



TECHNOLOGY VALIDATION AND TEST DATA

In addition to Balboa Pacific's own analytical data on exhaust emissions and solid byproducts, the following reports prepared by independent certified environmental companies and laboratories are available upon request.

- 1. Scientific Associates: Capability Evaluation (February 2004):** Response to request for scientific opinion regarding the application of Balboa Pacific's Pyrolytic Gasification technology in the eradication of the chemical defoliant 'Agent Orange'.
- 2. URS Corporation Ltd (December 2002):** *Validation of Previous Monitoring Reports for the Bal Pac 2000 Pyrolysis Plant*
- 3. Dames & Moore (March 1997; Contracted by Sandia National Laboratories):** *Performance Testing of a Laser-Induced Breakdown Spectroscopy (LIBS) Based Continuous Metal Emissions Monitor at a Pyrolytic Waste Treatment Facility.* Testing the LIBS-based CEM on the Balboa Pacific Corporation Thermal Conversion System processing municipal solid waste, shredded tires, and spent catalyst; run concurrently with *Source Test Report Multiple Metals Emissions Testing*.
- 4. Dames & Moore (March 1997; Contracted by Sandia National Laboratories):** *Source Test Report Multiple Metals Emissions Testing.* Testing the BAL-PAC pyrolytic unit processing municipal solid waste, shredded tires, and spent catalyst.
- 5. Dames & Moore (March 1997; Prepared for Big Bear Area Regional Wastewater Agency):** *Source Test Report Pyrolytic Thermal Conversion Unit Using a Municipal Waste Feed*
- 6. Dames & Moore (February 1996; Prepared for Balboa Pacific Corporation):** *Source Test Report PCB Treatability Demonstration Test on the Pyrolytic Thermal Conversion Unit with a Thermal Oxidizer (Liquid Feed)*
- 7. Dames & Moore (February 1996; Prepared for Balboa Pacific Corporation):** *Source Test Report PCB Treatability Demonstration Test on the Pyrolytic Thermal Conversion Unit with a Thermal Oxidizer (Liquid and Solid Feed)*
- 8. John L. Hunter & Associates (December 1995; Prepared for Balboa Pacific Corporation):** *Source Test Report: Effluent air sampling and analysis from Pyrolytic Thermal Conversion Unit*
- 9. Pacific Environmental Services, Inc. (October 1995; Prepared for ATC Environmental Services, Inc.):** *Source Test Report for Measurement of Toxic Metals, Particulate Matter, Nitrogen Oxides, Sulfur Dioxide, Carbon Monoxide and Total Hydrocarbons on the Exhaust of a Pyrolytic Oxidation Unit at Balboa Pacific Corporation*
- 10. Pacific Environmental Services, Inc. (April 1995; Prepared for ATC Environmental Group, Inc.):** *Source Test Protocol for Measurement of Particulate Matter, Nitrogen Oxides, Sulfur Dioxide, Carbon Monoxide and Total Hydrocarbons on the Exhaust of a Pyrolytic Oxidation Unit at Balboa Pacific Corporation*
- 11. Pacific Environmental Services, Inc. (April 1995; Prepared for Balboa Pacific Corporation):** *Source Test Protocol for Measurement of Particulate Matter, Chromium, Manganese, Copper, Lead, Zinc, Nickel, Cadmium, Nitrogen Oxides, Carbon Monoxide and Hydrocarbons on the Exhaust of a Pyrolytic Oxidation Unit at California Steel Industries, Inc.*
- 12. Pacific Environmental Services, Inc. (June 1994; Prepared for Southern California Gas Company):** *Project Summary Report on Demonstration of Thermal Waste Conversion System at California Steel, Inc.*