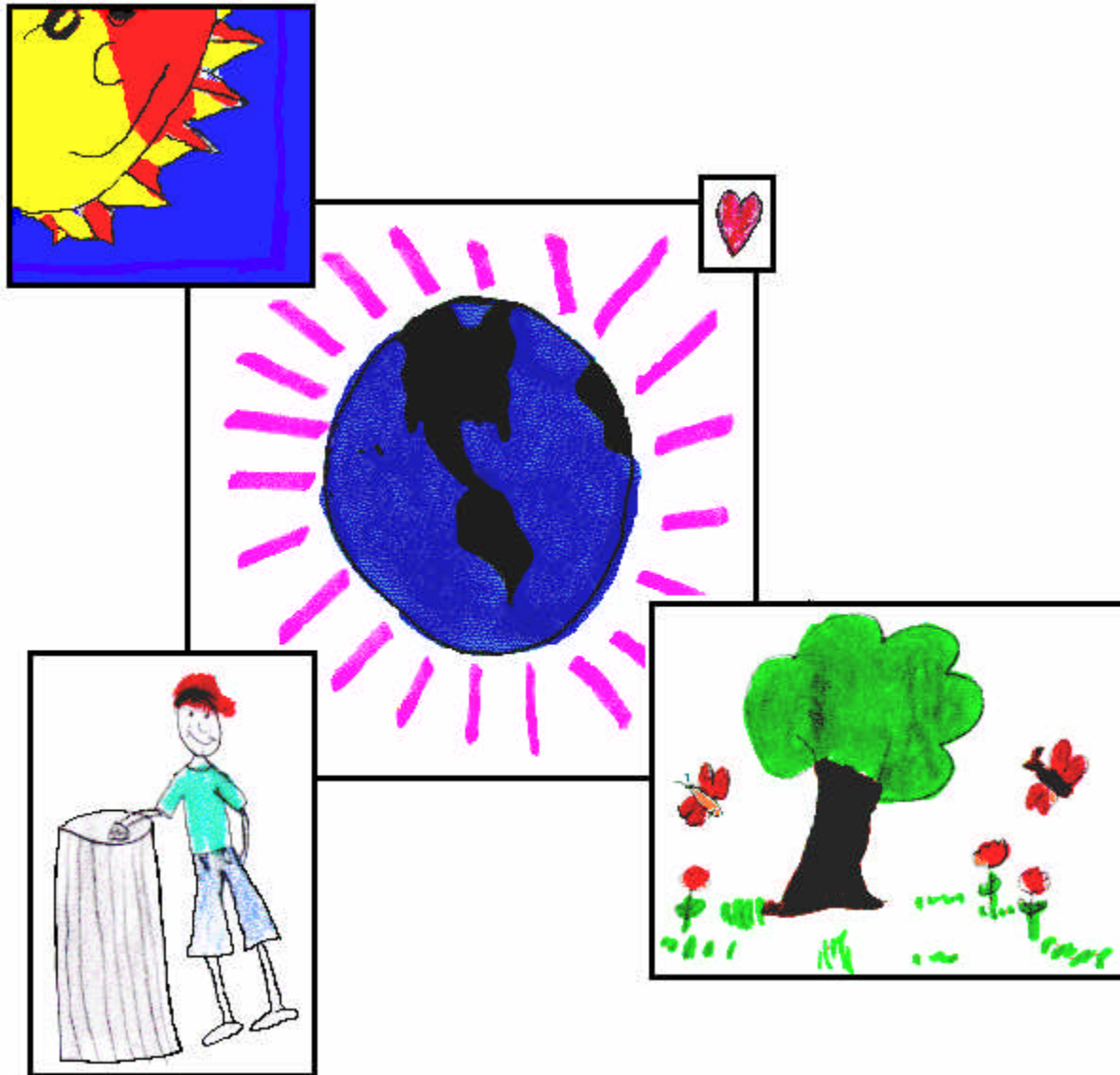


Colonial Pipeline Company Environmental Report



Ensuring a clean and healthy environment

President's Message

We at Colonial Pipeline Company have a vision to provide excellence in oil pipeline transportation services. One of our missions is to ensure a clean and healthy environment. This report introduces you to Colonial's environmental programs and exhibits our commitment to environmental protection.

Colonial is working hard to prevent oil spills. This report briefly explains some of the prevention measures we are taking. While prevention is always the best medicine, we also maintain a comprehensive emergency response training program to be well prepared should a spill occur. We have demonstrated our capability to rapidly and effectively respond to spills to protect public safety and mitigate environmental impacts.

Americans understand the need to properly care for our environment. They demand sound corporate environmental performance. Responsible environmental stewardship simply makes good business sense. More importantly, it's the right thing to do. Integrating environmental programs into our business plan is one of my top priorities.

Colonial's environmental programs have made considerable progress, and we are on track to accomplish our mission to ensure a clean and healthy environment. We are continually looking for ways to improve the program. We want to earn the reputation of being a responsible environmental neighbor. I encourage you to share your thoughts on our environmental programs and performance using the reply card provided.

Sincerely,
Dave Lemmon
President and CEO

Environmental Management System

The Environmental Management System is a process we use to ensure that we meet our environmental commitments. Colonial's Environmental Team leads this effort, and environmental consciousness is the responsibility of all employees.

Environmental Team Structure

The Team consists of 17 employees. A small staff of environmental specialists and the Team leader are located at corporate headquarters. An environmental project manager and one to three environmental technicians are located within each of the four operating districts. This decentralized approach makes it easier for environmental and other pipeline personnel to coordinate their efforts systemwide.

As a member of Colonial's leadership, the Environmental Team leader helps to incorporate environmental objectives into the company's strategic business plans.

Our environmental management system has many aspects. Three key elements are:

- Aggressive training and development program
- Establishment, implementation, and tracking of goals
- Comprehensive audit program

Training

Environmental Team members participate in several types of in-house and external training. We work continuously to improve our technical knowledge and interpersonal skills.

Environmental Team members also instruct and coach other employees and contractors who perform environmental work.

Goals

Each year we set new Environmental Team goals which complement and enhance Colonial's overall corporate goals.

Environmental Team goals cover a wide range of initiatives. Some of these are:

- Regulatory compliance
- Pollution prevention/smart waste management
- Environmental stewardship
- Spill prevention and emergency response
- Safety
- Assessment and remediation
- Training
- Budget

Once established, we track these goals quarterly. We report these goals to all employees at the start of the year and follow up with periodic reports measuring our performance.

Audit Program

Colonial's comprehensive environmental compliance audit program includes these activities:

- Routine facility walk-through inspections
- Record checks to ensure that necessary documents are in order
- Thorough annual inspections by a corporate internal audit team (with findings reviewed by Colonial's Board of Directors)

In all cases, when deficiencies are discovered, we notify appropriate personnel to take corrective actions. We then make a follow-up check to make sure that problems get solved.

Regulatory Compliance

Colonial strives to meet or surpass all applicable environmental laws and regulations. Our procedures and controls help us achieve and maintain a continuous process of environmental compliance.

One Manual Fits All

In 1997 the Environmental Team issued the first edition of the Environmental Regulatory Compliance Guidance Manual. This manual combines all of our existing environmental guidebooks and serves as a single easy-to-understand resource for employees to get the information they need for a specific issue.

Involvement in Rulemaking

To help us plan for future compliance with ever-changing environmental regulations, we carefully monitor pending legislation that may affect our business. We review proposed regulations and amendments every year and submit comments to regulatory agencies as appropriate. We also actively participate in work groups and on committees that focus efforts on important environmental issues.

Regulators seek industry assistance and public comments to develop workable rules and regulations based on sound science. This involvement in the rulemaking process helps Colonial build good working relationships with industry, regulators, and the public.

Compliance Performance

Complying with all applicable rules and regulations is an extremely difficult task. Nearly 1,500 permit limits apply to our 165 environmental permits. In 1996 we were in compliance 96% of the time with permitted discharge limits. In 1997 our compliance improved to 97%. Our ultimate goal is to achieve 100% compliance.

Smart Waste Management

Colonial generates most of its waste from maintenance and repair activities. We can achieve our greatest benefits by practicing smart waste management.

Our Environmental *Regulatory Compliance Guidance Manual* includes a “best practices” document for waste management. Colonial personnel follow these practices when

- Planning how to handle waste-generating situations
- Considering alternative maintenance and material handling methods

Recycle! Recycle! Recycle!

Colonial seeks opportunities to recycle waste streams. Since most of our wastes result in high energy value, they can be used as alternate fuels for other industry processes. We handle waste streams using these methods (listed in order of preference):

1. Reuse elsewhere
2. Recycle
3. Treat on site
4. Arrange for treatment or disposal off site

Our recycled wastes include:

- Gasoline tank sludge for cement kiln fuel blending
- Contaminated soil for brick manufacturing
- Tank bottom wastewater for fuel reclamation

Waste Minimization

Our preferred waste management practice is to minimize waste at the source. We analyze the way we operate, looking for alternatives that offer environmental security for all of us.

Two successful waste minimization efforts have been:

- Installing domes on tanks to prevent rainwater from mixing with gasoline or kerosene
- Donating rubber spheres previously used for pipeline operation as toys for zoo animals

Spill Prevention

How We Prevent Spills

In 1990 Colonial initiated a program we call Objectives for the Nineties. Its goals are to improve the integrity of the pipeline system, become more proactive on environmental issues, and expand our system.

Under this program, our expenditures for pipeline integrity projects have increased from approximately \$15 million to \$50 million annually. These projects are designed to improve and protect the physical condition of our pipeline system. In 1997 we updated the program and prepared a new 10-year system integrity plan.

Some of the key system integrity projects included in the plan are:

- Internal inspection of pipelines
- Tank internal inspections, dome and windgirder installations, floor replacements
- Additional block valve installations and inspections
- Installation of valve seal leak containment systems
- Enhanced cathodic protection
- Right-of-way reclamation

Post-Spill Critique

While we strive to prevent spills from ever occurring, we recognize that learning from spills that do occur is both valuable and necessary.

We perform post-spill critiques to evaluate the circumstances that led to the spill and the effectiveness of the response effort. We then identify corrective measures and make appropriate changes.

Putting Spills in Their Place - By Category

We categorize all spills by the type of failure that caused the spill. In keeping with our mission of a spill-free system, our tracking program helps us to evaluate trends associated with different kinds of spills. We use this evaluation process to accomplish three objectives:

- Identify problem areas
- Take appropriate corrective action
- Minimize recurrences

The Case of the Failed Valve Seals

When our tracking program flagged a recurring problem with spills resulting from valve seal failures, our Engineering Services group and field personnel joined forces to solve the problem.

Their solution involved piping the seal release points directly back into the pipeline system. Near the seal, the piping comes above ground, so a pipeline operator can see the result of a failed seal through a sight glass. In this way, we can find and replace a failed seal before a spill occurs. Since implementing this solution in 1993, spills from seal failures have decreased 70%.

Preparing for Emergencies

While prevention is and always will be Colonial's main objective, we will always be ready in the event of an emergency. We train not only our own employees in emergency preparedness, but also local fire departments and contractors. Training focuses on safety, personnel roles and responsibilities, and tools and techniques used to contain and collect spilled petroleum products.

In training we sometimes use a tabletop exercise - a simulated spill for which a response is acted out in a classroom setting. Responders are required to describe what, where, when, and how they would perform their duties for the simulated event.

Spill Drills

Colonial conducts two unannounced full-scale spill drills per year. A drill begins in the pipeline control center where a controller is given a scenario and initiates emergency procedures. Response personnel mobilize to the site and perform as if an actual emergency had occurred. A post-drill critique takes place to determine:

- How well did we perform?
- Where do we need to improve?
- What additional training needs appear necessary?

Emergency Response Plans

Colonial maintains reference documents for use in an emergency. An emergency response plan prepared for each district contains agency reporting requirements, procedures, roles and responsibilities for responding personnel, and available equipment and contractor resources.

Environmental Cleanup

In 1990 Colonial established a strategic plan to study environmental contamination caused by former spills at our 14 tank farm facilities. To accomplish this, we collected subsurface soil samples, installed ground water monitoring wells, and used other assessment tools. Since that time, this strategic plan has evolved to incorporate risk evaluation.

Evaluating Risk

When determining appropriate corrective action for environmental contamination, we first determine the associated amount of risk. Colonial uses a standard procedure for risk evaluation developed by the American Society for Testing and Materials (ASTM). The United States Environmental Protection Agency (EPA) supports this procedure and most states have adopted it with minimal modifications.

When an approved risk evaluation is complete, we pursue the resulting course of action, whether it is to monitor the natural degradation/removal of the contamination or to install an engineered remediation system.

Nature's Way

Soil and groundwater are made up of numerous components, including living organisms called microbes. These microbes can use petroleum-based contamination for food. An engineered remediation system can alter the subsurface conditions so these microbes can work more efficiently.

Because microbe removal of petroleum contamination may take many years, we use a monitoring program to track its progress. The program involves collecting samples of groundwater and/or soil to determine changes in contaminant concentrations. Using many tools, we expedite, predict, monitor, and evaluate the natural petroleum contaminant removal process provided by microbes. Sometimes the contaminants aren't removed, but simply become immobilized in the soil, no longer a threat to humans or the environment.

Engineered Remediation System

We often use an engineered remedial system to contain, collect, and treat contaminated areas. This can be done by altering subsurface conditions, or by removing the contaminants from the subsurface. When active remediation appears to be necessary, data collection focuses on selecting the appropriate technology and properly designing the remediation system components. With one effective process, soil vapor extraction, we utilize both the environment's natural abilities and engineering design by pulling air across subsurface contaminated soils. The air strips contaminants from the soil and brings them to the surface for treatment. At the same time, it improves the environment for natural petroleum degradation by introducing much-needed oxygen into the subsurface.

Computer-Based Data Management System

By 1998 Colonial had installed 34 remediation systems companywide. To monitor the systems' operating characteristics and their effect on contaminated areas, we recently designed a computer-based data management system. Using this decision-making tool, our environmental personnel better understand changing conditions, make appropriate system modifications, and optimize system performance to effectively achieve our cleanup goal.

Community Participation and Involvement

Colonial Pipeline Company is committed to working toward a clean and healthy environment not only for its employees but for the communities we serve. We do this in a variety of ways, such as hands-on involvement, monetary donations, lending or donating equipment to local emergency response organizations, and more.

Earth Year Funds

On April 22, 1970, environmental concerns grabbed attention in the political arena when Senator Gaylord Nelson successfully implemented Earth Day. This annual event has helped spark environmental awareness across the nation and around the world.

In 1990 Colonial celebrated the 20th anniversary of Earth Day by implementing the Earth Year Fund to emphasize that every day should be considered Earth Day. Each year funds are set aside on behalf of each employee for distribution to local environmental programs. No restrictions are placed on allocating expenditures in the hope that employees in each district will identify effective - and perhaps unique - ways to direct the funds.

Some recipients of the Fund's donations to schools have been:

- Sykesville Middle School Environmental Action Committee (Woodbine, MD) - to offset costs of a water quality monitoring program on the Patapsco River
- Brentsville District Middle-Senior High School (Fairfax, VA) - to support an Earth Day fair
- Hightower Elementary School (Doraville, GA) - to landscape the surrounding school yard

Earth Year Fund has also sponsored organized events such as *Envirothon*, an educational program in which teams of high school students try to solve problems in aquatics, forestry, soils, wildlife, and groundwater. Other activities have included donations to *the Interstate Commission on the Potomac River Basin* and *Save Our Streams* organizations. Through these endeavors, Colonial's employees, family, and friends are promoting environmental awareness within their communities.

Good Neighbor Program

In fall 1995 several companies in the petroleum industry began to share ideas for improving relationships with the communities near their facilities. By spring 1996 the Good Neighbor Program had been launched, with 57 companies-including Colonial Pipeline-committed to working together for the good of the community. Colonial's objective in participating is to positively influence the communities where we operate. We believe we can do this by:

- Getting involved in our communities
- Replacing fear of the unknown with facts
- Identifying our neighbors' real concerns

One area where being a good neighbor pays off is with volunteer fire departments. Colonial relies heavily on local emergency response organizations, and we've been pleased to help them in return. The Good Neighbor Program has assisted by:

- Purchasing new equipment for the Christiana Volunteer Fire Department (Christiana, TN)
- Renovating a fire house for the Cheddar Volunteer Fire Department (Williamston, SC)
- Adding two self-contained breathing apparatus (SCBA) units to the Allen Parish Fire Department (Reeves, LA)

Along with many hours of tours, drills, training sessions, and coordinating with local emergency planning commissions, these activities have prepared Colonial and the local communities to respond to potential emergencies.

The Good Neighbor Program commitment goes beyond environmental issues. For example, the *Needy Families Fuel Oil Account*, in cooperation with the Salvation Army, supplies home heating fuel to impoverished families in the northeast. We've also purchased special education supplies for schools, supported local charities, and sponsored various community events.

Closing Remarks

Colonial takes environmental stewardship seriously. We realize that our business of transporting large quantities of refined petroleum products involves significant potential risks to the environment. These risks must be managed carefully.

We've taken major strides to reduce our environmental footprint and established a solid framework with which to achieve improved performance. We are committed to integrating economic, environmental, and social concerns into our strategic business plans. Colonial is determined to provide safe and cost-effective transportation of refined petroleum products to meet the needs of our society in a manner that protects the environment and safety of the general public.

I hope this report has enhanced your understanding of Colonial's programs to safeguard our environment. We welcome your thoughts on this report and our environmental initiatives.

Sincerely,
Tom Cervino PE
Environmental Leader

Responsible environmental stewardship ...



... the right thing to do.