

July 27, 1998

THE SAN JOAQUIN COMPANY INC.
8617 ETCHEVERRY DRIVE, TRACY, CALIFORNIA 95376

Alameda County Health Care Services
Environmental Health Services
Environmental Protection (LOP)
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
Attention: Mr. Larry Seto

Subject: Former East Bay Packing Site 208 Jackson Street, Oakland, California

Dear Mr. Seto:

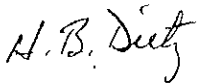
SNK Development Inc. has purchased the property formerly owned by Mr. Tsu Ming Chen doing business as Wo Lee Foods located at 208 Jackson Street, Oakland, California. This property was purchased in July of 1998 for redevelopment.

SNK Development Inc. has contracted with The San Joaquin Company, Inc. for preparation of a Remediation Plan which was provided to you in early July of 1998. The purpose for preparation of the new plan was to more closely meet the needs for redevelopment of the property at 208 Jackson Street and the nearby area. This plan involves the removal of surface obstacles to permit excavation of the soil which is the source of the hydrocarbon affecting the groundwater at the south-west corner of the site which was the location of four previously installed underground gasoline and diesel storage tanks. Following the removal of the source of hydrocarbons affecting the groundwater SNK wishes to close the site at the earliest possible date.

The Remediation Plan prepared by The San Joaquin Company, Inc. for this site dated June, 1998 supersedes all prior plans prepared by the prior owner, Mr. Chen. SNK has authorized remediation to begin at the earliest possible date.

If you have any questions please contact myself or Mr. Scott Johnson of SNK Development Inc. located at 185 Berry Street, Suite 1200, San Francisco, California. He can be reached at (415) 896-1186.

Sincerely yours,



H. B. Dietz

HBD/gwd

cc: Scott Johnson, SNK Development Inc.

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ENVIRONMENTAL
PROTECTION

94107

THE SAN JOAQUIN COMPANY INC.
1400 Solano Avenue, Suite 12, Albany, CA 94706-2149

MEMORANDUM

From **Dai Watkins**
The San Joaquin Company Inc

To **Bernie Dietz**
Dietz Irrigation

Date **July 27, 1998**

Project No 9401 112 (SNK Development Inc)

Subject **Treatment of Hydrocarbon-affected Soil at Wo Lee Foods Company,
208 Jackson Street, Oakland, California**

Following are work element procedure notes for the treatment of soil affected by components of gasoline and diesel that will be excavated from the area around the former sites of underground storage tanks in the southern corner of the former Wo Lee Foods Company property at 208 Street Oakland. The subsurface area to be excavated is within the site boundary near the intersection of Second and Madison Street.

Stage A: EXCAVATION OF AFFECTED SOIL FROM THE SUBSURFACE

- 1 Demolish metal-frame building at intersection of Second and Madison Streets
- 2 Break up concrete paving covering the entire area of the subsurface that may be affected by hydrocarbons and dispose off site (Note: Retain as much concrete paving as is practicable to provide a large area for aeration and bioremediation of excavated soil.)
- 3 Excavate hydrocarbon-affected soil and clean overburden from subsurface according to the cleanup criteria established in the Remediation Plan.
- 4 Segregate clean overburden soil from hydrocarbon-affected soil in separate stockpiles placed on remaining concrete paving at distance from the remedial excavation (Note: The soil to be treated will include the existing stockpile of hydrocarbon-affected soil that was removed from the southern corner of the site when the underground storage tanks formerly located there were removed.)

Stage B: SOIL TREATMENT BY AERATION

- 1 Divide the stockpile of contaminated soil into three parts and quarter each part to obtain a sample for analysis for TPH(g), TPH(d) and BTEX.
- 2 Review sample analyses to determine maximum permissible daily volume of hydrocarbon-affected soil that can be removed from stockpile while complying with San Francisco Bay Area Air Quality Management District (SFBAQMD) regulations
- 3 Also use results of analyses of stockpiled soil to estimate number of samples from each spread of treated soil that will be needed to provide a statistically meaningful measure of components of hydrocarbon fuels remaining in the treated soil, according to the procedure presented in: United States Environmental Protection Agency (1989): *Methods of Evaluating the Attainment of Cleanup Standards*. Vol 1 Soils and Solid Media. Report No EPA 230/02-89-042 February 1989
- 4 Notify SFBAQMB that treatment of soil by aeration is scheduled to begin and submit aeration permit documents, if such are required based on results of analyses of soil from stockpile
- 5 Excavate hydrocarbon-affected soil from stockpile in daily batches so as to comply with limits set by SFBAQMG regulation and spread over concrete-paved yard to a depth of 9 in to 12 in Use loader and agricultural tractor equipped with a rototiller to thoroughly mix and spread soil through its full thickness Add batches taken from the stockpile to the soil-spread, refilling the spread as each batch is added
- 6 Locate soil-spreads and, as necessary, straw bales to contain any precipitation seeping from the soil spread, diverting it from the open remedial excavation
- 7 Aerate the spread soil by daily rototilling and periodic re-stockpiling and spreading using a loader Spread soil should be rototilled at least twice per day when remediation site is otherwise active If a period of aeration beyond the time required to perform other elements of the remediation program is necessary (this is *not* expected to be the case), the spread soil should be rototilled at least twice weekly
- 8 When no olfactory indicators of components of gasoline, or other short-chain hydrocarbons can be detected, treatment by aeration will be complete, at which time the spread soil should be sampled for TPH(g), TPH(d) and BTEX, according to the protocol described in work element B(2) above, to determine the concentrations of hydrocarbons remaining in the material. If the measured concentrations of TPH(g) and BTEX meet the cleanup standards established for those analytes in the Remediation Plan, Stage B (Soil Aeration) of the

treatment program is complete. If not, aeration of the spread soil by rototilling and turning with a loader should be continued until the cleanup criteria for those analytes have been met

Stage C: EVALUATION OF AERATED SOIL

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- 1 If the remaining concentrations of TPH(d) in the spread soil are sufficiently low to meet the cleanup criteria, the treated soil will be returned to the remedial excavation as compacted fill. Any excess will be stockpiled on site to be incorporated into the earthwork required for redevelopment of the site
- 2 If additional treatment is required to achieve the established cleanup criteria, treatment of the spread soil by natural bioremediation will be initiated
- 3 Alternately, if following aeration, the remaining concentration of TPH in the soil is sufficiently low to meet the requirements set by the California Regional Water Quality Control Board - San Francisco Bay Area Region (RWQCB) for a specified local land fill, and such disposal is called for by the owner's redevelopment schedule, the aerated soil will be trucked off-site for disposal to such permitted facility

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Stage D: BIOREMEDIATION OF SOIL

Note: *Bioremediation of the aerated soil will be land farming. The activity of the native biota in the soil to be treated will be stimulated by providing access to oxygen (by tilling the spread soil) and nutrients in the form of common agricultural fertilizers (biostimulation). An inoculum of cultured biota will not be used.*

If, although it is considered unlikely, the native biota are insufficient in number or activity to provide the desired conversion of hydrocarbons to carbon dioxide and water in a timely manner, it will be possible to treat the spread soil with an inoculum of imported biota if it is determined that such additional treatment would significantly reduce the time required to meet the cleanup criteria or the acceptable concentration of TPH that would permit disposal of the soil as a special waste at a permitted local landfill

If it is determined from the contaminant analyses and evaluation of schedule and economic tradeoffs described under work elements C(1) and C(3) that bioremediation of the aerated soil should proceed, the following work elements will be required

- 1 Broadcast a mixture of agricultural fertilizers containing nitrogen and phosphorus over the entire spread of soil to be treated at a rate of one pound per square yard. This fertilizer mix should contain nutrients in the approximate ratios Phosphorus 2: Potassium 0: Nitrogen 10. Standard formulations of agricultural fertilizers are not usually available with these nutrient ratios but appropriate mixtures can be obtained by adding ammonium sulfate to

commercially available mixes. The potassium content of the mixture applied to the spread soil should be held to the minimum practicable concentration.

- 2 Thoroughly rototill the fertilizer into the spread soil.
- 3 Construct an array of removable, minimal discharge irrigation spray nozzles to provide for complete coverage of the soil spread. The irrigation array will be supplied from on-site water.
- 4 Adjust the irrigation flow rate and timing to maintain soil moisture content between 20% and 60% of saturation.
- 5 The soil should be analyzed for nitrogen, phosphorus content and pH.
- 6 Notes
 - The preferred pH of the soil is slightly alkaline at 7.0 to 7.5. If the pH varies significantly from this range, it should be cautiously adjusted by addition of judicious quantities of hydrated lime or an acid balance product.
 - The nitrogen content of the soil should be maintained in excess of 50 ppm (parts per million) at all times, the concentration of phosphorus should be above 10 ppm.
- 7 Remove the irrigation system from the soil spread and broadcast additional fertilizer at the rate of 1 lb per square yard, or at such other rate as is indicated by the results of the soil tests performed under work element D(5) above.
- 8 Thoroughly rototill the soil spread, replace the irrigation system and set it in operation.
- 9 When visual and olfactory indicators are such that all remnants of hydrocarbon fuels appear to have been removed from the bioremediated soil, or a maximum of fourteen days have elapsed since the irrigation system was reinstalled over the soil spread, sample the soil for TPH(d) and BTEX according to the protocol described in work element B(1) above.
- 10 Evaluate the results from the analyses performed in work-element D(9) to determine if traces of components of hydrocarbon fuels in the soil are less than the cleanup standard established in the remediation plan. If they are, bioremediation is complete. If not, work elements D(6) through D(9) should be repeated until the cleanup criteria are met or an evaluation of the redevelopment schedule and budget indicates that off site disposal of the soil at a local landfill as a special waste would be advantageous.

Stage E: DISPOSITION OF EXCAVATED SOIL

- 1 Clean overburden soil and treated soil meeting the cleanup criteria can be stockpiled on site and incorporated into the earthworks required for the proposed redevelopment of the property. If there is an excess of soil, an appropriate quantity will be disposed, as applicable, as clean fill or as a special waste. If off-site disposal is advisable to provide sufficient room for timely treatment of the hydrocarbon-affected soil or to reduce an excess stockpile, all clean overburden soil may be removed from the site according to the remediation contractor's convenience.
- 2 If treated soil is to be disposed off-site, it shall not be transported until the applicable tests have been performed and it has been accepted for receipt at a pre-selected and permitted landfill.

THE SAN JOAQUIN COMPANY INC.
8617 ETCHIVERRY DRIVE, TRACY, CALIFORNIA 95376

June 9, 1998

City of Oakland
Fire Department
Office of Emergency Services Division
505 14th Street, 7th Floor
Oakland, CA 94612
Attention: Mr. LeRoy Griffin

Subject: Remediation of Soil at 208 Jackson Street, Oakland, California

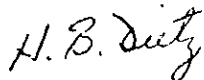
Dear Mr. Griffin:

SNK Development Inc is purchasing the property at 208 Jackson Street to develop into a multi-story office building. In 1990 four underground petroleum storage tanks were removed from the site. At least two of the previously removed tanks had leaked impacting the soil and groundwater on the site. SNK wishes to remediate the soil prior to the start of construction.

We met at the site in April of 1998 to discuss the proposed remediation of the site prior to the start of construction. Attached is the Remediation Plan for soil remediation of the site submitted for your approval. Included with this plan is a Site Specific Health and Safety Plan and the Health and Safety Plan which will be utilized during the remediation. It is desired to start the work July 1, 1998.

Your approval of this plan is requested. Please contact me if you wish to discuss details of this plan further.

Sincerely yours,



H. B. Dietz

HBD/gwd

THE SAN JOAQUIN COMPANY INC.
8617 ETCHEVERRY DRIVE, TRACY, CALIFORNIA 95376

STATEMENT OF QUALIFICATIONS

Organization

The San Joaquin Company Inc is a California Corporation with principal offices in Tracy and Albany, California. It provides professional engineering, planning, regulatory compliance and associated services to clients in industry, agriculture and commerce. Our Principals and engineering personnel hold professional licenses to practice in California, Nevada, Texas, Georgia and other jurisdictions of the United States and in the European Union.

Mission and Scope of Service

The mission of The San Joaquin Company Inc is to provide practical and cost-effective solutions to our clients' needs by application of sound engineering principles. We offer a comprehensive, multidisciplinary service that includes:

- Strategic planning, engineering and design for development and modernization of agricultural and industrial facilities and infrastructure
- Turnkey project management and construction services
- Irrigation and drainage system design and construction supervision
- Feasibility studies, engineering, project management and support services for construction of facilities subject to regulatory compliance requirements
- Multi-disciplinary pre-commitment screenings for agricultural, commercial and industrial property; Environmental site assessments
- Management and technical direction of multidisciplinary teams for risk assessment, and loss control. Settlement negotiation and litigation support
- Design and permitting of waste management systems for manufacturing, agriculture and mining
- Remediation design and engineering for sites affected by hazardous and regulated wastes. Regulatory and third-party liaison
- First response engineering for hazardous materials and waste releases
- Technical and managerial direction of turnkey contracts for rehabilitation and remediation of agricultural, industrial and commercial property

Turnkey Services

We can serve as a single source for a complete package of planning, technical and project management services or provide specialized support for a specific project. To support clients who desire turnkey design and construction services, we have established a close working relationship with Dietz Irrigation, a Class A General Engineering Contractor with Hazardous Waste Operations certification, that provides heavy construction services including specialized services for soil and groundwater remediation, waste treatment, and drainage and irrigation system construction. We also assemble, manage and direct multi-disciplinary teams of engineers, scientists, technicians, industry specialists, cost accountants and legal professionals for comprehensive management reviews, feasibility studies and forensic investigations.

Planning and Engineering for Quality of the Completed Project

The San Joaquin Company is dedicated to the principle of quality of the completed project. Achievement of this goal requires excellence in the execution of each technical element of the project scope, but, more importantly, careful integration of the multidisciplinary components so as to ensure that the results of the planning and engineering effort will result in a constructed project or environmental restoration program that cost-effectively serves its intended purpose.

Quality in the completed project demands that the management and execution of each project is directed by professionals with the necessary technical qualifications in each of the engineering disciplines involved, who are cognizant of issues of importance to strategic, economic and business planning, are familiar with regulatory requirements, and have experience with a broad range of construction practices. To ensure that these requirements are met, we assign a principal of the company to be in responsible charge of each of our projects.

For any project, regardless of size or type, but particularly for geotechnical engineering, environmental assessment, or other work requiring evaluation of subsurface conditions or construction in earth materials, an important element of the quality assurance process is the need for direct observation of field conditions by experienced and qualified engineers. An important element of the San Joaquin Company's service to our clients is to have our senior staff available in the field at any time critical observations or technical decisions are required.

Company Principals

The San Joaquin Company was founded and organized by Bernie Dietz and Dai Watkins, each of whom have over thirty years experience in engineering, construction and environmental restoration.

Dr. Watkins has advanced degrees in Civil and Geotechnical Engineering from major universities. These include a Doctorate of Philosophy in Geotechnical Engineering awarded by the University of California at Berkeley. He is a registered Civil Engineer, Geotechnical Engineer and Environmental Assessor in California and holds licenses to practice professional engineering in Texas, Georgia, Great

Britain and the European Union. He has extensive experience in general and project management, contract negotiation, engineering design and research, forensic analysis and expert testimony in both the public and private sectors. His career has developed from a craft apprenticeship to full charge of multidisciplinary projects and corporate executive responsibility. His technical specialties include toxic and nuclear waste management, environmental restoration, and geotechnical engineering, as well as a broad knowledge of multidisciplinary engineering practice for public works and specialized applications. He is the author of more than twenty published technical papers and books and has been the invited speaker and panelist at numerous technical conferences.

Mr. Dietz was awarded a Bachelor of Science degree in Chemical Engineering by the University of Southern California and has done graduate work in nuclear engineering. He holds a Class A General Engineering Contractor's license (with Hazardous Waste Operations endorsement) and is a Registered Environmental Assessor in California. He is a General Engineering Contractor license qualifier in Nevada. Mr. Dietz has broad technical and management experience in nuclear engineering, engineering for agriculture and in hazardous waste management. This includes the management and technical direction of very large, multidisciplinary turnkey projects staffed by several hundred engineers with associated support staff. He has been responsible for such projects as the underground investigations for the Basalt Waste Isolation Project at the Hanford, Washington nuclear reservation and many other major environmental projects involving site assessments, evaluation and implementation of remedial action programs, construction of environmental protection facilities, and other engineering construction.

Dr. Watkins' and Mr. Dietz's resumes are attached.

Equipment and Support Services

We maintain a comprehensive range of engineering instruments, sampling tools and ancillary equipment and have invested in state of the art computer equipment. Additional specialized instrumentation and support services that may be needed to meet project-specific requirements can be supplied by our established vendors. We procure analytical services from a pre-selected list of laboratories, each of which is certified by the California Environmental Protection Agency. We procure geotechnical drilling and well-installation services from a select list of contractors.

To provide an adequate capability to support large-scale subsurface investigations and other in-situ assessment programs, we have arranged with Dietz Irrigation for priority allocation of a wide range of construction equipment. Equipment available includes pumps, air compressors, steam cleaners, welding equipment, fork lifts, backhoes, trenching machines, front-loaders, bulldozers and large excavators.

PROFESSIONAL RESUME

D. J. WATKINS

EDUCATION

Ph.D. (1974) Geotechnical Engineering: University of California at Berkeley.
M.Eng. (1971) Civil Engineering: University of California at Berkeley.
D.I.C. (1969) Soil Mechanics Imperial College of Science and Technology.
M.Sc. (1969) Civil Engineering. University of London
B.Sc. (Hons) (1968) Civil Engineering. Polytechnic of Wales.

PROFESSIONAL REGISTRATION

Professional Engineer:	California, Texas, Georgia, Washington, Nevada
Geotechnical Engineer	California
Chartered Engineer	Great Britain
European Engineer	European Union
Registered Environmental Assessor:	California
29 CFR 1910 120 Supervisor's Certificate	U.S OSHA

SUMMARY OF EXPERIENCE

Management/Financial: President and founding Principal of The San Joaquin Company Inc Previously at International Technology Corporation, managed technical department and hired staff to expand company's ability to respond to a changing market. Advised clients on economics of sale, purchase, and rehabilitation of sites affected by hazardous wastes At the On-Site Treatment Corporation, provided in-house consultant services for design of accounting, financial and project management reporting systems in a venture capital environment. At the MARK Group, directed technical departments, prepared bids, procured subcontracts, equipment and materials and negotiated contracts for remediation services with government and private clients. Managed operations at Serata Geomechanics, including consulting services and geotechnical instrument design and manufacture Negotiated patent licenses and international joint ventures. As an independent consultant, reorganized financial, tax and computer program licensing policies for engineering firm. At Lawrence Berkeley Laboratory managed world's largest triaxial testing facility, and oversaw funding, personnel and scheduling functions.

Environmental Engineering: At I.T., The MARK Group and The On-Site Treatment Corporation, directed investigations and remediation of sites affected by toxic and radioactive wastes Designed closures of landfills and surface impoundments, NPDES and TPOS discharges Supervised construction of environmental protection facilities including construction of retention ponds, waste vaults, and double-walled piping systems with electronic leak detection systems Applied groundwater recovery and treatment closure agreements according to SARA, CERCLA and California Title 22 and Title 23 requirements

Nuclear Waste Disposal: Principal Investigator at Lawrence Berkeley Laboratory for geotechnical, hydrogeologic, hydrothermal, instrumentation and repository design studies in support of the Basalt Waste Isolation Project. Advised Nuclear Regulatory Commission during development of regulations for disposal of nuclear waste.

Mining: Geotechnical consultant with Serata Geomechanics, Inc for deep mines in evaporitic and hard rock and storage cavities for petrochemicals. Developed and applied new mining methods for mines in North America, Japan and Europe. At the University of California, evaluated feasibility of nuclear excavation technology.

Offshore Engineering: Project engineering in marine geotechnology with McClelland Engineers Inc. Lead multidisciplinary geologic, geophysical and geotechnical studies of stability of continental shelf at site of world-record depth oil platform. Developed innovative methods for evaluation of effects of hurricanes on sea floor sediments.

Public Works: Broad experience in municipal engineering with the County Borough of Newport. Projects included landfills, river diversions, highways, sewerage, traffic engineering, street lighting, housing development and urban planning.

Research/Teaching: Doctoral research in wave propagation in layered media at the University of California at Berkeley, including development of finite element methods. Teaching assistant for graduate program in soil mechanics. At LBL researched flow through fractured rock, hydrothermal phenomena and rock mechanics. Member of U.S. Department of Energy research policy committee.

Expert Testimony: Expert witness for litigation involving foundation failure, release of hazardous materials, and loss of containment of waste disposal facilities. Prepared testimony for U.S. Congress. Provided key testimony in litigation related to mine flooding settled in client's favor for \$28 million.

Publications: Author of more than twenty published technical papers and books. Invited speaker and panelist at numerous technical conferences.

PROFESSIONAL AFFILIATIONS

Member	American Society of Civil Engineers
Member	Institution of Civil Engineers
Fellow	Geological Society
Member	International Society for Soil Mechanics and Foundation Engineering
Member	International Society for Rock Mechanics

PROFESSIONAL RESUME

H. B. DIETZ

EDUCATION

B.S. (1962), Chemical Engineering: University of Southern California
Graduate Work (1963), Nuclear Engineering: Pierce College

PROFESSIONAL LICENSES

Class A General Engineering Contractor (with Hazardous Waste Operations Endorsement)	California
Registered Environmental Assessor	California
General Engineering Contractor License Qualifier	Nevada
29 CFR 1910.120 Supervisor's Certificate:	U.S. OSHA

SUMMARY OF EXPERIENCE

Management/Financial: Vice President and founding Principal of The San Joaquin Company Inc. Owner: Dietz Irrigation, a Class A General Engineering Contractor. Owner: Dietz Farms of Washington and California, a commercial producer of apples and other fruits. Previously: as General Manager, The MARK Group Construction Engineers Inc., established the company's capability and reputation in construction for environmental protection facilities and remedial action projects. As Director, Northwest Engineering Operations, International Technology Corporation, expanded a small engineering department into a major corporate profit center providing comprehensive regulatory compliance and environmental restoration services to large industrial and government clients throughout the northwestern United States. President, The OnSite Treatment Corporation, a venture capital-funded, hazardous waste treatment contractor. Over a twenty-year career with Rockwell International, held various management positions of increasing responsibility in engineering, quality assurance, procurement, material control, and construction.

Environmental Engineering: As reflected by the corporate executive and senior management positions he has held with companies specializing in environmental management and restoration, Mr. Dietz has extensive experience in environmental engineering. His technical specialties include project-specific technology evaluation for waste management and environmental restoration projects, management of turn-key remediation projects involving problem assessment, remediation design, cost control and regulatory compliance, and on-site treatment of hazardous wastes, and contaminated soil and groundwater. He has been successful in cleaning up and negotiating the legal closure of numerous sites affected by hazardous wastes and regulated materials subject to both Federal and California regulations.

Following is a list illustrative of some typical projects for which he has had responsibility

- Directed the feasibility study for remediation of the Hamilton Air Force Base Landfill, including in-person presentation of remediation plan to the Secretary of the Army.
- Managed a \$10 million, fast-track remediation project at Hamilton Air Force Base involving removal and disposal of major underground tank farms and on-site treatment of contaminated soil on a 300-acre site
- Directed construction for closure and capping of nine wastewater lagoons affected by explosives residues and other regulated substances at Lawrence Livermore National Laboratory.
- Directed remedial investigations and feasibility studies (RI/FS), engineering designs, preparation of closure and operating permit applications, technology selection and remedial construction for sites such as:
 - Major landfill - Contra Costa County, California
 - Truck manufacturing plant - Newark, California
 - High-rise building development - San Francisco Waterfront.
 - Tire manufacturing facility - Monterey County, California.
 - Oil refineries - Northern and Central California
 - Hydrocarbon-affected almond orchard - San Joaquin Valley, California
 - Packaging manufacturing facilities - several locations in the San Joaquin Valley, California.
- Directed on-site treatment of hazardous and regulated materials at numerous industrial facilities and waste sites by application of technologies appropriate to the project-specific conditions.

Nuclear Waste Disposal: Directed the underground investigations for the Basalt Waste Isolation Project, Hanford, Washington. The program required development of new methods of geotechnical testing, and construction of world-record scale drilling tools. The project management schedule identified 8,000 tasks of which some 1,000 were active at any given time. The project had an annual budget of \$60 million and a total cost of over \$300 million. Mr. Dietz's responsibilities included maintaining liaison with, and providing technical and management information to, United States Senators and Congressmen, senior officials of the Department of Energy, the Nuclear Regulatory Commission, international delegations, technical consultants and the national press.