

## Electronics and Semiconductor Manufacturing

Whether you're in the electronics, semiconductor, telecommunications, computer hardware, chip and wire, printed circuit board or other high-tech manufacturing field, CAPACCIO can help your company with all of your engineering and environmental, health and safety (EH&S) needs. From materials and services to equipment and fabrication projects, our staff has more than 100 years of combined experience working as Facility and EH&S Managers in the electronics and semiconductor industries and our staff of engineers, scientists, and regulatory specialists are experienced in a variety of electronics and semiconductor manufacturing and facilities processes. With this knowledge, we can help streamline your processes and improve performance in every area of your business.

Since 1992, our experts have been delivering unparalleled expertise through a variety of services designed especially for this industry. We serve our clients with facility set-up and closure protocols; greenhouse gas reporting; environmental, health and safety compliance and auditing services; preparation and submittal of environmental permits and registrations; sustainability reporting, design of manufacturing process and air and water pollution control systems; development and delivery of environmental, health and safety training services; developing, maintaining and auditing management systems (ISO, OHSAS); hazardous waste management; and by providing EH&S professional staff to work on-site at your facility.

### Environmental, Health and Safety Compliance

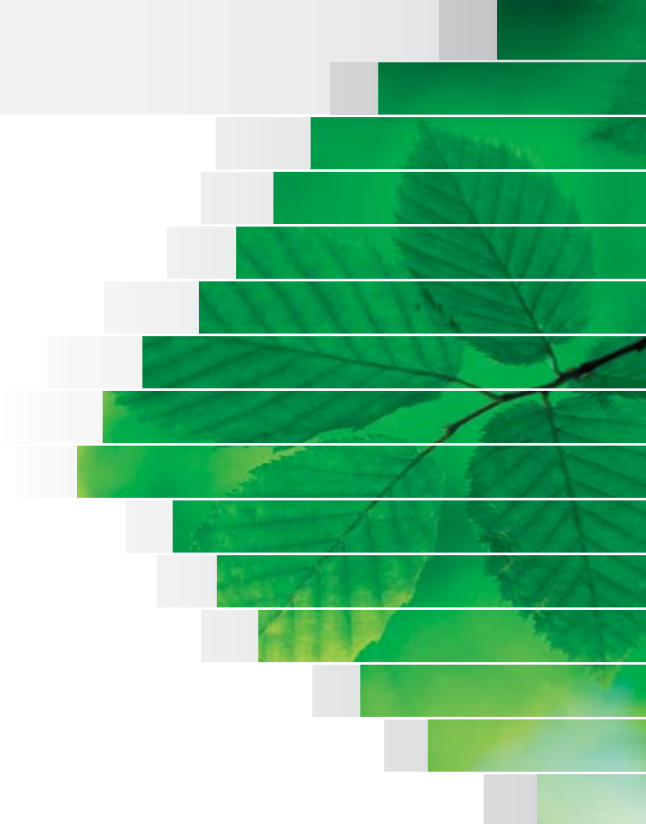
CAPACCIO can provide EH&S compliance services on an as needed basis, routine basis or we can work on-site and become part of your team under our Environmental Management Program™. On-site services can include:

- Biennial hazardous waste reports
- Chemical inventories
- Chemical, laser, radiation and biological safety
- Contingency and Emergency Response planning
- Controlled substances and controlled chemicals permitting/licensing
- Development of EHS management tools (e.g., environmental compliance calendar)
- EH&S management program design and implementation
- EH&S live and computer-based training
- DHS Chemical Facility Anti-Terrorism Standard reporting and planning

- Flammable storage permitting/licensing
- Greenhouse gas reporting
- Hazardous material storage planning
- Industrial hygiene and indoor air quality sampling
- Mass DEP Rideshare compliance and reporting
- Process safety management (for pilot and manufacturing plants)
- Recycling permits and programs
- Tier II reporting
- Systems and EH&S compliance auditing
- Systems development/integration
- Toxic chemical release inventory reporting (Form R)
- Toxics Use Reduction Planning and reporting (Form S)
- US DOT consulting including registration and site security plans
- Waste characterization
- Waste Generator training and written training programs
- Waste management programs

### Engineering Services

- Aboveground and underground storage tank permitting and certification
- Air permitting
- Air pollution control design and evaluation
- Industrial ventilation design and review
- CAD services including development of plans for wastewater treatment systems, site improvements, air pollution control systems, evacuation plans, and pollution prevention
- Determinations for Lowest Achievable Emission Rate (LAER), Best Available Control
- Technology (BACT), and Reasonably Available Control Technology (RACT)
- Permit application preparation for air pollution control systems and process ventilation
- Permit application preparation for water treatment and wastewater treatment systems
- Permit application preparation for fuel burning equipment including emergency generators
- Permit application preparation for surface water discharges under the National Pollutant Discharge Elimination System (NPDES) program
- Risk Management Programs
- Spill prevention, control, and countermeasures plans and training
- Stormwater pollution prevention plans, training
- Wastewater system design and evaluation
- Wastewater treatment system grading reports, operation and maintenance manuals, staffing



## EH&S Web-Based Applications and Tools

- EHS-Dashboard™
- Chemical Tracking (CHEMtrack™) Program for reporting needs/information management
- Risk Assessment and Lockout /tagout applications
- Custom Applications

## Sustainability Services

- Management Systems development, integration and auditing
- Sustainability and corporate assessments including:
  - Helping with SRI Certification
  - Verification
  - Benchmarking
  - Carbon Disclosure Project (CDP) Reporting
  - Corporate Sustainability (CSR) Reporting
  - Meeting the EICC standard

## Environmental Permitting

- Flammable Storage permits and licenses
- License applications for chemical storage
- Permit application preparation for air pollution control systems and process ventilation, stormwater and wastewater
- Permit application preparation for water treatment and wastewater treatment systems
- Permit applications for fuel burning equipment including emergency generators
- Permit application preparation for surface water discharges under the National Pollutant Discharge Elimination System (NPDES) program

## Design and Construction Assistance

- Bid assistance
- Contaminated soil and groundwater management
- Design of air and wastewater pollution control/treatment systems
- Design of local exhaust ventilation
- Drawings and specifications
- Pilot testing
- Treatability and feasibility studies
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## Due Diligence

- Facility set-up and closure assistance
- Property transaction screening
- ASTM Phase I environmental assessments
- Groundwater investigations

## QUALIFICATIONS

CAPACCIO professionals are:

- Certified Environmental, Health & Safety Trainers (CET)
- Certified Hazardous Materials Managers (CHMM)
- Certified Industrial Hygienists (CIH)  
Certified RABQSA Auditors
- Certified Safety Professionals (CSP)
- Licensed Professional Engineers (PE)
- Licensed Site Professionals (LSP)
- RCRA Hazardous Waste Management

**For more information regarding CAPACCIO's Electronics and Semiconductor manufacturing services, please contact Dan Forsythe, CHMM, TURP, RABQSA Auditor, Practice Area Leader for Semiconductor and Electronics, at 508.970.0033 ext. 135 or [dforsythe@capaccio.com](mailto:dforsythe@capaccio.com).**



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