



CH2MHILL

CH2M HILL
2485 Natomas Park Drive
Suite 600
Sacramento, CA 95833
Tel 916-920-0300
Fax 916-920-8463

September 26, 2008

Mr. Raoul Renaud
Hearing Officer
California Energy Commission
1516 9th Street
Sacramento, CA 95833

DOCKET

07-AFC-4

DATE SEP 26 2008

RECD. SEP 26 2008

**RE: Additional Documentary Evidence, Chula Vista Energy Upgrade Project
Docket No. 07-AFC-4**

Dear Mr. Renaud:

MMC Energy, Inc. files the attached additional documentary evidence for the Chula Vista Energy Upgrade Project (CVEUP) (Docket No. 07-AFC-4):

- Topographic map of the CVEUP project site, demonstrating that the project site is above the elevation of the 100-year floodplain
- Declaration and resume of Mr. Matthew Franck, expert witness on the topic of Land Use
- Resume of Mr. John Lowe, expert witness on the topic of Public Health

This additional evidence is being provided to the Committee, CEC Staff, and interveners Environmental Health Coalition and City of Chula Vista.

Sincerely,

Douglas M. Davy, Ph.D.
AFC Project Manager

c: Harry Scarborough, MMC Energy
Jane Luckhardt, DowneyBrand
CVEUP Service List

John A. Lowe

Certified Industrial Hygienist

Education

B.S., Environmental Toxicology, University of California, Davis, 1979

Professional Registrations

Certified Industrial Hygienist, Comprehensive Practices: American Board of Industrial Hygiene (1985, Certificate No. 3152)

Distinguishing Qualifications

Extensive experience in using risk assessment to make informed decisions about managing chemical and radiological hazards in the environment.

Relevant Experience

Mr. Lowe has 25 years of experience in assessing the potential for adverse health effects to workers and the general public associated with chemical contaminants or radionuclides in air, soil, and water. Mr. Lowe serves as task manager for preparing risk assessments used in environmental restoration and impact analyses for both commercial and government clients. Project experience includes: preparation of risk assessments and impact analyses of air emissions in support of permitting for industrial facilities, hazardous waste facility, municipal solid waste landfills and incinerators; public health impact analyses for EIR/EISs; preparation of risk assessments, data quality objectives and sampling designs for investigations conducted under RCRA, CERCLA and state hazardous waste programs; development of cleanup goals for feasibility studies and remedial design/remedial action of hazardous waste sites. His principal activities have been using risk assessment for making informed decisions about managing chemical and radiological hazards in the environment, assuring that sampling and analytical programs provide adequate data for decisionmaking, and developing cleanup goals that support future land use development strategies.

Mr. Lowe has extensive experience with the evaluation of potential indoor and ambient air exposure pathways associated with the emissions of chemical substances from soil or groundwater. He has been responsible for the planning and development of several investigations designed to evaluate indoor or ambient air exposure pathways. He has also led or participated in numerous studies involving the modeling of indoor or ambient concentrations in air with emissions and air dispersion models, including the Johnson and Ettinger model. Mr. Lowe has followed closely the various state and federal regulatory initiatives that are responding to the emerging area of indoor vapor intrusion from chemical substances in the subsurface environment.

Representative Projects

Risk Assessor, RCRA Program, Maine Yankee Plant Decommissioning and Environmental Restoration, Wiscasset, ME. Developed cumulative risk assessment and

John A Lowe

risk harmonization methodologies for chemical carcinogens and radionuclides, as part of the NRC decommissioning and RCRA closure activities at Maine Yankee. This activity is enabling Maine Yankee to comply with a Maine state legislative requirement to address cumulative risks from chemicals and radionuclides.

Indoor Air Monitoring Program, confidential telecommunications client, California, 2003-present. Mr. Lowe is a senior consultant responsible for development of the overall indoor air monitoring approach at this site. This indoor air monitoring program has been initiated in response to concerns by U.S. Environmental Protection Agency (EPA) Region 9 regarding potential vapor intrusion from chlorinated volatile organic compounds in soil underlying residential areas near the former GTE site. The objective of this program is to determine if there are potentially complete exposure pathways, in accordance with EPA's recent guidance for evaluation of vapor intrusion exposure pathways. An important element in the air monitoring program is CH2M HILL's homeowners notification program to notify, educate and obtain the cooperation and permission of residents to conduct air sampling in the identified residences. CH2M HILL's monitoring approach also incorporates tiered action levels corresponding to progressive responses to detected concentrations in indoor air, and evaluation of background concentrations, which may be indistinguishable from conservative, agency-specified risk-based levels in air.

Vapor Intrusion Investigation; McGaffey and Main Groundwater Plume Site; Roswell, New Mexico; February 2003-present. Under contract to EPA Region 6, CH2M HILL is conducting an evaluation of potential vapor intrusion pathways into structures from perchloroethylene (PCE) in soil gas and ground water at the McGaffey and Main Ground Water Plume Site in Roswell. An initial task in this evaluation has been collection of soil gas, subslab soil gas, indoor and background ambient air samples from selected structures. Participated in developing the sampling approach and data quality objectives for this investigation, in accordance with EPA's recently developed guidelines for evaluation of vapor intrusion pathways. The objectives of this investigation are to determine if vapor intrusion pathways into selected structures are potentially complete based on soil gas and subslab soil gas data, confirm potential vapor intrusion pathway into the selected residence via with crawlspace using ambient/crawlspace air samples and collect information needed to conduct modeling using the Johnson and Ettinger model.

Program Risk Assessor; Voluntary Environmental Corrective Action Program (VECAP); The Hoover Company; Canton, Ohio; 1999-present. Program risk assessor for a RCRA Corrective Action being performed by The Hoover Company. Important elements of the corrective action approach include: implementation of the tiered approach described in the American Society for Testing and Materials (ASTM) risk-based corrective action (RBCA) methodology; perimeter investigation for early identification of potential offsite risks, and integration of investigations and stabilization measures as needed to reduce the time needed to complete corrective action. Chlorinated VOC releases (perchloroethylene) from the facility migrated to offsite groundwater, underneath commercial and residential land use areas adjacent to the facility. Activities undertaken by CH2M HILL on Hoover's behalf to address this potential pathway included groundwater monitoring in the vicinity of structures, soil gas sampling at selected locations and modeling potential vapor transport using the Johnson and Ettinger model. This pathway evaluation, which concluded that potential exposure pathways were either incomplete nor not significant, was incorporated

John A Lowe

into the facility Human Exposure Environmental Indicators Determination which was approved by EPA Region 5 in September 2000.

Technical Lead; Landfill 26 Soil Vapor Risk Assessment; US Army Corps of Engineers (USACE), Sacramento District; former Hamilton Army Airfield, Novato, California; October 2001 to present. Technical leader for this risk assessment project including vapor intrusion modeling for a residential area adjacent to a closed landfill at the former Hamilton Army Airfield. Concerns were raised regarding potential health risks when volatile organic compounds subsequent to methane migration were detected in soil gas adjacent to residences. A phased investigation approach was implemented, based initially on passive soil gas sampling in order to identify locations for quantitative, active soil gas samples. The active soil gas samples provided data for use in the risk assessment. These soil gas data were used with the Johnson and Ettinger model to evaluate potential indoor air concentrations and associated health risks. Recent information developed as part of the EPA Office of Solid Waste's draft guidance for vapor intrusion environmental indicators was used in developing the model assumptions to assure that the resulting risk assessment was protective. The results from this risk assessment have demonstrated to the satisfaction of the regulatory agencies that the compounds detected in soil gas pose no health risks to the residents.

Vapor Pathway and Remediation Systems Evaluations; Marine Corp Base Camp Lejeune, North Carolina; March 2001-present. CH2M HILL has conducted several services at Marine Corps Base (MCB) Camp Lejeune related to vapor intrusion into buildings under the Comprehensive Long-Term Environmental Assessment, Navy (CLEAN) program for the Atlantic Engineering Facilities Division (EFDLANT). Projects to date have included evaluations of remediation systems installed near buildings to remove or treat volatile organic compound (VOC)-contaminated soil and/or groundwater. The treatment systems were evaluated to verify that subsurface conditions within the target volumes have not resulted in increased VOC emissions that could enter nearby buildings. CH2M HILL worked with various stakeholders, including EFDLANT and the Navy Environmental Health Center, to develop a sound approach to investigate the potential vapor intrusion pathways in structures that overly VOC plumes in groundwater.

Offsite Vapor Pathway Investigation; RFI for IRP Zone 4 (East Kelly Air Force Base [AFB]); Kelly AFB, San Antonio, Texas; June - September 1999. Assisted in development of an investigation approach for potential indoor air pathways at Zone 4 OU-2. OU-2 is generally the off-base area between Kelly AFB and the San Antonio River. Previous investigations had indicated that releases from one site in Zone 4 had affected groundwater that stretches from the site eastward to the San Antonio River. The dominant chemical in this plume is the industrial solvent trichloroethene (TCE) and its degradation product cis-1,2-dichloroethene (cis-1,2 DCE). Concerns have been raised that the chlorinated volatile organic compounds (VOCs) detected in groundwater off-base at Kelly AFB could migrate through soil and into buildings, posing inhalation exposures to building occupants. The Johnson and Ettinger model was to develop action levels in groundwater, which were used to screen groundwater analytical results in order to target locations for soil gas sampling.

Risk Assessment Task Manager; Remedial Investigation/Feasibility Study (RI/FS); Closure of Richards-Gebaur AFB; Kansas City, Missouri; March 2000-present. Risk

John A Lowe

assessment task manager for a RI/FS of 16 sites at Richards-Gebaur AFB. In collaboration with the Air Force and the Missouri Department of Natural Resources (MDNR), developed a tiered risk assessment approach based on the Risk-Based Corrective Action (RBCA) methodology to streamline the assessment of human health and environmental risks potentially associated with the sites, and to tailor the level of site-specific risk assessment performed to the needs of decision makers and stakeholders. The risk assessment results indicated that risks from chlorinated VOCs in groundwater warranted further evaluation. As part of the groundwater FS, the Johnson and Ettinger model was used to evaluate potential indoor air exposures and associated health risks from vapor intrusion from groundwater. The results from this evaluation support development of land use controls coupled with groundwater monitoring as a remedial alternative for the chlorinated VOCs in groundwater.

Risk Assessment Task Manager; McClellan AFB; Sacramento, California. Since 1993, have managed the risk assessments for several environmental restoration projects at this Air Logistics Center including: baseline risk assessment and evaluation of residual risks from the groundwater remedial alternative for the Davis Global Communications Center site RI/FS/ROD (1993-1994); baseline risk assessment, and evaluation of off-site air quality impacts from volatile organic chemicals for the Operable Unit D RI (1993); baseline risk assessment for the Groundwater Operable Unit (1993); cleanup goals development for Basewide Volatile Organic Compound (VOC) FS (1998-1999), Basewide Non-VOC and Landfill Sites FS and Engineering Evaluation/Cost Analysis (EE/CA) for selected Non-VOC sites (1998-2000). Primary issues addressed in the FSs and the EE/CA are development of cleanup goals to address future land uses as portions of the base transition to commercial and industrial uses. As part of the Basewide VOC FS, Mr. Lowe used the Johnson and Ettinger model to develop cleanup levels in soil for VOCs. The purpose for this exercise was to verify that cleanup levels in soil based achieving groundwater protection would also be protective for a vapor intrusion exposure pathway.

Selected Publications and Presentations

Lowe, J.A. 2002. *What am I Breathing In Here? An Overview of Indoor Vapor Intrusion from Contaminated Soil or Groundwater*. Presented at the 2002 Annual Training and Communication Conference Ohio EPA, Department of Hazardous Waste Management September 25, 2002.

Lowe, J.A. 2002. *Development of Site-Specific Assumptions in USEPA's Johnson and Ettinger Model for Use in Risk Assessments*. Presented at the Midwestern States Risk Assessment Symposium, Indianapolis, IN, July 24, 2002.

Lowe, J.A. 2000. Review: *The Complete Guide to the Hazardous Waste Regulations: RCRA, TSCA, HTMA, OSHA and Superfund*. 3d ed. Book review prepared for the *Electronic Green Journal*, Issue 12, <http://egj.lib.uidaho.edu/egj12/lowe1.html> April 2000.

Lowe, J.A. 1999. Review: *Sustainability Strategies for Industry: The Future of Corporate Practice*. Book review prepared for the *Electronic Green Journal*, Issue 11, <http://egj.lib.uidaho.edu/egj11/lowe1.html> December 1999.

John A Lowe

Lowe, J.A. 1999. Review: *Linking Sustainable Community Activities to Pollution Prevention: A Sourcebook*. Book review prepared for the *Electronic Green Journal*, Issue 10, <http://egi.lib.uidaho.edu/egi10/lowe1.html> April 1999.

Lowe, J.A. 1995. Risk-based cleanup standards in soil for brownfields and industrial use properties. Presented at the annual conference of the Society for Risk Analysis, December 4, 1995. Honolulu, Hawaii.

Grover, J., R. Day, J. Lowe, J. Smyth and P. Deming. 1995. Process for development of remediation goals in soil at the Hanford Site. Presented at ER 95, August 16, 1995. Denver, Colorado.

Lowe, J.A. and I.S. Jamall. 1994. Assessing health risks associated with DDT residues in soil in California: a Proposition 65 case study. *Risk Analysis*. 14(1): 47-52.

Lowe, J.A. 1992. Health Risks Associated with Volatile Organic Chemicals in Groundwater, in *Hazardous Materials Toxicology: Clinical Principles of Environmental Health*. J. Sullivan and G.R. Krieger, eds. Williams and Wilkins, New York.

Lowe, J.A. 1992. Hazardous Materials Incinerators and Hazardous Waste Sites, in *Hazardous Materials Toxicology: Clinical Principles of Environmental Health*. J. Sullivan and G.R. Krieger, eds. Williams and Wilkins, New York.

Lowe, J.A., M.T. Alberts and R.W. Dietrich. 1990. Health Risk Assessments for Waste-to-Energy Projects in California, in *Health Effects of Municipal Waste Incineration*. C.C. Travis and H.A. Hattemer-Frey, eds. CRC Press, Boca Raton, Florida.

Lowe, J.A. 1990. Methods of Estimating Toxic Equivalents for Polychlorinated Dibenzodioxins and Dibenzofurans, in *Health Effects of Municipal Waste Incineration*. C.C. Travis and H.A. Hattemer-Frey, eds. CRC Press, Boca Raton, Florida.

Matthew M Franck

preparation of an Environmental Impact Statement/Environmental Impact Report for the development of light rail facilities. The proposed light rail facility would run from Downtown Sacramento to Sacramento International Airport. Key issues of concern involve historic preservation in Downtown Sacramento; habitat, archeological, and recreation impacts in the American River Parkway, public safety impacts in developed neighborhoods, and nuisance issues associated with traffic and noise. The effort is being coordinated under the Federal Transit Administration's New Starts program.

Arden Parallel Force Main, Sacramento Regional County Sanitation District, Sacramento, California. Task Leader for the coordination of all environmental permit activities for the construction of a 60-inch sewer force main in Sacramento County, most of which is located within the environmentally sensitive American River Parkway. Coordinated with permitting agencies including the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, California Department of Fish and Game, Central Valley Regional Water Quality Control Board, State Lands Commission, and the State Reclamation Board, as well as managing staff in wetland delineation and special-status species surveys. Also coordinated with the county's Department of Environmental Review and Assessment to ensure the completion of CEQA documentation for the project. Currently providing services during construction.

Ongoing Environmental Documentation and Permitting Support, OMI-Thames Water, Stockton, California. Task Manager for environmental documentation and permitting support for the contract operation of the City of Stockton's wastewater, water, and stormwater infrastructure. To date, the major task in this support effort has been the coordination of a contractor's preparation of an Environmental Impact Report under CEQA for the upgrade of the City's wastewater treatment plant in accordance with Clean Water Act requirements. Another major task is the preparation of an application to the U.S. Coast Guard for a new utility bridge crossing of the San Joaquin River, including a NEPA Environmental Assessment. The utility bridge project has also included extensive agency coordination with the National Marine Fisheries Service, U.S. Fish and Wildlife Service, California Department of Fish and Game, Central Valley Regional Water Quality Control Board, and state and local levee agencies.

Water Treatment Plant Expansion, City of Sacramento, California. Coordinated preparation of the City of Sacramento's Environmental Impact Report to assess the planned expansion of the E.A. Fairbairn and Sacramento River Water Treatment Plants. Responsible for preparing and coordinating the preparation of all impact sections. The EIR required project-level impact considerations that included the application of PROSIM, a hydrologic model used to simulate Central Valley Project water deliveries.

Use Permit for Land Treatment of Agricultural Process Wastewater, Colusa Industrial Properties, Colusa, California. Task Leader for the preparation of a CEQA Initial Study for the use of a parcel of land for land disposal of agricultural process wastewater. The Initial Study was required to satisfy Colusa County Use Permit requirements. Prepared entire Initial Study with the assistance of soil scientists and water quality specialists. Assisted in the regulatory process for the issuance of Waste Discharge Requirements by the Central Valley Regional Water Quality Control Board.

Matthew M. Franck

Environmental Planner

Education

Bachelor of Science, Environmental Analysis and Planning, University of California at Davis, 1989

Distinguishing Qualifications

- Conducted environmental studies throughout California, Oregon, and Washington emphasizing land use and water resources planning
- Formerly City Planner, City of Folsom, Sacramento County, California

Relevant Experience

Mr. Franck is an environmental planner with CH2M HILL. He has 18 years of experience in managing and writing environmental impact assessment documents in compliance with NEPA and CEQA. He also coordinates local, state, and federal regulatory processes. Mr. Franck's education and multidisciplinary experience, as well as his expertise in land use and resource planning, provide a solid background for evaluating complex environmental policy issues. Prior to joining CH2M HILL, Mr. Franck was a City Planner for the City of Folsom.

Representative Projects

Placer County Water Authority – Environmental Support for Bickford Tank, Loomis Area, California. As part of an integrated project delivery team, CH2M HILL supported the design of PCWA's new Bickford Ranch water tank by providing CEQA document and site assessment services. CH2M HILL repackaged the adopted Bickford Ranch EIR into a concise, focused Mitigated Negative Declaration that evaluated the impacts of the changed project in the context of the prior EIR. In addition, CH2M HILL prepared a Phase 1 Environmental Site Assessment that summarized the potential for contamination of the environment and worker health and safety. Findings from both studies are being integrated with the overall design effort.

Placer County Water Agency, Environmental Support for Werner Tank, Ophir Area, California. As part of an integrated project delivery team, CH2M HILL is supporting the design of PCWA's new Werner Road water tank by provided CEQA and site assessment services. CH2M HILL prepared a Mitigated Negative Declaration to support the property acquisition phase, and is preparing a new CEQA document to address the impacts of the specific project. In addition, CH2M HILL prepared a Phase I Environmental Site Assessment to evaluate past contamination, and as a result prepared a Phase 2 study that included soil sampling and laboratory analysis. Resolving concerns associated with prior agricultural contamination required extensive coordination with the Department of Toxic Substances Control. Findings from all studies are being integrated with the overall design effort.

Downtown-Natomas-Airport Environmental Impact Statement/Environmental Impact Report, Sacramento Regional Transit District, California. Task Manager for the

STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of:

Chula Vista Energy Upgrade Project

DOCKET NO. 07-AFC-04

**DECLARATION OF
Matthew Franck**

I, Matthew Franck, declare as follows:

1. I am presently employed by CH2M HILL as an Environmental Planner.
2. A copy of my professional qualifications and experience is incorporated by reference in this Declaration.
3. I have reviewed, agree with, and sponsor the following exhibits into the record: Application for Certification, Section 5.6 – Land Use for the Chula Vista Energy Upgrade Project (Exhibit 1); Supplement to AFC – Response to Data Adequacy Review, Items #13 and 14 (Exhibit 2); Response to Environmental Health Coalition's Data Requests 55, 56 (Exhibit 8); Agreement with the City of Chula Vista on Mitigation and Consistency of the Project with the Chula Vista General Plan, dated August 4, 2008, docketed August 6, 2008 (Exhibit 21); and List of Power Plants in I-L Equivalent Zones (Exhibit 24).
4. It is my professional opinion that the exhibits listed above are true and accurate with respect to issues that they address.
5. I am personally familiar with the facts and conclusions related in the exhibits and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at Sacramento, CA on September 25, 2008.

A handwritten signature in black ink, appearing to read "M Franck", is written over a horizontal line.

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE
STATE OF CALIFORNIA

Application for Certification for the
CHULA VISTA ENERGY
UPGRADE PROJECT

Docket No. 07-AFC-4

PROOF OF SERVICE
(Revised 07/14/08)

INSTRUCTIONS: All parties shall 1) send an original signed document plus 12 copies OR 2) mail one original signed copy AND e-mail the document to the web address below, AND 3) all parties shall also send a printed OR electronic copy of the documents that shall include a proof of service declaration to each of the individuals on the proof of service:

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 06-AFC-07
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.state.ca.us

APPLICANT

Harry Scarborough
Vice President
MMC Energy Inc.
11002 Ainswick Drive
Bakersfield, CA 93311
hscarborough@mmcenergy.com

APPLICANT'S CONSULTANTS

Douglas M. Davy, Ph.D.
CH2M HILL Project Manager
2485 Natomas Park Drive, Suite 600
Sacramento, CA 95833
ddavy@ch2m.com

APPLICANTS ENGINEER

Steven Blue
Project Manager
Worley Parsons
2330 E. Bidwell, Suite 150
Folsom, CA 95630
Steven.blue@worleyparsons.com

COUNSEL FOR APPLICANT

Jane Luckhardt, Esq.
Downey Brand Law Firm
555 Capitol Mall, 10th Floor
Sacramento, CA 95814
jluckhardt@downeybrand.com

INTERESTED AGENCIES

California ISO
P.O. Box 639014
Folsom, CA 95763-9014
e-recipient@casio.com

INTERVENORS

*** California Unions for Reliable Energy (CURE)**

c/o Marc D. Joseph

Gloria Smith

Suma Peesapati

Adams Broadwell Joseph & Cardozo

601 Gateway Boulevard, Suite 1000

South San Francisco, CA 94080

mdjoseph@adamsbroadwell.com

gsmith@adamsbroadwell.com

spesapati@adamsbroadwell.com

*** City of Chula Vista, California**

c/o Charles H. Pomeroy

Caren J. Dawson

McKenna, Long & Aldridge, LLP

444 South Flower Street

Los Angeles, CA 90071

cpomeroy@mckennalong.com

cdawson@mckennalong.com

Jackalyne Pfannenstiel, Chair
Presiding Committee Member

jpfaenen@energy.state.ca.us

James D. Boyd, Vice Chair

Associate Committee Member

jboyd@energy.state.ca.us

Raoul Renaud

Hearing Officer

rrenaud@energy.state.ca.us

Chris Meyer

Project Manager

cmeyer@energy.state.ca.us

Kevin Bell

Staff Counsel

kbell@energy.state.ca.us

Public Adviser's Office

pao@energy.state.ca.us

ENERGY COMMISSION

*** Environmental Health Coalition**

Diane Takvorian & Leo Miras

401 Mile of Cars Way, Suite 310

National City, CA 91950

DianeT@environmentalhealth.org

LeoM@environmentalhealth.org


DECLARATION OF SERVICE

I, Haneefah Walker, declare that on September 26, 2008, I deposited the required copies of the attached Additional Documentary Evidence, filed in support of the Chula Vista Energy Upgrade Project (07-AFC-4) in the United States mail at Sacramento, California with first-class postage thereon fully prepaid and addressed to those identified on the Proof of Service list above. I declare under penalty of perjury that the foregoing is true and correct.

OR

Transmission via electronic mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210. All electronic copies were sent to all those identified on the Proof of Service list above.

I declare under penalty of perjury that the foregoing is true and correct.


Haneefah Walker