K. SINGH & ASSOCIATES, INC.

Engineers and Environmental Management Consultants 1135 Legion Drive, Elm Grove, WI 53122 (414) 821 - 1171 FAX (414) 821 - 1174

March 21, 1994

Ms. Margaret Graefe Wisconsin Department of Natural Resources 4041 N. Richards Street P.O. Box 12436 Milwaukee, WI 53212

Project # 2096

Reference: Monthly Progress Report Sanitary Landfill and Transfer

Delafield, Wisconsin

Dear Ms. Graefe:

The purpose of this letter is to provide a progress report for services provided from February 1, through 10, 1994. During this time period, we have addressed several issues, more specifically described as follows:

Project Management

Scope Item	% Activity Complete	Budget Expended
Staff Coordination & Status Review	100	\$ 80.00
Report Preparation		
Scope Item	% Activity Complete	Budget Expended
1. Leachate & Gas Monitoring Report	100	\$ 150.00
Site Visit		
Scope Item	% Activity Complete	Budget Expended
 Leachate & Gas Monitoring Observation 	100 100	\$ 125.00 \$ 160.00
Subcontractors' Invoices		
Scope Item	% Activity Complete	Budget Expended
 Celluar One Vydrzal Services, Inc. 	100 100	\$ 52.94 \$ 1,815.00

Ms. Margaret Graefe Page 2

Equipment Usage

Scope Item	% Activity Complete	Budget	Expended
1. Gas Meter	100	\$	62.50
Miscellaneous		•	
Scope Item	% Activity Complete	Budget	Expended
1. Mileage		\$	8.84
Amount Due	•	\$	2,454.28

We believe that this documentation helps to clarify our activities at the landfill site. Please call us, if you have any questions regarding this submittal.

Sincerely,

K, singh & associates, inc.

Pratap N. Singh, Ph.D., P.E.

Project Manager

cc: Ms. Marie Stewart / WDNR, Madison

Enc:

Invoice No. 2096-02-94 dated March 7, 1994

State of Wisconsin DEPARTMENT OF NATURAL RESOURCES Box 7921 Madison, Wisconsin 53707

INVOICE FOR PROFESSIONAL SERVICES

PROJECT _Sanitary Transfer and L	andfill	O&M,	REQUEST NO.	<u> </u>
_Delafield Site			PROJECT NO.	_SW472
LOCATION _Delafield, Waukesha Co.	, Wisco	nsin	CONTRACT NO	3618
		Total Fee Due To Date	Previously Submitted	Payment Due This Invoice
If "lump sum" contract:				
Original Contract Sum				
Change Orders (List Separately)				
·				
Total Contract To Date .		2 1,51, 19		2 11 5 1 20
If "hourly basis" contract:		2,454.28		2,454,28
Maximum contract-amount\$296,285.00_s	stipulated			
Change Orders (List Separately)				
(Attach itemized listing)				
Other Charges to contract:				
Additional Services: (Attach itemized listing)				
Reimbursable Expenses (Attach itemized listing)				
T	OTALS	2,454.25		2,454,28
		THIS IS TO CERTIFY to a payment of \$_	THAT The Firm named なみない	l herein is entitled
K. Singh & Associates			•	
Firm Name		Manager App	Months F	5/4/94
35 Legion Dr., Elm Grove, Visconsin 53122 Address		Project Manager App	roval	/ Vate
Firm Representative Date	; 1 /	Program Coordinator	Approval	Date
payreq.fm 8/90 (Submit original plus	two conies :	w/supporting invoic	=)	

K. SINGH

ASSOCIATES,

INC.

1135 Legion Drive,

Elm Grove,

Wisconsin 53122.

(414) - 821 - 1171

FAX (414) - 821 - 1174

Name

WDNR - Southeastern District

Street

Richards Street Annex-4041 North Richards Street

Date

March 07, 1994

City / State / ZIP Milwaukee

WI

Project #

2096

53212

Attention Ms. Margaret Graefe

Invoice No. 2096-2-94

DESCRIPTION:

Engineering Services

JOB:

Delafield Landfill

AUTHORIZATION:

Per your authorization of August 12, 1993

PERIOD COVERED:

February 1-10, 1994

Date	Details	Designation		Cost/Hr. Cost/Meal Cost/Min.	Total
	Project Management				
02/02/94	Staff coordination & status review	Principal Engineer (PS)	1	\$80.00	\$80.00
		Subtotal for Project Management			\$80.00
	Report Preparation				
02/04/94	Leachate & gas monitoring report	Project Scientist (RS)	3	\$50.00	\$150.00
		Subtotal for Report Preparation			\$150.00
	Site Visit				
02/03/94	Leachate & gas monitoring	Project Scientist (RS)	2.5	\$50.00	\$125.00
02/10/94	Observation	Principal Engineer (PS)	2	\$80.00	\$160.00
		Subtotal for Site Visit			<u>\$285.00</u>
	Subcontractor's Invoices				
01/22/94	Cellular One #00026203-040 Current charges		1.1	\$48.13	\$52.94
01/31/94	Vydrzal Services, Inc. #8095 Plow & salt access road for January		1.1	\$1650.00	\$1815.00
		Subtotal for Subcontractor's Invoices			<u>\$1867.94</u>
	Equipment Usage				
02/03/94	Gas meter		2.5	\$25.00	\$62.50
		Subtotal for Equipment Usage			<u>\$62.50</u>
	Mileage				
02/03/94		Project Scientist (RS)	34	\$0.26	\$8.84
		Subtotal for Mileage			<u>\$8.84</u>

PAYMENT DUE UPON RECEIPT

Invoice No. 2096-2-94

Date Details Designation Hour/ Cost/Hr. Oty./ Cost/Meal Mins. Cost/Min.

AMOUNT DUE \$2454.28

Kamala Singh President

K. SINGH & ASSOCIATES, INC.

Engineers and Environmental Management Consultants

1135 Legion Drive, Elm Grove, WI 53122 (414) 821 - 1171 FAX (414) 821 - 1174

March 21, 1994

Ms. Margaret Graefe Wisconsin Department of Natural Resources 4041 N. Richard Street Milwaukee, WI 53212

Job # 4025

Subject:

Monthly Status Report for Sanitary Transfer and Landfill

Delafield, Wisconsin

(Contract: SW 472 with effect from 02/11/94)

Dear Ms. Graefe:

Enclosed please find the monthly status report for the referenced site. Our comments are as follows:

- 1. Approximately, 116,500 gallons of leachate (about 21 loads) were hauled between February 1 & 28, 1994 (refer to Weekly Leachate & Condensate Hauling Report & AWS Data).
- 2. The Dial Log Plus communication and leachate control systems are functional.
- 3. The level of methane gas was more than its lower explosive limit (LEL) in gas venting wells, G-1 through G-3 and G-5 through G-8. The results were consistent with the previous round of monitoring. The methane gas detector is calibrated to measure methane only up to its LEL (5 %). The concentration of methane greater than 5 % does not represent actual methane concentration in a gas venting well. It indicates that the concentration is more than its LEL.
- 4. The concentration of methane ranged from 8.9 to 9.6 % at blower # 1 located at the western part of the landfill. The results were consistent with the previous measurements.
- 5. The concentration of methane ranged from 9.2 to 9.5 % at blower # 2 located at the southeast corner of the Ormson Corporation. The results were consistent with the previous measurements. The electric motor and exhaust at this location were working well.

The electric motor and exhaust were noted non-functional during the site visit on March 17, 1994. Miller Electric of Delafield was contacted to check the motor. The blower was checked on March 18, 1994. Based on the blower inspection and telephone conversation with Miller Electric, the motor is burnt and needs to be replaced. We will submit a proposal for motor repair soon.

6. About 0.9 % methane was recorded at the blower exhaust located along west wall of the Ormson Corporation. The results were consistent with the previous measurements. The electric motor and exhaust at this location were working well.

Ms. Margaret Graefe Page 2

7. The access road for leachate pumping needs to be repaired. A work plan and cost estimates from three sub-contractors for the road repair was submitted to WDNR on February 28, 1994. Authorization is awaited.

Dilip K. Singh, Ph.D., P.E.

Senior Project Engineer

Please call us, if you have any questions regarding this submittal.

Sincerely,

K, SINGH & ASSOCIATES, INC.

KaghuB. Singh, Ph.D.

Project Scientist

Enc: 1. Weekly Methane Monitoring Report

2. Weekly General Monitoring Report

3. Weekly Leachate and Hauling Report

4. AWS Leachate Pumping Data

cc: Marie Stewart / WDNR, Madison

WEEKLY METHANE MONITORING REPORT SANITARY TRANSFER & LANDFILL, DELAFIELD, WISCONSIN

			WEST								EA	ST	
Date	Name of			Per	cent (%) Met	hane		% Methane Comments				
54.0	Person				Loca	ation		,			Locat	ion	
		G-1	G-2	G-3	G-4	G-5	G-6	G-7	G-8	Blower # 1	Blower # 2	Blower # 3	
2/11/94	Raghu	8.7	9.2	8.6	2.5	7.2	8.4	9.2	9.8	9.2	9.5	0.9	Results are consistent with the previous measurements.
2/18/96	Raghu Raghu	7.8	8.6	9.2	2.1	6.8	8.2	8.9	8.9	8.9	9.2	0.9	Results are consistent with the previous measurements
2/25/94	Raghu	9.2	6.8	9.2	2.5	9.8	5.8	9.4	9.7	9.6	9.5	0.9	Results are consistent with the previous treasurements.
						·							

WEEKLY GENERAL MONITORING REPORT SANITARY TRANSFER & LANDFILL, DELAFIELD, WISCONSIN

Na	Name of	ACCESS ROAD LEADING TO LOADING AREA	LANDFILL COVER (DEPRESSIONS ETC.)	OTHER OBSERVATIONS			
Date	Person	Comments	Comments Comment				
2/11/94	Raghu	The hauter was able to pump the leachete	Covered with snow	-			
2/18/94	Raghu	The hauler was not able to pump the leachate due to soft ground	Covered with snow	-			
		Confacted Drik Project Manager and Co-ordinate for road repair					
		Contacted Methshare Excarching and Vydrzal service to bid proposals regarding the road repair					
2/24/94	Raghu	The access road was very soft. The hands was not able to pump the leacheds.	Covered with snow	•			
		The placture power of the leach cle monitoring splim was turned off to					
		prevent entry of the leach de from the leach de manhole to the					
		holding tants.					
2/25/94	Raghu	The hauter was able to drive the tanker down the hile of the landfrill, but	Covered with snow				
		it got stuck approximately 100 feet-					
		morth of the loading area. It happened due to a sudden decrease in the temperature The snow started melting in the week of					
		2/21/94 ans water accumulated on the road. The accumulated water converted					
		temperature. Ico provided free rotation for	r wheel,				

WEEKLY LEACHATE AND CONDENSATE HAULING REPORT SANITARY TRANSFER & LANDFILL, DELAFIELD, WISCONSIN

		10,000 GALLON		2,000 GALLON T	CONDENSATE TANK			
Date	Hauling Company	Gallons Pumped	No. of Loads	Gallons Pumped	No. of Loads	Gallons Pumped	No. of Loads	
02/01/94 to 02/28/94	Advanced Waste Services	116,500	21	NA	NA	NA	N/A	
		Please see	the attack	ad Meet.				
Weekly Total								
Weekly Total 0	Weekly Total Gallons							
Weekly Total Lo								
	y							

001

03:10/94 16:17

K. SINGH & ASSOCIATES, INC.

Engineers and Environmental Management Consultants
1135 Legion Drive, Elm Grove, WI 53122 (414) 821 - 1171 FAX (414) 821 - 1174

SPEED MEMORANDUM

DATE

03/10/94

OT

Mike Malatesta

COMPANY:

Advanced Waste Services (AWS)

FAX#

(414) 355 - 7600

TEL.#

(414) 355 - 9027

FROM

Raghu Singh

SUBJECT :

Hauling leachate from 10,000 & 2,000 gallons tanks

between February 1 & 28, 1994

Sanitary Transfer & Landfill, Delafield, Wisconsin

Please provide following information by 03/11/94

Date	** ***	Leachate P	umping Activities	••
	10,000 Gallons pumped	gallon tank No. of Loads		allon tank No. of Loads
02/01/94	à	11500		
02/02/94	9			
02/03/94		5500		
02/04/94	\	5500 5500		
02/05/94	Ø			
02/06/94	2	11020		
02/07/94	12	5500		
02/08/94	1.6	55W		
02/09/94	Ľ			
02/10/94	Ø			
02/11/94	}	5500		
02/12/94	Ø			

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Date		Leachate Pu	imping Activities
	10,000 Gallons pumped	gailon tank No. of Louds	2,000 gallon tank Gallons pumped No. of Loads
02/13/94	Ø		
02/14/94	2	Call	
02/15/94	\	5500	
02/16/94	Ø		***************************************
02/17/94	Q		
02/18/94	Ø		·
02/19/94	Ø		
02/20/94	Ø .	-3	
02/21/94	Ø		
02/22/94	<u>ح</u>	1450)	
02/23/94	0		
02/24/94	Ø		
02/25/94	4	How	
02/26/94	Ø		
02/27/94	Ø		
02/28/94	2:	11000	
Total		116500	