



# RTP CAN EFFECTIVELY IDENTIFY AND RESOLVE YOUR ENVIRONMENTAL ISSUES

RTP Environmental Associates, Inc. (RTP) is a full-service environmental consulting firm with a highly experienced technical staff of engineers, chemists, meteorologists, computer scientists and information specialists. Founded in 1978, our years of experience provide us with excellent knowledge of the complex technical and regulatory issues involved in environmental permitting activities. We respond quickly to immediate needs, as well as provide long-range comprehensive planning services for both large and small scale projects.

Each regional office is headed by a principal with over 20 years experience in their respective disciplines. Several principals are nationally recognized experts. Our leadership is reflected in our training activities with major clients and state agencies, as well as books and training manuals authored by RTP staff.

With offices located throughout the United States, RTP is uniquely positioned to effectively assist industry and government with the identification, analysis, and control of environmental issues. We provide consulting services in air, water and solid waste disciplines.

### RTP CONSULTING SERVICES ARE CONCENTRATED IN THESE MAJOR AREAS

- Air Quality Permitting and Regulatory Assistance
- Meteorology and Dispersion Modeling
- Air Quality and Meteorological Monitoring
- Air Pollution Control System Services
- Enforcement and Litigation Support
- Training and Information Sciences
- Source Sampling and Emission Control Technology Evaluations
- Solid and Hazardous Waste Management
- Water Quality Permitting and Regulatory Assistance
- Risk Management Planning Services
- **Environmental Impact Statements and Assessment Services**
- **Environmental Site Assessment Services**
- ISO 14001 Environmental Management System Services
- RCRA Compliance and Training Services
- Indoor Air Quality Services
- Asbestos and Lead Paint Services

RTP's philosophy is to provide our clients high quality, responsive and cost-effective consulting services. This document describes the services we offer in the areas outlined above. For more information or a description of additional services, please contact our nearest office.



Please visit our website at www.rtpenv.com



# RTP has become synonymous with leading-edge air quality permitting services.

Our staff includes many of the top air quality professionals in the country, including nationally recognized experts involved in training government and industry permitting professionals. We have the experience and expertise to achieve project goals even under the most complex regulatory and permitting situations. Some of our core service areas include:

- Process analysis and emissions inventory
- Statutory/regulatory analysis and applicability determinations
- Strategic project planning to minimize compliance costs and other regulatory impacts
- NSR/PSD and minor source pre-construction permitting
- RACT, BACT, LAER, MACT and BART determinations
- Dispersion modeling and ambient air monitoring
- CAM development and compliance monitoring
- Title V and synthetic minor/conditional major operating permits
- Air toxics permitting and compliance



### **ANALYSIS OF COMPLEX REGULATORY ISSUES**

Our clients rely on RTP to provide them with a complete analysis and thorough understanding of Clean Air Act (CAA) regulations and applicability to

specific situations. RTP has extensive experience with regulatory applicability determinations and the development/ approval of alternative compliance and monitoring plans. This often relates to NSR and PSD, where RTP is widely recognized

as the leading authority, but that expertise extends to all areas of CAA compliance. Our veteran staff, which includes former EPA and State agency officials, recognizes the need to look beyond the words in the regulation to understand EPA and/or state policies and legal precedents. RTP maintains what is clearly the most comprehensive and usable nongovernmental compilation of EPA air policy and guidance documents in existence, and we bring the knowledge contained in that compilation to bear in developing permitting strategies and negotiating with regulatory agencies.

### PRE-CONSTRUCTION AND TITLE V PERMITTING

One of our core services is "routine" major and minor source permitting for clients throughout the U.S., representing all major industry sectors. RTP has an extensive track record of successful projects in all areas of pre-construction permitting, including major NSR/ PSD permits, minor and synthetic minor permits, PSD netting-based permits, non-attainment area permits and offsets, and bubble or plant wide applicability limit (PAL) permits. We dedicate senior level staff who have the comprehensive knowledge and experience necessary to deliver permit applications and supporting technical analyses,

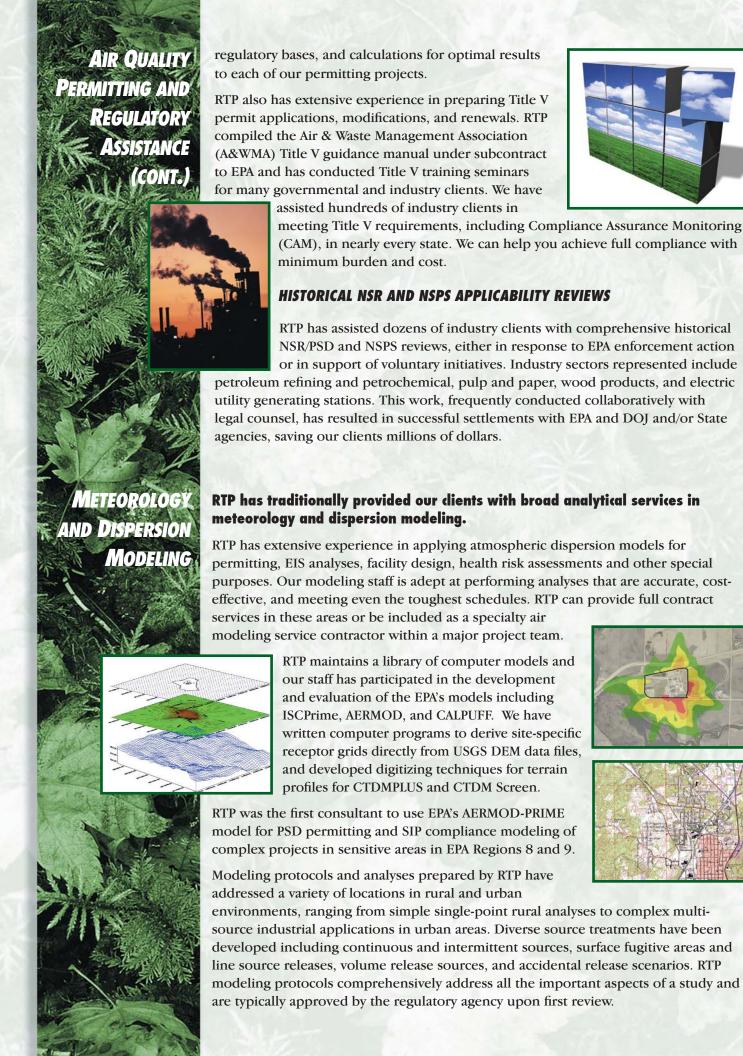
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# We perform ambient monitoring for pollutants and meteorological parameters.

Our meteorological monitoring experience includes the installation and operation of remote, solar powered wind measurement systems, Doppler and monostatic acoustic radar systems, and multi-leveled tall towers. We can provide complete turnkey systems or lease equipment for the duration of a monitoring project.



RTP performs independent "third party" system and performance audits on existing monitoring systems as well as data reduction and processing services.

RTP also integrates high quality field data with local and regional meteorological and climatological conditions to specifically evaluate existing and proposed source interactions.

RTP can provide you with complete turnkey ambient monitoring systems for meteorology, criteria pollutants, metals, fluorides,

volatile and semi-volatile organics, toxic and hazardous pollutants as well as noise and odor. Our experienced staff offers full-service instrumentation, operation and calibration. RTP can supply visual and data telemetry, data management and equipment maintenance services. In addition, we can provide in-house analytical services for TSP, PM10, PM2.5, metals, fluorides, VOC, SVOC and HAPs.

### MONITORING SYSTEM FEATURES AND MANAGEMENT SERVICES INCLUDE

- Design of monitoring systems
- Supervisory control and data acquisition
- Real-time process monitoring
- Real-time and historical trending
- Alarming and alarm management
- 100% data integrity
- Comprehensive, accurate reporting
- Statistical process control.



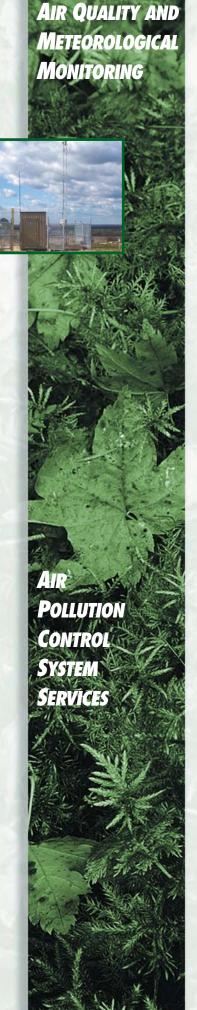
Increasingly stringent environmental regulations are requiring higher performance and greater reliability for new air pollution control (APC) systems.

Failure to comply can mean significant penalties for both owners and operators.





- Definition of emission characteristics, such as flow rate, temperature, pressure, and composition
- Identification of APC technology alternatives
- Technical and economic cost/benefit evaluations of alternatives with recommendations
- Preparation of process flow diagrams and piping & instrumentation diagrams
- RFP specifications
- Preparation of pre-construction air permit applications
- Development of monitoring, record keeping and reporting protocols and compliance systems
- Preparation of performance and compliance test protocols
- Supervision of performance test after start-up.



# ENFORCEMENT AND LITIGATION SUPPORT

# No company has been more involved in providing technical support to industry related to the EPA NSR enforcement initiatives.

RTP routinely provides expert services by means of testifying and consulting expertise to companies and law firms involved in enforcement actions. We also provide comprehensive environmental management and auditing services to address various challenges when enforcement issues arise.

### **OUR KEY SERVICES INCLUDE**

- Multi-media compliance audits
- Regulatory compliance management systems and tools
- CAA Section 114 response
- Historical regulatory and permitting reviews
- Consent Agreement negotiations and settlement
- Voluntary disclosures
- Expert witness services
- Litigation technical support



Support services include the development of expert reports and testimony related to RACT, BACT, MACT and LAER emissions calculations and permitting procedures.

# TRAINING AND INFORMATION SCIENCES

## RTP recognizes that it can be more economical and efficient to perform certain tasks in-house.

RTP has served as principal faculty for USEPA courses offered by the Air Pollution Training Institute (APTI). Courses developed and presented by RTP include Intermediate Permitting (APTI 461), Effective Permit Writing (APTI 454), Basic and Advanced New Source Review (NSR) Training, Best Available Control Technology (BACT), and Risk Management Planning. We offer a wide variety of training courses, several of which are not available elsewhere.

Unique to RTP is an Advanced NSR course being offered publicly and privately. The course is like no other; it reviews all of the 500+ policy documents in a five volume, 3,000 page NSR Guidance Notebook. RTP also offers a comprehensive workshop on BACT.

# RTP'S TRAINING COURSES ON FEDERAL AND STATE ENVIRONMENTAL LAWS AND REGULATIONS INCLUDE



- Basic, Intermediate, and Advanced New Source Review (NSR)
- Best Available Control Technology (BACT)
- Effective Permit Writing
- Basic New Source Performance Standards (NSPS)
- Basic National Emission Standards for Hazardous Air Pollutants (NESHAP)
- Negotiating Permit Conditions (NSR and Title V)
- Risk Management Planning (RMP)
- Internal auditing/training for Environmental Management Systems (EMS)
- HAZWOPER training
- Ambient air monitoring systems
- Continuous Emission Monitoring (CEM)
- RCRA, DOT and OSHA training



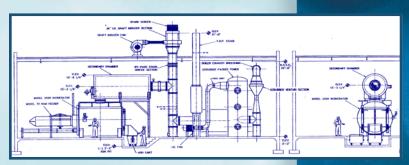
### RTP has expertise in source sampling and Continuous Emission Monitoring (CEM) systems acquired through both research projects and field experience.

RTP designs, conducts, manages, and audits source sampling as well as provides specifications or reviews of CEM systems for a variety of sources.

In many cases we work with associate firms with specialized capabilities in source testing and CEM certifications.

SOURCE
SAMPLING
AND EMISSION
CONTROL
TECHNOLOGY
EVALUATIONS

RTP scientists and engineers maintain the requisite skills to evaluate control options and prepare necessary documentation for conformance with Best Available Control Technology (BACT), Lowest Achievable Emission Rate (LAER), Compliance Assurance Monitoring (CAM), or State regulations.



# RTP is in the forefront of waste management from environmental and regulatory perspectives.

RTP provides environmental consulting and permitting services for the construction and operation of waste treatment storage and disposal facilities such as landfills, composting facilities, resource recovery projects and recycling efforts.



RTP also responds to NSPS and Emission Guideline requirements for landfills, municipal solid waste combustors, and other solid waste disposal facilities. We also provide technical and management support functions either as complete service contracts or special task assignments.





- Assessment and monitoring of existing conditions
- Remediation plan development
- Remedial investigation and feasibility study (RI/FS) workplans
- Remediation alternatives leading to site closure plans



The collective experience of RTP's staff assures that problems will be evaluated completely from all perspectives. Diffusion studies can be integrated into risk assessment methodologies for determining the potential of acute and chronic exposure. The access to risk assessment specialists and extensive databases provides clients with accurate and rapid responses to specific project needs.

SOLID AND
HAZARDOUS
WASTE
MANAGEMENT





RTP provides comprehensive services to successfully assist clients in preparing and obtaining environmental permits and plans required under the Clean Water Act.

Typical permits include NPDES wastewater discharge permits, individual NPDES stormwater

permits, multi-sector general permits, stormwater permits, and Section 404 Wetlands Permits. We also prepare Spill Prevention, Control, and Countermeasure (SPCC) Plans, Facility Response Plans (FRP), and Stormwater Pollution Prevention Plans (SWPPPs).

# RTP CONDUCTS THE NECESSARY SUPPORTING ANALYSES FOR

- Quantification and characterization of wastewater and stormwater
- Applicability determinations
- Wastewater treatment performance analysis
- Vulnerability and hazard analysis
- Preparation and implementation of stormwater management programs





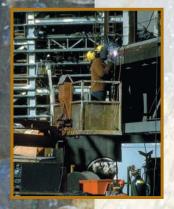
RISK
MANAGEMENT
PLANNING
SERVICES

# Under the General Duty Clause, all users of hazardous chemicals are required to plan for accidents.

RTP has extensive experience evaluating the three basic elements of an RMP (Risk Management Plan): Hazard Assessment, Prevention Program, and Emergency Response Program. We provide:

- Evaluation of potential ranges of releases for a facility, including worst-case accidental releases
- Analysis of potential off-site consequences
- Process hazard analyses
- Determination of program level and compliance documentation





RTP works with on-site and corporate staff to take maximum advantage of the experience and resources already available in your company.

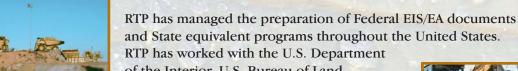
USEPA guidance for an off-site consequence analysis is very conservative. RTP is keenly aware of the potential dangers and liabilities associated with an RMP that shows potential for extreme off-site consequence. Our experience with independent computer modeling can significantly limit over-estimating dangers and liabilities. RTP can also work with your public relations group to prepare community information materials and to set up and participate in public meetings as part of the RMP process.





### RTP provides both managerial and technical assistance in scoping, negotiation, preparation, and defense of an **Environmental Impact Statement (EIS).**

Since permit applications are based on the same information for most environmental disciplines, RTP can integrate these efforts to ensure maximum efficiency and consistency.



of the Interior, U.S. Bureau of Land Management, Bureau of Indian Affairs and state planning and permitting agencies. Our experience has ranged from the fast track approach through defensible documentation for litigation purposes. Our efforts have withstood legal challenges. EIS/EA efforts include capital projects in excess of four billion dollars.

Environmental **IMPACT** STATEMENTS AND **ASSESSMENT** SERVICES



### The purpose of a phased site assessment is to review past and present land use practices, site operations, site conditions, and to evaluate the potential for areas of environmental and regulatory concern.



Site assessments include evaluations of the potential for soil, surface water, groundwater, and air quality contamination resulting from past and/or present operations and nearby off-site operations. The evaluation of the potential issues of concern relating to hazardous materials and wastes at a facility are often conducted in general accordance with the American Society for Testing and Materials (ASTM-1527) standards and in response to client-specific scopes of services.



Each assessment is performed in a phased approach, which begins with a preliminary physical site reconnaissance, including an evaluation of past and present land uses, commonly known as a Phase I Environmental Site Assessment. Potential environmental problems identified during this phase are further investigated to the extent required by applicable regulations as part of a Phase II assessment. Based on the investigative result, mitigation and/or remediation plans

may be initiated. The initial stages of a site assessment are the most crucial. RTP works closely with its clients and when appropriate, the regulatory agencies, to define a timely, phased work plan based on the ASTM standards or other applicable criteria. That plan addresses potential problem areas while remaining focused on specific objectives, thereby limiting analyses and costs. RTP seeks to minimize potential risk within the budgetary limitations of each specific project.

Our staff has performed a large number of environmental site assessment projects. RTP's experience ranges from small vacant lot assessments to large scale assessments. We are available to assist you in preparing a site assessment that is responsive to your needs.







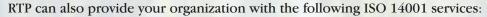
ISO 14001
ENVIRONMENTAL
MANAGEMENT
SYSTEM SERVICES

## RTP excels in developing and assessing Environmental Management Systems (EMS) to conform with ISO 14001 standards.

RTP will work with different management and staff levels within an organization to develop a complete, flexible, efficient, and value-added EMS program. We can assist in planning and implementing a combined Responsible Care and ISO 14001 EMS program.

RTP provides technical assistance in the development, implementation, and maintenance of procedures and programs for the following elements of an EMS:

- EMS manual
- Identification of environmental aspects and significant impacts
- Operational control procedures, work instructions, and records
- Identification of legal requirements
- Environmental objectives and targets
- Training requirements
- Internal and external communications
- Emergency preparedness and response
- Monitoring and measurement
- Calibration, maintenance, and record keeping
- Procedures for relevant compliance requirements
- Identification and maintenance of records
- Corrective or preventive action procedures
- Internal audit plan



- First party EMS audits
- Third party audits of an EMS
- Response to appropriate corrective actions and surveillance
- Gap analysis of existing systems
- Regulatory compliance audits
- Site-specific EMS training

RTP has staff members with international Registrar Accreditation Board EMS certification and experience as contract auditors with a major registrar.



# RTP provides comprehensive EPA and DOT compliance assistance and training for all hazardous waste generating facilities and businesses that ship and/or store hazardous materials or hazardous waste.

We work with clients to develop procedures that meet regulatory requirements, and we also provide required training pertaining to those processes. RTP has experience working with clients to meet DOT and International Air Transport Association (IATA) compliance requirements. We assist clients with DOT security assessments and in developing plans to manage risks identified in security assessments. RTP can audit your process for compliance and provide in-house training. Training can include both regulatory awareness as well as function-specific training.

# RTP provides comprehensive RCRA and OSHA compliance assistance and training services.

We provide routine audits for our clients to determine OSHA compliance in all areas of OSHA applicability. This includes hazard communication, process safety management, hearing conservation, lock-out/tag-out, and permit-required confined space entry.

RTP provides tailored on-site training for many OSHA standards for worker protection.



CONTINUAL

MPLEMENTATION AND OPERATION

ENVIRONMENTAL POLICY

MANAGEMENT REVIEW



# RTP assists dients with indoor and ambient air quality assessments that define potential sources and mitigation options.

RTP will investigate complaint histories, recent facility changes, HVAC evaluations as well as conduct sampling to quickly assess and efficiently identify problem areas and sources. RTP provides comprehensive reports of observations, analytical results and remediation recommendations.

RTP field technicians employ OSHA/ASTM sampling techniques to assess the presence of organic compounds, gaseous emissions, particulate matter, asbestos, lead, mold, bacteria and to determine odor and noise exposure levels. Air microbial samples are collected using impactors and specially prepared petri plates.

RTP performs HVAC inspection, evaluation and planning to provide necessary information to determine the adequacy of an HVAC system. RTP also ascertains the general state of repair and cleanliness and prophylactic protocols for protection against bioterrorist attacks.

RTP assists with both planning and management of the Indoor Air Quality (IAQ) environment by:

- Developing an IAQ profile
- Addressing existing and potential problems
- Educating building personnel
- Developing a plan for operations and maintenance
- Identifying processes with potentially significant pollutant sources
- Communicating with occupants about maintaining good IAQ
- Establishing procedures for responding to IAQ complaints

### RTP provides comprehensive asbestos and lead paint services to our clients.

These services include conducting building assessments, developing removal specifications, and monitoring removals for public, commercial, and industrial facilities. In addition, we are fully accredited under the Asbestos Hazardous Emergency Response Act (AHERA). Our staff has consulted on more than one thousand asbestos-related projects. The types of asbestos and lead services that RTP provides include:



### **SURVEYS AND INVESTIGATIONS**

- Walkthrough limited and general surveys
- Building architectural design review
- Pre-demolition surveys
- Air monitoring and exposure assessment
- Sampling plan and sampling
- AHERA surveys



### **ABATEMENT SERVICES**

- Design of abatement plans and specifications
- Abatement project monitoring
- Project oversight



### **OPERATION AND MAINTENANCE PROGRAMS**

- AHERA-style O&M plans for schools and public buildings
- Building-specific O&M plans tailored for commercial buildings



