed.

At each of the eight test pits, composite samples were obtained from stockpiled material collected from the shallow and deep zones of the excavation. Composite samples collected from the shallow zone material were designated "A" samples and those collected from the deep zone were designated "B" samples. At TP-7 only one composite sample was collected (designated TP-7A) since thickness of the refuse was only 4 feet at this location.

All samples were submitted to Analytical Resources, Inc. (Seattle, Wa.) for chemical analysis. Analytical Parameters included the following:

Parameter

Method

<ul style="list-style-type: none"> Volatile Organic Analysis Semi-volatile Organic Analysis Chlorinated Pesticides/PCBs Total Metals - Priority Pollutant List TCLP ("leachable") Metals - Priority Pollutant List Total Petroleum Hydrocarbons 	 <ul style="list-style-type: none"> EPA Method 8240 EPA Method 8270 EPA Method 8080 ICP (CVA for Mercury) EPA Method 6010 and 7471 EPA Method 418.1
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Analytical Results

Attached are summary tables which present results of the analytical testing. Please note that the summary tables include only those compounds detected in one or more of the samples tested. The laboratory certificates contain additional analytical data for all of the samples and may be furnished upon request.

Analytical results were compared to three sources of regulatory criteria. These included values (where established) presented in the *Model Toxics Control Act Cleanup Regulation* (MTCA, Chapter 173-304 WAC), *Dangerous Waste Regulations* (Chapter 173-303 WAC), and *High Risk Waste Levels* established by Thurston County Environmental Health. Please note that on the summary tables, only those values which exceeded either MTCA or Dangerous Waste criteria are highlighted by shading. A summary of those samples which exceeded one or more of the regulatory criteria (where established) is as follows:

Model Toxics Control Act (Chapter 173-340 WAC)

<u>Parameter</u>	<u>Criteria</u>	<u>Samples Above Criteria</u>
Total Petroleum Hydrocarbons	200 mg/Kg	TP-1A, TP-1B, TP-2A, TP-2B TP-4A, TP-4B, TP-5B, TP-7A TP-8A, TP-8B
Polychlorinatedbiphenol (PCBs)	1 mg/Kg	TP-2B, TP-8B
Arsenic (total)	20 mg/Kg	TP-5A
Cadmium (total)	8 mg/Kg	TP-1A, TP-1B, TP-3A, TP-4A TP-4B, TP-5A, TP-7A
Chromium (total)	100 mg/Kg	TP-5A
Copper (total)	500 mg/Kg	TP-1A, TP-1B, TP-5A, TP-6B
Lead (total)	250 mg/Kg	All Samples
Mercury (total)	1 mg/Kg	TP-1A, TP-1B, TP-7A

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Dangerous Waste Regulations (Chapter 173-303 WAC)

<u>Parameter</u>	<u>Criteria</u>	<u>Samples Above Criteria</u>
Lead (TCLP)	5 mg/Kg	TP-3A

Thurston County High Risk Waste Levels

<u>Parameter</u>	<u>Criteria</u>	<u>Samples Above Criteria</u>
Total Petroleum Hydrocarbons	200 mg/Kg	TP-1A, TP-1B, TP-2A, TP-2B TP-4A, TP-4B, TP-5B, TP-7A
Polychlorinatedbiphenol (PCBs)	1 mg/Kg	TP-8B, TP-2B
Arsenic (total)	20 mg/Kg	TP-5A
Barium (total)	100 mg/Kg	All Samples
Cadmium (total)	2 mg/Kg	All Samples (except TP-2A)
Chromium (total)	100 mg/Kg	TP-5A
Copper (total)	2 mg/Kg	All Samples (except TP-2A)
Lead (total)	250 mg/Kg	All Samples
Lead (TCLP)	0.05 mg/L	All Samples
Mercury (total)	1 mg/Kg	TP-1A, TP-1B, TP-7A
Silver (total)	5 mg/Kg	TP-1A, TP-1B, TP-2A, TP-3A TP-4A, TP-4B, TP-5A, TP-6A TP-6B, TP-8A, TP-8B
Zinc (total)	500 mg/Kg	All Samples

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As indicated by the summary, all of the 15 samples tested exceeded MTCA clean-up criteria for total lead. In addition, ten of the samples also exceeded MTCA criteria for total petroleum hydrocarbons (TPH). Other MTCA criteria exceeded in one or more of the samples included total arsenic, cadmium, chromium, copper, mercury, and PCBs.

When compared to High Risk Waste Levels established by Thurston County for in-county disposal, all of the samples tested exceeded criteria (where established) for total barium, cadmium, lead (total and TCLP), zinc, and copper (except TP-2A). Other High Risk Waste Level criteria exceeded in one or more samples included TPH, PCBs, arsenic, chromium, mercury, and silver.

With respect to Dangerous Waste Regulations, the only criteria exceeded was the lead (TCLP) value reported in the sample labeled TP-3A.

Disposal Alternatives

Test results of samples collected from the site indicate that most of the refuse material would likely have to be disposed of at a permitted municipal solid waste (MSW) landfill outside Thurston County. The levels of TPH, PCBs, and several metal species present in many of the samples tested at levels above MTCA criteria indicate the material is not suitable for disposal either as clean material or in a permitted inert-demolition material landfill. Because of the number of High Risk Waste Level criteria exceeded, the material also does not appear to be suitable for disposal in a permitted municipal solid waste landfill within Thurston County. In addition, MSW landfills within Pierce County do not accept petroleum contaminated soils with concentrations exceeding 2,000 ppm which would appear to apply to at least some of the material at the site.

Previous Investigations

As part of our work, we also reviewed several previous consultant reports to obtain additional information about the site. These included the following:

Dames & Moore

Letter report dated September 8, 1989. Re:
Recommendations for Methane and Leachate
Management - Proposed Costco Store, Olympia,
Washington

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Howard Godat & Associates Letter report dated June 22, 1989. Re: Soil Investigation, Old Dump Site.

Dames & Moore Letter report dated March 3, 1988. Re: Haggan Foods/West Olympia Property Estimated Disposal and Transportation Costs

Hart - Crowser Groundwater and Methane Evaluations, 27-Acre Site Black Lake Boulevard and Cooper Point Road, Olympia, Washington. June 24, 1987. Prepared for Briar Development.

Hart - Crowser On-Site Review and Testing, 27-Acre Site, Black Lake Boulevard and Cooper Point Road, Olympia, Washington. September, 1986. Prepared for Planmark, Inc.

Dames & Moore Report of Geotechnical Services, City of Olympia Landfill, Olympia, Washington. September 17, 1984. Prepared for the City of Olympia.

In summary, most of the previous consultant reports we reviewed included at least some subsurface field investigations at the site. In all, a total of 55 test pits and/or borings have been conducted at the site prior to our work. However, of these earlier field investigations, chemical analysis has only been performed on composite samples collected from four of 25 test pits conducted by Dames & Moore during their 1984 investigation for the City of Olympia. The remaining test pits and borings were generally performed to assess other properties of the landfill such as methane and leachate generation, groundwater quality, depth and content of refuse, underlying soil conditions, etc.

The chemical analysis performed on the four samples collected by Dames & Moore included fewer parameters than our investigation. Parameters tested during their investigation included the following:

Pesticides/PCBs (by GC/ECD)
Total Metals (As, Ba, Cd, Cr, Pb, Hg, Se, Ag)
Extractables (semi-volatile organic compounds by GC/MS)

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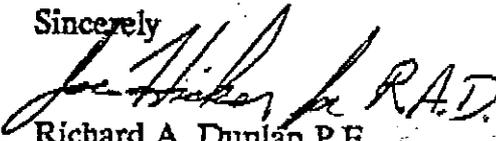
Generally, results of samples collected during the Dames & Moore investigation were very similar to results from samples collected during our investigation both in the parameters detected and the concentrations present of those parameters. However, it should be noted that the Dames & Moore investigation did not include testing for "leachable" metals (TCLP or other method), volatile organic compounds, or total petroleum hydrocarbons. Without these parameters, a complete comparison to MTCA, Dangerous Waste, or High Risk Waste Level criteria could not be made. Note that none of these criteria were in place at the time of the Dames & Moore 1984 investigation.

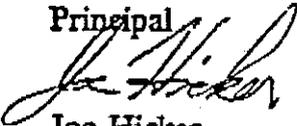
Conclusions

In summary, sample results from our investigation indicate that most of the material at West Olympia Landfill exceeds MTCA and/or Thurston County High Risk Waste Level criteria for one or more parameters, most notably TPH and several metal species. The only Dangerous Waste criteria exceeded in any of the samples was lead (TCLP) detected in one sample (TP-3A). For these reasons, it appears the material would likely have to be disposed of in a permitted MSW landfill outside Thurston County if excavation were to occur. Further negotiation of this issue with local health district officials and other applicable parties may result in additional disposal alternatives for the material.

We hope this report has presented a clear summary of the results of our investigation. At this point, we do not intend to conduct further activities related to this project until directed by our client. If you have any questions concerning the sample results or the project in general, please contact me at (206) 863-5128.

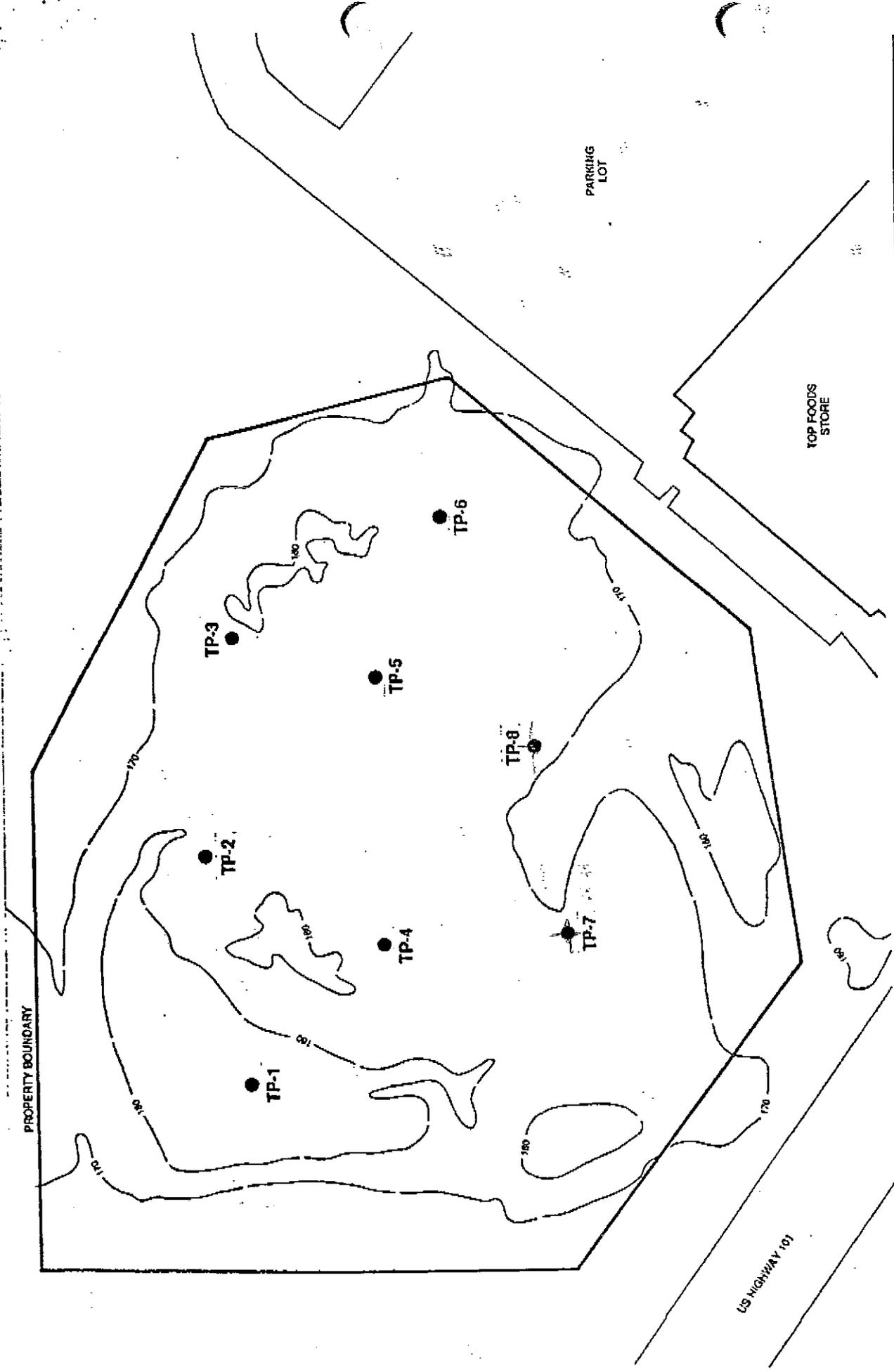
Sincerely


Richard A. Dunlap P.E.
Principal


Joe Hicker
Project Hydrogeologist

JH/jh
Enclosures

Test Pit Location West Olympia Landfill



Note: Contour Elevations in Feet
Site Map Source: Howard Godat & Associates, HGA No. 2491



TP-1 ● Test Pit

— 100 — Topographic Contour Line
(in Feet MSL)



NOTES - ORGANICS AND METAL ANALYSIS

MTCA - MODEL TOXIC CONTROL ACT (CHAPTER 173-340 WAC) CLEAN UP CRITERIA
DW - DANGEROUS WASTE REGULATION (CHAPTER 173-303) CRITERIA
THURSTON COUNTY - THURSTON COUNTY HIGH RISK WASTE LEVEL
B - PROBABLE BLANK CONTAMINATION
J - ESTIMATED VALUE (LESS THAN DETECTION LIMIT)
M - LOW SPECTRAL MATCH PARAMETERS
E - ESTIMATED VALUE, QUALITY ASSURANCE CRITERIA NOT MET
HA - VALUE EXCEEDS ONE OR MORE CRITERIA

TABLE 2. PRIORITY POLLUTANT METAL ANALYSIS DATA, WEST OLYMPIA LANDFILL

SAMPLE I.D.	TP-1A	TP-1B	TP-1A	TP-1B	TP-2A	TP-2B	TP-3A	TP-3B	TP-4A	TP-4B	TP-5A	TP-5B	TP-6A	TP-6B	TP-7A	TP-7B	TP-8A	TP-8B
METALS (TOTAL)																		
ANTIMONY																		
ARSENIC																		
BARIUM																		
BERYLLIUM																		
CADMIUM																		
CHROMIUM																		
COPPER																		
LEAD																		
MERCURY																		
NICKEL																		
SILVER																		
THALLIUM																		
ZINC																		
SAMPLE I.D.																		
SAMPLE DATE																		
METALS (TCLP)																		
ANTIMONY																		
ARSENIC																		
BARIUM																		
BERYLLIUM																		
CADMIUM																		
CHROMIUM																		
COPPER																		
LEAD																		
MERCURY																		
NICKEL																		
SELENIUM																		
SILVER																		
THALLIUM																		
ZINC																		

TABLE 2. PRIORITY POLLUTANT METAL ANALYSIS DATA, WEST OLYMPIA LANDFILL

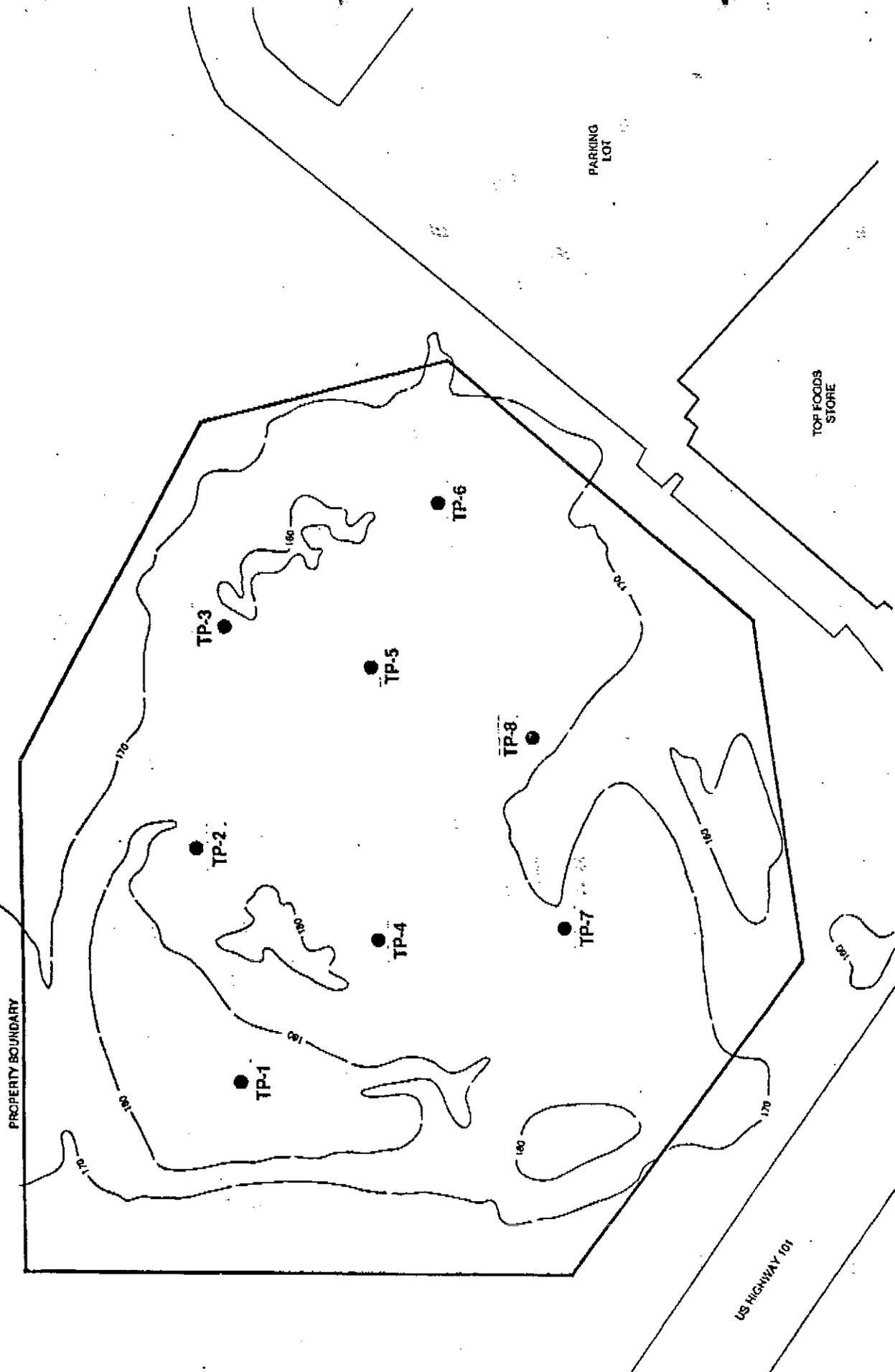
SAMPLE I.D.	SAMPLE DATE	UNITS	MFGA	THURSTON COUNTY	TP-1A	TP-1B	TP-2A	TP-2B	TP-3A	TP-3B	TP-4A	TP-4B	TP-5A	TP-5B	TP-6A	TP-6B	TP-7A	TP-7B	TP-8A	TP-8B
METALS (TOTAL)																				
ANTIMONY		mg/kg-dry			23E	36E	7E	17E	10E	13E	17E	<13E	19E	8E	<12E	27E	20E	14E		
ARSENIC		mg/kg-dry	20.0	40.0	<13	<19	<6	<7	<6	<6	<13	<13	33	<6	<12	13E	16	<6		
BARIIUM		mg/kg-dry		100.0	1190E	1370E	534E	591E	565E	407E	1530E	539E	939E	234E	666E	1710	1190E	311E		
BERYLLIUM		mg/kg-dry			0.1	<0.4	0.2	0.5	0.3E	0.1	0.6	0.3	<0.3	0.2	<0.2	<0.1	0.3	0.1		
CADMIUM		mg/kg-dry	8.0	10.0	37.7E	11.5E	1.9E	3.9E	15.4E	3.4E	33.5E	11.5E	11.5E	3.8E	6.3E	6.1E	8.1E	4.1E		
CHROMIUM		mg/kg-dry	100.0	100.0	77.6E	90.6E	90.5E	84.4E	61.3	46.4E	75.9E	54.1E	134E	56.9E	87.5E	84.4E	69.2E	47.8E		
COPPER		mg/kg-dry	500.0	500.0	51E	137E	75.3	410	299	399	354	339	743	283	467	311E	374	319		
LEAD		mg/kg-dry	250.0	250.0	2.64E	5.00E	4.51E	5.1E	1590E	1500E	3.210E	6.51E	507E	7.8E	1.60E	5.7E	10.4E	8.1E		
MERCURY		mg/kg-dry	1.0	1.0	11.3E	1.34E	0.16E	0.14E	0.24E	0.10E	0.23E	0.37E	0.13E	0.15E	<0.05E	0.10E	0.21E	0.33E		
NICKEL		mg/kg-dry			100	97	135	176	77	131	70	53	185	71	86	78	68	65		
SELENIUM		mg/kg-dry			<13	19	<6	13	10	12	<13	<13	31	14	<12	9	<13	6		
SILVER		mg/kg-dry	5.0	5.0	18.2E	8.8	9.4	3.7	6.6	3.2	7.7	5.7	16.3	3.1	7.5	31.1	4.7	7.6		
THALLIUM		mg/kg-dry	500.0	500.0	36	41E	13E	19E	28E	17E	33E	60E	85E	29E	51E	30E	54E	12E		
ZINC		mg/kg-dry			2180E	3110E	944E	5450E	8100E	889E	2170E	1700E	2410E	986E	1740E	3650E	3270E	1800E		
SAMPLE I.D.					TP-1A	TP-1B	TP-2A	TP-2B	TP-3A	TP-3B	TP-4A	TP-4B	TP-5A	TP-5B	TP-6A	TP-6B	TP-7A	TP-8A	TP-8B	
SAMPLE DATE					4/16/92	4/16/92	4/16/92	4/16/92	4/15/92	4/15/92	4/16/92	4/16/92	4/15/92	4/15/92	4/15/92	4/15/92	4/16/92	4/15/92	4/15/92	
METALS (CCLP)		UNITS	DW																	
ANTIMONY		mg/L			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.65	<0.05	<0.05	<0.10	0.09	<0.05	
ARSENIC		mg/L	5.0		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.10	<0.05	<0.05	
BARIIUM		mg/L	100.0		1.34	1.16	2.14	1.38	0.879	0.445	1.48	1.36	0.638	1.81	0.646	0.776	1.28	1.81	<0.05	
BERYLLIUM		mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	
CADMIUM		mg/L	1.0		0.879	0.031	0.014	0.015	0.060	0.077	0.159	0.109	0.056	0.012	0.231	0.034	<0.003	0.059	<0.001	
CHROMIUM		mg/L	5.0		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.010	<0.005	<0.005	
COPPER		mg/L			0.078	0.147	0.143	0.013	0.578	0.844	0.098	0.148	0.060	0.457	0.449	0.231	0.033	0.195	<0.005	
LEAD		mg/L	5.0		0.59	0.43	0.68	1.29	3.5E	0.41	1.15	0.34	0.46	0.56	0.53	0.40	0.98	3.61	0.059	
MERCURY		mg/L	0.02		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
NICKEL		mg/L			0.10	0.10	1.35	0.59	0.14	0.17	0.13	0.13	0.16	0.07	0.16	0.14	0.06	0.37	0.31	
SELENIUM		mg/L	1.0		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.10	<0.05	<0.05	
SILVER		mg/L	5.0		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.005	<0.003	<0.003	
THALLIUM		mg/L			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.10	<0.05	<0.05	
ZINC		mg/L			7.57	6.50	0.73	10.3	0.71	4.51	13.06	14.50	3.39	3.93	13.40	0.76	4.14	17.20	0.89	

TABLE I. ORGANIC DATA ANALYSIS, WEST OLYMPIA LANDFILL

SAMPLE I.D.	PARAMETERS	UNITS	MITCA	DW	THURSTON COUNTY	TP-1A 4/16/92	TP-1B 4/16/92	TP-1A 4/16/92	TP-1B 4/16/92	TP-2D 4/16/92	TP-3A 4/15/92	TP-3B 4/15/92	TP-4A 4/16/92	TP-4B 4/16/92	TP-5A 4/15/92	TP-5B 4/15/92	TP-6A 4/15/92	TP-6B 4/15/92	TP-7A 4/16/92	TP-7B 4/15/92	TP-8A 4/15/92	TP-8B 4/15/92	
44' ddd		ug/L				52	<10	5.4J	<10	<10	<10	18	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	34J
	PCBs	ug/L	1,000			<200	<300	5.40	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<1500
	Arachyr 1242/1016					<200	<200	<100	<1500	<1500	40J	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<1500
	Arachyr 1248					<250	300	120	230	230	300	600	<100	<100	<100	150	<100	75J	<100	<100	<100	160	<500
	Arachyr 1254					<500	<400	<100	<300	<300	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	98J	<300
	Arachyr 1260					1600	2100	3100	5700	5700	180	190	210	210	45	390			210	210	410	3000	
	Total Petroleum Hydrocarbons (PHH)	ug/Kg	200		200																		
	VOLATILE ORGANICS																						
	Methylene chloride	ug/L	500		500	18	<2.6	3.7	3.6		4.80	28B	11	18	7.8B	<2.5	150	18	11	<2.3	<2.3	4.1B	
	Acetone	ug/L				8.2	6.5	400	220		<6.0	<14.5	<6.0	<6.6	53	130	<5.9	<6.6	<7.1	200	<2.0	2.40	
	Carbon disulfide	ug/L				1.4	<1.3	6.0	3.5		<1.2	<2.9	<1.4	<1.3	<1.2	<1.3	<1.2	<1.3	<1.4	<1.2	<1.2	<1.4	
	2-butanol	ug/L				<6.3	<6.5	73	38		<6.0	<14.5	<6.0	<6.6	11	27	<5.9	<6.6	<7.1	45	<2.0	67	
	Cis-1,2-dichloroethene	ug/L				<1.3	<1.3	<1.4	2.5		<1.2	<2.9	<1.4	<1.3	<1.2	<1.3	<1.2	<1.3	<1.4	<1.2	<1.2	<1.4	
	benzene	ug/L	500	500	500	<1.3	<1.3	2.8	2.1		<1.2	<2.9	<1.4	<1.3	1.8	<1.3	<1.2	<1.3	<1.4	<1.2	<1.2	<1.4	
	Tetrachloroethene	ug/L	500	500	500	<1.3	<1.3	<1.4	<1.2		11	<2.9	10	7.4	<1.2	<1.3	<1.2	<1.3	<1.4	<1.2	<1.2	<1.4	
	Toluene	ug/L	40,000	40,000	40,000	3.8	2.0	4.5	1.9		4.8	27	2.7	11	6.6	3.1	12	11	9.1	7.4	<1.2	<1.4	
	Chlorobenzene	ug/L				<1.3	<1.3	<1.4	<1.2		<1.2	<2.9	<1.4	<1.3	<1.2	<1.3	<1.2	<1.3	<1.4	<1.2	<1.2	90	
	Total xylenes	ug/L	20,000	20,000	20,000	2.6	<2.6	8.90M	<2.5		<2.4	6.0	<2.8	2.7	<2.4	<2.5	2.3J	2.7	<2.8	2.8	<2.3	9.1	
	1,1,2-trichloroethane	ug/L				<2.5	<2.6	<2.7	<2.5		<2.4	<5.8	<2.8	<2.6	<2.4	<2.5	<2.4	<2.6	<2.8	<2.3	<2.3	<2.7	
	SEMI VOLATILES																						
	1,4-dichlorobenzene	ug/L				<77		58J			<71	<74	<75		<74	<79	<79		<88	<88	110		
	Naphthalene	ug/L				<77		130			<71	<74	<75		<74	<79	<79		<88	<88	190		
	2-methylnaphthalene	ug/L				<77		180			<71	<74	<75		<74	<79	<79		<88	<88	81J		
	Phenanthrene	ug/L				54J		<87			<71	<74	<75		<74	<79	<79		<88	<88	<83		
	Perfluorobiphenyl	ug/L	10,000	100,000	100,000	<390		<430			<350	<370	<375		<370	<400	<410		<440	<440	<410		
	Fluoranthrene	ug/L				310		120			<71	<74	<75		<74	<79	<79		<88	<88	94		
	Anthracene	ug/L				40J		<87			<71	<74	<75		<74	<79	<79		<88	<88	<83		
	Di-n-butylphthalate	ug/L				<77		<87			<71	<74	<75		<74	<79	<79		<88	<88	61J		
	Fluoranthene	ug/L				54J		96			<71	<74	<75		<74	<79	<79		<88	<88	43J		
	Pyrene	ug/L				340		140			<71	<74	<75		<74	<79	<79		<88	<88	98		
	Benzo(a)anthracene	ug/L				99		85J			<71	<74	<75		<74	<79	<79		<88	<88	<83		
	Bis(2-ethylhexyl)phthalate	ug/L				140		180			74	38J	110		190	34J	<79	<79		<88	<88	900	
	Chrysene	ug/L				180		170			41J	110	110		190	34J	<79	<79		<88	<88	84	
	Di-n-octylphthalate	ug/L				<77		55J			<71	<74	<75		<74	<79	<79		<88	<88	<83		
	Benzo(b)fluoranthene	ug/L				69J		140M			<71	<74	<75		<74	<79	<79		<88	<88	<83		
	Benzo(k)fluoranthene	ug/L				69M		79M			<71	<74	<75		<74	<79	<79		<88	<88	<83		
	Benzo(a)pyrene	ug/L				<77		57M			<71	<74	<75		<74	<79	<79		<88	<88	<83		
	Indeno(1,2,3-cd)pyrene	ug/L				<77		57M			<71	<74	<75		<74	<79	<79		<88	<88	<83		
	Dibenz(a,h)anthracene	ug/L				<77		56J			<71	<74	<75		<74	<79	<79		<88	<88	<83		
	Benzo(g,h,i)perylene	ug/L				<77		59J			<71	<74	<75		<74	<79	<79		<88	<88	<83		

TABLE 1. ORGANIC DATA ANALYSIS, WEST OLYMPIA LANDFILL

SAMPLE ID.	TP-1A	TP-1B	TP-1A	TP-2A	TP-3A	TP-3B	TP-4A	TP-4B	TP-5A	TP-5B	TP-6A	TP-6B	TP-7A	TP-8A	TP-8B	
SAMPLE DATE	4/16/92	4/16/92	4/16/92	4/16/92	4/15/92	4/15/92	4/16/92	4/16/92	4/15/92	4/15/92	4/15/92	4/15/92	4/16/92	4/15/92	4/15/92	
PARAMETERS	UNITS	MITCA	DW	THURSTON COUNTY												
PESTICIDES	ug/L															
4-4' ddt	52	<10	39	17	<10	5-43	<10	<10	<10	18	<10	<10	<10	257	3XJ	
PCBs																
Arochlor 1242/1014	ug/L	1,004														
Arochlor 1254	ug/L	<200	540	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Arochlor 1254	ug/L	<200	<100	<1500	40J	<100	<100	<100	<100	<100	<100	56J	<100	<100	<100	154K
Arochlor 1260	ug/L	<250	340	120	300	695	<100	<100	<100	150	<100	75J	<100	160	<100	<100
Arochlor 1260	ug/L	<300	<500	<100	<300	<100	<100	<150	<100	<100	<100	<100	<100	98J	<100	<100
Total Polycyclic Hydrocarbon (PHH)	ug/Kg	1600	3100	5600	180	190	280	210	45	390			206	610	3000	
VOLATILE ORGANICS																
Methylene chloride	ug/L	18	<2.6	3.7	3.6	4.8B	11	18	7.8B	<2.5	15B	18	11	<2.3	4.8B	
Acetone	ug/L	8.2	6.6	400	210	<6.0	<6.9	<6.6	53	130	<5.9	<6.6	<7.1	200	240	
Carbon disulfide	ug/L	1.4	<1.3	6.0	3.5	<1.2	<1.4	<1.3	<1.2	<1.3	<1.2	<1.3	<1.4	<1.2	<1.4	
2-hexanone	ug/L	<6.3	<6.5	73	38	<6.0	<6.9	<6.6	11	27	<5.9	<6.6	<7.1	45	6*	
Cis-1,2-dichloroethane	ug/L	<1.3	<1.3	<1.4	2.5	<1.2	<1.4	<1.3	<1.2	<1.3	<1.2	<1.3	<1.4	<1.2	<1.4	
Benzene	ug/L	<1.3	<1.3	2.8	2.1	<1.2	<1.4	<1.3	1.8	<1.3	<1.2	<1.3	<1.4	<1.2	1.4	
Tetrahydrofuran	ug/L	<1.3	<1.3	<1.4	<1.2	11	<1.4	<1.3	7.4	<1.3	<1.2	<1.3	<1.4	<1.2	<1.4	
Toluene	ug/L	3.8	3.0	4.5	1.9	4.8	2.7	11	6.6	3.1	12	11	7.4	<1.2	<1.4	
Chlorobenzene	ug/L	<1.3	<1.3	<1.4	<1.2	<1.2	<1.4	<1.3	<1.2	30	<1.3	<1.3	<1.4	<1.2	9.8	
Total xylene	ug/L	2.6	<2.6	5.9M	<2.5	<2.4	<2.8	2.7	<2.4	<2.5	2.31	2.7	<2.8	2.8	9.1	
1,1,2-trichloroethane	ug/L	<2.5	<2.6	<2.7	<2.5	<2.4	<2.8	<2.6	<2.4	<2.5	<2.4	<2.6	<2.8	<2.3	<2.7	
SEMI VOLATILES																
1,4-dichlorobenzene	ug/L	<71	58J	<71	<71	<71	<75	<75	<74	<74	<79	<79	<88	110		
Naphthalene	ug/L	<71	130	<71	<71	<71	<75	<75	<74	<74	<79	<79	<88	190		
2-methylnaphthalene	ug/L	<71	180	<71	<71	<71	<75	<75	<74	<74	<79	<79	<88	81J		
Fluorene	ug/L	54J	<87	<87	<71	<71	<75	<75	<74	<74	<79	<79	<88	<83		
Perfluorinated	ug/L	<300	<430	<350	<350	<350	610	610	<370	<370	<400	<400	<440	<410		
Phenanthrene	ug/L	310	128	<71	<71	<71	40J	40J	<74	<74	<79	<79	<88	96		
Anthracene	ug/L	40J	<87	<71	<71	<71	95	95	<74	<74	<79	<79	<88	<83		
Di-tert-butylphtalate	ug/L	<71	<87	39J	39J	39J	<75	<75	40J	44J	44J	44J	<88	61J		
Fluoranthene	ug/L	54J	94	<71	<71	<71	71J	71J	<74	<74	<79	<79	<88	43J		
Pyrene	ug/L	340	140	<71	<71	<71	150	150	<74	<74	<79	<79	<88	96		
Benz(a)anthracene	ug/L	99	85J	<71	<71	<71	63J	63J	<74	<74	<79	<79	<88	<83		
Bis(2-ethylhexyl)phthalate	ug/L	140	180	<71	<71	74	38J	38J	190	34J	34J	34J	61J	900		
Chrysene	ug/L	180	170	41J	41J	41J	110	110	<74	<74	<79	<79	<88	84		
Di-tert-butylphtalate	ug/L	<71	55J	<71	<71	<71	<75	<75	<74	<74	<79	<79	<88	<83		
Benz(b)fluoranthene	ug/L	69J	140M	<71	<71	<71	140	140	<74	<74	<79	<79	<88	<83		
Benz(a)fluoranthene	ug/L	80M	70M	<71	<71	<71	100	100	<74	<74	<79	<79	<88	<83		
Benz(a)pyrene	ug/L	<71	52M	<71	<71	<71	260	260	<74	<74	<79	<79	<88	<83		
Indeno(1,2,3-cd)pyrene	ug/L	<71	<87	<71	<71	<71	50J	50J	<74	<74	<79	<79	<88	<83		
Dibenz(a,h)anthracene	ug/L	<71	<87	<71	<71	<71	350	350	<74	<74	<79	<79	<88	<83		
Benzofluoranthene	ug/L	<71	<87	<71	<71	<71	350	350	<74	<74	<79	<79	<88	<83		



Note: Contour Elevations in Feet
 Site Map Source: Howard Godat & Associates, HGA No. 2491

SCALE IN FEET

0 50 100

TP-1 ● Test Pit

— 160 — Topographic Contour Line (in Feet MSL)

**Test Pit Location
 West Olympia Landfill**

NOTES - ORGANICS AND METAL ANALYSIS

- MTCA - MODEL TOXIC CONTROL ACT (CHAPTER 173-340 WAC) CLEAN UP CRITERIA**
- DW - DANGEROUS WASTE REGULATION (CHAPTER 173-303) CRITERIA**
- THURSTON COUNTY - THURSTON COUNTY HIGH RISK WASTE LEVEL**
- B - PROBABLE BLANK CONTAMINATION**
- J - ESTIMATED VALUE (LESS THAN DETECTION LIMIT)**
- M - LOW SPECTRAL MATCH PARAMETERS**
- E - ESTIMATED VALUE, QUALITY ASSURANCE CRITERIA NOT MET**
- 19 VALUE EXCEEDS ONE OR MORE CRITERIA**

Old Olympia Landfill

have call - Joe Hicken - Parametrix

petroleum HC
low PCB & MTCA

8 test pits

SV low

VOC

Heavy metals

burn site - red ashy matrix

glass / rust / soil

lots of glass - bottles

metal debris

lots of 5 gal paint cans - no drums

some perched water - layer on top of till
8' → 16'

some concrete / wood - lumber

some physical properties
foreign particles

3% L.E.L. low levels

Parametrix, Inc.

13020 Northup Way Bellevue, WA 98005
206-455-2550 Fax: 206-869-9556

FAX TRANSMISSION COVER PAGE FAX # 206-869-9556

Number of Pages (not including this page) 2

To: JOHN LIBBY

From: JOE HICKER

Receiving FAX Number: ~~786-5582~~ 786-5582

Date: 4/14/92 Time: 16:20

Comments:

LETTER CONCERNING CHEMICAL SCREENING CRITERIA
FOR MATERIAL DISPOSED OF IN THURSTON Co.

Parametrix, Inc.

Consultants in Engineering and Environmental Sciences

13020 Northrup Way Bellevue, WA 98005
206-455-2550 • Fax: 206-869-9556

Mr. Greg Grunenfelder
Thurston County Public Health and Social Services Department
Environmental Health Division
2000 Lakeridge Drive SW
Olympia, Washington 98502-6045

March 27, 1992
21-2158-02 (01)

Re: Chemical Screening Criteria

Dear Mr. Grunenfelder:

Parametrix is conducting a subsurface characterization of material landfilled at a site located in Thurston County. The objective of this project is to characterize and possibly segregate the material into discrete material types which may be individually evaluated for disposal or re-use alternatives. Such material types may include clean fill, inert/demolition debris, or mixed solid waste material. Removal of the material from the site is desirable for future development of the property.

As part of this project, we are contacting several nearby counties to determine which landfills could potentially accept the material. We are also seeking to determine the appropriate chemical screening parameters for the material prior to disposal. Based upon the results of chemical screening, we wish to establish what criteria the material would have to meet in order to be classified as clean fill material or for disposal at either an inert/demolition waste landfill (facility meeting WAC 173-304-461 standards) or a sanitary landfill (facility meeting WAC 173-304-460 standards).

The following is a list of chemical parameters we are proposing to screen samples of the waste material during our investigation:

Metals - Priority Pollutant List	TCLP
Volatile Organic Analysis	EPA Method 8240
Semi-Volatile Organic Analysis	EPA Method 8270
Chlorinated Pesticides/PCBs	EPA Method 8080
Total Petroleum Hydrocarbons	EPA Method 418.1

Assuming there is a site within Thurston County which could potentially accept the material, we are requesting a review of these parameters to determine whether they would be appropriate for screening the material prior to potential disposal. In addition, we are seeking to determine the number of samples per unit volume of material necessary for adequate screening frequency.



Mr. Greg Grunenfelder
Thurston County Public Health and Social Services Department
March 27, 1992
Page 2

Please review this list at your earliest convenience. I will be contacting you in the near future so that we may further discuss this matter. If you have any questions, please contact me at 455-2550.

Sincerely,

Joe Hicker
Project Hydrogeologist

Enclosures

JH/jh

cc: Frank Weiss, The Weiss Co.
Richard Dunlap, PMX

Joe Hicker

4-9-92

Parametrix

455-2550

old West Olympia garbage dump
letter written to Sugg re criteria to test for.

Contact 5 counties

screening criteria prior to disposal
metals, organics, SVOC, pesticides,

middle of April - test pits
disposal
estimation of cost

13020 Northrup Way Bellevue, WA 98005
206-455-2550 • Fax: 206-869-9556



RECEIVED
APR 08 1992
ENVIRONMENTAL HEALTH

Mr. Greg Grunenfelder
Thurston County Public Health and Social Services Department
Environmental Health Division
2000 Lakeridge Drive SW
Olympia, Washington 98502-6045

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Mr. Greg Grunenfelder
Thurston County Public Health and Social Services Department
March 27, 1992
Page 2

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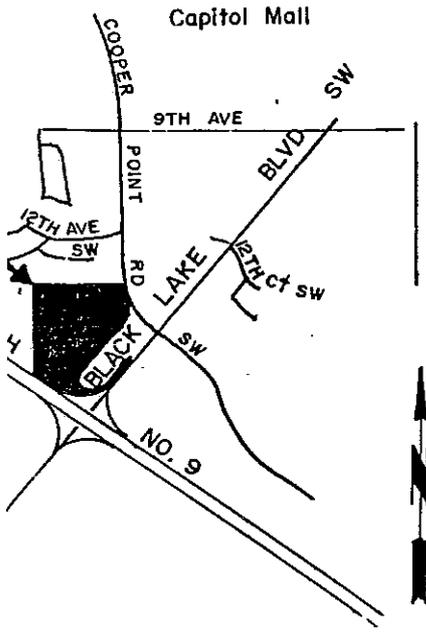
Sincerely,

Joe Hicker
Project Hydrogeologist

Enclosures

JH/jh

cc: Frank Weiss, The Weiss Co.
Richard Dunlap, PMX



SITE MAP

NO SCALE

CONDITIONS OF APPROVAL

1. THE COST OF CONSTRUCTION AND MAINTAINING ALL STREETS NOT HEREIN DEDICATED AS PUBLIC STREETS SHALL BE THE OBLIGATION OF ALL THE OWNERS AND THE OBLIGATION OF ANY CORPORATION IN WHICH TITLE OF THE STREETS MAY BE HELD.
2. ALL LANDSCAPED AREAS IN PUBLIC RIGHT OF WAYS SHALL BE MAINTAINED BY THE OWNER AND HIS SUCCESSORS AND MAY BE REDUCED OR ELIMINATED IF DEEMED NECESSARY FOR OR DETRIMENTAL TO CITY STREET PURPOSES.
3. LOT 3 IS A FORMER LANDFILL SITE WHICH WILL REQUIRE SPECIFIC APPROVAL BY THE THURSTON COUNTY HEALTH DEPARTMENT PRIOR TO DEVELOPMENT.

ENGINEER'S CERTIFICATE

EXAMINED AND APPROVED THIS 26TH DAY OF Oct. A.D. 1988
Alvin S. Smith
 CITY OF OLYMPIA ENGINEER

ASSESSOR'S CERTIFICATE

EXAMINED AND APPROVED THIS 20TH DAY OF October A.D. 1988
by Dawn Aline Green
 THURSTON COUNTY ASSESSOR

TREASURER'S CERTIFICATE

I HEREBY CERTIFY THAT ALL TAXES ON THE PROPERTY SHOWN HEREON HAVE BEEN PAID TO AND INCLUDING THE YEAR 1988
By M. Thompson 10/24/88
 THURSTON COUNTY TREASURER

PLANNING DIRECTOR'S CERTIFICATE

EXAMINED AND APPROVED THIS 20TH DAY OF October A.D. 1988
By Holly Gilbert
 PLANNING DIRECTOR

AUDITOR'S CERTIFICATE

FILED FOR RECORD AT THE REQUEST OF _____, THIS _____ DAY OF _____, A.D. 1988 AT _____ MINUTES PAST _____ O'CLOCK _____ M. AND RECORDED IN VOLUME _____ OF SHORT SUBDIVISIONS AT PAGES _____ RECORDS OF THURSTON COUNTY, WASHINGTON

THURSTON COUNTY AUDITOR

BY _____ DEPUTY

OWNER'S CERTIFICATE

WE, BRIAR DEVELOPMENT COMPANY, A PARTNERSHIP, AND THOMPSON PROPERTIES FOUR LIMITED PARTNERSHIP. A

LEGEND

CAPPED IRON BAR SET ON KEY RECORDED IN BOOK 18 SURVEYS AT PAGE 138

OF OLYMPIA STREET AMENDMENT

DIAN - CITY OF OLYMPIA COORDINATES

CAPPED IRON BAR SET FOR 5428

REBAR W/L.S. CAP#24214 FOR AMENDMENT

DIVISION

8 AS RECORDED UNDER SE PORTIONS OF LOTS EASEMENT. ALL RE-EASEMENTS AND OTHER THIS AMENDMENT ARE

PTION

CITY OF OLYMPIA STREET
DOCUMENT

MERIDIAN - CITY OF OLYMPIA
COORDINATES

2" CAPPED IRON BAR SET FOR
S#5428

2" REBAR W/L.S. CAP#24214
SET FOR AMENDMENT

B DIVISION

5428 AS RECORDED UNDER
REVISE PORTIONS OF LOTS
EASEMENT. ALL RE-
"A" EASEMENTS AND OTHER
OF THIS AMENDMENT ARE

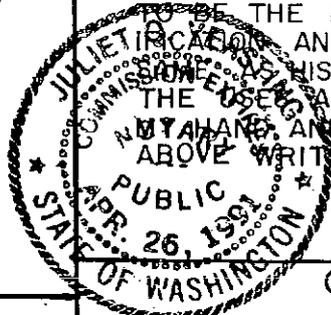
DESCRIPTION

PARCEL

NO. B.L.A. SS-5443 AS
LINE ADJUSTMENTS AT PAGES
3611210125, RECORDS OF

B.C.E. JOB # 2158

RECORDED
RECORDED
SECTION
PAGE



Isen
ng Engineers Inc.
urvey & Engineering Specialists
Cent, Washington. 98032 (206) 251-6222

EXAMINED AND APPROVED THIS 20th DAY OF October
A.D. 1988

By Holly Gilbert
PLANNING DIRECTOR

AUDITOR'S CERTIFICATE

FILED FOR RECORD AT THE REQUEST OF _____
_____, THIS _____ DAY OF _____, A.D. 1988

AT _____ MINUTES PAST _____ O'CLOCK _____ M. AND RECORDED
IN VOLUME _____ OF SHORT SUBDIVISIONS AT PAGES _____
RECORDS OF THURSTON COUNTY, WASHINGTON

THURSTON COUNTY AUDITOR

BY _____
DEPUTY

OWNER'S CERTIFICATE

WE, BRIAR DEVELOPMENT COMPANY, A PARTNERSHIP, AND
THOMPSON PROPERTIES FOUR LIMITED PARTNERSHIP, A
WASHINGTON LIMITED PARTNERSHIP, OWNERS OF DESCRIBED
PROPERTIES, ACKNOWLEDGE THAT AMENDMENT OF THIS
SHORT SUBDIVISION IS OF OUR FREE WILL AND CONSENT.

D. E. Hagen Stephen C. Pulliam
Briar Development, Partner GENERAL PARTNER
THOMPSON PROPERTIES FOUR

ACKNOWLEDGMENTS

STATE OF WASHINGTON
COUNTY OF THURSTON Whatcom
THIS IS TO CERTIFY ON THIS 20th DAY OF September, A.D.
1988, BEFORE ME THE UNDERSIGNED, A NOTARY PUBLIC,
PERSONALLY APPEARED D. E. Hagen TO ME KNOWN
TO BE THE PERSON WHO EXECUTED THE FOREGOING CERT-
IFICATION AND ACKNOWLEDGED TO ME THAT HE SIGNED THE
SAME AS HIS FREE AND VOLUNTARY ACT AND DEED FOR
THE USES AND PURPOSES THEREIN MENTIONED. WITNESS
MY HAND AND OFFICIAL SEAL THE DAY AND YEAR FIRST
ABOVE WRITTEN. Susan E. Johnson

NOTARY PUBLIC IN AND FOR THE STATE OF
WASHINGTON RESIDING IN Bellingham

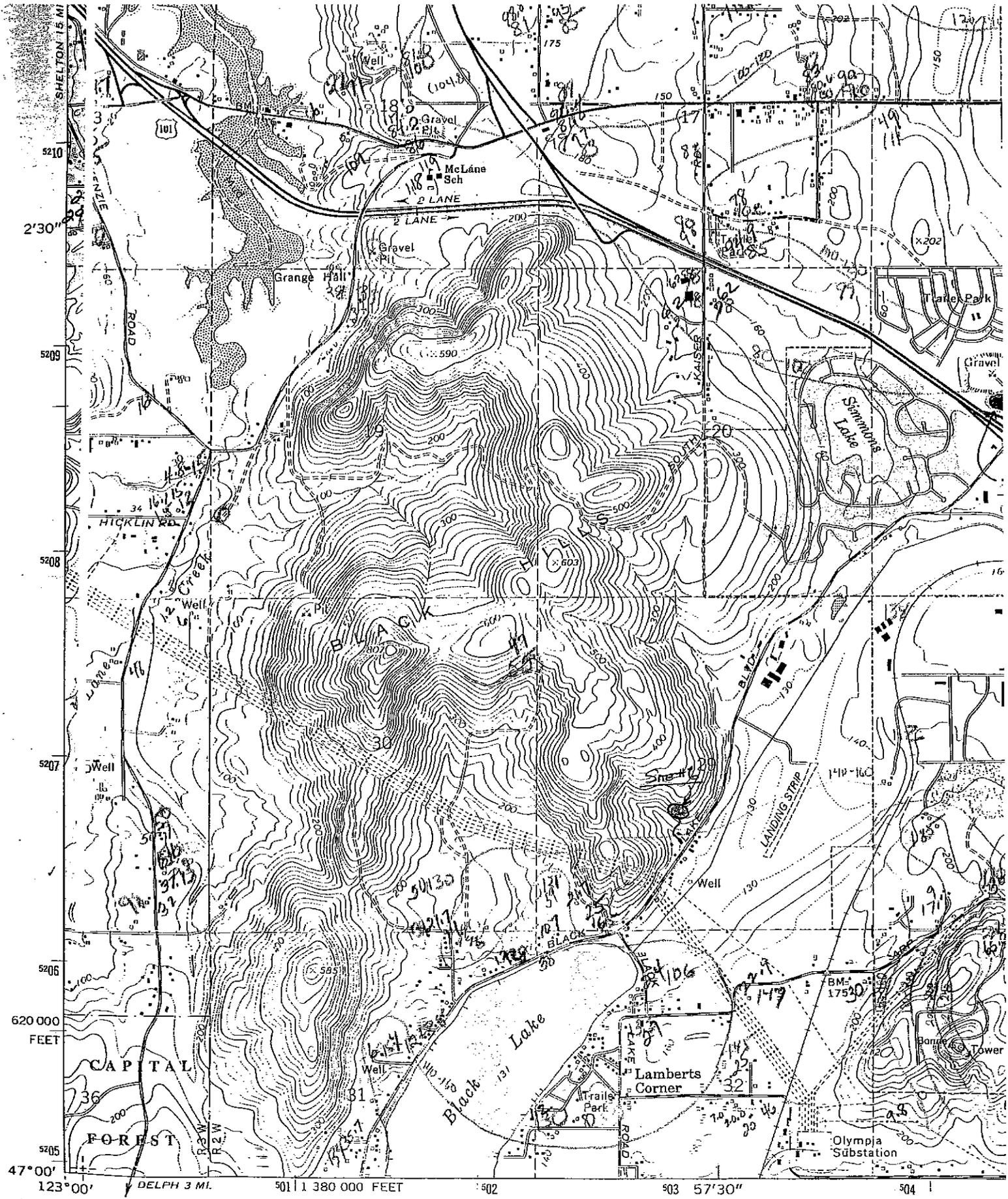
STATE OF WASHINGTON
COUNTY OF THURSTON KING S.S.
THIS IS TO CERTIFY ON THIS 23rd DAY OF SEPTEMBER, A.D.
1988, BEFORE ME THE UNDERSIGNED, A NOTARY PUBLIC,
PERSONALLY APPEARED STEPHEN C. PULLIAM TO ME KNOWN
TO BE THE PERSON WHO EXECUTED THE FOREGOING CERT-
IFICATION AND ACKNOWLEDGED TO ME THAT HE SIGNED THE
SAME AS HIS FREE AND VOLUNTARY ACT AND DEED FOR
THE USES AND PURPOSES THEREIN MENTIONED WITNESS
MY HAND AND OFFICIAL SEAL THE DAY AND YEAR FIRST
ABOVE WRITTEN. Juliet Beckel

NOTARY PUBLIC IN AND FOR THE STATE OF
WASHINGTON RESIDING IN Seattle

CITY OF _____ AMENDED
OLYMPIA SHORT SUBDIVISION 5428

A PORTION OF SECTION 21,
TOWNSHIP 18 NORTH, RANGE 2 WEST, W.M.

ORIGINAL ASSESSOR'S PARCEL NO.'S
12821240000, 12821240101
12821240102, 12821240103



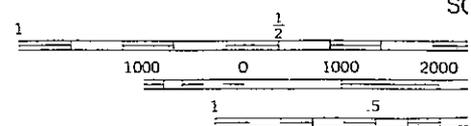
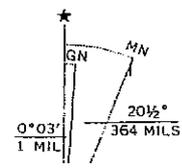
Mapped by the Defense Mapping Agency
 Edited and published by the Geological Survey
 Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial
 photographs taken 1959. Field checked 1959

Selected hydrographic data compiled from NOS chart
 6462 (1947) and hydrographic surveys (1936). This
 information is not intended for navigational purposes

Polyconic projection. 10,000-foot grid ticks based on
 Washington

1:62,500
 CHESTER
 1:62,500



CONTOUR
 DOTTED LINES R

SC