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Woodward-Clyde Consultants

Engineering & sciences applied to the earth & its environment

September 15, 1993 93C0276A

Mrs. Rita Sullins Don-Sul, Inc. 187 North L Street Livermore, CA 94550

Subject: Arrow Rentals - Agreement for Professional Services

Dear Rita:

Attached is a fully executed Agreement for Professional Services contract for the remediation project at the Arrow Rentals site located at 187 North L Street. Work will commence when Woodward-Clyde is given notice to proceed. We understand that this will occur when Don-Sul receives a letter of commitment from the State of California Underground Storage Tank Cleanup Fund approving this cleanup.

We are looking forward to working with you.

Sincerely,

Jo Beth Folger

Jo Beth Dolger

AGREEMENT FOR PROFESSIONAL SERVICES (Hereinafter "Agreement")

BETWEEN

Don-Sul, Inc.		
(Hereinafter "Client")		
187 North "L" Street		
(Street or Post Office Box)		
Livermore, California 94550		
(City, State and Zip Code)		
1110		
AND		
WOODWARD-CLYDE CONSULTANTS		
(Hereinafter "WCC")		
Assistance: 400)		
500 12th Street, Suite 100		
(Street or Post Office Box)		
Oakland, California 94607-4014		
(City, State and Zip Code)		
DATE OF AGREEMENT: August 31, 1993		
02002764		
AGREEMENT NUMBER: 93C0276A		

The parties agree as follows:

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ARTICLE I

SCOPE OF SERVICES, ESTIMATED TIME SCHEDULE, AND ESTIMATED CHARGES

The Scope of Services (hereinafter "Services"), the Estimated Time Schedule and the Estimated Charges are to be set forth in a written Addendum or Addenda to this Agreement. The terms and conditions of this Agreement shall apply to each Addendum, except to the extent expressly modified by the Addendum. Where charges are "not to exceed" a specified sum, WCC shall notify client before such sum is exceeded and shall not continue to provide the Services beyond such sum unless Client authorizes an increase in the sum. If a "not to exceed" sum is broken down into budgets for specific tasks, the task budget may be exceeded without Client authorization as long as the total sum is not exceeded.

ARTICLE II

METHOD OF CHARGING AND PAYMENT CONDITIONS

Unless otherwise stated in the Addendum, the method of charging for the Services shall be on a time and materials basis and shall be based on the Schedule of Fees and Charges in effect when the Services are performed. The current Schedule of Fees and Charges is shown in Attachment 1. WCC periodically shall submit invoices to Client. Client shall pay each invoice within thirty Charges is shown in Attachment 1. WCC periodically shall submit invoices to Client. Client shall pay each invoice within thirty (30) days of the date of the invoice. However, if Client objects to all or any portion of any invoice, Client shall notify WCC of the objection within fifteen (15) days from date of the invoice of one and one-half percent (1/26) of the amount of the invoice per month or the in dispute. Client shall pay an additional charge of one and one-half percent (1/26) of the amount of the invoice per month or the maximum percentage allowed by law, whichever is the lesser, for any payment received by WCC more than thirty (30) days from date of invoice. Payment thereafter shall first be applied to accrued interest and then to the unpaid principal. The additional date of invoice. Payment thereafter shall first be applied to accrued interest and then to the unpaid principal. The additional charge shall not apply to any disputed portion of any invoice resolved in favor of Client. In the event of a legal action brought by WCC against Client for invoice amounts not paid, attorneys' fees, court costs, and other related expenses shall be paid to the prevailing party by the other party.

Client shall compensate WCC for any sales or value-added taxes which apply to the Services rendered under this Agreement or any Addendum thereto. Client shall reimburse WCC for the amount of such taxes in addition to the compensation due for Services.

In addition to the above, if payment of WCC invoices is not resintained on a thirty (30) day current basis, WCC may, by ten (10) days written notice to Client, suspend further performance and withhold any and all data from Client until such invoice payments are restored to a current basis.

ARTICLE III

CONSTRUCTION PROCEDURES

Unless expressly provided in an Addendum (and then only to the extent expressly defined), WCC, except for its own services, shall not specify construction procedures, manage or supervise construction, or implement or be responsible for health and safety procedures; shall not be responsible for the acts or omissions of contractors or other parties on the project; and shall not have control or charge of and shall not be responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs. In the event WCC, by Addendum, expressly assumes health and safety responsibility for certain concerns such as toxic concerns, the acceptance of such responsibility shall not be deemed an acceptance of responsibility for other health and safety requirements such as those relating to excavating, trenching, drilling and backfilling, unless expressly provided otherwise. WCC testing or inspection of portions of the work of other parties on a project shall not relieve such other parties from their responsibility for performing their work in accordance with applicable plans, specifications and safety requirements.

ARTICLE IV

RECOGNITION OF RISK

Client recognizes that environmental, geologic and geotechnical conditions will often vary from those encountered at the times and locations where data are obtained by WCC, and that the limited data results in uncertainty with respect to the interpretation of these conditions, despite the use of due professional care.

For contaminated waste and chemical projects, Client recognizes the concerns set forth in Attachment 2, entitled "Special Contaminated Waste and Chemical Conditions."

ARTICLE V

PROFESSIONAL RESPONSIBILITY

WCC represents that the Services shall be performed, within the limits prescribed by Client, in a manner consistent with that level of care and skill ordinarily exercised by other professional consultants under similar circumstances at the time the Services are performed. No other representations to Client, express or implied, and no warranty or guarantee is included or intended in this Agreement, or in any report, opinion, document or otherwise.

ARTICLE VI

LIMITATIONS OF LIABILITY

The liability of WCC, its employees, agents and subcontractors (hereinafter for purposes of this Article VI referred to collectively as "WCC"), for Client's claims of loss, injury, death, damage, or expense, including, without limitation, Client's claims of contribution and indemnification with respect to third party claims relating to services rendered or obligations imposed under this Agreement, including all Addenda (hereinafter "Client's Claims"), shall not exceed in the aggregate under this Agreement:

- (1) The total sum of \$100,000 for Client's Claims arising out of:
- any actual or potential environmental pollution or contamination, including, without limitation, any actual or threatened release of toxic, irritant, pollutant, or waste gasses, liquids, or solid materials, or failure to detect or 1965 (a) properly evaluate the presence of such substances, except to the extent such release, threatened release or failure to detect or evaluate is caused by WCC's gross negligence or willful misconduct; and
 - professional negligence, including errors, omissions or other professional acts, and including unintentional breach of contract:
 - The total sum of \$1,000,000 for Client's Claims arising out of negligence, or other causes for which WCC has any legal (2) liability, other than as described in (1)(a) and (b) above.

In no event shall either Client or WCC be liable for every pential damages, including, without limitation, loss of use or loss of profits, incurred by one another or their subsidiaries or assumption, regardless of whether such damages at caused by breach of contract, willful misconduct, negligent act or omission, or other act of either of them.

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ARTICLE VII

INDEMNIFICATION

It any claim is brought against Client and/or WCC its employees, agents and subcontractors (hereinafter for purposes of this Article VII referred to collectively as "WCC"), by a third party, relating in any way to services under this Agreement, including all Addenda, the contribution and indemnification rights and obligations of Client and WCC, subject to the limitations of liability under Article VI above, shall be determined as follows:

- if any negligence, breach of contract, or willful misconduct of WCC caused any damage, injury or loss claimed by the third party, then WCC and Client shall each indemnify the other against any loss or judgment on a comparative responsibility basis under comparative negligence principles (Client responsibility to include that of its agents, employees and other contractors);
- (2) unless WCC was guilty of negligence, breach of contract, or willful misconduct which in whole or in part caused the damage, injury or loss asserted in the third party claim, Client shall indemnify WCC against the claim, liability, loss, legal fees, consulting fees and other costs of defense reasonably incurred;
- (3) to the fullest extent permitted by law, Client shall indemnify and hold harmless WCC for all liability arising from the risks described in (1)(a) of Article VI of this Agreement in excess of the limit of liability set forth therein, unless such liability is caused by the gross negligence or willful misconduct of WCC.

ARTICLE VIII

INSURANCE

WCC and Client agree to maintain during the performance of the Services (1) statutory Workers' Compensation coverage; and (2) Comprehensive General and Automobile Liability insurance coverage in the sum of not less than \$1,000,000.

ARTICLE IX

RIGHT OF ENTRY

Client grants to WCC, and, if the project site is not owned by Client, warrants that permission has been granted for, a right of entry from time to time by WCC, its employees, agents and subcontractors, upon the project site for the purpose of providing the Services. Client recognizes that the use of investigative equipment and practices may unavoidably alter the existing site conditions and affect the environment in the area being studied.

ARTICLE X

INDEPENDENT CONTRACTOR STATUS AND SUBCONTRACTORS

Unless and only to the extent specifically provided to the contrary, WCC shall be an independent contractor and shall have responsibility for and control over the details and means for providing the Services. WCC can use subcontractors to perform services usually performed by subcontractors. If WCC wishes to use a subcontractor where it is not customary to do so, WCC shall obtain prior written approval or subsequent written confirmation from Client. To the extent that Client insists upon the signing of of manifests for the disposal of hazardous substances by WCC's agents of employees, such signing shall be as Client's agent so that WCC will not be considered to be a generator, transporter or disposer of such substances, and Client shall indemnify WCC against any claim or loss resulting from such signing.

ARTICLE XI

SAMPLES, CUTTINGS AND HAZARDOUS SUBSTANCES

WCC shall preserve such soil, rock, water and other samples obtained from the project site as it deems necessary for the project for not longer than forty-five (45) days, unless otherwise legally required, after the issuance of any document that includes the data obtained from those samples, unless other arrangements are mutually agreed upon in writing. At any time, WCC can request in writing that Client remove samples, cuttings and hazardous substances generated by the project from the project site or other location. Client shall promptly comply with such request, and pay and be responsible for the removal and lawful disposal of samples, cuttings and hazardous substances, unless other arrangements are mutually agreed upon in writing.

ARTICLE XII

OWNERSHIP AND MAINTENANCE OF DOCUMENTS

Unless otherwise specified in this Agreement or in an Addendum, and provided that WCC has been fully paid for the Services, Client shall have the right to use the documents, maps, photographs, drawings and specifications resulting from WCC's efforts on the project, for purposes reasonably contemplated by the parties. WCC shall have the right, but shall not be obligated, to retain copies of all such materials and shall have the right to use the same for any purpose, unless such use would be expected to cause harm to Client. Client shall specify in advance, in writing, and be charged for all arrangements for special or extended-to cause harm to Client. Client shall specify in advance, in writing, and be charged for all arrangements for special or extended-to maintenance of such materials by WCC. WCC retains the right of ownership with respect to any patentable concepts or copyrightable materials arising from its Services.

Reuse of any material described above by Client on extensions of this project or on any other project without WCC's written authorization shall be at Client's risk, and Client agrees to indemnify, defend and hold harmless WCC from all claims, damages and expenses, including attorneys' fees, arising out of such unauthorized reuse.

ARTICLE XIII

CONFIDENTIALITY

WCC, upon Client's request, shall have its employees, agents and subcontractors sign reasonable and customary confidentiality agreements furnished by Client.

ARTICLE XIV

CLIENT ACTION TO BE TAKEN

Prior to the commencement of the Services, and thereafter, Client shall notify WCC of any known potential or possible health or safety hazard or condition existing on or near the project site upon which the Services are to be or are being performed by WCC, its agents, employees or subcontractors, with particular reference to hazardous substances or conditions. If hazardous substances or conditions are discovered during the performance of the Services that are different in type, amount or concentration from those disclosed to WCC prior to commencement of the Services, then, upon notification, Client and WCC shall seek to determine the equitable adjustment (if any) to be made to the Addendum. If the parties are unable to agree, the Addendum will be terminated in accordance with the termination for convenience provisions of this Agreement. Client shall compensate WCC for any emergency measures necessary for health and safety. Client shall have the responsibility for properly reporting the discovery of hazardous substances to appropriate authorities.

Client shall correctly show, on plans to be furnished to VCC, the location of subsurface structures, such as pipes, tanks, cables and utilities. If the Services require VCC to investigate the location of such underground structures, then, consistent with the agreed upon scope of such investigation, VCC shall be obligated to perform the investigation in accordance with reasonable standards of care. VCC shall not be responsible for damage to upon a structures which occurs despite the use of due care.

Client shall provide WCC, in writing, all criteria, design the ministruction standards, and all other information relating to Client's requirements for the project.

Client shall give WCC prompt written notice of any suspected deficiency in the Services.

Client, with reasonable promptness, shall provide required approvals and decisions.

ARTICLE XV

DELAYS

In the event that WCC field or technical work is interrupted due to causes outside of its control, WCC shall be equitably compensated (in accordance with WCC's current Schedule of Fees and Charges) for the additional labor, equipment, and other charges associated with maintaining its work force and equipment available during the interruption, or at the option of Client, for such similar charges that are incurred by WCC for demobilization and subsequent remobilization. In no event shall WCC be required to maintain a field force in standby status in the field for a period in excess of five (5) calendar days.

Except for the foregoing provision, neither party shall hold the other responsible for damages or delays in performance caused by force majeure, acts of God, or other events beyond the control of the other party or that could not have been reasonably foreseen and prevented. For this purpose, such acts or events shall include, without limitation, unusual weather affecting performance, floods, epidemics, war, riots, strikes, lockouts or other industrial disturbances, protest demonstrations, unanticipated site conditions, and inability, with reasonable diligence, to supply personnel, equipment or material for the Services. Should such acts or events occur, both parties shall use their best efforts to overcome the difficulties arising and to resume as soon as reasonably possible the normal pursuit of the Services. Delays within the scope of this Article which cumulatively exceed forty-five (45) days shall, at the option of either party, make the applicable Addendum subject to termination for convenience or to renegotiation.

ARTICLE XVI

SUSPENSION OF WORK

Client may, at any time, by ten (10) days written notice, suspend performance by WCC. If payment of invoices by Client is not maintained on a thirty (30) day current basis, WCC may, by ten (10) day written notice to Client, suspend further performance until such payment is restored to a current basis. Suspension for any reason exceeding forty-five (45) days shall, at the option of WCC, make the applicable Addendum subject to termination or to renegotiation. All suspensions shall extend the time schedule for performance in a mutually satisfactory manner, and WCC shall be paid for Services performed and charges prior to the suspension date plus suspension charges. Suspension charges shall include, without limitation, the putting of documents and analyses in order, personnel and equipment rescheduling or reassignment adjustments, and all other related charges incurred directly attributable to suspension.

ARTICLE XVII

TERMINATION

Client may terminate all or any portion of the Services for convenience, at its option, by sending a written Notice of Termination to WCC. WCC may similarly terminate for convenience in the event of delays or suspensions exceeding forty-five (45) days as provided in the foregoing articles. The Notice of Termination shall specify when and which work will be discontinued and when termination shall be effective. No later than thirty (30) days after termination, Client shall pay WCC upon invoice for

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Services performed and charges prior to termination, plus termination charges. Termination charges shall include, without limitation, the putting of project documents and analyses in order, personnel and equipment rescheduling or reassignment adjustments, and all other related charges incurred directly attributable to termination.

Either party can terminate this Agreement or an Addendum for cause if the other commits a material, uncured breach of this Agreement. Termination shall be effective twenty (26) days after receipt of a Notice of Termination, unless a later date is specified in the Notice. The Notice of Termination shall contain specific reasons for termination and both parties shall cooperate specified in the Notice. Termination shall not be effective if reasonable action to in good faith to cure the causes for termination stated in the Notice. Termination shall not be effective if reasonable action to cure the breach has been taken before the effective date of the termination. In the event of termination for cause, WCC shall be paid the same as in the case of termination for convenience, and the parties shall have their remedies at law as to any other rights and obligations between them, subject to the other terms and conditions of this Agreement.

Client and WCC recognize that professional standards and ethics govern the Services. If circumstances arise which, in WCC's opinion, preclude it for professional or ethical reasons from continuing performance, WCC shall advise Client of that fact. The parties shall immediately attempt to arrive at a mutually satisfactory solution. If this cannot be done to the satisfaction of both parties, either may terminate, in which case Client shall compensate WCC in accordance with this Article.

ARTICLE XYIII

COMPLIANCE WITH LAW

WCC and Client will use reasonable care to comply with applicable laws in effect at the time the Services are performed, which, to the best of their knowledge, information, and belief, apply to their respective obligations under this Agreement.

Client shall pay for any reasonable additional charges from WCC for services required on the part of WCC to comply with laws or regulations which become effective after the execution of this Agreement or any Addenda to this Agreement.

ARTICLE XIX

ASSIGNMENTS

Neither party to this Agreement shall assign its duties and obligations hereunder without the prior written consent of the other party.

ARTICLE XX

GOVERNING LAW

Unless otherwise provided in an Addendum, the law of the state where the project is located will govern the validity of this Agreement, its interpretation and performance, and remedies for contract breach or any other claims related to this Agreement. If the project is located in more than one state, the law of the state where most of the Services are performed shall govern.

The provisions of this Agreement shall be enforced to the fullest extent permitted by law. If any provision of this Agreement is found to be invalid or unenforceable, the provision shall be construed and applied in a way that comes as close as possible to expressing the intention of the provisions and that saves the validity and enforceability of the provision.

ARTICLE XXI

TIME BAR TO LEGAL ACTION

All legal actions by either party against the other for breach of this Agreement or any Addendum, or for the failure to perform in accordance with the applicable standard of care, however denominated, that are essentially based upon such breach or failure, shall be barred two (2) years from the time claimant knew or should have known of its right to make a claim, but, in any event, not later than four (4) years from the substantial completion of the Services.

XXII

NO THIRD PARTY RIGHTS

This Agreement shall not create any rights or benefits to parties other than Client and WCC.

ARTICLE XXIII

INTEGRATED WRITING

This Agreement constitutes a final and complete repositor, of the agreements between Client and WCC. It supersedes all prior or contemporaneous communications, representations, or agreements, whether oral or written, relating to the subject matter of this Agreement. Modifications of this Agreement shall represent the subject matter of this Agreement. Modifications of this Agreement shall represent the subject matter of the subject matter of the subject matter of the subject matter.

ARTICLE XXIV

NOTICES, SIGNATURES AND AUTHORIZED REPRESENTATIVES

The following signatories of this Agreement are the Authorized Representatives of Client and WCC for the execution of this Agreement. Each Addendum shall set forth the name and address of the respective Authorized Representatives of the parties for the administration of that Addendum. Any information or notices required or permitted under this Agreement or any Addendum shall be deemed to have been sufficiently given if in writing and delivered either personally or by mail to the undersigned representative or any other Authorized Representative identified in the applicable Addendum.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly Authorized Representatives, as follows:

Signature

RITA M. SULLINS

Typed Name

VICE PRESIDENT

Signature

Ron Derammelaere, P.E.
Typed Name
Manager, Waste Management Operations
Vice President
Title

9/14/93

ARROW RENTALS CORRECTIVE ACTION PLAN

The following describes the basis for compensation for services performed during the calendar year 1993. This Schedule of Fees and Charges will be adjusted annually on January 1 of each subsequent year to reflect merit and economic salary increases, and changes in the expected level and mode of operations for the new year. The new Schedule of Fees and Charges will apply to existing and new assignments.

PERSONNEL CHARGES

The charge for all time required in the performance of the Scope of Services, including office, field and travel time, will be at the Unit Price Hourly Rates set forth below for the labor classification indicated.

Labor Classification	Hourly	Rate
Clerk/Office Assistant*	-	\$ 32
Technical Typist/Word Processor*		41
Editor*		50
Drafter/Illustrator*		50
Sr. Drafter/Illustrator*		61
Technician*		50
Senior Technician* /Lab/Field Superv	isor	61
Assistant Staff Professional		50
Staff Professional		69
Sr. Staff Professional		78
Assistant Project Professional		87
Project Professional		99
Senior Project Professional		113
Consulting Professional		122
Sr. Consulting Professional		126
Principal/Sr. Principal Professional		135

When W-C staff appear as expert witnesses at court trials, arbitration hearings, and depositions, their time will be charged at \$250/hour. All time spent personnel preparing for such trials, hearings, and illitions, will be charged at the above standard rates.

marges for contract personnel under W-C supervision and using W-C facilities will be made according to the hourly rate corresponding to their classification.

A maximum of eight (8) hours travel time per day will be charged for travel within the continental United States.

Overtime (hours worked in excess of eight (8) hours per day) by exempt personnel will be charged at the above straight time hourly rate. Overtime by nonexempt personnel (classifications identified with an asterisk "*") will be charged at 1.3 times the above hourly rates.

Special project accounting reporting and financial services, including submission of invoice support documentation, will be charged at the rate of \$45 per hour.

W-C LABORATORY SERVICES

The charges for laboratory testing performed at W-C facilities are set forth in the Schedule of W-C Laboratory Testing Charges.

This fee schedule contains confidential business information and is not to be copied or distributed for any purpose other than the use intended in this contract or proposal.

Woodward-Clyde



1993 SCHEDULE OF FEES AND CHARGES

OTHER PROJECT CHARGES

Subcontracts and Equipment Rental

The cost of services subcontracted by W-C to others including, but not limited to, chemical analysis, test born specialty contractors, surveyors, consultants, and equipmental; e.g., backhoes, bulldozers, and test apparatus, enbe charged at cost plus 15%

Other Project Non-Salary Expenses

Other costs incurred by W-C, which are directly identifiable to the project, including, but not limited to: vehicle rental; subsistence; fares of public carriers; special supplies and/or equipment; fees and special project insurance; permits and licenses; shipping charges; tolls and parking; special drafting, stenographic, or printing supplies, including outside printing of photographs, photostats, blueprints, etc., will be charged at cost plus 15%

Communications

The cost of communications including telephone, telex, facsimile, courier services, postage, express mail and incidental copying costs will be charged at a flat rate of 3% of total gross labor charges.

Computers

The charge for use of in-house computers is as follows:

General Applications \$7.00/hr Specialized Applications \$25.00/hr

General applications include word processing, spreadsheets, and database management. Specialized applications include Computer Aided Design and Drafting (CADD), Geographic Information Systems (GIS), modeling applications and other similar technical computing.

In addition to the above, there will be a charge of \$5.00 cach for paper plot and \$15.00 each for mylar plot generated by the CADD and GIS systems.

Document Reproduction

In-house reproduction will be charged at \$0.10 per page for black and white, and \$1.25 per page for color.

Specialized Equipment

The use of specialized W-C equipment will be the fixed regal rates set forth in the Schedule of W-C Specialized Equipment Charges.

Vehicles and Mileage

owned vehicles used on project assignments will be charged at the following rental and mileage rates without markup.

	Rate			Rate/	
Vehicle Type	Hourly	Daily	Weekly	Monthly	Mile
Pickup Four Wheel Drive Van	\$6.00 \$8.00 \$10.00	\$35.00 \$45.00 \$60.00	\$175.00 \$225.00 \$300.00	\$700.00 \$1100.00 \$1200.00	\$0.45 \$0.45 \$ 0.45

Minimum charge is 4 hours.

PAYMENT AND INTEREST CHARGES

W-C shall submit progress invoices to Client in duplicate showing the services performed during the invoice period and the charges therefor.

Within thirty (30) days after receipt of an invoice, Client shall pay the full amount of the invoice; however, if Client objects to all or any portion of any invoice, it shall so notify W-C of the same within fifteen (15) days from date of receipt of invoice and shall pay that portion of the invoice not in dispute. The parties shall immediately make every effort to settle the disputed portion of the invoice. Client shall pay an additional charge of one and one-half percent (1-1/2%) per month for any payment made more than thirty (30) days after receipt of the invoice. The additional charge shall not apply to any disputed portion of any invoice resolved in favor of the Client.

Client shall reimburse W-C for any sales, use, and value added taxes that apply to the Services. Such reimbursement shall be in addition to the compensation due for services.

Any attorney's fees, court costs, and other related expenses incurred by W-C in collecting delinquent invoice amounts shall be paid by Client.

ATTACHMENT 2

SPECIAL CONTAMINATED WASTE AND CHEMICAL CONDITIONS

Client recognizes that, while necessary for investigations, commonly used exploration methods, such as drilling borings or excavating trenches, involve an inherent risk. These exploration methods may penetrate through an aquifer of contaminated fluid and serve as a connecting passageway between the contaminated aquifer and an uncontaminated aquifer or groundwater, inducing cross-contamination. While back-filling with grout or by other means, according to a state of practice design, is intended to provide a seal against such passageway, it is recognized that such a seal may be imperfect and that there is an inherent risk in drilling borings, excavating trenches or implementing other methods of exploration in connection with a contaminated site.

Client recognizes that the state of practice, particularly with respect to contaminated site and waste conditions, is changing and evolving. For example, the long-term effect of chemicals on soils or manufactured or constructed liner systems is not well-established or known at this time. While WCC is required to perform in reasonable accordance with the standards in effect at the time the Services are performed, it is recognized that those standards may subsequently change because of improvements in the state of practice.

Client recognizes that projects, such as contaminated waste sites and sanitary landfill sites, may not perform as anticipated by Client, even if the Services are performed in accordance with the level of care and skill ordinarily exercised by other professional consultants under similar circumstances. It is also recognized that a satisfactorily designed, constructed and maintained monitoring system may assist in the early detection of environmental changes. Unless it is specifically included in the Services, WCC shall not perform such monitoring.

It is recognized that certain of the governmental regulations relating to hazardous waste sites purport to require achievement of results which cannot be accomplished in an absolute sense (e.g., the construction of entirely impermeable liners). WCC shall be obligated to use due professional care to comply with the regulations but does not guarantee results.

On projects relating to efforts to ascertain the presence or absence of hazardous substances or underground tanks, the level of effort may range from very limited observation and inquiry to extensive investigation and testing. The level of uncertainty with respect to opinions reached on such projects will vary, depending on the extent of the investigation, but some level of uncertainty will exist in every project.

LFTM-CON 5/87

TCC'S SERVICES

ADDENDUM NO. ______

In accordance "Client"), and Work the Scope of Service Import as:	ce with the Agreement for Professional Services betwe odward-Clyde Consultants (hereinafter "WCC"), dated rices, Estimated Time Schedule, Estimated Charges, a	en <u>Don-Sul. Inc.</u> (hereinafter <u>August 31, 1993</u> , this Addendum describes and Payment Conditions for WCC's services on the Project
	Arrow Reptals Remed	at inn
Client Authorized Representative:	RITA 11 SULLIA	
Address	187 NORTH L STREE	/
	LIVERMORE LA 9450	(V)
Telephone No:	510 - 455-1900	
WCC Authorized Representative:	Ron Derammelaere, P.E.	
Address:	500 12th Street, Suite 100	
	Oakland, California 94607-4014	
Telephone No:	(510) 874-3149	
1616bious 140:	(310) 674 3212	
Authorized Repre		Dages attached to this Addendum and initialed by the
and initialed by time schedules as	the Authorized Representatives. Decause of the olice re only estimated schedules which are subject to revision	e set forth on a separate page attached to this Addendum ertainties inherent in the services contemplated hereunder, on unless specifically described as otherwise herein.
of Fees and Char	ges shall be attached to this Addendum and initiated by	is shall be on a "time and materials" basis and shall be in time the services are performed. WCC's current Schedule by the Authorized Representatives.
pages attached to be modified shall	to this Addendum and signed on the last page by the A libe specifically referenced in the modification, and the control of the	nt referenced above shall apply to this Addendum except to y such modification, the modification shall be set forth on uthorized Representatives; the Article of the Agreement to me modification shall be precisely described.
Acceptanc	e of the terms of this Addendum is acknowledged by th	e following signatures of the Authorized Representatives.
7.ccc passic		
APPROVAL AN	D ACCEPTANCE:	
CLIENT	2	wcc Y
(01	7	Manualan
Signature	m. Jule.	Signature
~	P/2	
KITA	M. Ducker	Ron Derammelaere, P.E. Typed Name
Typed Name		Manager, Waste Management Operations
VICE	PRESIDENT	Vice President
Title		Title
1	0 100	0114193
Date of Signa	ture	Date of Signature

ATTACHMENT TO ADDENDUM I AGREEMENT 93C0276A, DATED AUGUST 31, 1993 ARROW RENTALS REMEDIATION

SCOL

The following is our approach to address the scope of work included in Arrow Rentals' RFP dated June 28, 1993. A more detailed description of our proposed scope of services is contained in our proposal dated July 28, 1993.

The RFP specified that soil and groundwater at the Arrow Rentals property located at 187 North L Street, Livermore, CA, containing petroleum hydrocarbons be remediated using dual vacuum extraction (DVE). Eleven dual vacuum extraction wells and two induction wells were to be used for the remediation. The equipment was specified to consist of the following:

- 3 Six-inch DVE wells, 55-feet deep, with downhole pumps (electrically powered) capable of pumping 8-gallons per minute (gpm) of water
- 8 Four-inch DVE wells, 45-feet deep, with entrainment pipes*
- 2 Two-inch induction wells
- A blower capable of producing 500 standard cubic feet per minute (SCFM) at 12 inches Hg vacuum.
- · A 500 SCFM catalytic oxidizer
- A 150-gallon air/water separator
- · All piping shall be sized such as not to inhibit the above flow rates.

Exact equipment and sizing will be determine the pilot testing.

Our general approach to meeting the project objectives is to develop a technically feasible and economically advantageous program for accomplishing site remediation, and to present the plans clearly and concisely to all the parties as to facilitate the understanding and approval. A full description of each of the tasks is given below.

Task 1 Preparation of CAP

Woodward-Clyde will prepare a CAP suitable for submission to the Alameda County Department of Environmental Health. This document will describe the workplan as agreed upon and will comply with requirements of the Regional Water Quality Control Board, Tri-Regional Board Staff's Recommendations for Preliminary Investigation and Evaluation of Underground Tank Sites, Appendix A, 30 August 1991.

Task 2 Permitting

It is expected that the vapor extraction and treatment portion of the system proposed will operate under a permit from the Bay Area Air Quality Management District (BAAQMD), and the proposed groundwater recovery and treatment portion of the system will discharge to the City of Livermore sewage treatment system, which will also require a permit. As a part of this task, Woodward-Clyde will prepare required permit applications and pay the permit fees for both the BAAQMD and City of Livermore.

Task 3 Pilot Tests

Vapor Extraction Pilot Test

Prior to designing the system, a pilot test will be conducted to characterize vapor extraction well performance and assess the feasibility of vadose zone remediation by soil vapor extraction.

WCC will use a mobile testing unit for the VES pilot test including a blower, power source, water knockout tank, vapor sampling port and vacuum gage. Generally extracted vapors will be passed through a drum of granular activated carbon (GAC) for emissions control before discharge to the atmosphere. Induced vacuum at existing monitoring well locations or soil

vapor probes will be monitored during the test to estimate the effective zone of influence of the extraction well. Extracted vapors will be analyzed in the field, using portable monitoring instruments and color reactive tubes, and with laboratory confirmation.

Pump Test

A constant-rate discharge aquifer pump test will be conducted to estimate hydraulic properties. Pumping will be performed in one existing well and water levels will be monitored in other existing monitoring wells. It is assumed that during the test, extracted groundwater will be treated for TPH using a portable carbon absorption treatment unit. Following treatment the water will be discharged to the sanitary sewer.

Following the field testing, aquifer data will be analyzed using the methods of Theis (1935), Cooper-Jacob (1946), or another appropriate and accepted pumping test analysis method.

Task 4 System Design

The results of the pilots tests will be used to finalize the system design, including number and spacing of wells and equipment selection. Detailed plans and specifications will be required to obtain permits and construct the system. WCC proposes to prepare these design plans and specifications which can be used for the manufacture and installation of the DVE and groundwater and vapor treatment systems. A draft of the design document will be submitted to Arrow Rentals for review prior to finalizing the design.

Task 5 System Installation and Startup

Installation of the soil/groundwater remediation system will consist of installing new wells, providing and installing the extraction and treatment equipment, installing appropriate piping and controls, and providing startup.

WCC and our subcontractors will procure the major system equipment specified in the design document.

It is assumed in the cost estimate that one soil sample from each of the new wells will be analyzed by modified EPA method 8015 for detection of petroleum hydrocarbons. Further analysis may be performed as requested by the regulatory agencies.

Excavated material will be stored on-site at a location to be approved by Arrow Rentals until it is decided whether or not the material may be returned to the excavation or if it requires treatment and/or disposal. Disposal of contaminated soil is not included in the cost estimate.

Upon completion of system installation, WCC will inspect the final installation and will notify the relevant regulatory agencies and the client as to the start-up date. WCC will arrange for initial inspection and sampling to be performed in accordance with any permit conditions.

Startup of the system will consist primarily of monitoring the system during the first days of operation. A maximum startup duration of one week has been assumed for the cost estimate. BAAQMD requirements for startup vary by site and may alter this cost. One analysis of the treated water for 13 metals by EPA 6010/7000 will be required by the Livermore Sewage Treatment Plant.

Task 6 Operation and Maintenance (Including System Monitoring)

After the initial startup period, the extraction and treatment systems will be checked by WCC on a weekly basis to verify proper operation and to perform any required maintenance. Because reporting and the majority of the laboratory analyses will likely be required only quarterly, costs have been estimated on a quarterly basis.

The remediation system will likely be operated under a Bay Area Air Quality Management District (BAAQMD) Authority to Construct/Permit to Operate and a water discharge permit issued by the City of Livermore Sewage Treatment Plant. These permits will largely determine the frequency of monitoring and level of reporting required for the system. Please note that BAAQMD requirements do vary by site and may alter this cost.

VES Monitoring

Field monitoring of the vapor treatment system will be performed by WCC using portable field instruments such as a photoionization detector (PID) and/or a flame ionization detector (FID).

We will perform quarterly sampling and laboratory analysis of the extracted vapors for TPH(g), BTEX, and atmospheric gases (oxygen, carbon dioxide and nitrogen).

Groundwater Remediation System Monitoring

Monitoring of the groundwater treatment system will be performed in accordance with the schedule established in the sewage discharge permit. The effluent of the treatment system will be sampled and analyzed quarterly for TPH(g) by modified EPA 8015 and BTEX by EPA 8020.

Task 7 Groundwater Quarterly Monitoring Program

It is assumed that the Alameda County Department of Environmental Health will require quarterly groundwater monitoring of existing monitoring wells which are not being used as extraction wells during the operation of the groundwater remediation system. It is assumed that 5 existing onsite groundwater monitoring wells will be included in this program. Groundwater will be analyzed at a state-certified laboratory for TPH(g) and BTEX. The quarterly groundwater monitoring analytical laboratory test results will be submitted to the Alameda County Department of Environmental Health and the RWQCB in the form of a letter report. Purged water will be run through the treatment system.

Task 8 Closure Sampling

For closure, we have assumed that four our borings will be required to confirm soil remediation. Each boring will be drilled with a truck mounted drill rig approximately 40 feet to the groundwater table, with 6 soil samples each boring. Each soil sample will be analyzed for TPH and BTEX.

We anticipate that for closure and shut down of the groundwater remediation system, a short closure report would be prepared. This report would summarize the results of groundwater

treatment and monitoring request approval for shut-down and closure. This task will be more fully defined as the project nears completion.

Task 9 Post-Closure Monitoring

It is assumed that the Alameda County Department of Environmental Health will require a quarterly groundwater monitoring program to be performed for up to two years following the shut down of the groundwater remediation system. For cost estimating purposes, we have assumed that five existing groundwater monitoring wells associated with the site will be included in this program. Groundwater will be analyzed at a state-certified laboratory for TPH(g) and BTEX. A quarterly groundwater monitoring letter report presenting the analytical laboratory test results will be prepared for submittal to the lead regulatory agency. This task will be more fully defined when the project nears completion.

COST ESTIMATE

Woodward-Clyde will perform the work on a time and materials basis in accordance with our current Schedule of Charges. Our 1993 Schedule of Charges is included as Attachment 1 to this contract. Woodward-Clyde estimates that the total cost for Task 1 through 6 will be approximately \$331,727. For cost estimating purposes, we have assumed that the remediation system will be in operation for one year. For one year of operation followed by two years of post-closure monitoring, Woodward-Clyde estimates that the total cost for operation, maintenance and monitoring will be approximately \$101,400. It is expected that the monthly operating costs will decrease as remediation progresses, which would reduce the total cost for operation and maintenance. These cost estimates are based on the following assumptions:

- Costs are based on the work scope descriptions and assumptions provided in Arrow Rentals' Request for Proposals and in Section 2.0 of this proposal, as well as the terms and conditions contained in Woodward-Clyde's Agreement for services.
- Cost estimates are based on our 1993 Schedule of Charges, estimates provided by vendors, and our experience on similar projects. Actual subcontractor costs may vary, and cannot be finalized until the final design has been approved by regulators and bids obtained.

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- The cost estimates are based on the assumption that the contamination of concern at this site is limited to petroleum related products, and that the types, extent and locations of the contamination are not significantly different than what have been identified by previous investigations. No provision is included for remediating offsite contamination.
- The cost estimate for operation of the groundwater treatment portion of the system
 is based on the assumption that all extracted groundwater will be treated with
 granulated activated carbon and then discharged to the nearby sewer for disposal.
 Estimates of permit fees and discharge fees charged by the City of Livermore have
 been included, but actual fees will depend on the volume of water recovered.
- The cost estimate for operation of the system is based on the assumption that a catalytic oxidation system will be required for air emissions control. A nominal amount of supplemental fuel (natural gas) will be required for the operation during the latter part of the operational period. It is also probable that the oxidation system will be replaced with a carbon treatment system towards the end of the period, but actual fuel or carbon usage is impossible to predict at this time and costs have not been included.
- · The cost estimate assumes that no planning department review will be required.
- The cost estimate is based on the assumption that 3 phase electrical power will not be needed and natural gas is available onsite.
- Because electricity will likely be paid for directly by Arrow Rentals, the electricity costs to operate the system have not been included.

It must be recognized that all of the estimates are based on our present best estimates of levels of effort required and presently unverified assumptions concerning the specifications and performance for the remedial systems to be installed and operated.

SCHEDULE

Following is an estimated schedule for completion of the project. After being given the notice to proceed by Don-Sul, Inc., preparation of the CAP will take approximately 2 weeks. After approval of the CAP by the regulatory agencies, pilot testing will being. Approximately one month will be required for these tests and their analyses. System design will then take approximately one month. Following approval of the final design by all involved parties, equipment purchase and installation will commence. We estimate that well and equipment installation may take approximately 2 months. Although it is impossible to predict cleanup duration, for purposes of this proposal, we estimate the system may be in operation for one year, followed by two years of post-closure monitoring.

Client Initials Rs
Date 9-3-93

WCC Initials

ADDENDUM NO. 2 TO PROFESSIONAL SERVICES AGREEMENT Don-Sul Inc./Woodward-Clyde Consultants August 31, 1993

This addendum is made concurrently with execution of the Agreement between Woodward-Clyde and Don Sul with the stated date of August 31, 1993 and is made part of that agreement.

- 1. Letter of Commitment. Don Sul has been tentatively approved for funding of the clean up which is the subject of this agreement by the State of California Underground Storage Tank Cleanup Fund (UST Fund). In the absence of funding from the UST Fund, Don Sul would lack the resources to pay its obligations under this agreement. Thus, the notice to proceed will not be issued until such time as the UST Fund issues its final letter of commitment approving this cleanup.
- 2. Change Orders. The UST Fund generally will recognize change orders caused by uncertainties inherent in the cleanup process but will reject change orders which it determines are caused by negligence or incompetence of the cleanup contractor. In order to assure that Don Sul is not put into the position of having to pay for any unfunded change orders or project costs ("additional work"), Woodward-Clyde will notify Don Sul prior to undertaking additional work in excess of the amounts specified in its bid. Don Sul must approve any additional work in writing before additional work may commence. Don Sul may consult with UST Fund officials regarding any additional work. Don Sul will work quickly to obtain and provide written approval regarding additional work and will not unreasonably withold its consent.
- 3. Payment Schedule. Within three days of receipt of each invoice from Woodward-Clyde, Don Sul will complete all necessary paperwork and submit the invoice for payment to the UST Fund. Within three days of reciept of payment by the UST Fund (if payment is made through Don Sul), Don Sul will make payment of funds received for work performed by Woodward-Clyde. If acceptable to the UST Fund, Don Sul will cause checks to be made out payable to "Don Sul Inc. and Woodward-Clyde Consultants", when appropriate.

- 4. Business Operations. Woodward-Clyde understands that Don Sul must conduct ongoing operation of a rental business on the premises where the cleanup will be taking place. To the extent feasible, Woodward-Clyde will conduct the cleanup in a manner which minimizes disruption to the operation of the rental business.
- 5. Separate Meter. Although the Attachment to Addendum 1 provides that Don Sul will be responsible for electricity costs associated with the clean up, Woodward-Clyde will be responsibe for arranging the installation of a separate meter (to be billed to Don Sul separately from the rental business electrical bill) so power costs can be accurately documented to the UST Fund.

Don Sul Initials RS
Date 9-3-93

WCC Initials

Date