

PROFESSIONAL BACKGROUND -- CLEMENT MESAVAGE, JR.

General. Clement Mesavage, Jr. has over 30 years of consulting and trade association experience in environmental, health, safety, fire and explosion, variance and loss, and customer service quality matters associated with product storage, handling, and transfer practices of over 500 bulk liquid, aboveground tank terminals ("tank farms") in 43 states that handle hundreds of liquid petroleum, chemical, and other products (SIC Codes 4226 and 5171). Services have included expert witness testimony, incident investigation, facility compliance and contractor service quality audits, due diligence site assessments, waste management services, contingency plan preparation, air, water, and waste permitting services associated with DOT, EPA, OSHA, USCG, and State requirements as well as industry and customer contracted responsibilities. He has also had contracts with government and private pipeline operators (SIC Codes 4612, 4613, 4619, and 9711), plus the military, manufacturers, municipalities, port/airport authorities, and insurance companies. In addition, at referral of the FBI and DOE, Mr. Mesavage has been since 1999 Special Term Employee to the Nations Infrastructure Protection Program advising DOD, Homeland Security, and others on protection of military/industry tank farm assets from terrorist attacks; work encompassing 1,500 locations.

Education. Mr. Mesavage holds 3 college degrees. He holds a B.S. in Engineering (Environmental) from Purdue University [Purdue (W. Lafayette)], a Master of Civil Engineering from the Massachusetts Institute of Technology [M.I.T. (Cambridge)] (Contingency Logistics in Bulk Liquid Material Transportation), and a Master of Public Administration from the University of Southern California [U.S.C. (Los Angeles)] (Permit Acquisition & Agency Project Decision Prediction Techniques). His education was specifically tailored to meet the needs of the tank terminal, bulk plant, maritime, product distribution, and transport mode companies. His M.I.T. thesis was funded in part by the Maritime Administration.

Author/Publications. Mr. Mesavage was the draft author of the California Hazardous Material Pipeline Act under consulting contract with the California State Assembly (AB 2587, carried by Elder, 1979). He is also wrote several documents when he was an employee of the Independent Liquid Terminals Association (ILTA). The ILTA documents including the 400-page compilation entitled "ILTA Law and Regulation Guide to Bulk Liquid Terminals" (co-author, 1983), and author of "OSHA Emergency Action Plans" (1981), "Terminal Personnel Training" (1981), "Model Spill Prevention, Control, & Countermeasure Plan" (1982), "Model U.S. Coast Guard Operations Manual" (1982), "Computer Application at Terminals" (1982), "Scales, Meters, and Liquid Gauging" (1982), "Application of Hazardous Waste Regulation to Terminal Operations" (1982), "MARPOL Ship/Waste Water Reception" (1984), "Model Safety Checklist for Design and Operation of Terminals" (1985), and "Model Hazard Communication Manual for Terminals" (1988). He also wrote/ copyrighted in 1994 a model EPA/USCG FRP OPA spill response plan for the tank farm industry.

Regulation Expertise. Mr. Mesavage has been a qualified expert witness to the oil and chemical industry and its infrastructure plus the U.S. Justice Department as well as insurance companies in matters involving regulation compliance with 40 CFR 110-112 (SPCC/OPA), 49 CFR 172-199 (DOT/RSPA), 40 CFR 52, 60, 61, 68, 79 and 80 (Air), and 122-124 (NPDES), 33 CFR 154-158 (USCG), 40 CFR 300-302 (CERCLA), 40 CFR 355-370 (SARA/EPCRA), 29 CFR 1910-18 (OSHA), 40 CFR 403 (CWA/POTW), 40 CFR 260-280 (RCRA), and 40 CFR 761 (TSCA). He has also provided testimony regarding industry standards such as NFPA 30 & API 2610, customary practices in industry, and to State regulation affecting storage and transfer.

Employment. Mr. Mesavage is currently Senior Professional and Compliance Program Director for Earth Tech, Inc. a Tyco International Company. He completes EH&S work for tank farms, power plants, and telecommunications clients. He is also Sole Member Proprietor of Midstream Farm, LLC, a Virginia company based in Virginia that was formed December 28, 2001 to replace Mr. Mesavage's previous company of 14 years known as Think Tank Resources, Inc. His project work has included being the regulatory compliance auditor of DLA/DFSC/DESC Navy and Air Force tank farm depots nationwide and providing EH&S services for the following companies: Allied Terminals, Ameropan, Amoco Oil, Arcadian, Archer Daniels Midland, Argonne National Lab, BASF, Baytank, Bethlehem, Brooklyn Union, Buckeye Pipeline, Cabot Corp., CALTEX, Carbon Steel, Center Oil, Charter Terminal, Charter-Triad LLC, Citgo, Citicorp, Clark Oil, Colonial Pipeline, Corco, Croda Inc., Croda Storage, Crowley, Crown Centrap Petroleum, Cummins Terminal, Defense Fuel Supply Center (DFSC/DESC)/Defense Logistics Agency, Delaware Terminal, Delta Commodities, Demaco Corp., Diamond Oil, Dubai, U.A.E., Dominion Generation, Dynamac, E D & F Man, EOTT Energy, Enron Oil/Gas, Fleet Supplies, Florida Power & Light, Foster Wheeler, Galveston Terminals, Gantrade, GATX Terminals, Gaylord Chemical, General Chemical, Gulf Interstate, Gulf States, Halliburton NUS, Houston Fuel Oil, ICI Americas, Kinder Morgan, ILTA, Independent Liquid Manufacturers Association (ILMA), Interstate Energy Co., International Oil, ITAPCO, IWRN, Lemm Corp., Liquid Transfer, Louis Dreyfus Energy Corp., Lubripac, Marketwest Hydrocarbon, Media General Cable, MEIOCO, M.I.T., Montank, Motiva, Nelson Energy, New Haven Terminal, Noco, Norfolk and Southern Railroad, Norfolk Oil, Northville, O-3 Limited, Oiltanking, Optimal Quality Grains/DuPont, PanOcean, Pennsylvania Power & Light, PEPCO, PetroUnited, Petroleum Fuel and Terminal Company, Pipeline Technology, Pirelli Tire, Platzer Shipyard, PM Ag Products, Port City Terminal, Port of Port Royal, PPG, Praxair, Ramsey Scarlett, R. M. Walsdorf, Rollins, Roscom, SICPA, South Coast Terminals, Santa Fe Pacific Pipelines, Sprague Energy, ST Services, Star/Texaco, Statia, Steuart Petroleum, Stratus, Systems Logistic Trucking, Terquimca, 3M, Tidewater Barge, Tidewater Terminal, Unitank, United Elastic, U.S. Air Force, U.S. Justice Department, U.S. Navy, Valleytank, Verizon,, W.A.S. Terminals, Westway Terminals, Whitaker Oil, Witco Chemical, Wolf Lake, & Zapata Haynie, Transmontaigne, & White Pass Alaska.

Prior to his full time consulting, Mr. Mesavage was the National Director of Technical Services (1981-1988) for the Independent Liquid Terminals Association [ILTA] (servicing 87 aboveground tank farm firms with 487 terminal locations and their 350 suppliers), was West Coast Manager of Environmental Affairs (1979-1981) for GATX Terminals Corporation (43 terminals and once was largest of its kind), and was an environmental systems engineer (1974-1975) with Bechtel Corporation. As a student, Mr. Mesavage had research assistantships with M.I.T., Southern Cal., and Purdue, as well as the Department of Economics of Harvard University (under contract with the John F. Kennedy School of Government); he also completed an internship with the California Coastal Commission while at Southern Cal.

While in college in the 1970's, Mr. Mesavage was also a part time bulk liquid terminal consultant (1975-1979) providing various services in Southern California to Champlin, SOHIO/BP, the Port of Long Beach, City of Boston, County of Los Angeles, the Federal EPA, Marlex Petroleum, MacMillon Oil, Chevron USA, the San Diego Naval Base, Bethlehem Steel, the California State Assembly, Arizona Public Service, Southern California Edison, Mobil Oil, and lobbyists. This work was done to pay for tuition, etc.

Registration/Memberships. Mr. Mesavage is a Registered Environmental Assessor (REA #00036) in the State of California, has been a Member of the Institute of Environmental Auditors, the National Association of Environmental Professionals, the Water Pollution Control Federation, the Air and Hazardous Waste Management Association, and has been a working group member in the past of API, CMA and Federal Chemical Transportation Advisory Committees on Marine Vapor Emissions. Mr. Mesavage has also contributed comments to ILTA, API, and NFPA regarding the provisions of various industry standards such as NFPA 11 and 30, API 650, 653, and 2610, plus ANSI and ASME standards.

Deposition, Trial Court, Administrative Hearing, Rulemaking, or Other Testimony

Mr. Mesavage has participated in administrative hearings, submitted affidavits and declarations, has participated in agency rulemaking, and has been retained for litigation support services including deposition and trial testimony experience. Career experience (not limited in years) includes the following (legal cases or other matters): **(a.h.** = admin. hearing; **e.r.** = expert report; **d.** = deposition; **t.t.** = trial testimony; **r.d.** = rulemaking development; **c.l.** = committee liaison); **f.q.d.** = fact question development; **p.i.** = pending involvement; **s.i.** = site investigation; **a.** = affidavit):

1. Marlex Petroleum & Federal EPA (e.r.) (San Francisco)
2. Fletcher v. Utah Power and Light (e.r.) (Salt Lake City)
3. Graybill and Unocal (e.r. d.). (San Diego)
4. Halliburton NUS Environmental. v. Roy F. Weston Services (e.r. d., t.t.) (Philadelphia)
5. Petroport and N.Y.C. Fire Department (e.r.) (N.Y.C.)
6. Amoco and City of Fairfax, VA (a.h.) (Fairfax)
7. Petroleum Fuel & Terminal and Chicago Sanitation District (a.h.) (Chicago)
8. County of L.A. and Federal EPA (r.d. a.h.) (Los Angeles)
9. GATX and Port of Los Angeles (a.h.) (Los Angeles)
10. SOHIO and Port of Long Beach (r.d. a.h.) (Long Beach)
11. Clark Refining & Marketing and Illinois EPA (a.h.) (Rockford)
12. Clark Refining & Marketing and Missouri DNR (s.i.) (Rockford)
13. Pacific Molasses and State of Alabama (a.h.) (Montgomery)
14. Pacific Molasses and Federal EPA (s.i.) (Houston)
15. California State Assembly and Pipeline Operators (r.d. c.l., a.h.) (Sacramento)
16. ST Services and State of Texas (a.h.) (Austin)
17. City of Boston and Federal EPA (c.l.) (Boston)
18. Agency Rulemaking and Congressional Lawmaking (r.d. & c.l.) (Washington)
19. PPG Industries and Clorox (s.i. e.r.) (Louisville)
20. United Elastic and Chevron (e.r.) (Richmond)
21. Ameropan Oil and Commonwealth Edison (e.r. a.h.) (Chicago)
22. Sun Pipe Line v. Toxic Tort Party (f.q.d.) (Corpus Christi)
23. U.S. v. Koch (f.q.d.) (Tulsa & Houston)
24. U.S. v. Texaco Pipeline (e.r.) (Houston)
25. Pittston Company & Ultramar America, Ltd (Tankport) v. Allianz Insurance, Hartford Insurance, London Insurers, Wausau & American Marine Underwriters (e.r. d) (Newark)
26. Stan Trans. v. Norman Trainer (e.r.) (Galveston)
27. Stan Trans v. Loughridge (p.i.) (Texas City)
28. Galveston Terminal, Hollywood Marine, & SeaRiver Maritime v. J. Young (s.i.) (Houston)
29. Shell Oil Products v. Lloyds of London and Deverin (p.i.) (Newark)
30. White Pass Alaska v. Harbor Transportation Canada (e.r.) (Anchorage)
31. Posey v. Chaparral (p.i.) (Phoenix)
32. Witco Chemical v. OSHA (e.r.) (Pittsburgh)
33. International Matex v. Archer Daniels Midland (p.i.) (New Orleans)
34. Vopak/Paktank & Yasuda Fire & Marine Insurance v. M/V Stolt Kikyo et al (e.r.) (Houston)
35. Chester County Airport Authority v. AE&C, Inc. (e.r.) (Philadelphia)

36. U.S. EPA & Texas v. ARCO, Ashland, Kinder-Morgan, GATX, & El Paso et al (e.r., d.) (Houston)
37. Dow Chemical v. Odfegfeld Shipping (p.i.) (Freeport)
38. Dupont Optimum Quality Grains v. Westway Trading (e.r. d.) (Sioux City)
39. Global Solutions & Am. Guarantee & Liability v. NASDI & Greenwich Insurance (e.r.) (Century City)
40. Crowley Maritime v. Beacon Insurance and Chicago Insurance (e.r. d, a.) (Seattle)
41. Exxon-Mobil v. Proposition 65 Coalition (p.i.) (Los Angeles)
42. Amerada Hess v. El Paso Pipe Line Company (p.i.) (Corpus Christi)
43. Baltimore Gas & Electric & Pinkerton Securities v. Injured Party (p.i.) (Baltimore)
44. Kinder Morgan v. Injured Party (p.i.) (Carteret, NJ)
45. Motiva (Texaco) v. U.S. Justice/EPA (p.i.) (Delaware City)
46. Hong King Int'l Airport v. Shiuwing Steel (p.i.) (Hong Kong)
47. Injured Party v. Denver Area Facility (p.i.) (Denver)
48. Railroad Company Employee v. Lemm Services (f.q.d.) (Charleston, SC)
49. Ship Agent/Vessel Party v. Shell Oil (p.i.) (New Orleans)
50. Radtke v. Rohm & Hass Company (p.i.) (Chicago)
51. Crown Central Petroleum v. Robson (e.r.) (d.) (Indianapolis)
52. Pipeline Technology v. ICOM Pipeline (p.i.) (Baton Rouge)
53. Systems Logistics Trucking v Southern Counties Oil Co. (e.r.) (Los Angeles)
54. International Oil & SL Transport v. Plaintiff Federated Insurance Company (e.r.) (Denver)
55. Titan Tire v. Pirelli Tire, et al (Des Moines) (e.r.)
56. U.S. Justice Dept. v. Sunoco (p.i.) (Philadelphia, PA)
57. Genetech v. Rice (p.i.) (San Francisco)
58. Richmond Redevelopment Agency v. Ashland Oil & Petromark (e.r.) (San Francisco)
59. Customer v. Birch Oil (e.r.) (Baltimore)
60. Norfolk Southern v. Johnson (Chattanooga, TN) (p.i.)

Types of Documents or Operating Procedures Written for Consulting Clients:

1. Industry Model Vulnerability Assessment Protocol (written for Homeland Security, FBI, and DOE; circulated to law enforcement agencies nationwide)
2. ILTA Terminal Operation Series Publications (refer to names on Page 1 of my resume)
3. ILTA Guide to Federal Laws & Regulations (1,000 page guide)
4. Navy and Air Force EH&S Multi-Media Fuel Depot Audits (each report over 1000 pages)
5. Expert Witness Reports (refer to caseload in my resume)
6. Incident Episode Response Reports (CERCLA/RCRA/CAA/CWA)
7. Air Pollution Permit Application Reports
8. Spill Facility Response Plans (OPA EPA/USCG/MMS/DOT/RSPA FRP & State Specific Plans); procured copyright to the EPA FRP Model Format; have dozens of plans approved in all EPA/USCG districts.
9. Spill Prevention Control and Countermeasure Plans (SPCC Plans) written nationwide.
10. USCG Operation Manuals (Coast Guard equivalent of the SPCC Plan)
11. Stormwater Pollution Prevention Plans (SWPPP Plans)
12. Best Management Practices Plans (BMP Plans)
13. Standard Operating Procedures (SOPs)
14. Phase 2 Site Assessments (ASME 1527-1528 Due Diligence Reports)
15. Site Health and Safety Plans (OSHA/EPA HazWaste Site Safety Plans)
16. Risk Management Plans (EPA RMP Toxic Air Pollutant Plans)
17. Process Safety Management Plans (OSHA PSM Plans)
18. Confined Space Entry Plans (OSHA)
19. Bloodborne Pathogen Plans (OSHA)
20. Respiratory Protection Plans (RPP Plans)
21. Emergency Action Plans (EAPs)
22. Emergency Response Plans (ERPs)
23. Hazard Communication Plans (HazCom Plans)
24. Generator Contingency Plans (RCRA Waste Generator Plans)
25. TSDF Contingency Plans (Treatment Storage Disposal Facility Plans)
26. Waste Management Evaluations (RCRA Waste Brokerage Reports)
27. HazWaste Manifests and DOT HazMat) Bills of Lading (completed for hundreds of substances)
28. Product Marketing Studies (EH&S Marketing Reports for Vendor Services & Products)
29. DOT/RSPA Pipeline Operation Manuals

30. DOT/RSPA Facility Security Plans (Homeland Security Plans required as of 2003)
31. HM 181 and HM 126F DOT/HazMat Operator Training Plans
32. Groundwater and Soil Sampling Plans (Remediation)
33. Environmental, Safety, & Health Audits (Multi-Media Reports; have done over 400)
34. ISO 14000-14001 EH&S Audits
35. Tailored Training Program Audits
36. Environmental and Safety Manager Training Course Programs
37. OSHA Safety Audits (All 29 CFR 1910 provisions)
38. TSCA & FIFRA Premanufacture Notices (Toxic Substance Control Act (TSCA) EPA Applications
39. Alcohol Tobacco and Firearms (ATF) Facility Operating Procedures
40. Federal Railroad Administration (FRA) Transport Mode Loading & Unloading Procedure Manuals
41. MSD Sheet Preparation (Have written dozens of MSD Sheets using OSHA 179 Format)
42. POTW/Sewer Permit Sampling Plans
43. Dredging and Natural Resource Assessment Plans
44. SARA Title III Tier 2 Reports and Form R's
45. HAZOP Risk Assessment Plans
46. Title V Air Permit Applications (I have procured permits in many states)
47. Air Pollution Emission Inventory Reports (EPA TANKS 4.9)
48. Proposition 65 California Toxics Inventory Reports
49. API 653 All State and Alaska & New Jersey Format Tank Inspection Reports
50. Air Pollution Modeling Reports (Screening & Advance Atmospheric Modeling Reports)
51. Insurance Inspection Reports
52. Marine Vapor Recovery Operation Manuals
53. MARPOL International Waste Receipt Certificates of Application
54. MARPOL Waste Exportation Applications
55. MARPOL Noxious Liquid Substance (NLS) Applications
56. Facility Inspection Checklists (All EH&S and SOP Matters)
57. Medical Surveillance Plans (OSHA)
58. RCRA Waste Minimization Plans
59. Pipeline Operator Qualification Program Plans
60. Corporation Meeting Presentations
61. Fire Code and Protection Plans (NFPA 30)
62. Computer Applicability to Terminals

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