

Jackie Zorovich
Director, Verification Services, The Climate Registry

SUMMARY OF SKILLS AND EXPERTISE

Jackie Zorovich has managed The Climate Registry's verification and accreditation programs since September 2008. She is uniquely qualified for her position with eight years of experience in environmental engineering, including hands-on experience conducting greenhouse gas (GHG) verifications and developing and implementing GHG inventory management plans and environmental management systems for many organizations. Ms. Zorovich manages The Registry's relationship with Verification Bodies and affiliated Accreditation Bodies (e.g. ANSI) and maintains The Registry's verification documentation.

Prior to joining The Registry, Ms. Zorovich was a Senior Engineer and project manager at First Environment, an environmental consulting firm which is now an ANSI-accredited Verification Body. While at First Environment, Ms. Zorovich managed several greenhouse gas verification projects for clients in the commercial, manufacturing, waste, and power generation sectors. She was also integrally involved in the development of GHG inventories for several clients. Prior to her involvement in climate change services at First Environment, Ms. Zorovich was a project manager for many hazardous waste site investigation and remediation projects.

RELEVANT EXPERIENCE

September 2008-Present

Manages The Climate Registry's verification program, including conflict of interest evaluation, oversight of independent verification bodies, and maintenance of relationships with Accreditation Bodies (e.g. ANSI, SCC, EMA) to ensure that accredited Verification Bodies have the appropriate competencies to successfully implement The Registry's verification program. Maintains The Registry's verification documentation (General Verification Protocol, Guidance on Accreditation, website content, etc.) to ensure these resources are current, accurate, user-friendly, and clear.

Serves on the ANSI GHG Validation/Verification Accreditation Committee (GVAC), which is the decision making body on matters of GHG Verification Body accreditation and is responsible for setting the overall policies and procedures for the program.

September 2008-Present

In addition to managing The Registry's verification program, serves as an expert to many external parties. Serves on the United States Technical Advisory Group TC 207 for the International Standards Organization (ISO), which is responsible for maintenance and development of international standards related to GHG inventory development, GHG product carbon footprinting, GHG verification, accreditation of GHG Verification Bodies and many other environmental standards. Also serves on the Western Climate Initiative's Verification Subcommittee and the Carbon Disclosure Standard Board's technical work group. Provides technical assistance and support to a Chinese NGO, iCET, in developing verification and accreditation requirements. For the state of Massachusetts, manages verification program support services for mandatory reporting of greenhouse gas emissions.

August 2005-September 2008

Served as lead verifier and project manager for several of First Environment's GHG verifications conducted under the California Climate Action Registry (CCAR), most notably:

Coso Operating Company's 2006 GHG report: Conducted a site visit at Coso's California geothermal power plant, evaluated the data management system, assessed emissions calculations, and prepared verification report. Assessment included geothermal process emissions from the release of non-condensable gases during transfer of geothermal steam from the ground to the unit turbines.

TAMCO Steel's 2006 GHG report: Assessed calculation of process emissions, considering carbon content of steel, amount of carbon purchased for electrodes, and the amount of carbon remaining in waste materials.

Eastman Kodak Company's 2006 GHG report: Verified emissions from Kodak's U.S. operations as well as emissions from their non-U.S. operations.

Developed GHG emissions inventories and environmental management systems for several of First Environment's clients, most notably:

Waste Management's 2006 GHG emissions inventory for CCAR: Coordinated with Waste Management to acquire data necessary to report their inventory. Reviewed methodologies, performed anomaly assessments on data sets and calculated emissions. Entered all inventory data into CCAR's online reporting tool, CARROT. Prepared Power/Utility Reporting Form. Compiled optional re-reporting data including biogenic and sequestered emissions from landfills and emissions reductions from recycling operations.

Avon Products: Developed a user-friendly spreadsheet tool to calculate GHG emissions and strategically summarize the data in tables and charts to facilitate identification of potential opportunities for reduction of emissions.

Wisconsin Public Services Corporation: Assisted in development of an ISO 14001 Environmental Management System for Wisconsin Public Service's coal burning power plant. Identified activities contributing to GHGs and potential impacts.

EDUCATION AND RELEVANT TRAINING

- B.S., Civil Engineering, Cornell University, 2001
- Engineer in Training (EIT) status – Fundamentals of Engineering (FE Exam), Spring 2002.
- Greenhouse Gas Emissions Verifier Training Course (audited), Future Perfect and California Air Resources Board, June 2009
- Advanced Continuous Emissions Monitoring Course #401, California Air Resources Board, July 2008
- GHG Emissions Verifier Training, Future Perfect Ltd, July 2007

PROFESSIONAL HISTORY

- 2008-Present, The Climate Registry, Director of Verification Services
- 2005–2008, First Environment, Senior Environmental Engineer
- 2003–2005, BETA Group, Inc., Senior Environmental Engineer
- 2001– 2003, First Environment, Environmental Engineer

ACCREDITATION SERVICES
MANAGEMENT PORTAL**ANSICA**
Version 2.0***** UNCONTROLLED COPY *****

Printed on: 2010-08-17

Copyright © 2010 by the American National Standards Institute, Inc. All rights reserved. No part of this publication may be produced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher. Published by American National Standards Institute, 1819 L Street, NW, Washington, DC 20036

Date Issued: 2009-10-27**PUBLIC PROCEDURE GHG-PR-722**

Approved By: Lane Hallenbeck (2009-10-27)

Revision: 1

Fees – GHG Program

1 Objective

1.1 This procedure defines the fees for ANSI GHG accreditation program.

2 Definitions

2.1 VVB: Validation / verification body.

3 Responsibilities

3.1 Changes to the fees associated with GHG Program are suggested by the Program's management staff and must be approved by the ANSI Vice President, Accreditation Services.

4 Application Fee

4.1 Non-refundable application fee is \$5,000. This fee is payable by the applicant VVB upon submitting the full application for ANSI accreditation.

5 Assessment Fees

5.1 The assessment fees are \$1,250 per day per assessor plus expenses. This rate is applied to the assessor day(s) necessary to complete the assessment, including the review of the initial application and any additional materials as well as analysis of responses to corrective actions and preparation of the assessment report. Assessors are provided with guidelines regarding expenses associated with hotels and meals that are closely aligned with accepted customary United States governmental rates. Travel time is billed based on the formula $(T-2\text{hrs})/2$ which means that ANSI shall bill for $\frac{1}{2}$ of assessors' travel time beyond the initial 2 hours.

5.2 Fees associated with surveillances, reassessments, follow-up visits, witness assessments, scope extension assessments and any extraordinary assessments are also based on the \$1,250 per assessor per day rate and apply to review of materials, onsite assessments, preparation of reports and review of corrective actions.

5.3 Assessor and staff daily rates used in this document are based on 8 hour work day.

6 Annual Fee

**NMED - ZOROVICH
EXHIBIT 2**

6.1 The Annual Fee shall be based upon a percentage of the gross revenues of the accredited validation / verification program(s), including all fees charged by the VVB to its participants. The objective is to fairly apportion the general expenses of the ANSI accreditation program over all accredited VVBs based on the relative value of ANSI accreditation to each one. The table in Figure 1 details the specific rules for calculating the Annual Fee.

REVENUE		ANNUAL FEE
FROM	TO	
\$0	\$375,000	\$1,500
\$375,000	\$13,750,000	0.4% of revenue
Over \$13,750,000		\$55,000

Figure 1: Annual Fee Schedule

6.2 Annual Fee shall be payable on each anniversary of the VVB's initial accreditation and shall be based on the relevant revenue from the previous calendar year.

7 Appeal Fee

7.1 The Appeal Fee is \$1,000. Subsequent fees associated with staff attendance at the appeals hearings are charged at \$1,250 per staff member per day plus direct expenses. If the ruling is in favor of the appellant, all appeals fees shall be refunded to the appellant.

8 Scope Extension Fee

8.1 Scope Extension Fee is \$1,000 per application. Payment must be received along with the application.



ANSI Accreditation Services



[HOME](#) | [ANSI](#) | [PROGRAMS](#) | [ANAB/ACLASS](#) | [MANAGEMENT STAFF](#) | [CONTACT US](#) | [SITE MAP](#) | [ANSICA LOGIN](#)

[WHY SEEK ACCREDITATION?](#) | [NEWS](#) | [REFERENCE MATERIALS](#) | [GOVERNANCE COMMITTEES](#) | [COMPLAINTS](#) | [APPEALS](#) | [FEEDBACK](#)



GREENHOUSE GAS
Verifier/Validator Accreditation
ISO 14065

[← BACK](#)

« ACCREDITATION HOME PAGE

- CALL FOR GVAC NOMINATIONS
- General Information
- NEW PROGRAM: Superior Energy
- Notices & Announcements
- How to Apply
- Policies, Procedures and Forms
- Accreditation Directory
- Strategic Partnerships
- FAQs

ANSICA 2.0 Portal Login

Username:

Password:

Remember username:

Greenhouse Gas VVB Accreditation (Accredited)

#	ORGANIZATION	ID
1	Advanced Waste Management Systems, Inc.	0791
2	Alliant Environmental, LLC	0792
3	Bureau Veritas Certification North America (BVCNA)	0747
4	Complete Integrated Certification Services Ltd (CICS)	0795
5	Environmental Services, Inc.	0800
6	ERM-CVS Ltd.	0801
7	First Environment, Inc.	0802
8	KEMA Registered Quality, Inc.	0807
9	Morrison Hershfield Limited	0811
10	NSF International Strategic Registrations, Ltd. (NSF-ISR)	0814
11	QMI-SAI Global	0748
12	Rainforest Alliance, Inc.	0797
13	Ruby Canyon Engineering Inc.	0818
14	Ryerson, Master and Associates, Inc.	0819
15	Scientific Certification Systems, Inc.	0821
16	SCS Engineers	0822
17	TUV SUD America Inc.	0526



ANSI Accreditation Services



[HOME](#) | [ANSI](#) | [PROGRAMS](#) | [ANAB/ACCLASS](#) | [MANAGEMENT STAFF](#) | [CONTACT US](#) | [SITE MAP](#) | [ANSICA LOGIN](#)

[WHY SEEK ACCREDITATION?](#) | [NEWS](#) | [REFERENCE MATERIALS](#) | [GOVERNANCE COMMITTEES](#) | [COMPLAINTS](#) | [APPEALS](#) | [FEEDBACK](#)



GREENHOUSE GAS
Verifier/Validator of Accreditation
ISO 14065

[« BACK](#)

« ACCREDITATION HOME PAGE

- CALL FOR GVAC NOMINATIONS
- General Information
- NEW PROGRAM: Superior Energy
- Notices & Announcements
- How to Apply
- Policies, Procedures and Form
- Accreditation Directory
- Strategic Partnerships
- FAQs

ANSICA 2.0 Portal Login

Username:

Password:

Remember username:

Greenhouse Gas VVB Accreditation (Applicant)

#	ORGANIZATION
1	Agri-Waste Technology, Inc.
2	Cameron-Cole, LLC
3	Gonestoga-Rovers & Associates
4	Det Norske Veritas (USA), Inc.
5	E.H. Pechan & Associates, Inc.
6	Enviroplan Consulting
7	Jacobs Engineering Group Inc.
8	Kleinfelder West, Inc.
9	KPMG Performance Registrar Inc.
10	Perry Johnson Registrars Carbon Emissions Services, Inc.
11	Ptarmigan Forestry & Carbon Consulting
12	SES Inc.
13	Stantec, Inc.
14	Tetra Tech EM Inc.
15	TRA Certification, Inc.

This page last reviewed April 7, 2010

ARB-Accredited Verification Bodies

The following 44 verification bodies are accredited to provide verification services to greenhouse gas emissions data reporters.

Executive Order No.	Verification Body Name and Address	Contact Information	Website
H-10-156	AMEC Geomatrix Inc. 510 Superior Avenue, Suite 200 Newport Beach CA 92663	Anne McQueen 949-574-7082 anne.mcqueen@amec.com	www.amecgeomatrix.com
H-09-007	Analytical Environmental Services 1801 7th Street, Suite 100 Sacramento CA 95811	Erin Quinn 916-447-3479 equinn@analyticalcorp.com	www.analyticalcorp.com
H-10-157	Ashworth Leininger Group 601 East Daily Drive, Suite 302 Camarillo CA 93010	Michael Waller 805-764-6003 mwaller@algcorp.com	www.algcorp.com
H-10-158	Bureau Veritas 1565 MacArthur Blvd. Costa Mesa CA 92626	David Church 714-431-4181 dave.church@us.bureauveritas.com	www.us.bureauveritas.com
H-10-159	Cameron-Cole, LLC 50 Hegenberger Loop Oakland CA 94621	Chris Lawless 510-777-1858 clawless@cameron-cole.com	www.cameron-cole.com
H-10-160	Carbon Verification Service, LLC 915 L Street, Suite C, PO Box 294 Sacramento CA 95814	James Groome 916-208-9389 jgroome@carbonverificationservice.com	www.carbonverificationservice.com
H-09-010	Conestoga-Rovers & Associates, Inc. 19449 Riverside Drive, Suite 230 Sonoma CA 95476	Ann Rosecrance 707-933-2371 arosecrance@croworld.com	www.croworld.com/en/services/ss_climatechange.asp
H-09-008	ConSol 7407 Tam O'shanter Drive Stockton CA 95210	Jim Hodgson 209-473-5000 jhodgson@consol.ws	www.consol.ws

H-10-161	Davenport Engineering, Inc. 2461 West 208th Street, Suite 200 Torrance CA 90501	Neal Davenport 310-787-4600 ghgverification@davenport-co.com	www.davenport-co.com
H-09-003	Det Norske Veritas Certification, Inc. One Bush Street, 12th Floor San Francisco CA 94104	Barbara Toole O'Neil 415-318-3913 barbara.tooleoneil@dnv.com	climatechange.dnv.com
H-09-005	E.H. Pechan & Associates, Inc. 5528-B Hempstead Way Springfield VA 22151	Stephen Roe 407-864-1895 steve.roe@pechan.com	www.pechan.com/climate_change_services.asp
H-10-174	E5, Inc. 11358 Knott Street Garden Grove CA 92841	Sherrie Walters 714-373-3800 slwalters@e5.com	www.e5.com
H-10-162	Eastern Research Group, Inc. 8950 Cal Center Drive, Suite 348 Sacramento CA 95826	Paula Fields 916-361-6751 paula.fields@erg.com	www.erg.com
H-09-004	Environ International Corporation 6001 Shellmound Street, Suite 700 Emeryville CA 94608	Douglas Daugherty 510-420-2513 ddaugherty@environcorp.com	www.environcorp.com/ghgverification
H-10-195	Environmental Resources Management (ERM) Certification and Verification Services 9301 Richmond Road West Milford NJ 07480	Barry Muller 862-684-0289 barry.muller@ermcvs.com	www.ermcvs.com
H-10-194	Environmental Science Associates (ESA) 225 Bush Street, Suite 1700 San Francisco	Jeff Caton 415-896-5900 jcaton@esassoc.com	www.esassoc.com

H-10-189	Inc. 5500 Ming Avenue, Suite 360 Bakersfield CA 93309	Doug Shaffer 661-282-2200 dshaffer@insenv.com	www.insenv.com
H-10-178	KEMA- Registered Quality, Inc. 155 Grand Avenue, Suite 500 Oakland CA 94612	Steve Dunning 510-914-6922 Steve.dunning@kema.com	www.kema.com
H-09-009	Lincus, Inc. 55 East Huntington Blvd. Suite 320 Arcadia CA 91006	Jorj Nofal 877-525-8898 jnofal@lincusenergy.com	www.lincusenergy.com
H-10-165	Locus Technologies 299 Fairchild Dr. Mountain View CA 94043	John Wesley Hawthorne 650-641-8264 hawthornej@locustec.com	www.locustec.com/services_ghg.asp
H-10-193	Nexant, Inc. 101 Second Street, 10th Floor San Francisco CA 94105	Flora Chul 415-369-1029 fchul@nexant.com	www.nexant.com
H-10-166	NSF International Strategic Registrations Ltd. 789 N. Dixboro Road Ann Arbor MI 48105	John Shideler 734-827-6866 lupo@nsf.org	www.nsf-isr.org
H-10-191	Oris Solutions 506 West Vista Way Vista CA 92083	Jim Larson 925-787-5759 jlarson@oris-solutions.com	www.oris-solutions.com
H-10-167	Paragon Consulting Services 1300 SW 6th Avenue, Suite 320 Portland OR 97201	Michael Koszalka 503-928-7403 mkoszalka@paragonconsultingservices.com	www.paragonconsultingservices.com/ghg/verification
H-10-176	Rincon Consultants, Inc. 790 East Santa Clara Street Ventura CA 93001	Matthew Maddox 805-641-1000 x20 mmaddox@rinconconsultants.com	www.rinconconsultants.com
H-09-001	Ryerson, Master and Associates, Inc. 735 State	Ivor John 805-730-1338	www.rmaq.com

	Street, Suite 407 Santa Barbara CA 93101	ivorjohn@rmaq.com	
H-10-168	Schreiber, Yonley & Associates, Inc. 16252 Westwoods Business Park Drive Ellisville MO 63021	Kathy Strubberg 636-256-7200 kathys@syaeng.com	www.perma-fixcom/sya
H-09-011	SCS Engineers 3117 Fite Circle, Suite 108 Sacramento CA 95827	Patrick Sullivan 916-361-1297 psullivan@scsengineers.com	www.scsengineers.com/ghg_sustain.html
H-10-169	Shaw Environmental, Inc. 4 Park Plaza, Suite 600 Irvine CA 92614	Paul Nguyen 949-660-5495 paul.nguyen@shawgrp.com	www.shawgrp.com/markets/envservices/envair
H-10-170	Sierra Research 1801 J Street Sacramento CA 95811	Jeffrey Adkins 916-444-6666 jadkins@sierraresearch.com	www.sierraresearch.com
H-10-171	Tetra Tech, Inc. and Subsidiaries 3475 E. Foothill Blvd. Pasadena CA 91107	Eddy Huang 626-470-2417 eddy.huang@tetrattech.com	www.tetrattech.com
H-09-068	Trinity Consultants, Inc. 1 Technology Drive, Suite F- 215 Irvine CA 92618	Vineet Masuraha 949-296-4100 vmasurah@trinityconsultants.com	www.trinityconsultants.com/ab32ghgverification
H-10-177	TUV SUD America, Inc. 10 Centennial Drive Peabody MA 01960	Marisol Bacong 978-573-2500 mbacong@tuvam.com	www.tuvam.com
H-10-172	Versar, Inc. 7844 Madison Ave. Suite 167 Fair Oaks CA 95628	Satish Natarajan 916-475-0090 snatarajan@versar.com	www.ab32verifiers.com
H-10-173	WZI Inc. 1717 28th Street Bakersfield CA 93301	Jesse Frederick 661-326-1112 jfrdrck@wziinc.com	www.wziinc.com

List of AB-Accredited Verifiers (in PDF format)

For questions regarding ARB's verifier accreditation or greenhouse gas verification process, please contact:

