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Attorneys for Designated Party SAN DIEGO GAS & ELECTRIC COMPANY

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

In the matter of Tentative Cleanup and Abatement Order No. R9-2010-0002 (Shipyard Sediment Cleanup) DESIGNATION OF EXPERT WITNESSES BY DESIGNATED PARTY SAN DIEGO GAS & ELECTRIC COMPANY; DECLARATION OF JILL A. TRACY IN SUPPORT THEREOF

PLEASE TAKE NOTICE that pursuant to the San Diego Regional Water Quality Control Board Final Plan adopted February 18, 2010 as amended by the Ruling on Cleanup Team's Motion to Extend Remaining Discovery Deadlines and Related Matters Addressed at Prehearing Conference, dated July 16, 2010 ("Final Discovery Plan"), Designated Party San Diego Gas & Electric Company ("SDG&E") hereby designates the following expert, which SDG&E intends to call to offer testimony at the San Diego Regional Water Quality Control Board ("RWQCB") hearing in this matter pursuant to Code of Civil Procedure section 2034.260:

#### **Retained Experts**

 Jason Conder, Ph.D., Manager ENVIRON 18100 Von Karman Ave. Suite 600 Irvine, CA 92612 (949) 798-3618 SDG&E expressly reserves any and all rights, pursuant to Code of Civil Procedure sections 2034.280 and 2034.310, as well as any statutory or common law rights, to later name other experts, including experts named in counter-designations, before the hearing in this matter, or to call unnamed experts whose testimony is needed to aid in the determination by the RWQCB of cleanup levels and liability or to refute, impeach, and/or rebut the contentions, testimony, or other evidence offered by the expert witnesses proffered by the RWQCB, Designated Parties, or other non-designated party witnesses.

SDG&E expressly reserves the right to seek leave of the RWQCB to name or call any additional expert retained as the need arises in the course of discovery and investigation in preparation for the hearing in this matter, pursuant to the Final Discovery Plan and Code of Civil Procedure section 2034.280. All discoverable reports and writings of such expert witnesses prepared in the course of forming their respective opinions in this matter will be provided to the RWQCB and Designated Parties when prepared by said witnesses in accordance with the Final Discovery Plan and Code of Civil Procedure sections 2034.210(b) and 2034.270.

Dated: July 19, 2010

OFFICE OF THE GENERAL COUNSEL

Jill A. Tracy

Attorneys for Designated Party SAN DIEGO GAS & ELECTRIC

**COMPANY** 

**DECLARATION OF JILL A. TRACY** 

I, Jill A. Tracy, declare as follows:

1. I am Senior Counsel for San Diego Gas & Electric Company ("SDG&E")

and the lead attorney for SDG&E in the above-captioned matter.

2. I make this declaration based upon information and belief.

3. **Jason M. Conder, Ph.D.** is a Manager in the Ecology and Sediment

Management Practice at ENVIRON, whose qualifications are outlined in the attached curriculum

vitae (Exhibit A).

a. The general substance of Dr. Conder's testimony will concern the

evaluation of beneficial use impairments, ecological and human health risks, alternative cleanup

levels, sediment characterization and dominant fate and transport mechanisms of sediment-

associated chemicals at the Shipyard Sediment Site, as well as all other issues related to the

Tentative Cleanup and Abatement Order No. R9-2010-0002 and the accompanying Draft

Technical Report, issued by the RWQCB on December 22, 2009. This synopsis may be amended

by the report or deposition testimony of Dr. Conder.

b. Dr. Conder has agreed to testify at the hearing in this matter and will be

sufficiently familiar with the matter to submit to a meaningful deposition. Dr. Conder's fee for

deposition and hearing testimony is \$ 340.00 per hour.

I declare under penalty of perjury under the laws of the State of California that the

foregoing is true and correct.

Executed this 19<sup>th</sup> day of July, 2010, at San Diego, California.

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Jill A. Tracy

Attorneys for Designated Party

SAN DIEGO GAS & ÉLE¢TRIC

**COMPANY** 

#### **EDUCATION**

2004 PhD, Environmental Science, University of North Texas (UNT)

2000 MS, Zoology, Oklahoma State University (OSU)

1997 BS, Wildlife and Fisheries Ecology, OSU

#### **EXPERIENCE**

Dr. Jason M. Conder is a Manager in the Ecological/Sediment Practice at ENVIRON. He has over 10 years research and consulting experience in environmental toxicology, ecological risk assessment, bioaccumulation and bioavailability of environmental contaminants, environmental chemistry, environmental monitoring technology, wildlife ecology and management, plant and animal taxonomy, and statistics. Project-related experience includes the assessment of ecotoxicity, bioaccumulation, and bioavailability of organic compounds and metals to aquatic and terrestrial invertebrates, plants, mammals, reptiles, and fish exposed to contaminated soils, sediments, and water. A key focus of his expertise is contaminant bioavailability. Jason has extensive experience with the measurement and interpretation of environmental contaminants in soil, sediment, water, and biological tissues, including innovative methods to predict contaminant bioavailability and toxicity.

Jason has published over a dozen peer-reviewed articles in the primary scientific literature in environmental toxicology and chemistry, including several book chapters on contaminant bioavailability and sediment quality assessment. He serves as a peer reviewer for scientific journals, including: Environmental Toxicology and Chemistry, Integrated Environmental Assessment and Management, Chemosphere, Archives of Environmental Contamination and Toxicology, and Journal of Soils and Sediments.

Since joining ENVIRON in 2004, Jason has led ecological risk assessments, ecological/biological investigations, ecotoxicological studies, environmental fate and transport studies, and human health risk assessments. Representative experience includes:

- Fish Bioaccumulation Assessment, Private Client, Upper Mississippi River, MN. Evaluated bioaccumulation of PFOS in benthic and pelagic fish from water column and sediment PFOS sources. Investigated chemical fate and source issues relevant to exposure of fish to PFOS.
- Ecological Risk Assessment, Private Client, Augusta Bay, Sicily. Prepared an Ecological Risk Assessment and Sediment Quality Triad Evaluation for an industrial pier impacted with a variety of organics and metals, including mercury, methylmercury, and PAHs. Managed a team of 3 ecotoxicologists in providing a full assessment using various lines of evidence, including habitat information and chemical measurements in sediment, sediment porewater, fish, mussels, and benthic invertebrates. Key components of the assessment included food chain and bioavailability modeling and risk assessment to evaluate risks to invertebrates, fish, and piscivorous birds. Geospatial modeling was also conducted to identify areas of Augusta Bay that are associated with potentially-elevated chemical exposures.
- Contaminated Sediment Risk and Chemical Fate and Transport Evaluation, San Diego Gas & Electric (Subsidiary of Sempra Energy), San Diego Bay, CA. Evaluation of human health and ecological risks, sediment cleanup values, remedial strategies, sediment hydrodynamics, chemical fate and transport, remedial cost allocation, and chemical sources and uses in San Diego Bay. Served as project manager and technical advisor in proceedings with the California Regional Water Quality Control Board (CRWQCB) and other parties named in the CRWQCB's Cleanup and Abatement Order.

- Monitored Natural Recovery (MNR) Guidance, United States Department of Defense (DoD).
   Technical advisor on a resource document used to guide DoD remedial project managers on the evaluation and application of MNR for contaminated sediment.
- Evaluation of Water Quality Impacts from Terrestrial Burn Dump, Private Client, San Francisco Bay, CA. With hydrogeologists, evaluated the ecological and human risks associated with the hypothetical transport of metals and organic chemicals to San Francisco Bay via ground water flow from a former burn dump site located 0.25 miles upland of the Bay. With considerations of appropriate aquatic life screening values and sediment geochemistry conditions, the evaluation demonstrated insignificant risk associated with the site.
- Quantico Bay Thin-Layer Cap Demonstration Project, United States Department of Defense (DoD). Led evaluation of a Thin-Layer Cap remediation project for 14-acres of sediments impacted with chlorinated pesticides (DDT, DDD, and DDE). The 5-year study is evaluating a variety of endpoints involving chemical fate and transport, chemical bioavailability measurements via in situ organism deployment and SPME measurements, cap physical stability, and degree of ecological risk reduction. Responsibilities included project management, coordination of field work, and interpretation and presentation of results.
- Ecotoxicological Data Review, The Dow Chemical Company, Saginaw River and Bay Watershed, Ml. Review and synthesis of 30+ years of environmental data to support the avian and aquatic ecological risk assessment of dioxins and furans present in the Tittabawassee River, Saginaw River, and Saginaw Bay.
- Contaminated Sediment Management Decision-making Framework, The Dow Chemical Company. Led the development of a decision-making framework for evaluating the cause-effect relationships between chemically-impacted sediments and 16 different Beneficial Use Impairments identified by the State of Michigan. Using a tiered approach, frameworks begin with simple and resource-efficient screening steps using sediment quality guidelines and ecological benchmarks, then proceeds to considerations of more site-specific factors and determinations of probable linkages between sediments and specific Beneficial Use Impairments. Higher tiers in the frameworks utilize more advanced, but scientifically rigorous and agency-accepted approaches utilizing tools such as chemical fate and transport modeling, risk assessment, and Sediment Quality Triad, complete with decision rules for the interpretation of results with respect to resource impairment. The frameworks place screening and investigative tools in the proper context and facilitate a more efficient characterization of natural resources suspected to be affected by chemically-impacted sediment.
- Ecological Risk Assessment, Honeywell, NY/NJ Estuary System, Jersey City, NJ. Avian and aquatic ecological risk assessment of 66-acre area offshore of a former chromium ore processing facility. In addition to evaluation of chemicals in sediment, pore water, and surface water and wildlife species and habitat at the Site, responsibilities included TrophicTrace modeling to predict chemical bioaccumulation in avian and human food chains and application of the Sediment Quality Triad (SQT), a line-of-evidence approach that integrates chemistry data, laboratory toxicity results, and benthic community surveys to understand ecological risk. Using the SQT with equilibrium partitioning modeling to quantify risks, revealed that benthic community impacts and sediment toxicity were associated with widespread background PAH contamination in the local estuary, not site-related chromium releases. Key work also included evaluation of the effectiveness and risks associated with application of 11 sediment remedial alternatives, highlighting the ability of cost-effective remedies to reduce risk to ecological and human receptors.

- Sediment Monitoring Guidance and Web Portal, US Navy Space and Naval Warfare Systems Center, San Diego, CA. Prepared a guidance document and online web portal/database (http://www.ISRAP.org) of monitoring needs and tools associated with sediment remediation (dredging, capping, and monitored natural recovery). The guidance and online web portal assists Navy remedial project managers in developing efficient and effective monitoring plans and includes a decision-making framework to aid in selecting effective monitoring tools to assess all phases of remediation, including short-term monitoring (construction and remedial design performance) and long-term monitoring (ecological and human health risk).
- Landscape-level Ecological Risk Assessment, ICF Consulting/US Department of Energy, Bakersfield, CA. Developed a unique landscape-level approach for performing a California Department of Toxic Substances Control (DTSC) Part B Scoping Ecological Risk Assessment at a 75-square mile petroleum reserve located in southern California. The novel approach used landscape ecology and population indices to discern potential effects of active and historical petroleum exploration and production activities on the habitat and populations of endangered species and other sensitive receptors. The first step in this assessment included the site-wide investigation of the spatial co-occurrence of soil contamination and ecological receptors, as predicted by landscape-level models integrating historical ecological monitoring data, topography, and soil type.
- Ecological Risk Assessment, Private Client, CA. Conducted a DTSC Part B Scoping Ecological Risk Assessment for a former 996-acre munitions, explosives, and solid rocket fuel manufacturing facility located in southern California. Project responsibilities included the compilation of generic ecological risk-based soil screening benchmarks, preparation of a technical brief on the ecotoxicity of perchlorate, and development of a site-specific ecological risk-based soil screening level for perchlorate.
- Predictive Ecological Risk Assessment, Private Client, CA. Prepared a DTSC Part B Scoping and Phase I Predictive Ecological Risk Assessment for a 429-acre site in southern California at which explosives, solid rocket motor fuel, cryogenics, petroleum hydrocarbons, hypergolic fuels, and solvents were used. Project responsibilities have included the compilation of generic ecological risk-based soil screening benchmarks, field inspection of the Site, interpretation of biological survey information for development of the conceptual site model, food chain modeling to predict chemical bioaccumulation, and ecological risk calculations, including estimation of inhalation risks to burrowing mammals and development of toxicity reference values. Through interpretation of historical site use and the spatial pattern of chemical impacts and projected future land uses, narrowed the focus of the assessment to an undeveloped riparian area comprising approximately 5-10% of the site, enabling a more efficient and realistic approach to characterizing long-term ecological risk.
- Human Health Risk Assessment for Perchlorate Associated with Homegrown Produce, Private Client, CA. Designed and managed a laboratory plant-uptake study to determine bioconcentration factors for perchlorate accumulation by garden crops from perchlorate-impacted soils at a site in southern California. Results from the three-species study were used to generate site-specific, risk-based perchlorate concentrations associated with the consumption of homegrown garden produce by future residents. Responsibilities included experimental design and management, collection of site soils, and analysis and interpretation of data. Risk-based concentrations estimated with site-specific data developed in this study were approximately 100-fold higher than concentrations estimated using data from previous studies, which were shown to be unrealistic and overly conservative.
- Food-chain Modeling of Perfluorinated Compounds, E.I. du Pont de Nemours and Company (DuPont), Canadian Arctic. With a multi-disciplinary team of environmental chemists, engineers,

and risk assessors, assessed of the global fate and transport of perfluorinated carboxylic acids (PFCAs) to the Canadian Arctic. As lead technical advisor in ecotoxicology, responsibilities included development of a 5-tier food chain bioaccumulation model. The model integrated biological receptor life history and behavior, toxicokinetics of PFCAs, and environmental fate and transport processes in the Arctic Ocean to predict concentrations of PFCAs in polar bear liver tissue. Key challenges of the project included developing a model that did not rely on octanol-water partition coefficients (KOW values). Model development included Monte Carlo analysis to account for uncertainty and variability associated with model parameters and predictions.

- Critical Review of the Bioaccumulative Potential of Perfluorinated Compounds, E.I. du Pont de Nemours and Company (DuPont). Performed a survey of environmental monitoring and laboratory data on the bioaccumulation, bioconcentration, and biomagnification of perfluorinated carboxylic acids (PFCAs) and perfluorinated sulfonates (PFASs). Results were synthesized in a scientific manuscript submitted to a peer-reviewed scientific journal (Environmental Science & Technology) that summarized the bioaccumulative potential of these compounds according to guidance from current US and European chemical regulatory frameworks.
- Landscape-level Environmental Assessment to Predict Dust Emissions, Western Regional Air Partnership (WRAP), Various locations, Western US. Developed a guidance document to inventory ecological and land-use data resources for the estimation of dust emission. Responsibilities included a feasibility assessment and refinement of a framework for identifying and estimating dust emissions from natural sources such as wind erosion of naturally-barren areas, animal movements, and geologic events. A key product was a database of over 60 data resources that could be used by WRAP to provide input data for natural dust emission modeling and assessment of the degree of anthropogenic disturbance to natural lands. Project efforts also included two case studies in which the approaches were applied to identify dust sources in areas near Saguaro West National Park, AZ and Salt Creek Wilderness Area, NM.
- Subsurface Vapor Intrusion Modeling, Various locations, CA. Using the Johnson and Ettinger (J&E) Models, investigated human health risk due to subsurface vapor intrusion of VOCs such as PCE and TCE from impacted soils and ground water in four sites. Project responsibilities included applying various model types, including simple, default, screening-level J&E models and more complex, custom applications involving alteration of the default models to account for site-specific geology and future building practices. In addition to modeling, project responsibilities also included preparation of reports for California DTSC and RWQCB.

Prior to joining ENVIRON, Jason held the following positions:

#### USEPA Graduate Research Fellow, University of North Texas, Denton, Texas

Proposed and managed 3-year, \$122,000 project to investigate the ecological risk of the
explosive 2,4,6-trinitrotoluene (TNT) in aquatic sediments under the supervision of Dr. Thomas
La Point in cooperation with the US Army Corps of Engineers.

#### USEPA Graduate Research Fellow, Oklahoma State University, Stillwater, Oklahoma

 Investigated the bioavailability and toxicity of heavy metals (Cd, Pb, and Zn) to earthworms in soil under the supervision of Dr. Roman Lanno.

Research Technician, Oklahoma State University Ecotoxicology and Water Quality Laboratory, Stillwater, Oklahoma

Research Technician, Oklahoma State University Ecotoxicology and Water Quality Research Laboratory. Performed whole effluent toxicity tests for NPDES Permitting of municipal and industrial effluents.

#### **AWARDS**

American Chemical Society Award of Excellence for presentation at the 232nd National Meeting - 2006

EPA STAR Graduate Research Fellowship, (PhD) - 2001-2004

EPA STAR Graduate Research Fellowship, (MS) - 1998-2000

OSU Research Excellence Award, Biological Sciences Division - 2000

SETAC/EA Engineering Jeff Black Award - 1999

OSU Sewell Award (Outstanding Ecology Student) - 1997

#### PROFESSIONAL AFFILIATIONS & ACTIVITIES

Member, Society of Environmental Toxicology and Chemistry (1997-Present)

Member, American Chemical Society (2005-Present)

#### **PUBLICATIONS & PRESENTATIONS**

#### **Publications**

- Space and Naval Warfare Systems Center Pacific and ENVIRON International Corporation. 2010. Long-Term Monitoring Strategies for Contaminated Sediment Management. Final Guidance Document. http://www.israp.org.
- Merritt, K. Conder, J., Magar, V., Kittay, V.J., Chadwick, D.B. In Press. A review of thin-Layer placement applications to enhance natural recovery of contaminated sediment. Integr. Environ. Assess. Manag. 00:000-000.
- Merritt, K. Conder, J., Magar, V., Kirtay, V.J., Chadwick, D.B. 2009. Enhanced Monitored Natural Recovery (EMNR) Case Studies Review. US Navy Technical Report 1983, SPAVVAR SSC Pacific. May.
- Magar, V.S., Chadwick, D.B., Bridges, T.S., Fuchsman, P.F., Conder, J.M., Dekker, T.J., Steevens, J.A., Gustavson, K., Mills, M.A. 2009. Monitored Natural Recovery at Contaminated Sediment Sites. U.S. Department of Defense, Environmental Security Testing and Development Program (ESTCP), Project ER-0622.
- Lotufo, G.R., Nipper, M., Carr, R.S., Conder, J.M. 2009. Fate and toxicity of explosives in sediments. In: Sunahara, G.I., Lotufo, G.R., Kuperman, R.G., Hawari, J. (Eds.), *Ecotoxicology of Explosives*.
- Conder, J.M., Sorensen, M.T., Leitman, P., Martello, L.B., Wenning, R.J. 2009. Avian Ecological Risk Potential in an Urbanized Estuary: Lower Hackensack River, New Jersey, U.S.A. *Sci. Tot. Environ.* 407:1035-1047.

- Conder, J.M., Hoke, R.A., de Wolf, W., Russell, M.H., Buck, R.C. 2008. Are PFCAs bioaccumulative? A critical review and comparison with persistent lipophilic compounds. *Environ. Sci. Technol.* 42:995-1003.
- Sorensen, M.T., Conder, J.M., Fuchsman, P.C., Martello, L.B., Wenning, R.J. 2007. Using a Sediment Quality Triad approach to evaluate benthic toxicity in the lower Hackensack River, New Jersey. Arch. Environ. Contam. Toxicol. 53:36-49.
- Bowen, A.B., Conder, J.M., La Point, T.W. 2006. Solid phase microextraction of aminodinitrotoluenes in tissue. *Chemosphere* 63:58-63.
- Lanno, R.P., Conder, J.M., Wells, J.B., La Point, T.W. 2005. Application of solid-phase microextraction fibers as biomimetic sampling devices in ecotoxicology. In: Ostrander, GK, (Ed.), Handbook of Techniques in Aquatic Toxicology, Vol 2., pp. 511-524. Lewis Publishers/CRC Press, Boca Raton, FL, US.
- Conder, J.M., La Point, T.W. 2005. Solid phase microextraction for predicting the bioavailability of TNT and its primary transformation products in sediment and water. *Environ. Toxicol. Chem.* 24:1059-1066.
- Moore, D.W., Baudo, R., Conder, J.M., Landrum, P.F., McFarland, V.A., Meador, J.P., Millward, R.N., Shine, J.P., Word, J.Q. 2005. Bioaccumulation in the assessment of sediment quality: uncertainty and potential application. Ch. 11 in Wenning, R.J., Batley, G.E., Ingersoll, C.G., Moore, D.W. (Eds.), Sediment Quality Guidelines. SETAC Press, Pensacola, Fl, US.
- Conder, J.M., La Point, T.W., Bowen, A.T. 2004. Preliminary kinetics and metabolism of 2,4,6-trinitrotoluene and its reduced metabolites in an aquatic oligochaete. *Aquat. Toxicol.* 69:199-213.
- Conder, J.M., Lotufo, G.R., Bowen, A.T., Turner, P.K., La Point, T.W., and Steevens, J.A. 2004. Solid phase microextraction fibers for estimating the toxicity of nitroaromatic compounds. *Aquat. Ecosystem Health Manage*. 7:387-397.
- Conder, J.M., Lotufo, G.R., La Point, T.W., Steevens, J.A. 2004. Recommendations for the assessment of TNT toxicity testing in sediment. *Environ. Toxicol. Chem.* 23:141-149.
- Lanno, R., Wells, J., Conder, J., Bradham, K., Basta, N. 2004. The bioavailability of chemicals in soil for earthworms. *Ecotox. Environ. Saf.* 57:39-47.
- Conder, J.M., La Point, T.W., Lotufo, G.R., Steevens, J.A. 2003. Nondestructive, minimal-disturbance, direct-burial solid phase microextraction fiber technique for measuring TNT in sediment. *Environ. Sci. Technol.* 37:1625-1632.
- Conder, J.M., Lanno, R.P. 2003. Lethal critical body residues as measures of Cd, Pb, and Zn bioavailability and toxicity in the earthworm *Eisenia fetida*. *J. Soils and Sediments* 3:13-20.
- Conder, J.M., Seals, L.D., Lanno, R.P. 2002. Method for determining toxicologically relevant cadmium residues in the earthworm *Eisenia fetida*. *Chemosphere* 49:1-7.
- Conder, J.M., Lanno, R.P., Basta, N.T. 2001. Assessment of metal availability in smelter soil using earthworms and chemical extractions. *J. Environ. Qual.* 30:1231-1237.
- Conder, J.M., Lanno, R.P. 2000. Evaluation of surrogate measures of cadmium, lead, and zinc bioavailability to Eisenia fetida. Chemosphere 41:1659-1668.
- Conder, J.M., Lanno, R.P. 1999. Heavy metal concentrations in the mandibles of white-tailed deer living in the Picher Mining District. *Bull. Environ. Contam. Toxicol.* 63:80-86.

- Conder, J.M. 2009. Marine Paints as Historical Sources of PCBs to Sediments. Society of Environmental Toxicology and Chemistry (SETAC) North America Annual Meeting, New Orleans, LA, November 2009.
- Conder, J.M., Lee, K., Perruchon, E., Fuchsman, P., Magar, V., Chadwick, D.B., Bridges, T.S. 2009. Review of Monitored Natural Recovery at Contaminated Sediment Sites. Fifth International Conference on Remediation of Contaminated Sediments. Jacksonville, FL. February 2009.
- Magar, V., Chadwick, D.B., Bridges, T.S., Steevens, J., Mills, M., Dekker, T., Fuchsman, P., Conder, JM. 2009. Department of Defense Guidance on the Role of Monitored Natural Recovery in Sediment Remediation. Fifth International Conference on Remediation of Contaminated Sediments. Jacksonville, FL. February 2009.
- Conder, J.M., Klepper, G., Fuchsman, P., Wenning, RJ. 2009. Use Impairment Decision-making Approach for Assessment of Sediments. Fifth International Conference on Remediation of Contaminated Sediments. Jacksonville, FL. February 2009.
- Kirtay, V. J, Chadwick, D.B., Conder, J.M., MacGregor, A., Magar, V. 2009. Interactive Sediment Remedy Assessment Portal (ISRAP): A Tool to Facilitate Sediment Monitoring Strategies. Fifth International Conference on Remediation of Contaminated Sediments. Jacksonville, FL. February 2009.
- Conder, J.M., Lee, K., Perruchon, E., Fuchsman, P., Magar, V. Review of Monitored Natural Recovery at Contaminated Sediment Sites. Society of Environmental Toxicology and Chemistry (SETAC) North America Annual Meeting, Tampa, FL, November 2008.
- Conder, J.M., Magar, V.M., Chadwick, D.B, Dekker, T., Steevens, J., Mills, M., Bridges, T. 2008. Guidance for Monitored Natural Recovery at Contaminated Sediment Sites. Battelle Remediation of Chlorinated and Recalcitrant Compounds, Monterey, CA, May 2008.
- Conder, J.M., Sorensen, M.T. 2008. Ecological Screening Levels for Total Petroleum Hydrocarbons in Soil. 18th Annual Association for Environmental Health and Sciences (AEHS) Meeting and West Coast Conference, San Diego, CA, March 2008.
- Conder, J.M., Wells, J.W., Sorensen, M.T. Ecological Screening Levels for Volatile Organic Compounds in Soil Gas. 18th Annual Association for Environmental Health and Sciences (AEHS) Meeting and West Coast Conference, San Diego, CA, March 2008.
- Conder, J.M., Wells, J.B., Sorensen, M.T. Ecological Screening Levels for Volatile Organic Compounds in Soil Gas. Society of Environmental Toxicology and Chemistry (SETAC) North America Annual Meeting, Milwaukee, WI, November 2007.
- Conder, J.M., Klepper, G., Martello, L.B., Fuchsman, P., Daniel, J., McCullough, M., Wenning, R.J. Use impairment decision-making approach for assessment of sediments. Society of Environmental Toxicology and Chemistry (SETAC) North America Annual Meeting, Milwaukee, WI, November 2007.
- Conder, J.M., Hoke, R.A., Russell, M.H., Buck, R.C., de Wolf, W. The Bioaccumulation Potential of PFCAs and Comparison with Persistent Lipophilic Compounds. Society of Environmental Toxicology and Chemistry (SETAC) North America Annual Meeting, Milwaukee, WI, November 2007.
- Kirtay, V., Chadwick, B., Halkola, H., Conder, J.M., Magar, V., Kurtz, C., MacGregor, A. Interactive Sediment Remedy Assessment Portal (ISRAP): A Tool to Facilitate Design of Long-term Remedial Monitoring Strategies. Society of Environmental Toxicology and Chemistry (SETAC) North America Annual Meeting, Milwaukee, WI, November 2007.

- Conder, J.M., Sorensen, M.T. Ecological Screening Levels for Total Petroleum Hydrocarbons in Soil. Society of Environmental Toxicology and Chemistry (SETAC) North America Annual Meeting, Milwaukee, WI, November 2007.
- Conder, J.M., Magar, V.M. 2007. Monitoring sediment remedies and ecological recovery. Sediment Remediation: How do you select and design options? USEPA and Sediment Management Work Group Workshop. Atlanta, GA, October.
- Conder, J.M., Magar, V.M., Evison, L.H. 2007. Monitoring sediment remedies and ecological recovery. Sediment Remediation: How do you select and design options? USEPA and Sediment Management Work Group Workshop. Portland, OR, September.
- Conder, J.M., Klepper. A Use Impairment Decision-making Approach for Evaluating Part 201 Obligations for Sediments. Sediment Management Work Group (SMWG) Sponsor Forum, Berkeley, CA, September 2007.
- de Wolf, W. Conder, J.M., Hoke, R.A., Russell, M.H., Buck, R.C. Are PFCAs bioaccumulative? A critical review and comparison with persistent lipophilic compounds. Society of Environmental Toxicology and Chemistry (SETAC) Europe Annual Meeting, Porto, Portugal, May 2007.
- Lotufo, G., Conder, J.M. Fate, bioavailability and toxicity of explosives in sediments. Battelle Fourth International Conference on Remediation of Contaminated Sediments, Savannah, GA, January 2007.
- Kirtay, V., Conder, J.M., Magar, V., Chadwick, B., Halkola, H., Kurtz, C., MacGregor, A. Long-term monitoring strategies for contaminated sediment management. Battelle Fourth International Conference on Remediation of Contaminated Sediments, Savannah, GA, January 2007.
- Sorensen, M., Fuchsman, P., Conder, J.M., Martello, L.B., Wenning, R.J. Using a sediment quality triad approach to evaluate sediment toxicity in the lower Hackensack River, New Jersey, US. Battelle Fourth International Conference on Remediation of Contaminated Sediments, Savannah, GA, January 2007.
- Wenning, R.J., Conder, J.M. Using science to understand the significance of persistent chemicals in the environment. Society of Environmental Toxicology and Chemistry (SETAC) North America Annual Meeting, Montréal, Canada, November 2006.
- Buck, R.C., Russell, M., Korzeniowski, S., Bingman, T., Gannon, J., Washburn, S., Keinath, M., Yarwood, G., Conder, J. Environmental modeling of DuPont fluorotelomer-based products in North America. Society of Environmental Toxicology and Chemistry (SETAC) North America Annual Meeting, Montréal, Canada, November 2006.
- Conder, J.M., Wenning, R.J., Buck, R.C., Korzeniowski, S.H., Hoke, R.A., Powley, C.R., Russell, M.H., Gentry, R., Washburn, S.T. Model for predicting perfluorinated carboxylates in an Arctic food chain. 232nd American Chemical Society National Meeting and Exposition, San Francisco, CA, September, 2006.
- Wenning, R.J., Conder, J.M., Buck, R.C., Korzeniowski, S.H., Hoke, R.A., Powley, C.R., Russell, M.H., Gentry, R., Washburn, S.T. Model for predicting perfluorinated carboxylates in an Arctic food chain. 26th International Symposium on Halogenated Persistent Organic Pollutants (DIOXIN), Oslo, Norway, August, 2006.
- Conder, J.M., Haroun, L., Scofield, R. Uptake of perchlorate by garden crops in perchlorate-impacted soil: Implications for risk assessment. 16th Annual Association for Environmental Health and Sciences (AEHS) Meeting and West Coast Conference, San Diego, CA, March 2006.

- Conder, J.M., Haroun, L., Lockwood, R.E., Roberts, S., Scofield, R., Hall, S., Horsley, T. 2006. Uptake of perchlorate by garden crops from a perchlorate-impacted soil and risk via produce consumption. Perchlorate: Progress Toward Understanding and Cleanup, Groundwater Resources Association of California, Santa Clara, CA, January, 2006.
- Fuchsman, P., Conder, J.M., Sorensen, M., Martello, L., Wenning, R. 2005. Using a cause-effect approach to identify benthic toxicants in the Lower Hackensack River, New Jersey (Part 1 of 2). Society of Environmental Toxicology and Chemistry (SETAC) North America Annual Meeting, Baltimore, MD, November 2005.
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## California Regional Water Quality Control Board, San Diego Region

# In the Matter of Tentative Cleanup and Abatement Order No. R9-2010-0002

#### PROOF OF SERVICE

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I, the undersigned, declare: I am employed in the County of San Diego, State of California. I am over the age of 18 years and not a party to this action. My business address is 101 Ash Street, Suite 1200, San Diego, California, 92101. I served a copy of the following document(s):

1. FIRST DESIGNATION OF EXPERT WITNESSES BY DESIGNATED PARTY SAN DIEGO GAS & ELECTRIC COMPANY; DECLARATION OF JILL A. TRACY IN SUPPORT THEREOF

\_\_\_\_ (BY PERSONAL SERVICE) I caused each such envelope to be sealed and given to a courier for delivery on the same date.

☑ (BY E-MAIL) I caused the above-referenced documents to be converted in digital format (.pdf) and served by electronic mail to the addresses listed below.

\_\_\_\_ (BY REGULAR MAIL) I caused the above document(s) to be deposited in the United States mail at San Diego, California, with postage thereon fully prepaid addressed to the party(ies) listed below. I am readily familiar with the company's practice of collection and processing correspondence for mailing. Such mail is deposited with the United States Postal Service each day and that practice was followed in the ordinary course of business for the service herein attested to.

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## California Regional Water Quality Control Board, San Diego Region

## In the Matter of Tentative Cleanup and Abatement Order No. R9-2010-0002

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# California Regional Water Quality Control Board, San Diego Region

## In the Matter of Tentative Cleanup and Abatement Order No. R9-2010-0002

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I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct. Executed on July 19, 2010 at San Diego, California.

Nicole B. Mussachia