COMMITTED TO ENVIRONMENTAL EXCELLENCE

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

1996 ENVIRONMENTAL REPORT

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Annual Environmental &
Annual Radiological Environmental
Operating Reports

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

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Executive summary

NATURAL RADIATION SOURCES CONTRIBUTE MOST OF THE EXPOSURE TO MAN... NUCLEAR POWER OPERATIONS CONTRIBUTE LESS THAN ONE MILLIREM.

This report describes the environmental monitoring programs conducted at the South Texas Project during 1996. Included in this report are the Environmental Protection Plan Status, the results of the Radiological Environmental Monitoring Program, and the Land Use Census.

Radiation and radioactivity in the environment are constantly monitored within a 15-mile radius of the South Texas Project. Sampling locations are selected using weather, land use, and water use information. Two types of sampling locations are used. The first type, control stations, are located in areas that are beyond measurable influence of the South Texas Project or any other nuclear facility. The sample results from these stations are used to explain radiation from sources other than the South Texas Project. Indicator stations are the second type of stations. The samples from these stations measure if any radiation is contributed to the environment by the project. Indicator stations are located in areas close to the South Texas Project where any plant releases would be at the highest concentration.

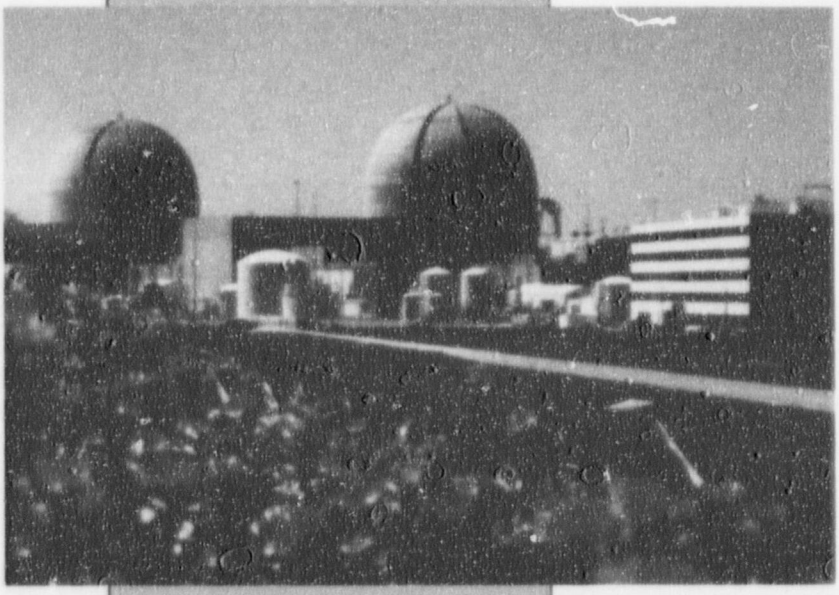
Prior to initial operation of the South Texas Project, samples were collected and analyzed to determine the amount of radioactivity present in the area. These results are used as a "pre-operational baseline". Results from the indicator stations are compared to both current control sample results and the pre-operational baseline values to determine if changes in radioactivity levels are attributable to station operations or other causes such as nuclear weapons testing programs and natural variations.

Radioactivity levels in the South Texas Project's environment frequently fall below the minimum detection limits of the current state-of-the-art scientific instruments. Samples with radiation levels that cannot be detected are below the Lower Limits of Detection. The United States Nuclear Regulatory Commission also has a required "reporting level". Licensed nuclear facilities must prepare a special report and increase their sampling if any measured radiation level is equal to or greater than this reporting level. The South Texas Project has never met or exceeded a reporting level.

Measurements made are divided into four categories or pathways based upon how the results may affect the public. Airborne, water-borne, ingestion, and direct radiation are the four pathways that are sampled. Each is described in detail on the next page.

WORLD CLASS PERFORMANCE

During 1996, as in each previous year, operation of the South Texas Project created no adverse effects or health risks. The maximum radiation exposure calculated for a hypothetical person living at the boundary of the South Texas Project during 1996 was less than one millirem. For reference this dose may be compared to the 360 millirem average annual radiation exposure to people in the United States from natural and medical sources. Natural radiation sources in the environment contribute most of the radiation exposure to humans while nuclear energy operations contribute less than one millirem.



THE FOUR MEASUREMENT CATEGORIES

Airborne Pathway

The airborne pathway is sampled in areas around the South Texas Project by measuring radioactivity of iodine and particulate air filters. The 1996 airborne results were similar to pre-operational levels with only naturally occurring radioactive material unrelated to operation of the South Texas Project.

Ingestion Pathway

The ingestion pathway includes broadleaf vegetation, agricultural products and food products. Naturally occurring isotopes were detected at average environmental levels in the samples. Man-made isotopes found in the samples were consistent with values found in pre-operational samples.

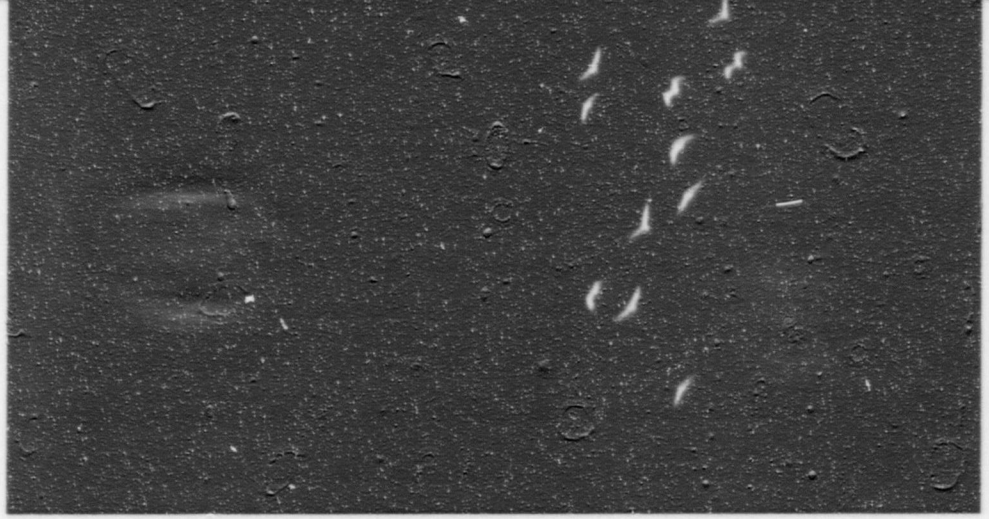
Direct Exposure Pathway

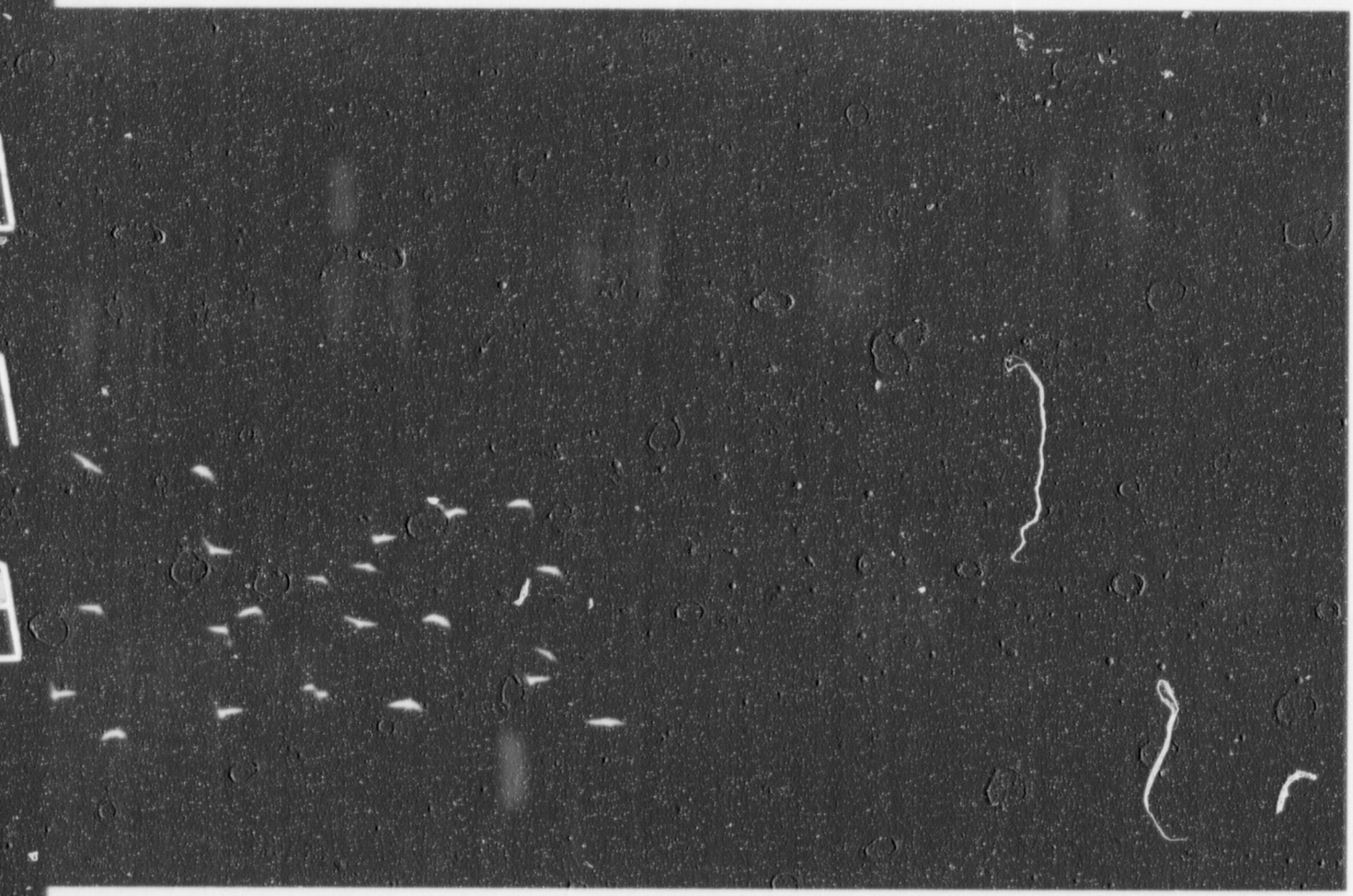
The direct exposure pathway measures environmental radiation doses by the use of thermoluminescent dosimeters. These results are consistent with the readings from previous years and continue to show no effect from plant operations.

Waterborne Pathway

The waterborne pathway includes samples taken from surface water, ground water, rain water and drinking water. Also included in this path are sediment samples taken from the Main Cooling Reservoir and the Colorado River. Tritium was the only man-made isotope detected in water samples, which was measured in the Main Cooling Reservoir and the ditches and sloughs onsite. The average tritium level increased in the Main Cooling Reservoir but remained below the United States Nuclear Regulatory Commission limits and United States Environmental Pro-tection Agency drinking water standards. Sediment samples from the Main Cooling Reservoir continue to show plant related isotopes and are consistent with the trend from previous years. The South Texas Project has reduced the amount of this type of radioactive material released from the power plant. Offsite sediment samples continue to show no radioactivity from the South Texas Project. This indicates there is no observed effect offsite from the plant.

The South Texas Project continues to operate without affecting the population or the environment by maintaining the calculated doses for people living in the area to less than one millirem. Environmental programs at the site monitor known and predictable relationships between the operation of the South Texas Project and the surrounding area. These monitoring programs verify that the operation of the South Texas Project has minimal impact offsite and is well within state and federal regulations and guidelines. These programs are verified by the State of Texas.





Site and area description

BOTH UNITS TOGETHER PRODUCE ENOUGH ELECTRICITY TO SERVE 1.5 MILLION HOMES

The South Texas Project is located on 12,300 acres in Matagorda County, Texas, approximately 15 miles southwest of Bay City along the west bank of the Colorado River. The South Texas Project is jointly owned by Houston Lighting & Power Company, Central Power & Light Company, the City of Austin and the City of San Antonio. Houston Lighting & Power Company is the designated Project Manager for the owners and is responsible for implementation of all environmental programs.

The South Texas Project consists of two 1,250 megawatt Westinghouse pressurized water reactors. Unit 1 received a low-power testing license on August 21, 1987, obtained initial criticality on March 8, 1988 and was declared commercially operational by Houston Lighting & Power on August 25, 1988. Unit 2 received a low-power testing license on December 16, 1988, obtained initial criticality on March 12, 1989 and was declared commercially operational on June 19, 1989. Both units together produce enough electricity to serve 1.5 million homes

How the South Texas Project Works

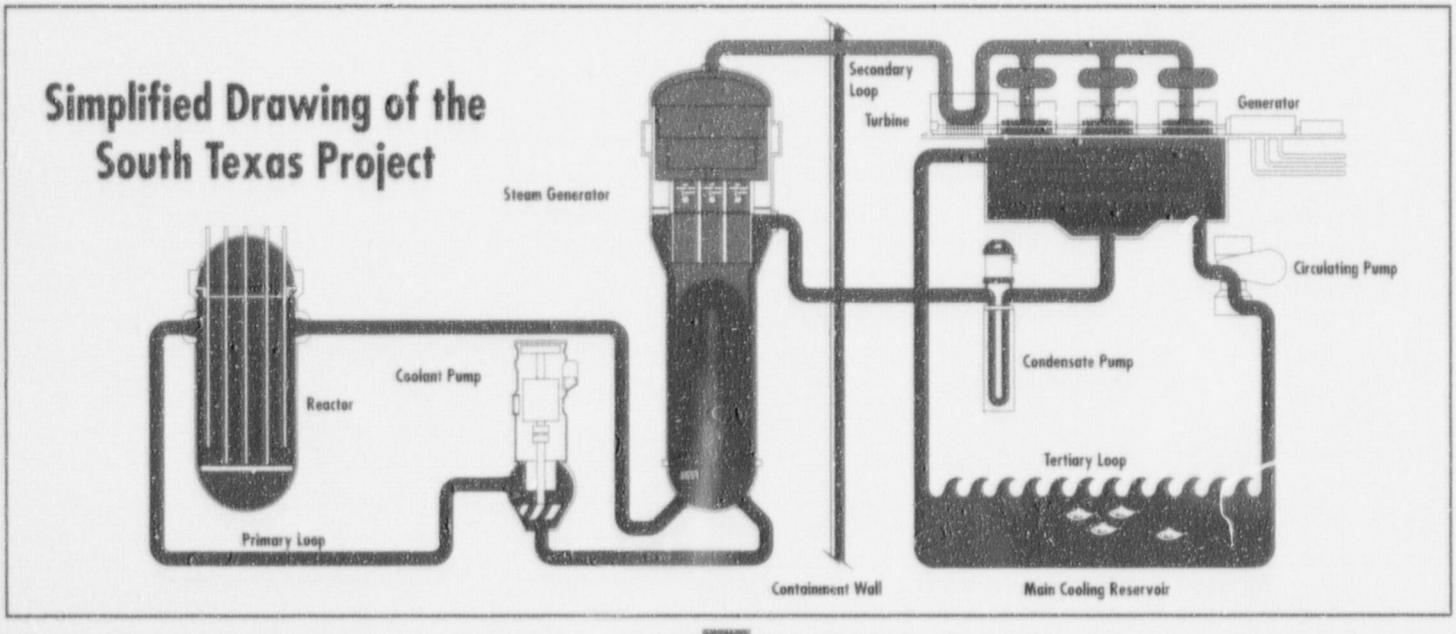
Fossil-fueled and nuclear-powered steam generating plants operate on the same principle. Fuel is used to produce heat to convert water into high-pressure steam. The steam is directed through a turbine to turn a generator. In a fossil fuel plant, the heat is produced by burning coal, lignite, oil or natural gas in a boiler. In a nuclear plant, the reactor replaces the boiler and the "fissioning" or splitting of uranium atoms inside the reactor produces heat.

The fuel for a nuclear reactor is uranium. It is formed into cylindrical ceramic pellets, each about the size of the end of your little finger. One pellet has the energy potential of about a ton of coal. Millions of these pellets are stacked in fuel rods that are arranged into assemblies that make up the core of the reactor. The use of uranium allows us to conserve natural gas, oil and coal.

A nuclear plant starts operating when control rods in the core are withdrawn, enabling the fissioning process to begin. Water flowing around the fuel rods picks up heat from the fuel, and the hot water is piped to large heat exchangers called steam generators. The water in the reactor is pressurized to prevent boiling. This is why the South Texas Project's reactors are called "pressurized water reactors."

This hot pressurized water heats a separate supply of water in the steam generators to produce steam that is directed through the blades of a turbine generator to produce electricity. The steam then goes to a condenser where a separate supply of cooling water from the reservoir turns the steam back into water. The water is then recycled by pumping it back to the steam generator for reuse. A diagram of the plant water systems is shown below.

In addition to its safety systems, the South Texas Project has many built-in physical barriers that would prevent the release of radioactive materials in the unlikely event of an accident. The most visible and imposing barriers are the four-foot-thick concrete steel reinforced containment buildings (the two dome-like structures). These massive structures rest on 18-foot-thick concrete and steel foundations. Inside, each reactor vessel is surrounded by two concrete shield walls, one seven feet thick and the other 3.5-feet thick. The reactor vessel itself, where the nuclear reaction takes place, has steel walls varying in thickness from approximately four to six inches.



The Site

Sixty-five acres of the South Texas Project are occupied by the two power plants. Plant facilities include a 7,000 acre main cooling reservoir and a 47 acre essential cooling pond. Many smaller bodies of water onsite include Kelly Lake, drainage ditches, sloughs and depressions. Much of the land east of the cooling reservoir is leased for cattle grazing. Approx- imately 1,700 acres remain in a more natural state as a lowland habitat. The surrounding area is characterized by coastal plain with farmland and pasture predominating. Local relief of the area is characterized by flat land, approximately 23 feet above sea level.

The Area

The economic base for this area is agricultural related. Most of the land near the site is used for the production of five major agricultural products: beef, rice, grain sorghum, soybeans and cotton. In addition to the agriculture industry, there is commercial fishing in the lower Colorado River, East and West Matagorda Bays, Intracoastal Waterway and the Gulf of Mexico. Currently shrimp, oysters, and crab are the target commercial fish while fin fishes have been commercially less important in recent years.

Although the surrounding area is heavily cultivated, significant amounts of woodlands, thicket, brush, fields, marsh and open water exist to support wildlife. The area lies in the southern region of the central flyway and is host to an abundance of migratory birds. The local estuary environments provide the necessary habitat for a variety of fish types to complete their life cycles. Recreational hunting and fishing is also done in the area.

The South Texas Project's plant site has been declared a wildlife habitat. Many species of animals call the site home. Our neighbors include American alligators, a family of osprey, bald eagles and several hundred deer. In winter, literally hundreds of thousands of waterfowl, principally migratory geese, have found that the plant's 7,000 acre cooling reservoir provides a good resting place during their migration. The station also established a man-made wetland habitat in 1996 which is anticipated to attract an increasing diversity of migratory fowl and other wildlife.

The climate of the region is subtropical maritime, with continental influence. It is characterized by short mild winters and long hot and humid summers. Rainfall is usually abundant throughout the year with an annual average of approximately forty-two inches. The prevailing wind direction is from south-southeast, shifting to north-northeast for short intervals during the winter months.

RADIOLOGICAL ENVIRONMENTAL INTRODUCTION AND SUMMARY

APPROXIMATELY 900 ANALYSES OF AIR, WATER, SEDIMENT, VEGETATION, AND MEAT SAMPLES WERE PERFORMED IN 1996.

There were three items of interest identified by this program during 1996. Below is a short discussion of these items.

- Tritium concentration in the Main Cooling Reservoir declined in 1996 following a planned outage early in 1996 as the tritium releases from the plant decreased and river makeup pumping to the reservoir increased.

- Cobalt-60 levels in two reservoir sediment samples were higher than previous samples; however, the amount of Cobalt-60 in the Main Cooling Reservoir sediment remained within the expected range.

- The Radiological Laboratory relocated to new laboratory facilities on site from its location in Houston, Texas.

Operation of the South Texas Project continues to have no significant radiological impact on the area. The radiological doses received by the general public from plant operations were well below regulatory limits. Plants and animals analyzed from the off-site sampling stations continue to show no radiological contribution from plant operation.

SUCCESS THROUGH TEAMWORK

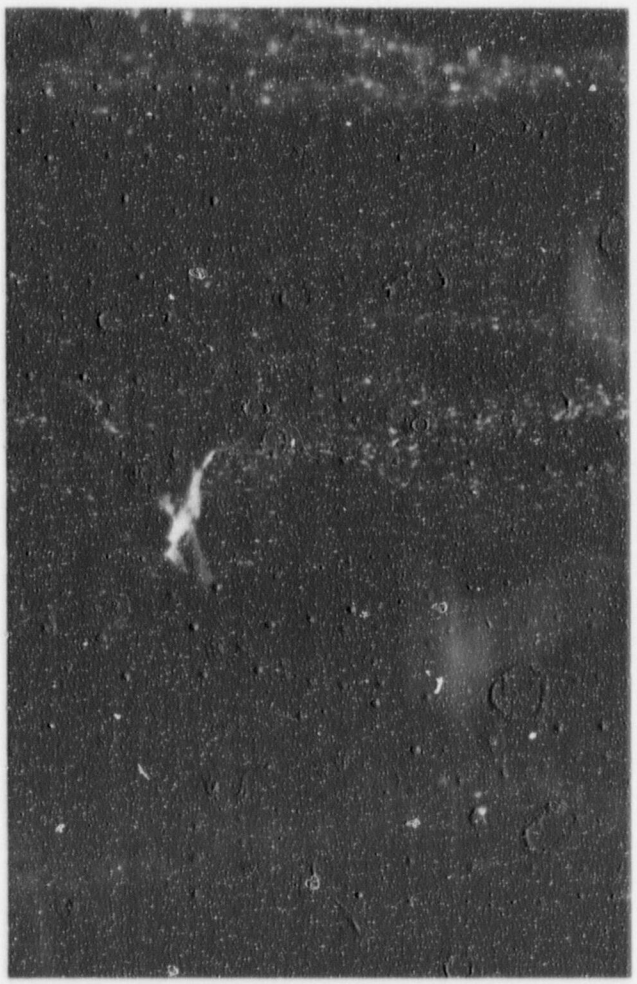
The purpose of the Radiological Environmental Monitoring Program is to verify that the South Texas Project is operating within its design parameters and to assure plant effluents do not result in a significant radiological dose to individuals off-site. This objective is accomplished by thoroughly evaluating known and predictable relationships between the plant and the environment while performing additional evaluations where unique relationships may exist. Approximately 900 analyses of air, water, sediment, vegetation, and meat samples were performed during 1996.

RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

Program Description

The South Texas Project initiated a comprehensive pre-operational Radiological Environmental Monitoring Program in July 1985. That program terminated on March 7, 1988, when the operational program was implemented. The pre-operational monitoring program data forms the baseline against which operational changes are measured.

Critical pathway analysis requires that samples be taken from water, air, and land environments. These samples are obtained for evaluation of potential radiation dose to man. Sample types are based on established pathways and from experience gained at other nuclear facilities. A special study was also performed by Houston Lighting & Power Company in conjunction with Texas A&M University to evaluate site-specific wildlife sample types. Sampling locations were determined after considering site meteorology, Colorado River hydrology, local demography and land use. Sampling locations are further evaluated and modified according to field and analysis experience. Table 1 lists the minimum sampling locations and frequency of collection.



Sampling locations may be referred to as indicator or control stations. Indicator stations are locations on or off the site that may be influenced by plant discharges during plant operation. Control stations are locations where plant influence is not expected. Though most samples analyzed are accompanied by a control sample, it should be noted that this practice is not always possible or meaningful with all media types. Fluctuations in the concentration of radionuclides and direct radiation exposure at indicator stations are evaluated in relation to historical data and the control stations. Indicator stations are compared to characteristics identified during the pre-operational program to monitor for radiological effects from plant operation.

Several sample identification methods are used to implement the program. Figure 1 includes two maps that identify permanent sample stations. Sample stations shown on Figure 1 are described in Table 2. Table 2 also includes additional sampling locations and media types that may be used for additional information. Figure 2 illustrates the zones used when collection locations are not permanent sample stations.

Analysis of Results and Trends

Environment samples from areas surrounding the South Texas Project continue to indicate no significant radiological contribution from plant operation. Analytical values from offsite indicator sample stations continue to trend with the control stations. Onsite indicator samples continued to increase or decrease in measured values at their expected rates.

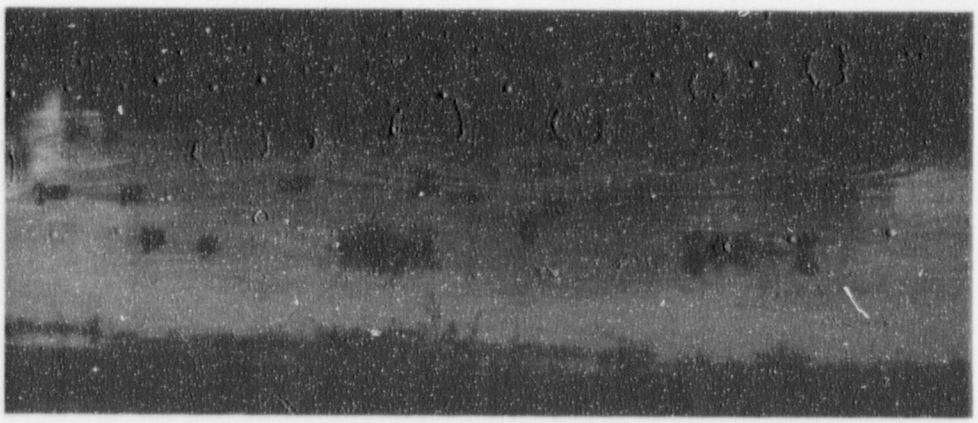
Average quarterly beta activity from three onsite indicator stations and a single control station for air particulate samples have been compared historically from 1988 through 1996 (see Figure 3). The average of the onsite indicators trend closely with the offsite control values. The comparison illustrates that plant operations are not having an impact on air particulate activity even at the Sensitive Indicator Stations (#001, #015, #016). These stations are located near the plant and are in a leeward direction. The beta activity measured in the air particulate samples are from natural radioactive material. As a routine part of the program, we perform gamma analysis on quarterly composites of the air particulate samples to

determine if any activity is from the South Texas Project.

Direct gamma radiation is monitored in the environment by thermoluminescent dosimeters located in 40 locations around the South Texas Project. The natural direct gamma radiation varies according to location because of differences in the natural radioactive material in the soil, the moisture content of the soil and the vegetation cover. Figure 4 compares the amount of direct gamma radiation measured at the plant since the fourth quarter of 1985 for three different types of stations. The Control Stations are greater than 10 miles from the site and are in the direction of the least prevailing winds (stations #23 and #37). The Sensitive Indicator Stations are in the directions that the wind blows the most and are one mile from the plants on Farm-to-Market Road 521 (Stations #01, #15 and #16). The Indicator Stations are the remainder of the stations up to and including Station # 42. The values plotted are the averages for all of the stations according to type. Figure 4 indicates changing conditions in the area of the individual stations. The average of the Control Stations is higher than the other stations because station #23 is in an area that has a slightly higher natural background from sediments, probably due to the soil composition. Considering the information above and the trends shown in Figure 4, it is clear that the power plants are not adding to the direct radiation in the environment.

Bottom sediment samples are taken in two locations in the Main Cooling Reservoir each year. The positive results from plant-produced radioactive material, Cobalt-58 and Cobalt-60, are shown in Figure 5. The amount of Cobalt-58 has decreased to below levels that can be detected. Cobalt-60 is remaining at the same levels or slightly increasing. The first bottom sediment samples collected in 1996 indicated levels higher than in the past. Additional samples were collected to see if this was a new trend or if the samples were anomalies because of the particulate nature of Cobalt-60 effluents. The average of these samples is shown in Figure 5. This verified that the increased level of Cobalt-60 was an anomaly. The Cobalt-60 reservoir bottom sediment samples were nonetheless well within the expected range. Cesium-137 measurements are approximately equal to the pre-operational values. In 1995, a slight increase was observed; however, the increase was not enough to determine if it was from the operation of the plants. The 1996 Cesium-137 measurements remained consistent with the previous data with no significant change noted.

Tritium is a radioactive hydrogen isotope and is produced during the operation of the plants. Tritium produced in the reactors is a part of the water molecule. Waste water is treated to remove impurities before release, but because tritium is chemically part of the water molecule, it cannot be removed. Some of the tritium is released into the atmosphere and the remainder is released into the Main Cooling Reservoir. The tritium escapes from the Main Cooling Reservoir by evaporation and by percolation from the relief wells that are a part of the dike's stabilization system. Shown in Figure 6 is the amount of tritium released to the Main Cooling Reservoir each year and the amount present during the last quarter of each year. This indicates that almost half of the tritium is removed from the reservoir each year. The majority of the tritium escapes from the reservoir by evaporation because the flow from the relief wells is not enough to account for the tritium removed. Rain water was collected for three years (1992 - 1994) to determine if the tritium was



remaining in the local area. Tritium was not found in any rain water samples.

Tritium enters the sloughs and ditches of the site as runoff from the relief wells that surround the reservoir. The tritium concentration in eight surface water sample points is shown in Figure 7 for 1988 through 1996. The specific locations for the sample points can be found in Table 2. The onsite sloughs and ditches have continued to increase in concentration and are expected to continue increasing until they are near equilibrium with the reservoir. The concentration of tritium in the reservoir decreased during 1993 and early 1994 because the plants did not operate. During the first quarter of 1995 there was an unusual increase in the tritium concentration in the reservoir. An investigation was initiated to determine the cause. The source of tritium was promptly identified and corrected. The increase in the production of tritium was attributed to resin in the water processing system that had been treated with natural lithium instead of lithium depleted in Lithium-6. The neutrons from the reactor interact with Lithium-6 to produce tritium. Tritium measurements in the first quarter of 1996 increased as expected due to planned outage activities. The subsequent reduction of tritium levels in 1996 resulted from decreased tritium inventory in the plant in conjunction with an increased infusion of river water to the reservoir from makeup pumping activities. An increase in tritium concentration is expected to continue to appear in the sloughs and ditches through 1997 because it takes one to two years for water to move from the reservoir to the relief wells. In 1996, the tritium concentrations in the sloughs and ditches were consistent with these expectations. There was one sample from the Little Robbins Slough that showed an unexpected tritium concentration of 7,700 picoCuries per kilogram in 1995 (refer to Figure 7). This concentration is 26 percent of the United States Nuclear Regulatory Commission's 30,000 picoCuries per kilogram reporting level. Tritium measurements in the Little Robbins Slough have since returned to and remain within expected values. The water in the reservoir and the effluent streams is not used as drinking water. The only way it could be introduced into humans is by eating fish grown in the water. If a person ate forty pounds of fish a year from water that was at the United States Nuclear Regulatory Commission reporting level (30,000 picoCuries per kilogram) less than one millirem would be received. This is insignificant compared to the almost twenty millirem a year each person receives from the naturally occurring radioactive potassium in the body.

Some samples are collected and analyzed that are not required by our licensing documents or internal procedures but are obtained to provide additional assurance that the public and the environment is being protected from any adverse effect of the plant. These samples include pasture grass, sediment samples from various ditches onsite and air samples near communities or other areas of interest. The results of these analyses indicate that there is no significant radiological contribution from plant operation to the environment.

Land Use Census

The Annual Land Use Census is performed to determine if any change has occurred in the location of residents and the use of the land within five miles of the South Texas Project generating units. The information is used to determine if any changes in the Radiological Environmental Monitoring Program are needed.

The results of the survey indicated that there were no changes required in the program. The census is performed by contacting area residents and local government agencies who provide the information. In addition, a survey is performed to verify the nearest residents within five miles of the South Texas Project generating units in each of 16 sectors. Listed in the chart to the right are the sector and distance to the nearest residence.

Sector	Distance (approx. miles)	Location
ESE	3.5	Selkirk Island
SE	3.5	Selkirk Island
SW	4.5	Cirus Grove
WSW	2.5	FM 521
W	4.5	FM 1095
WNW	4.0	Ashby-Buckeye Road
NW	4.5	Wondirk Road
NNW	3.5	Runnells Ranch (FM 1468)
N	3.5	Runnells Ranch (FM 1468)

Items of interest that were noted during the census.

- The South Texas Project initiated a wetland habitat project in 1996 on 110 acres of previously unused land northeast of the power plants to provide seasonal habitat for migratory waterfowl and other dependent wetland wildlife.
- The Hoechst Celanese Corporation Bay City Plant, which typically employs 350 personnel, is located approximately 4.5 miles north-northeast of the South Texas Project.
- Lyondell Petrochemical Plant, which typically employs 150 personnel, is located approximately six miles east of the South Texas Project.
- Molten Metal Technology, Inc., began construction of a chemical reprocessing plant adjacent to the Hoechst Celanese Corporation Bay City Plant and is located just beyond the 5-mile radius of the South Texas Project.
- Irrigation practices are similar to those in the past with no use of water below the Bay City Dam from the Colorado River. However, rice acreage decreased by 10 percent and grain sorghum increased by 200 percent from last year in 1996. Other crops remained the same as the previous year.
- Ranching practices remained generally unchanged in 1996.
- Broadleaf vegetation sampling is performed at the site boundary in the three most leeward sectors and at a control location in lieu of a garden census. Broadleaf vegetation samples taken also satisfy the collection requirement when milk samples are not available.
- No commercial dairy operates in Matagorda County and there is no reliable source of milk within the five mile zone.
- There were no commercial vegetable farms located within the five mile zone.
- Commercial fishing in the area decreased in 1996 due to the red tide.
- A new public park was established on the Colorado River's intersection with FM 521 approximately 3 miles east of the South Texas Project.

QUALITY ASSURANCE

Quality assurance is the planned or systematic actions necessary to provide adequate confidence that an item or facility will perform satisfactorily. Quality assurance for the Radiological Laboratory is measured and assessed by four distinct methods.

Nuclear Assurance and Licensing.

- ❑ Performs periodic surveillance of specific activities throughout the year.
- ❑ Performs comprehensive audits.
- ❑ Provides for an independent technical review by a technical specialist. (Not performed in 1996)

Radiological Laboratory Quality Assurance Program.

- ❑ Routine instrument control checks including calibrations and calibration verification.
- ❑ Annual testing of analysts' ability.
- ❑ Intralaboratory quality control analyses of samples.
- ❑ Internal assessments of quality control activities.

Interlaboratory Measurement Assurance Programs to ensure consistency with the rest of the industry.

- ❑ Participation in the Nuclear Energy Institute/National Institute of Standards and Technology Measurement Assurance Program for the Nuclear Industry.

- ❑ Participation in the Battelle Pacific Northwest Laboratories' Measurement Assurance Program.
- ❑ Participation in an interutility measurement assurance program.

Periodic reviews by outside organizations or agencies (e.g. United States Nuclear Regulatory Commission, American Nuclear Insurer's, etc.).

- ❑ Perform programmatic content and effectiveness reviews of the Radiological Environmental Monitoring Program implementation to assure license compliance and establish the degree of compliance with select operational guidelines. Reviews, surveillance and audits have determined that the programs, procedures and personnel are adequate and perform satisfactorily.

The measurement capabilities of the Radiological Laboratory are demonstrated by participating in interlaboratory measurement assurance programs. These programs provide samples that are similar to those measured for the Radiological Environmental Monitoring Program. In 1996, the United States Environmental Protection Agency discontinued supplying samples to utilities for these purposes. Accordingly, the South Texas Project initiated a measurement assurance program using the National Energy Institute and National Institute of Standards and Technology intercomparison program supplied nuclides to prepare the same sample media as previously provided by the United States Environmental Protection Agency Intercomparison Studies Program.

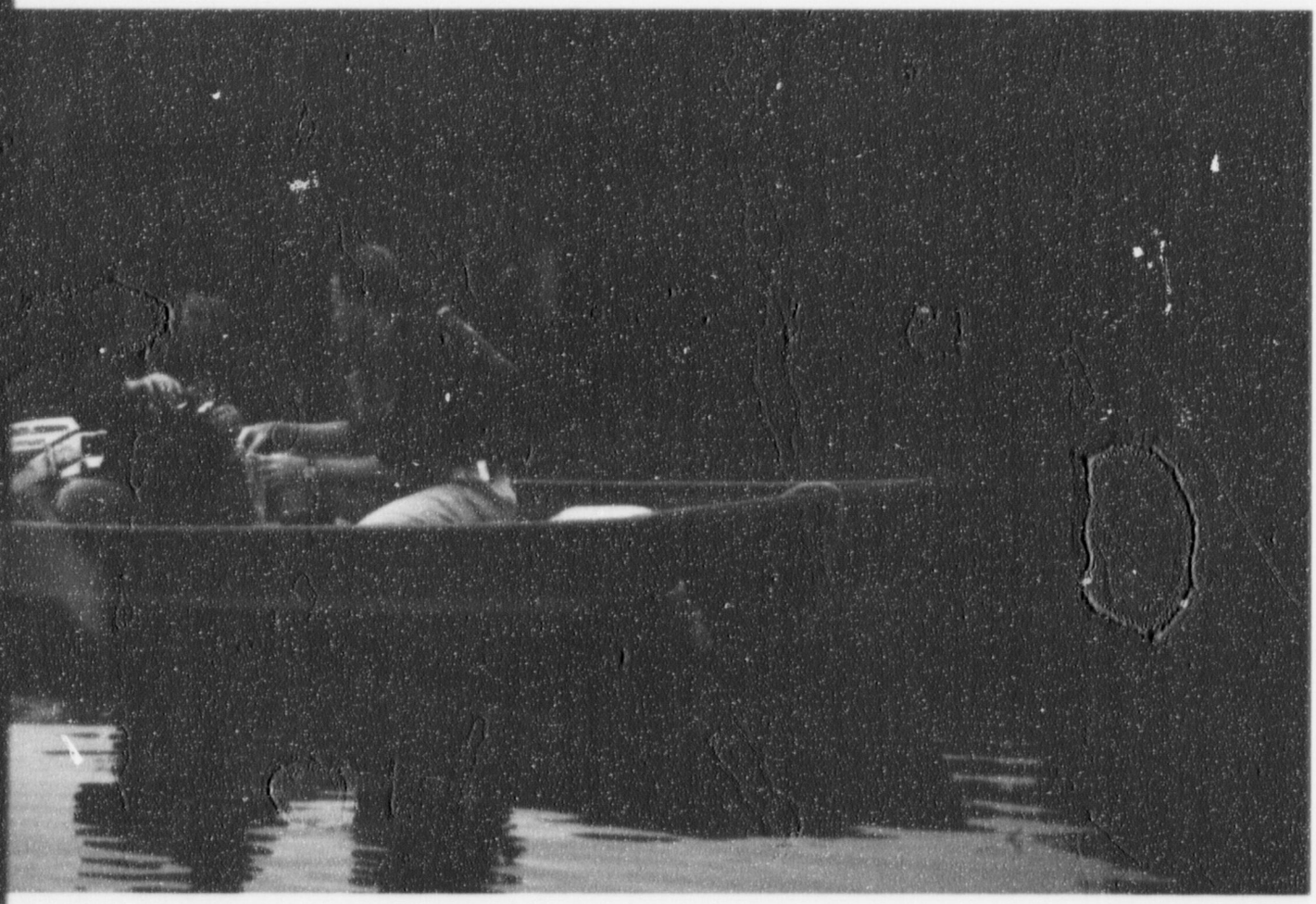
The laboratory continued to operate at a high performance level in these programs. All measurements were in agreement with industry-accepted criteria. The performance is demonstrated in Figure 8 for the three intercom-

parison programs in which we participated.

Six performance objectives have been identified to monitor the overall success of program implementation. They are analytical accuracy, analytical precision, analysis sensitivity, timeliness of sample analysis, scheduled collection and analysis, and percent quality control samples analyzed. The performance objectives have been summarized and the performance results are found in Figure 9, 1996 Performance Objective Summary. The Radiological Laboratory maintained high performance levels in 1996 while undergoing an organizational restructuring and relocating from its previous location in Houston, Texas to new laboratory facilities on site. The areas of analytical accuracy and quality control sample load saw increased performance levels, while maintaining 100 percent performance in analytical precision and analysis sensitivity.

All of the performance objectives are consistent with the performance of previous years. The performance objective for achieving a 15 percent accuracy for Inter- and Intra-laboratory quality control samples was 98.8 percent. The performance objective for achieving 15 percent precision for replicate inter- and intra-laboratory quality control samples was 100.0 percent. The performance objective of analyzing required samples in order to meet their regulatory sensitivities was 100.0 percent. Samples were analyzed within 30 days of receipt 91.9 percent of the time. Of the required samples, 98.0 percent were collected and analyzed. Missed samples are identified in Figure 10. Quality control sample load was 27.3 percent in 1996.

In summary, the Radiological Environmental Monitoring Program is conducted at a high level of quality for completeness, efficiency and accuracy.



Environmental Introduction and Summary

SOUTH TEXAS PROJECT STRIVES TO IMPROVE ON PAST SUCCESSES AND PREPARE FOR FUTURE CHALLENGES

The South Texas Project is committed to the production of electricity in a safe, reliable, economical and environmentally sound manner from nuclear energy. The station's programs, policies and business plan objectives reflect this commitment. This commitment is also reflected in the efforts of the site personnel who develop and implement site environmental protection programs and monitor the site's environmental compliance status. Noteworthy 1996 environmental accomplishments at the South Texas Project discussed in this report include:

- Initiation of natural resource management partnerships and joint efforts between the South Texas Project and the United States Fish and Wildlife Service, Ducks Unlimited, Texas Parks and Wildlife, the United States Department of Agriculture Natural Resources Conservation Service and local environmental organizations.
- Cooperative water management effort between the South Texas Project and the Lower Colorado River Authority for mutual benefit.
- Initiation of an environmental restoration project for target areas of the station.
- Expanded use of material recycling opportunities.
- An outstanding record for wastewater discharge compliance.

ENVIRONMENTAL PARTNERSHIP

This Annual Environmental Operating Report describes nonradiological environmental conditions and performance at the South Texas Project from January 1 through December 31, 1996. During this period, the South Texas Project continued to operate in an environmentally responsible manner. The 1996 assessment included herein illustrates that the South Texas Project maintained high standards of environmental performance and compliance throughout 1996.

Commitment to environmental responsibility is an integral component of the South Texas Project operating policy. This commitment is a core element in the South Texas Project vision of a world class power producer. Through station goals, financial resources, programs, procedures, employee training and communication, the South Texas Project strives to improve on past successes and prepare for future challenges.

Environmental operating report

ENVIRONMENTAL CONDITIONS

Environmental conditions and performance at the South Texas Project are closely monitored by environmental staff at the South Texas Project. The Houston Lighting & Power Company corporate Environmental Department provides support and technical assistance to the South Texas Project and conducts additional facility evaluations of the station's environmental program performance. Also in 1996, members of the Texas Natural Resource Conservation Commission conducted a potable water sanitary survey at the station. This section of the report discusses the South Texas Project's environmental program performance and compliance status during 1996.

AQUATIC AND ECOLOGICAL MONITORING

The South Texas Project location falls within the Texas Land Resource Area designation as coastal prairie and can be divided into two broad ecological areas based on topography, soils, and vegetation. The bottomland area is a swampy, marshy area that occupies approximately nine percent of the total site near the Colorado River. This area provides an important habitat for birds and other wildlife. A spoil impoundment constructed in 1972 by the United States Army Corps of Engineers is included in this area. The remaining area of the site offers diverse habitats for mammals and several groups of birds. Environmental staff regularly monitor the site environs for changing conditions. Ecological conditions onsite in 1996 remained generally unchanged and satisfactory.

The South Texas Project initiated two natural resource management projects in 1996. In partnership with the United States Fish and Wildlife Service and local environmental organizations, the South Texas Project initiated a prairie restoration and enhancement project at the station. The South Texas Project was selected because of its prime location within the Texas coastal prairie ecosystem and because of its existing biodiversity. The primary goal of the first project is to develop a native prairie grass seed bank to provide native seed for future restoration efforts along the Texas coastal prairies. Although initially hampered by drought conditions early in 1996, progress continues toward this goal. For the second project, Houston Lighting & Power Company and the South Texas Project also initiated a joint effort with Ducks Unlimited, Texas Parks and Wildlife, the United States Fish and Wildlife Service, and the United States

Department of Agriculture Natural Resources Conservation Service to establish a 110-acre wetland habitat for migratory fowl at the station. This habitat area found immediate favor with a variety of bird groups and other wildlife. This wetland habitat is anticipated to continue to support an increasing diversity of plant and animal species.

The South Texas Project wetland habitat project, as well as the site in general, is located along the new state-sponsored Great Texas Coastal Birding Trail that is ultimately intended to extend along the entire Texas Gulf Coast from Brownsville to the Louisiana border. During informal bird surveys conducted by Houston Lighting & Power Company personnel in 1996, several bird species listed on the State and federal threatened or endangered list were observed at the wetland habitat and other site areas. These include the bald eagle, peregrine falcon, wood stork, white-faced ibis, wood ibis and white-tailed hawk. Additional migratory and resident bird species were observed through informal surveys of the site's diverse natural and man-made habitats. Intensive bird nesting continues throughout the lowland habitat, particularly in a heron rookery around the perimeter of Kelly Lake. Nesting activity on the internal Y-dike of the Main Cooling Reservoir, first recorded in 1986, has steadily increased. One state biologist estimates this area to host one third of the known nesting colonies of the common tern. Special precautions are taken each spring to protect these nesting areas on the internal dike's slopes and roadways.

The alligator population in the Main Cooling Reservoir and the surrounding wetland habitats appeared stable in 1996. In addition, a healthy population of white-tailed deer continues to be observed.

Although no specific site aquatic monitoring studies were required in 1996 by the United States Environmental Protection Agency or the State of Texas, the South Texas Project has continued to monitor populations of important wildlife species to detect population changes since early in the construction phase of the station. Survey results indicate that the site provides high-quality habitat in which a wide range of animals live and continues to attract extensive wildlife populations, offering a refuge for resident species as well as seasonal migrants. The lowland habitat located between the Colorado River and the east bank of the Main Cooling Reservoir offers a significant source of water year-round. These natural resource areas, in concert with numerous additional wetland and grassland areas, offer the key ingredients necessary to sustain the extensive wildlife population at the South Texas Project.

MAIN COOLING RESERVOIR

Under normal plant operating conditions, cooling water for the plants is diverted from and returned to the Main Cooling Reservoir. The Main Cooling Reservoir is a 7,000 acre, above grade, off-channel reservoir impounding 202,600 acre-feet of water at a maximum operating level of 49 feet mean sea level. Reservoir makeup water is withdrawn intermittently from the adjacent Colorado River. The ultimate heat sink for the plants is the Essential Cooling Pond which is a 46.9 acre, below grade, off-channel reservoir impounding 388 acre-feet of water at a maximum operating level of 26 feet mean sea level. Water Right Permit No. 3233, as amended, issued by the Texas Water Rights Commission, authorizes the maintenance of these reservoirs, impoundment of water in the reservoirs diverted from the Colorado River and circulation, diversion, and use of water from the reservoirs for industrial purposes in the operation of the plant. This permit also limits the rate of diversion from the Colorado River. Other compliance documents describing South Texas Project water rights include Certificate of Adjudication 14-5437 issued by the Texas Water Commission, Contractual Permit No. CP-327, as amended, and the contract between Houston Lighting & Power Company and the Lower Colorado River Authority. The South Texas Project diverted 47,275 acre-feet from the Colorado River in 1996 for the Main Cooling Reservoir fill operations. The highest Main Cooling Reservoir elevation for 1996 was 40.6 feet and the lowest elevation was 36.6 feet which is within the normal operating levels of the reservoir. The structural conditions of the reservoir remained satisfactory and unchanged in 1996.

The South Texas Project closely coordinated river pumping activities in mid-1996 with the Lower Colorado River Authority due to drought conditions in Texas. This close water management cooperation between the South Texas Project and the Lower Colorado River Authority allowed fulfillment of mutual goals. The station maintained optimal river pumping operations necessary to continue reservoir fill operations while preserving adequate freshwater flow conditions for downstream bay and estuarine environments.

WATER QUALITY COMPLIANCE

Water usage and wastewater treatment at the South Texas Project are regulated under the federal Safe Drinking Water Act, the Federal Clean Water Act, and the Texas Water Quality Act. Collectively, these acts provide regulations for safeguarding public drinking water supplies and maintaining the integrity of state and federal waters. The South Texas Project uses both surface water and groundwater for station purposes. Groundwater supplies onsite drinking water for station personnel. Groundwater is also utilized to supply makeup water for the Essential Cooling Pond, service water, firewater and other onsite industrial uses. Surface water from the Main Cooling Reservoir and the Essential Cooling Pond is utilized as cooling water for plant activities. Water from the Colorado River supplies makeup to the Main Cooling Reservoir via intermittent pumping periods.

Wastewater discharges are monitored for pH, total suspended solids, oil and grease content, chlorine concentrations, temperature, and/or biological oxygen demand as required by permit. Drinking water is routinely monitored for bacteriological contamination, volatile organic compounds, copper, lead, pesticides, herbicides, heavy metals and radioactivity as required by applicable regulations to ensure the health and safety of site workers. Reports identifying ground and surface water use are submitted annually to the Texas Natural Resource Conservation Commission. Monthly monitoring reports are submitted to the Texas Natural Resource Conservation Commission and the United States Environmental Protection Agency for wastewater discharges.

The Federal Clean Water Act, as amended in 1987, requires permits for storm water discharges associated with industrial activity from a point source. The South Texas Project Storm Water Pollution Prevention Plan, implemented in October of 1993, ensures that potential pollution sources at the site are evaluated and appropriate measures selected and implemented to prevent or control the discharge of pollutants in storm water runoff.

The South Texas Project currently has six wastewater outfalls which include sanitary waste discharges, discharge from the Neutralization Basin of the Nonradioactive Chemical Waste Treatment System and discharge from the Oily Waste Treatment System. These outfalls are internal and discharge to the Main Cooling Reservoir. The Main Cooling Reservoir blowdown discharges to the Colorado River; however, no discharges from this outfall took place in 1996. The station continued its outstanding wastewater discharge compliance performance record in 1996. Wastewater discharges in 1996 met state and federal water quality standard expectations.

AIR QUALITY COMPLIANCE

Air emission sources at the South Texas Project fall under the scope of air pollution regulations promulgated under the Texas Clean Air Act and the Federal Clean Air Act and the numerous associated amendments. The purpose of these regulations is to protect air resources from pollution by controlling or abating air pollution and emissions. Regulated emission sources at the South Texas Project include fossil-fueled boilers and emergency diesel generators, emissions resulting from onsite fire-fighting training, and asbestos removal from renovation or demolition projects. Asbestos removal is also strictly regulated for worker protection by the Occupational Safety and Health Protection Administration.

Fossil-Fueled Emission Sources

The South Texas Project has historically maintained two oil-fired auxiliary steam boilers to furnish steam for deaerator startup, turbine gland seals, and radioactive liquid waste processing when steam is not available from the nuclear steam supply system. In 1994, the station completed an extensive restoration of one auxiliary steam boiler unit that included the re-design and installation of a new boiler control system. The other auxiliary steam boiler is non-operational and scheduled for demobilization.

In addition to the auxiliary steam boiler at the South Texas Project, there are 19 diesel generators located onsite. These diesels are designed to provide emergency power to various plant systems or buildings in the event of loss of power. The station temporarily installed an additional 2,000-kilowatt diesel generator in 1996 to be available as a backup emergency generator during a planned plant outage early in the year. Operation of these generators as internal combustion engine driven generator sets used only for emergency service is authorized under Texas Natural Resource Conservation Commission Standard Exemption List No. 5.

Fire-Fighting Activities

The South Texas Project conducts onsite training of selected employees on proper fire-fighting techniques. Most onsite instruction consists of training on the proper use of a fire extinguisher. Advance notification of firefighting training sessions is provided to the Matagorda County Environmental Services and the Texas Natural Resource Conservation Commission.

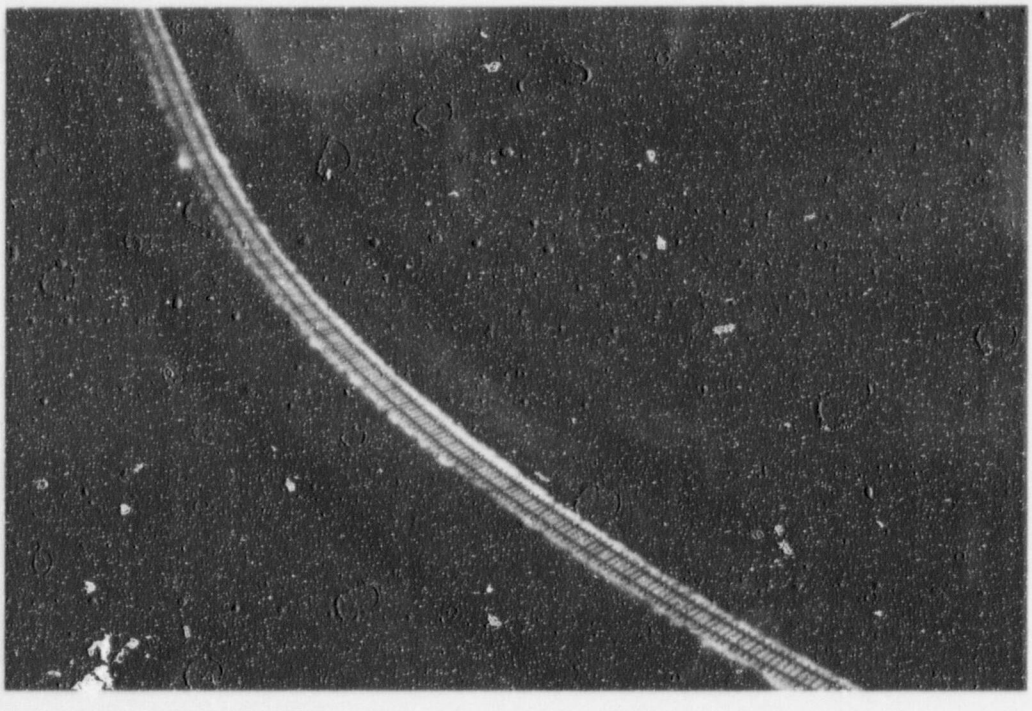
Asbestos Removal

Regulations addressing asbestos removal are found in the United States Environmental Protection Agency National Emission Standards for Hazardous Air Pollutants and advance notification is provided as applicable to the appropriate jurisdictional agency – in Texas, the Texas Department of Health – for asbestos removal and demolition activities. Advance notification is provided accordingly of demolition of buildings onsite and also for the removal of certain coatings containing fixed asbestos when applicable. Buildings are inspected for the presence of asbestos prior to demolition

SOLID WASTE MANAGEMENT COMPLIANCE

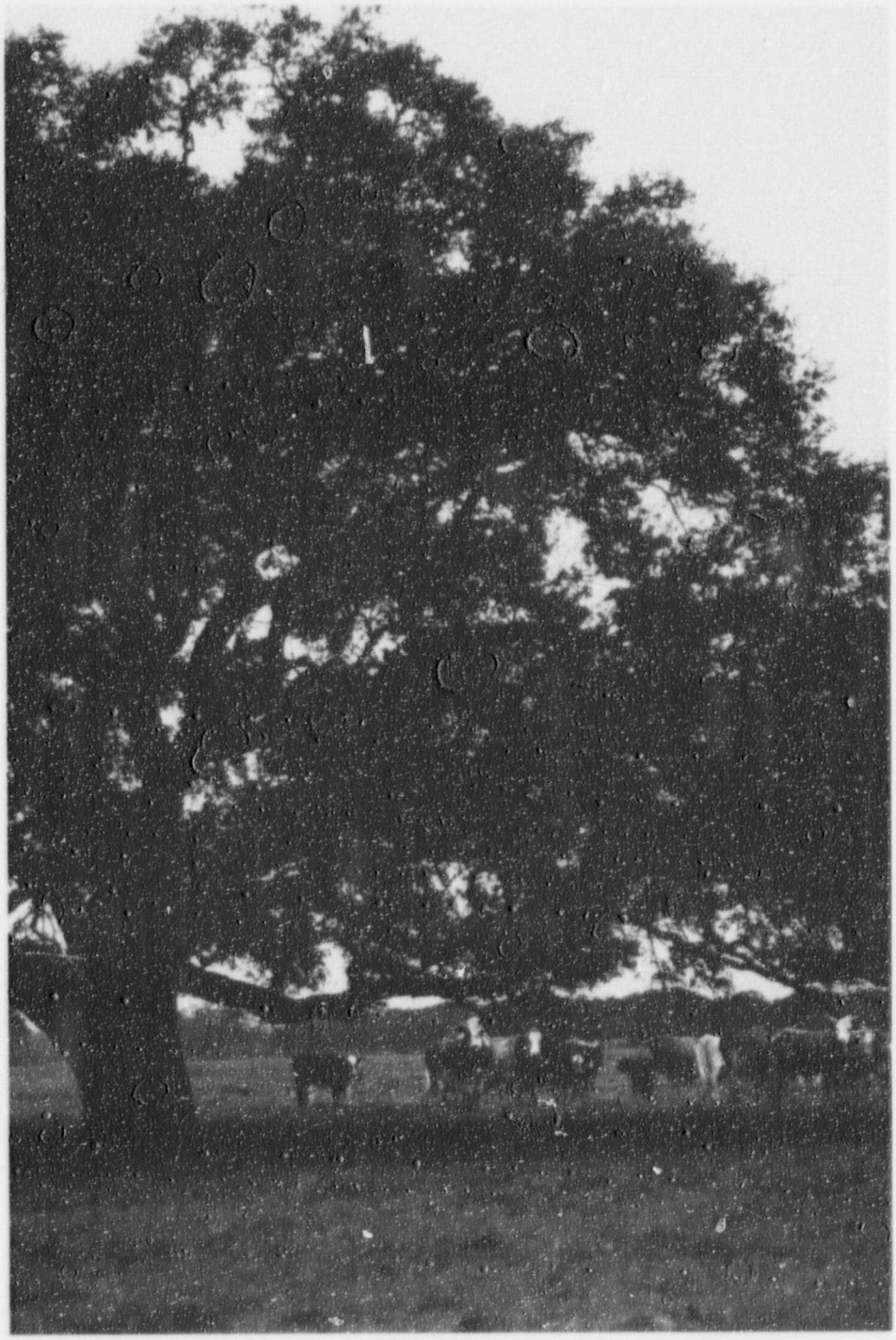
Solid waste management procedures for hazardous and nonhazardous wastes generated at the South Texas Project ensure that wastes are properly dispositioned in accordance with applicable federal, state, and local environmental and health regulations. By regulatory definition, solid waste includes solid, semi-solid, liquid, and gaseous waste material. Nonradioactive wastes generated at the South Texas Project are regulated primarily by the United States Environmental Protection Agency under the Resource Conservation and Recovery Act and its amendments, the Comprehensive Environmental Response, Compensation, and Liability Act and by the Texas Natural Resource Conservation Commission under the Texas Solid Waste Disposal Act. The Texas Natural Resource Conservation Commission regulates the collection, handling, storage, and disposal of solid wastes including hazardous wastes. The transportation of waste materials is regulated by the United States Department of Transportation.

The South Texas Project is registered with the Texas Natural Resource Conservation Commission as a large quantity generator of industrial solid wastes including hazardous wastes. Texas Natural Resource Conservation Commission regulations require that industrial solid wastes generated at the South Texas Project be identified to the Commission. These wastes are identified in the Texas Natural Resource Conservation Commission Notice of Registration issued for the South Texas Project. The registration is revised whenever there is a change in waste management practices at the site. A maximum storage period of 90 days limits hazardous waste accumulation at the South Texas Project. The Resource Conservation and Recovery Act and Texas Solid Waste Disposal Act also require the use of proper storage and shipping containers, labels, manifests, reports, personnel training, a spill control plan and an accident contingency plan. Houston Lighting & Power Company personnel conduct routine inspections of waste storage and accumulation areas to ensure compliance with the regulations. Plant personnel also inspect areas throughout the site to ensure wastes are not stored or accumulated inappropriately. Quarterly solid waste assessments are conducted at the site by corporate environmental personnel. Waste handling and disposal activities are summarized and documented in a waste summary report for the South Texas Project submitted annually to the Texas Natural Resource Conservation Commission.



Nonradioactive Recycling Activities

The Resource Conservation and Recovery Act encourages the recycling, recovery, or reuse of waste when possible to reduce the amount of waste being disposed of in landfills. The South Texas Project ships waste oil, waste diesel fuel, waste antifreeze solution and waste solvent for fuel blending and thermal energy recovery. Used oil is sent to a recycling vendor for re-processing. Lead-acid batteries are returned, when possible, to the original manufacturer for recycle or are shipped to a registered battery recycler, thereby reducing the volume of hazardous waste that might otherwise be generated. An extensive site paper recycling program results in the collection of several tons of paper each year. In 1996, the South Texas Project collected approximately 15 tons of paper for recycling. Every one ton of paper recycled saves approximately 17 trees, saves enough energy to power the average home for six



months and eliminates approximately three cubic yards of landfill material.

The station also embarked on an extensive environmental restoration campaign in 1996 targeting areas impacted by construction support activities now demobilized. The station surveyed, evaluated and developed individual restoration plans for each target area based on site-specific factors. Low-level hydrocarbon contamination was the most commonly identified issue. Contaminated soil and material was removed prior to proceeding with final restoration steps. Ninety-nine percent of the material generated from these restoration activities was shipped to a state-approved vendor for recycling.

Plant personnel continue to explore areas where recycling activities may be expanded or initiated.

Nonradioactive Waste Management Activities

Nonradioactive solid waste that cannot be shipped for recycling is shipped for disposal. Municipal-type trash is transported to the county landfill transfer station for appropriate disposition while construction-related non-combustible, inert debris is placed in the onsite landfill as specified on the South Texas Project's Solid Waste Notice of Registration. Waste minimization efforts and heightened employee awareness in this area allowed the South Texas Project to achieve an approximate 43 percent reduction in the total amount of nonradioactive Class I waste generated at the site from the previous year. The station experienced an increase in hazardous waste generation volumes in 1996. Retirement of plant laundry processing equipment allowed the station to dispose of a large quantity of solvent-based dry cleaning fluid. Neither the equipment nor the dry cleaning fluid was ever utilized at the station. Current laundry processes no longer require the use of solvent-based dry cleaning fluids. Also contributing to the increased 1996 hazardous waste volume was a waste oil tank inadvertently contaminated with halogenated solvents resulting in a larger than normal quantity of hazardous waste that was subsequently shipped for fuels blending and thermal energy recovery. Corrective measures have effectively prevented recurrence. Paint waste volumes also increased in 1996. This increase in paint waste volume reflects increased painting activities at the station as well as an aggressive inventory reduction campaign. Substantial source reduction efforts have been devoted towards minimizing the volume of paint waste generated at the station. In general, these efforts have been effective at controlling the volume of hazardous paint waste generated from station painting activity.

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT ACTIVITIES

Hazardous Material Incident Response

The Comprehensive Environmental Response, Compensation, and Liability Act created a federal authority and source of funding for responding to spills and other releases of hazardous materials, pollutants, or contaminants into the environment. As a result of this Act, reportable quantities were established for several hundred chemicals. Spills exceeding these parameters must be reported to the United States Environmental Protection Agency. The South Texas Project emphasizes awareness training on the prevention of spills while maintaining station readiness to respond should a spill occur. Station spill response team members receive annual refresher training in hazardous material incident response. Spill control efforts in 1996 successfully resulted in the prevention of any reportable spills and a minimum number of non-consequential spills.

Superfund Amendment and Reauthorization Act Title III Compliance

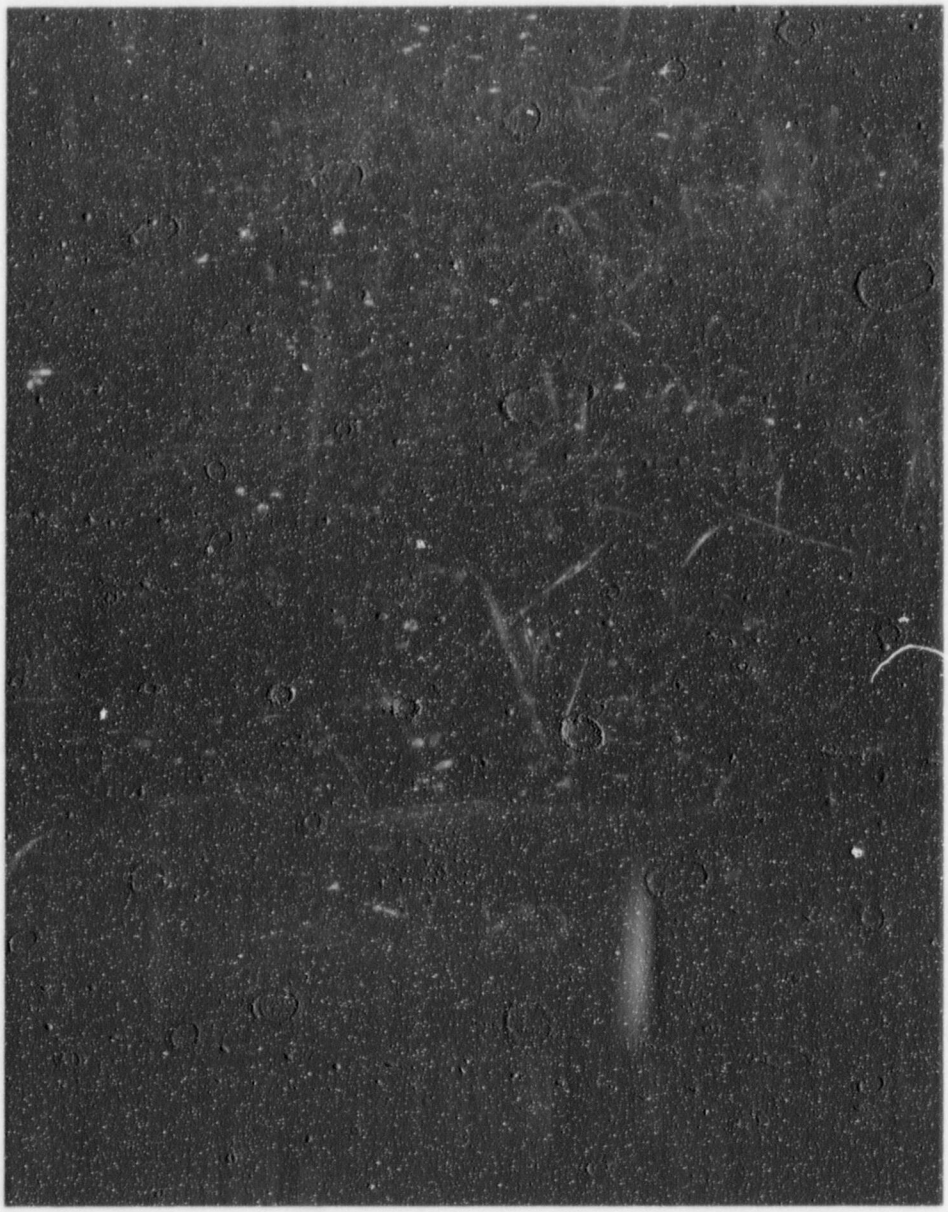
The Comprehensive Environmental Response, Compensation, and Liability Act was amended and enhanced in 1986 to establish new programs for addressing emergency preparedness and community right-to-know. This amendment is known as the Superfund Amendment and Reauthorization Act. The South Texas Project conducts site wide inspections to identify and record hazardous products and chemicals on site as required by the Superfund Amendment and Reauthorization Act and the Texas Hazard Communication Act. Annual reports are submitted for each preceding calendar year to the Texas Department of Health.

CHEMICAL CONTROL

The South Texas Project maintains an Expendable Materials Program to evaluate those chemicals and products that have the potential to come in contact with plant components. Disposal requirements are evaluated and documented for approved chemicals and products listed in the station's Expendable Materials Manual. Plant procedures provide additional disposal, storage and use guidance for both expendable materials and those materials that fall outside the scope of the Expendable Materials Program.

Plant procedures also control storage of product drums and gas cylinders at the South Texas Project. Workers are encouraged to take only the amount of material necessary to perform a job. Plant personnel conduct routine inspections of chemical storage in the plant area. These programs and controls aid in minimizing the amount of waste generated at the South Texas Project and reduce opportunities for inadvertent spillage of material.

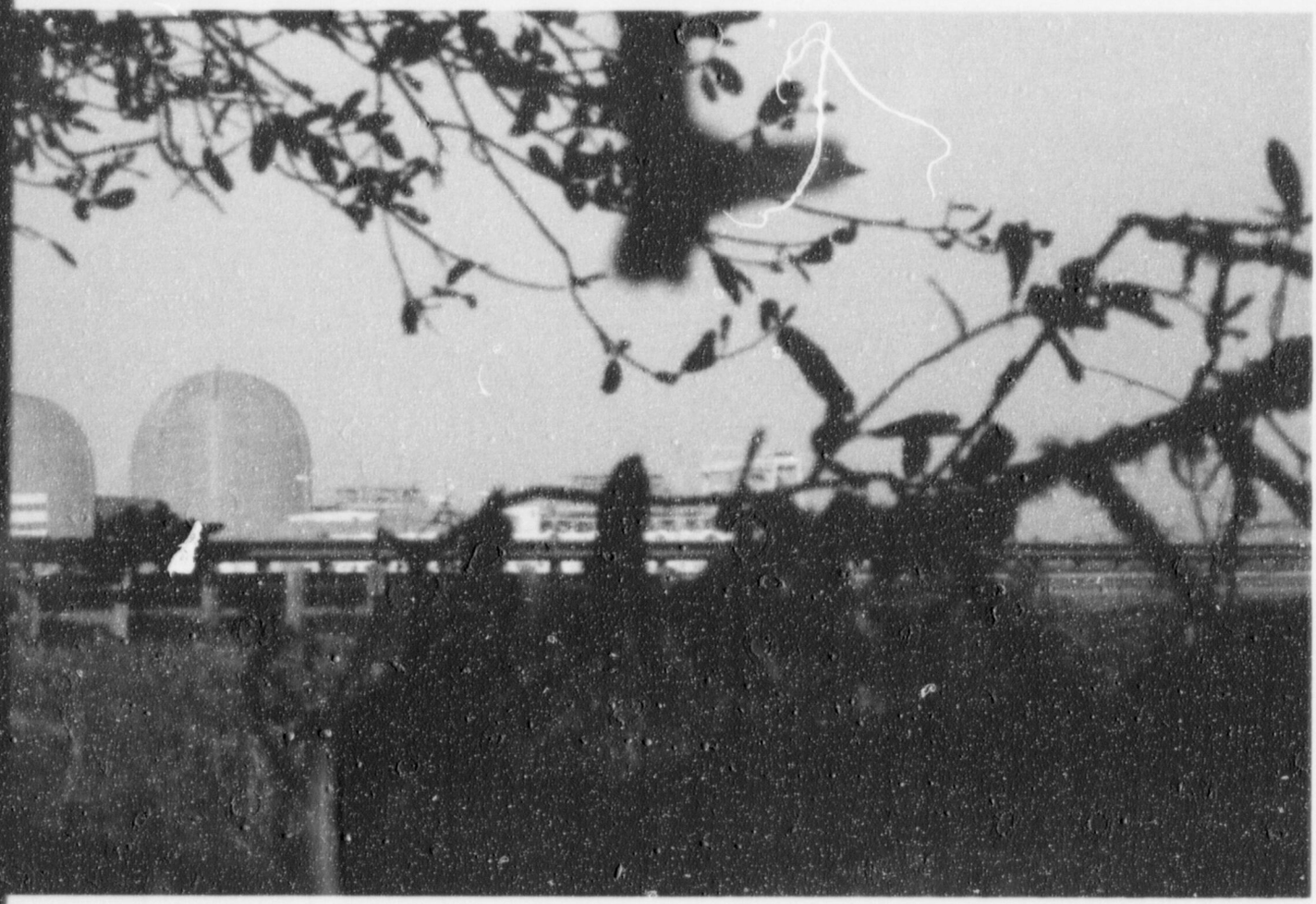
ENVIRONMENTAL PROTECTION PLAN STATUS



The Environmental Protection Plan was issued in March of 1989 to provide for the protection of nonradiological environmental values during operation of the South Texas Project. This section reviews Environmental Protection Plan noncompliances identified by the plant and associated corrective actions to prevent recurrence. Potential nonconformities are quickly addressed when identified to maintain operations in an environmentally acceptable manner. The station's Corrective Action Program is used to document these conditions and track corrective actions to completion. In addition, internal assessments, reviews, and inspections conducted in 1996 document plant compliance.

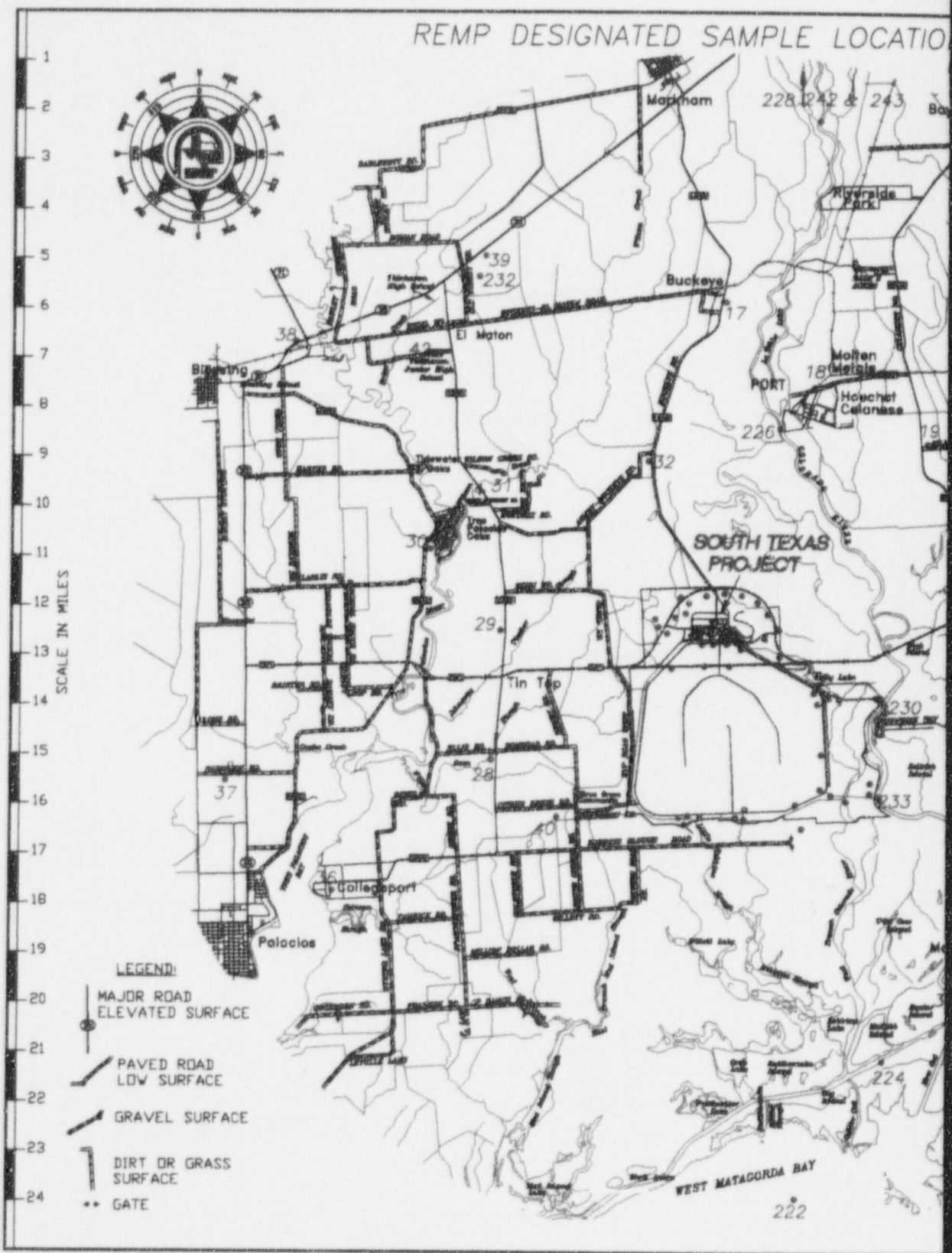
This section also reviews nonroutine reports submitted by plant personnel and any activities that involved a potentially significant unreviewed environmental question. A proposed change, test or experiment is deemed to involve an unreviewed environmental question if it concerns: (1) a matter that may result in a significant increase in any adverse environmental impact previously evaluated in the Final Environmental Statement related to the Operation of South Texas Project, Units 1 and 2 (Docket Nos. 50-498 and 50-499), environmental impact appraisals, or in any decisions of the Atomic Safety and Licensing Board; or (2) a significant change in effluents or power level; or (3) a matter not previously reviewed and evaluated in the documents specified in (1) above, that may have a significant adverse environmental impact. No unreviewed environmental questions were identified in 1996.

Events that require reports to Federal, State, or local agencies other than the Nuclear Regulatory Commission are reported in accordance with the applicable reporting requirements. The Nuclear Regulatory Commission is provided with a copy of such reports at the same time it is submitted to the other agency. If a nonroutine event occurs and a report is not required by another agency, then a 30-day report to the Nuclear Regulatory Commission is required by the Environmental Protection Plan. No 30-day or other nonroutine reports to the Nuclear Regulatory Commission were required in 1996.



Addendum of figures

Addendum of figures


REMP DESIGNATED SAMPLE LOCATIO
Markham
228 242 & 243
Riverside Park
Buckeye
*39
*232
17
El Maton
38
42
Blessing
Molten Metals
PORT
Honchet Celanese
18
226
79
32
31
30
SOUTH TEXAS PROJECT
29
Tin Top
230
28
37
233
40
36
Collegeport
Palacios
224
222
WEST MATAGORDA BAY
SCALE IN MILES
1
2
3
4
5
6
7
8
9
10
11
12
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14
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23
24
LEGEND:
MAJOR ROAD ELEVATED SURFACE
PAVED ROAD LOW SURFACE
GRAVEL SURFACE
DIRT OR GRASS SURFACE
GATE

Figure 1

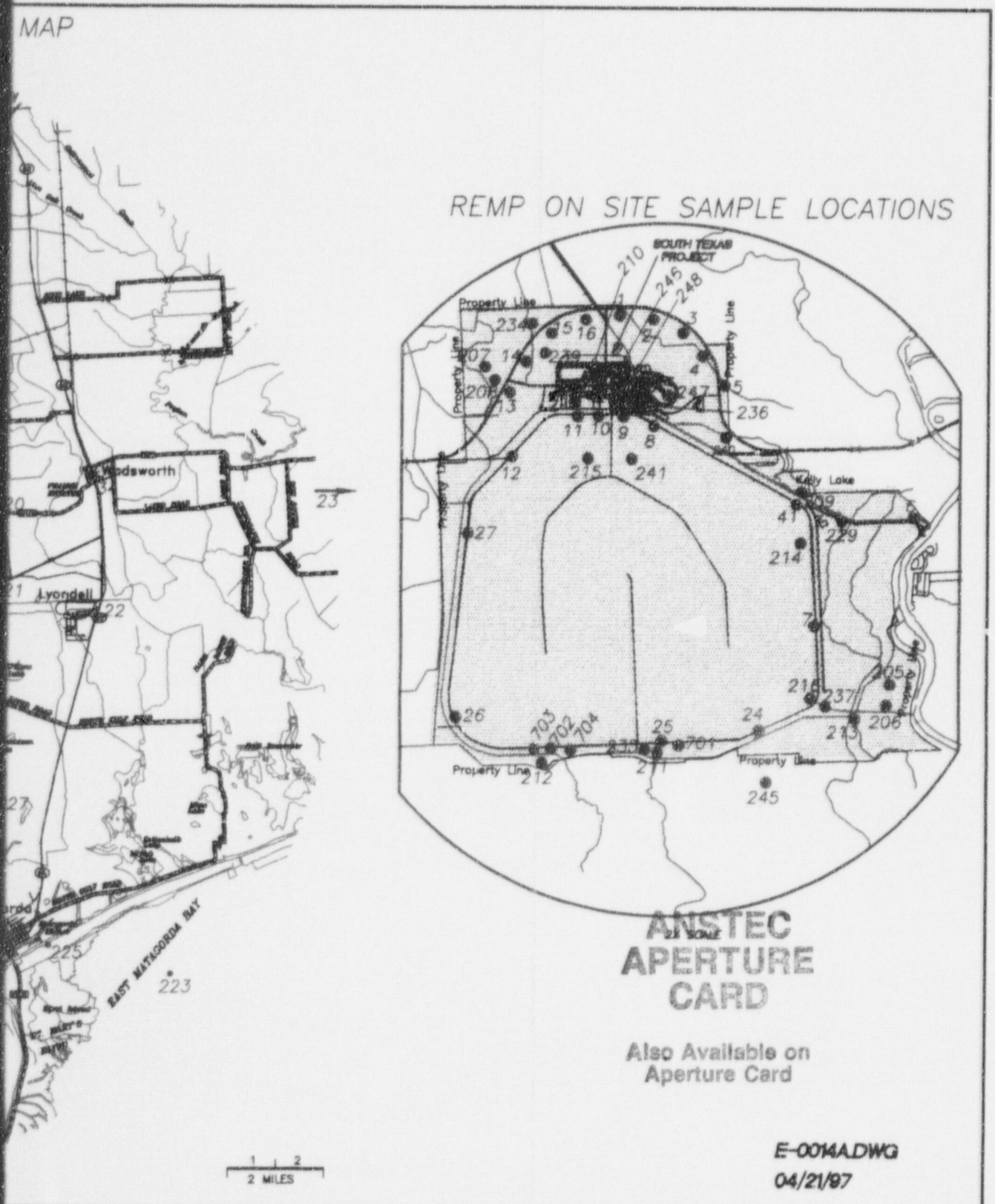

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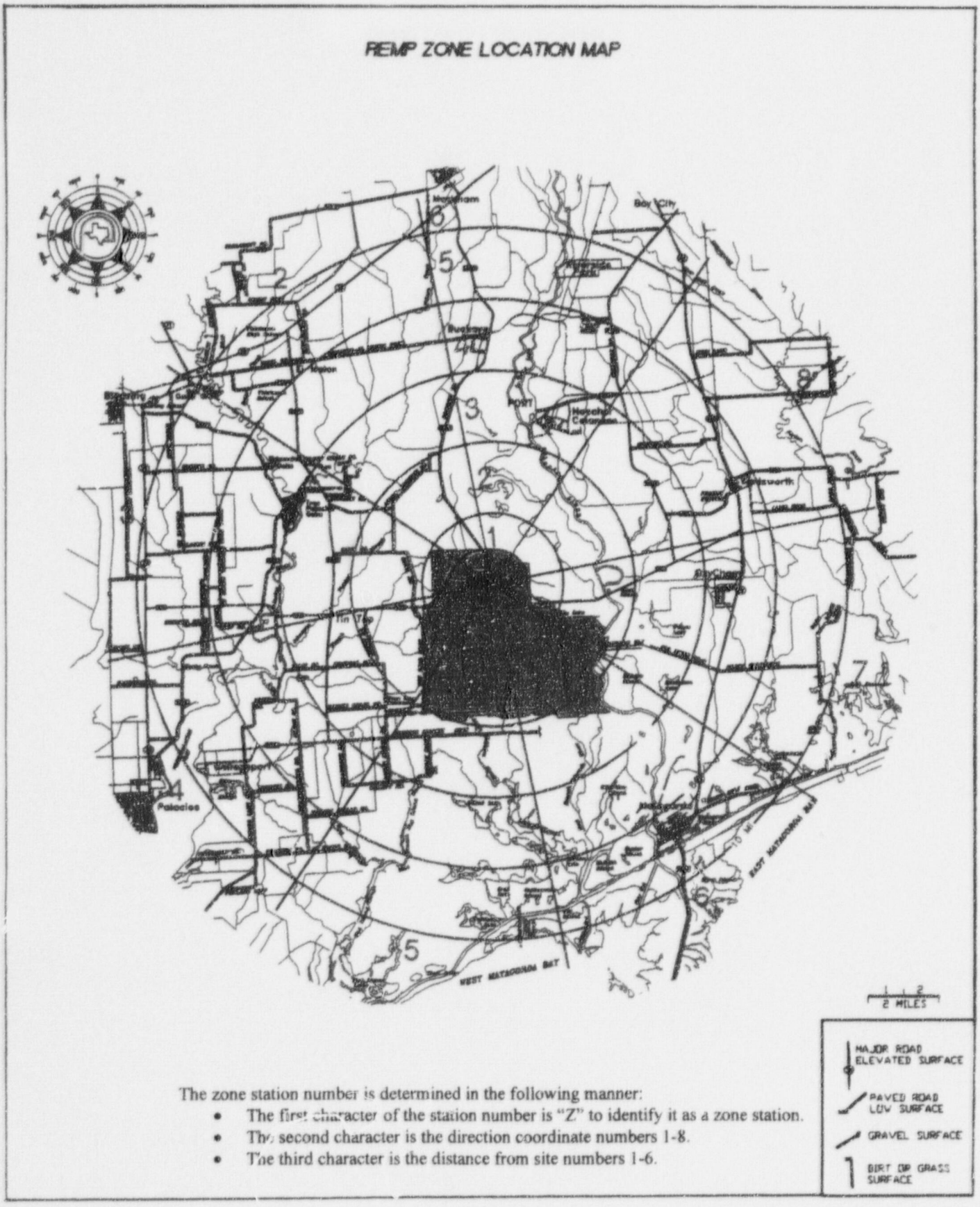
Figure 2



The zone station number is determined in the following manner:

- The first character of the station number is "Z" to identify it as a zone station.
- The second character is the direction coordinate numbers 1-8.
- The third character is the distance from site numbers 1-6.

HISTORICAL COMPARISON OF AVERAGE QUARTERLY BETA ACTIVITY FROM INDICATOR AND CONTROL AIR SAMPLES 1988 - 1996

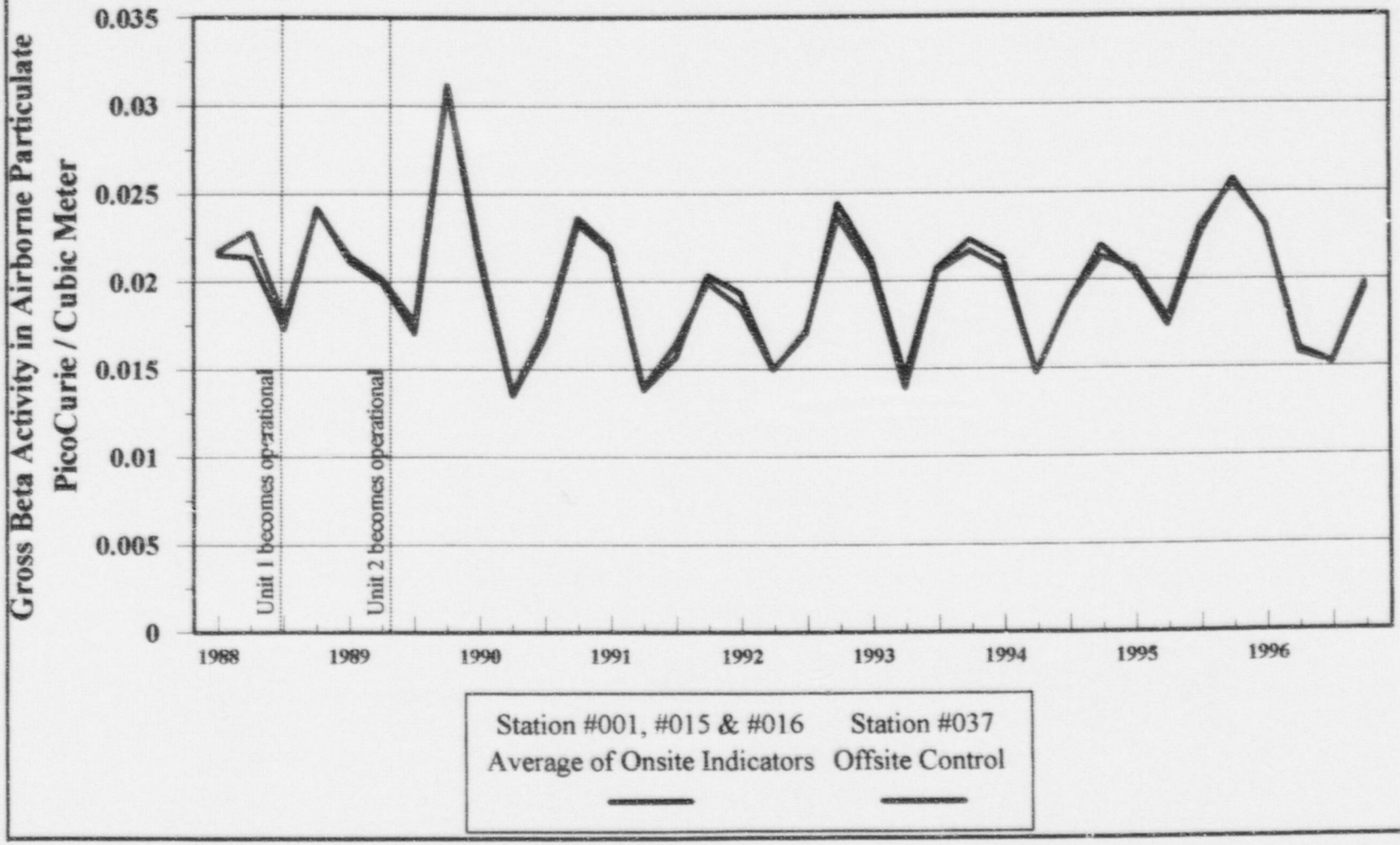


Figure 3

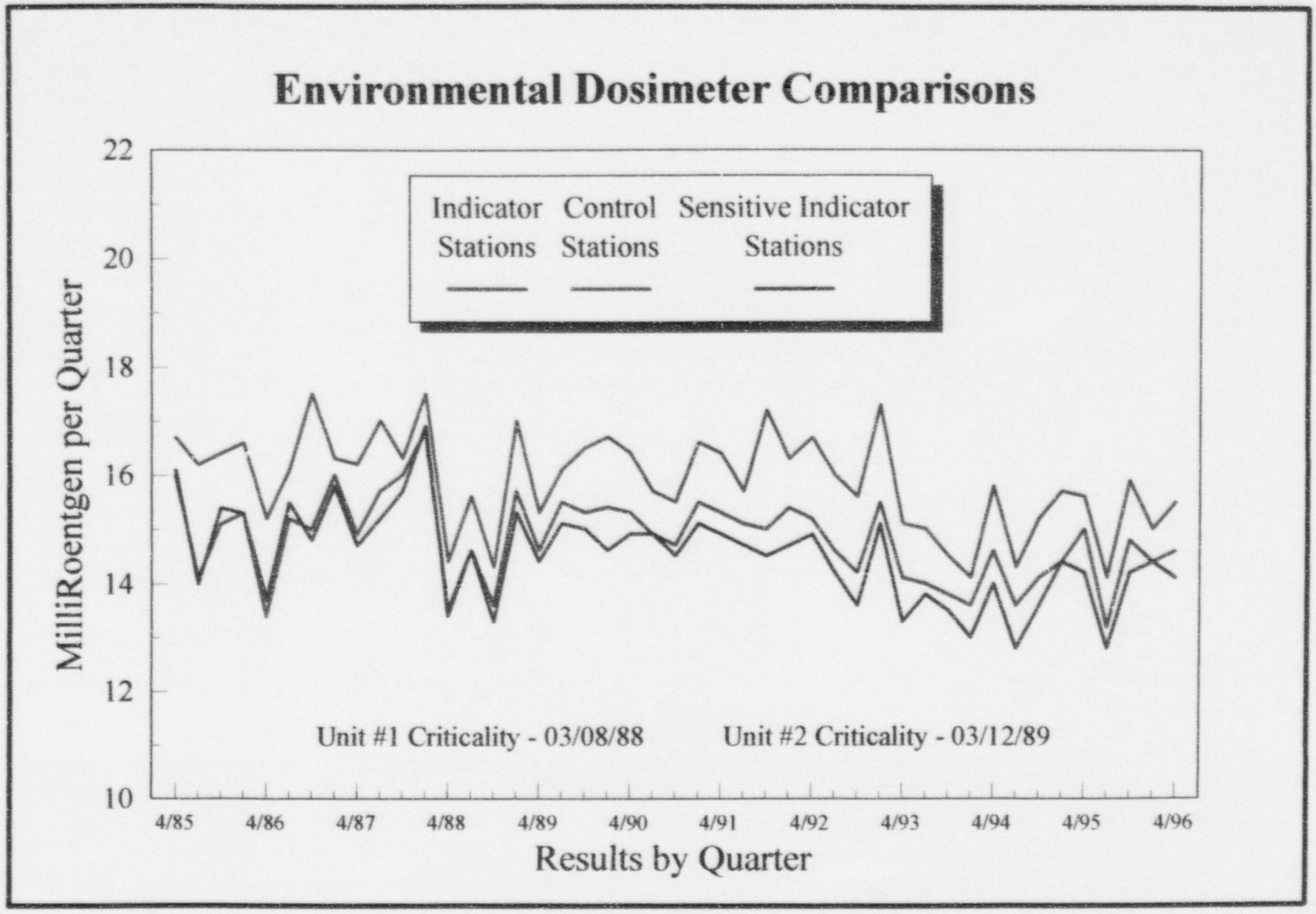

Environmental Dosimeter Comparisons
Indicator Stations
Control Stations
Sensitive Indicator Stations
MilliRoentgen per Quarter
22
20
18
16
14
12
10
Unit #1 Criticality - 03/08/88
Unit #2 Criticality - 03/12/89
4/85
4/86
4/87
4/88
4/89
4/90
4/91
4/92
4/93
4/94
4/95
4/96
Results by Quarter

Figure 4

Historical Comparison of Cobalt-58 & Cobalt-60 in Main Cooling Reservoir Sediment 1986 - 1996

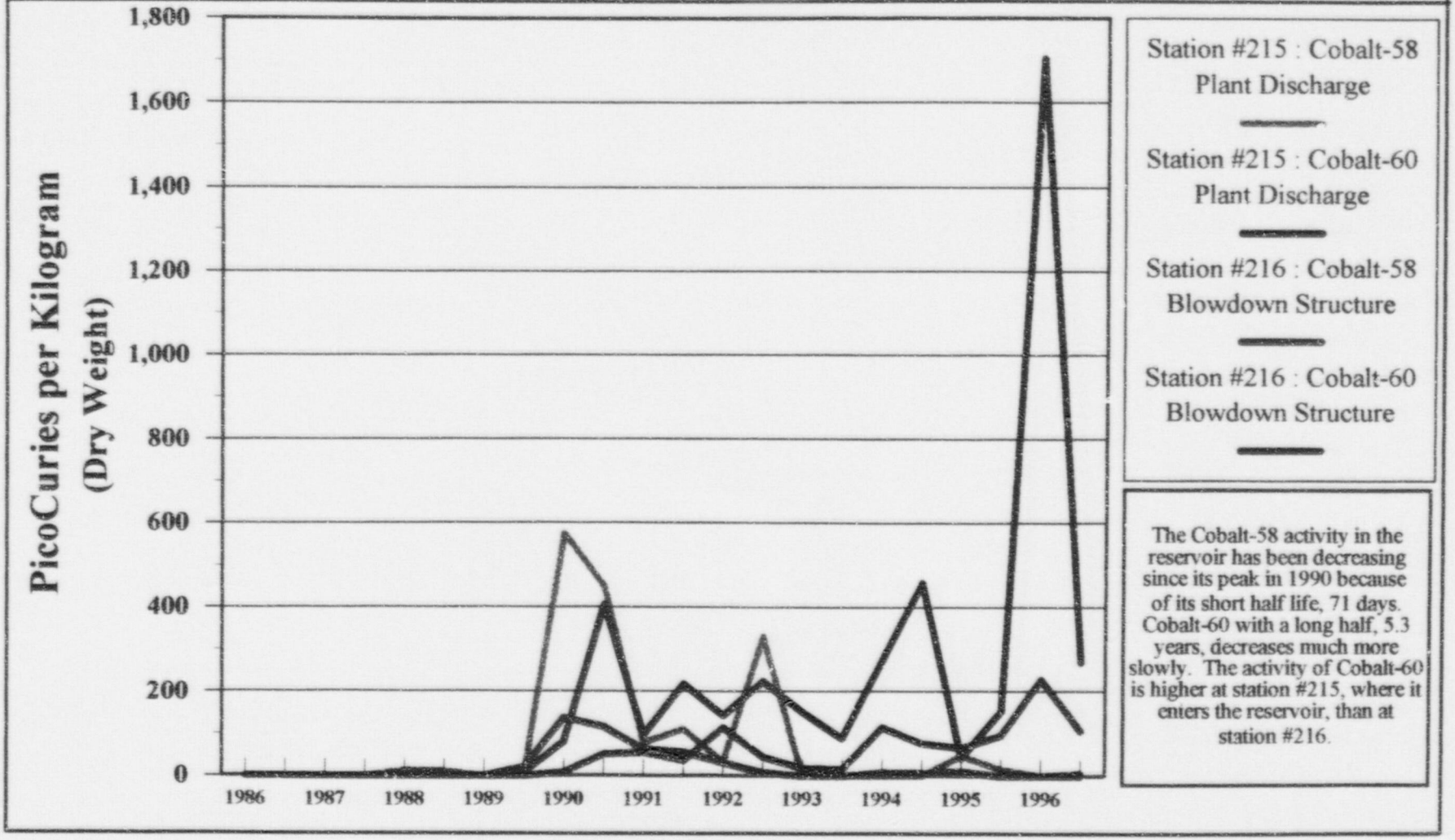


Figure 5

Historical Comparison of Tritium Added to and Remaining in the Main Cooling Reservoir 1989 - 1996

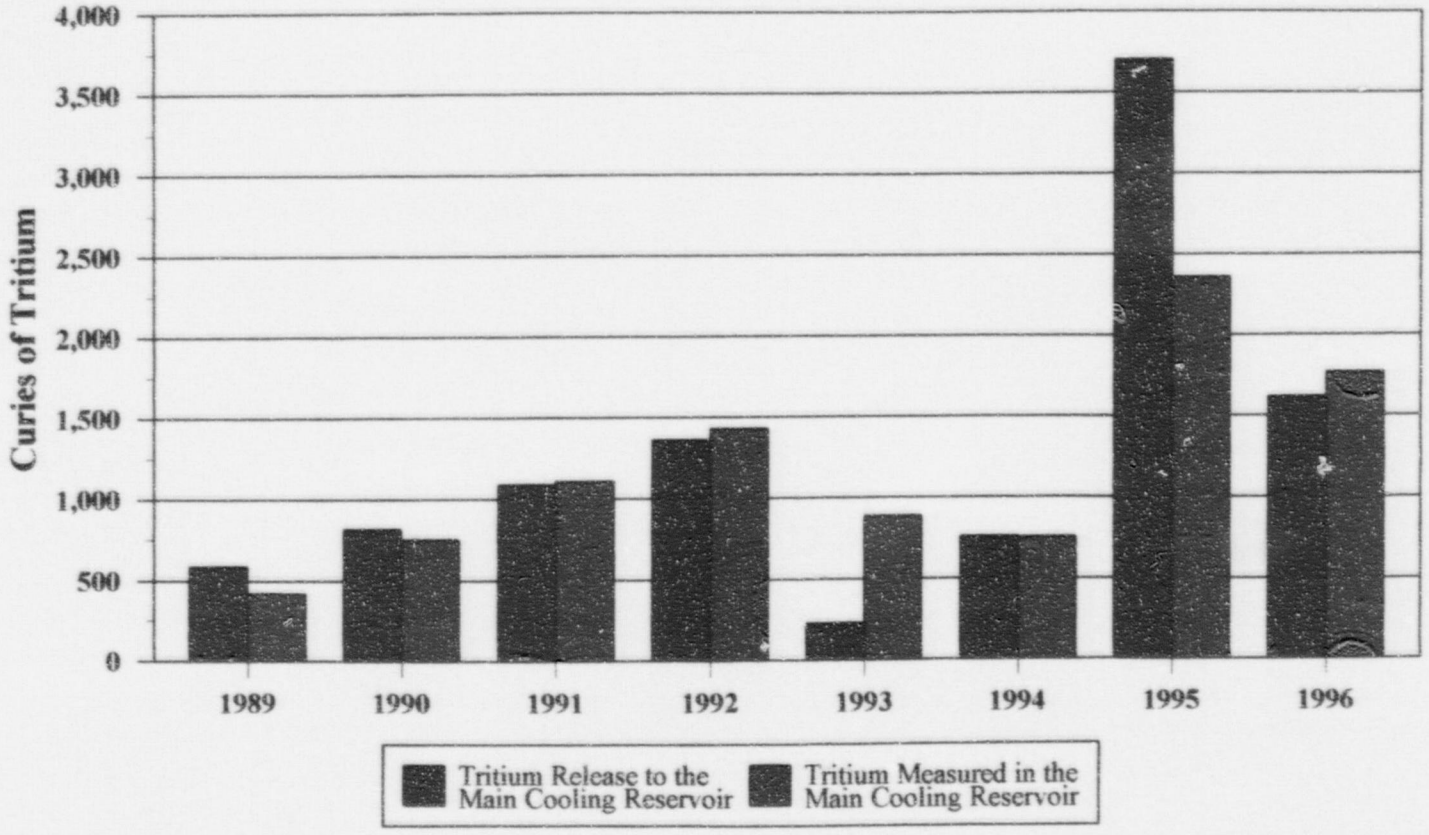


Figure 6

Historical Comparison of Tritium Activity in Surface Water 1988 - 1996

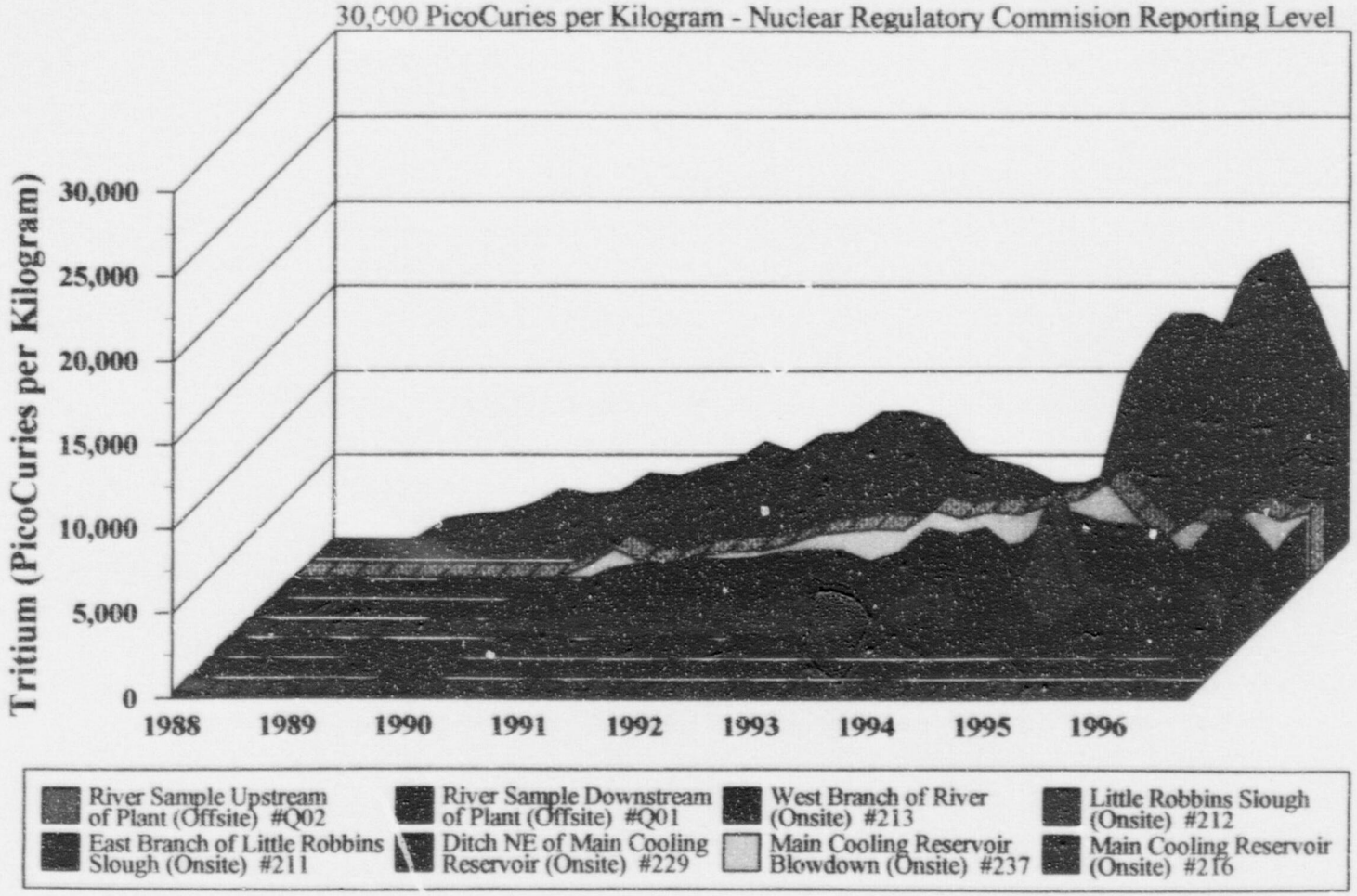
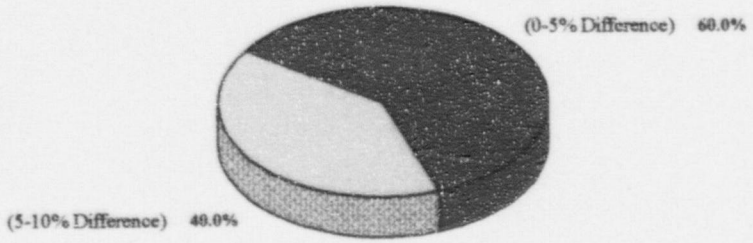
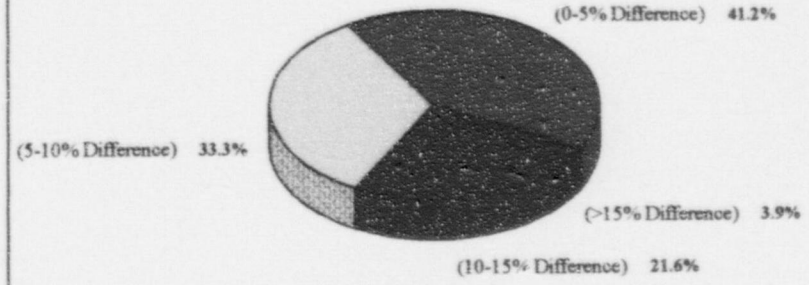


Figure 7

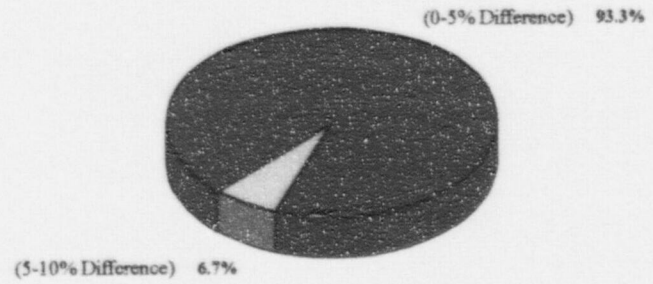
1996 Radiological Laboratory Quality Assurance Program Performance



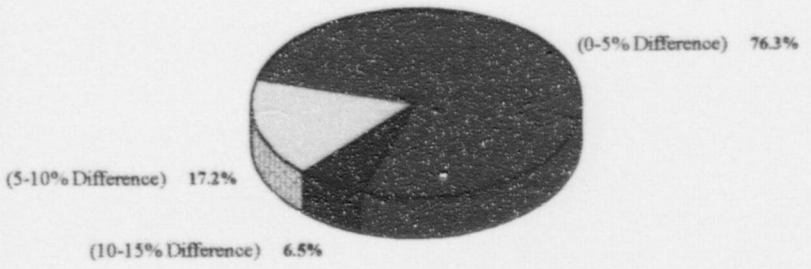
Battelle Environmental Thermoluminescent Dosimetry
(5 Analyses)



Intra-Laboratory Comparison
(51 Analyses)



Nuclear Energy Institute / National Institute of Standards & Technology
(19 Analyses)



Inter-Utility Measurement Assurance Program
(93 Analyses)

Figure 8

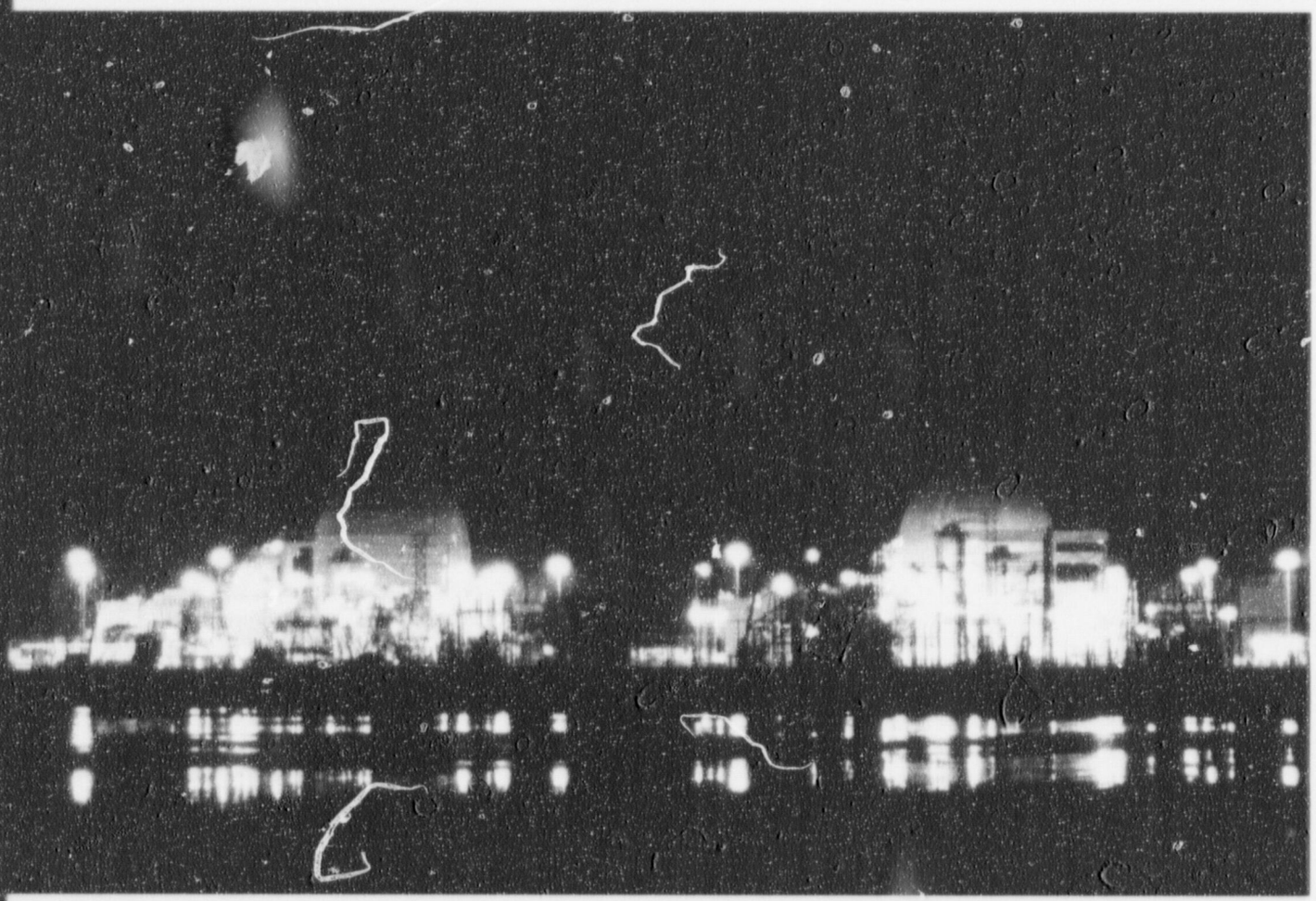
1996 PERFORMANCE OBJECTIVES SUMMARY

Performance Objective	Performance
±15% Accuracy for Inter- and Intralaboratory Quality Control Samples	98.8%
±15% Precision for Replicate Inter- and Intralaboratory Quality Control Samples	100.0%
Analyze REMP Samples in Order to Meet Required Sensitivities	100.0%
Perform the Analysis of REMP Samples Within 30 Days of Sample Receipt	91.9%
Collect and analyze required REMP samples as scheduled	98.0%
Maintain a minimum of 20% quality control sample load which will include field duplicates and splits, reagent blanks, blinds, etc.	27.3%

Figure 9

MISSED SAMPLES

ITEM NUMBER	MEDIA CODE	FREQUENCY	TIME PERIOD	COMMENTS
1	Broadleaf Vegetation	Monthly	January 1996	No samples collected. Vegetation was not available at any of the stations.
2	Broadleaf Vegetation	Monthly	February 1996	No samples collected. Vegetation was not available at any of the stations.
3	Broadleaf Vegetation	Monthly	March 1996	No samples collected. Vegetation was not available at any of the stations.
4	Broadleaf Vegetation	Monthly	April 1996	No samples collected. Vegetation was not available at any of the stations.
5	Broadleaf Vegetation	Monthly	May 1996	Only one of the two required indicator sampling stations was collected. Vegetation was not available at the other station.
6	Broadleaf Vegetation	Monthly	June 1996	Only one of the two required indicator sampling stations was collected. Vegetation was not available at the other station.
7	TLD	Quarterly	2nd Qtr. 96 Station #07	TLDs were removed by birds from the TLD station. Wire screens will be installed over the TLD stands to prevent birds from removing TLDs (CR 97-7168).
8	TLD	Quarterly	3rd Qtr. 96 Station #06	TLDs were damaged due to moisture penetration from TLD pouches that were damaged by birds. Wire screens will be installed over the TLD stands to prevent birds from damaging TLD pouches (CR 97-7168).



Addendum of Tables

Radiological Environmental Monitoring Program

The minimum Radiological Environmental Monitoring Program is presented in Table 1. The table is organized by exposure pathway. The specific requirements of location, collection and analysis frequencies are given for each pathway.

TABLE 1
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

EXPOSURE: DIRECT RADIATION

40 TOTAL SAMPLING STATIONS

Sample Media, Number, Approximate Location and Distance of Sample Stations from Containment.	Routine Sampling Mode	Nominal Collection Frequency	Analysis Type	Minimum Analysis Frequency
Exposure Media: TLD 16- Located in all 16 meteorological sectors, 1 mile. 16- Located in all 16 meteorological sectors, 4-6 miles. 6- Located in special interest areas (e.g. school, population centers), within 14 miles. 2- Control stations located in areas of minimal wind direction (WSW,ENE), 10-18 miles.	Continuously	Quarterly	Gamma	Quarterly

TABLE 1
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

EXPOSURE: AIRBORNE

5 TOTAL SAMPLING STATIONS

Sample Media, Number, Approximate Location, and Distance of Sample Stations from Containment.	Routine Sampling Mode	Nominal Collection Frequency	Analysis Type	Minimum Analysis Frequency
Charcoal and Particulate Filters				
3- Located at the exclusion zone, N, NNW, NW Sectors, 1 mile.	Continuously	Weekly	Charcoal: I-131	Weekly
1- Located in Bay City, 14 miles.			Particulate: Gross Beta & Gamma- Isotopic	As collected Quarterly Composite
1- Control Station, located in a minimal wind direction (WSW), 10 miles.				

TABLE 1
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

EXPOSURE: WATERBORNE

9 TOTAL SAMPLING STATIONS

Sample Media, Number And Approximate Location of Sample Stations	Routine Sampling Mode	Nominal Collection Frequency	Analysis Type	Minimum Analysis Frequency
Surface				
1- Located in MCR at the MCR blowdown structure.	Composite (grab if not available)	Monthly	Gamma-Isotopic & Tritium	Monthly
1- Located above the site on the Colorado River not influenced by plant discharge.				Quarterly Composite
1- Located downstream from blowdown entrance into the Colorado River.				
Ground				
1- Located at well downgradient in the shallow aquifer.	Grab	Quarterly	Gamma-Isotopic & Tritium	As collected

TABLE 1
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

EXPOSURE: WATERBORNE (CONTINUED)

Sample Media, Number And Approximate Location of Sample Stations	Routine Sampling Mode	Nominal Collection Frequency	Analysis Type	Minimum Analysis Frequency
Drinking Water				
1- Located on site.	Grab	Monthly	Gamma-Isotopic & Gross Beta	Monthly
1- Located at a control station.				
			Tritium	Quarterly Composites
Sediment				
1- Located above the site on the Colorado River, not influenced by plant discharge.	Grab	Semi-annually	Gamma-Isotopic	As collected
1- Located downstream from blowdown entrance into the Colorado River.				
1- Located in MCR.				

TABLE 1
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

EXPOSURE: INGESTION

7 TOTAL SAMPLING STATIONS

Sample Media, Number And Approximate Location of Sample Stations	Routine Sampling Mode	Nominal Collection Frequency	Analysis Type	Minimum Analysis Frequency
Milk *	Grab	Semi-monthly on pasture, monthly at other times.	Gamma-Isotopic & Low Level I-131	As collected
Broadleaf Vegetation 2- Located at the exclusion zone, N, NW, or NNW sectors. 1- Located in a minimal wind direction.	Grab	Monthly during growing season (When available)	Gamma-Isotopic	As collected
Agricultural Products **				

* Limited source of sample in vicinity of STP. (Attempts will be made to obtain samples when available.)

** No sample stations have been identified in the vicinity of the site. Presently no agricultural land is irrigated by water into which liquid plant wastes will be discharged. Agricultural products will be considered if these conditions change.

TABLE 1
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

EXPOSURE: INGESTION

7 TOTAL SAMPLING STATIONS

Sample Media, Number And Approximate Location of Sample Stations	Routine Sampling Mode	Nominal Collection Frequency	Analysis Type	Minimum Analysis Frequency
Fish and Invertebrates (edible portions)				
1- Representing commercially or recreational important species in vicinity of STP that maybe influenced by plant operation.	Grab	Sample in season or semi-annually if not seasonal	Gamma-Isotopic	As collected
1- Same or analogous species in area not influenced by STP.				
1- Same or analogous species in the MCR.				
Domestic Meat				
1- Represents domestic stock fed on crops grown exclusively within 10 miles of the plant.	Grab	Annually	Gamma-Isotopic	As collected

NOTE: Collection frequency may vary to accommodate sample media availability, equipment availability, and/or weather conditions.

Sample Media and Location Descriptions

Table 2 consists of a listing of the different types of samples followed by a description of each individual sample station and the analyses for that station. The required samples from Table 1 are in bold print. Many other sample types and locations are given which have been used for samples that have been taken for informational purposes.

TABLE 2
SAMPLE MEDIA AND LOCATION DESCRIPTIONS

AI	AIRBORNE RADIOIODINE	ML	(MIXED LIQUID) AERATION TANK
AL	ALGAE	ml	(WATER PORTION OF ML)
AP	AIRBORNE PARTICULATE	M1	BEEF MEAT
AS	(ASH SLUDGE) ASH TANK	M2	POULTRY MEAT
as	(WATER PORTION OF AS)	M3	WILD SWINE
BE	WILD BLACKBERRIES	M4	DOMESTIC SWINE
B1	RESIDENT DABBLER DUCK	M5	EGGS
B2	RESIDENT DIVER DUCK	M6	GAME DEER
B3	MIGRATORY DABBLER DUCK	M7	ALLIGATOR
B4	MIGRATORY DIVER DUCK	M8	RABBIT
B5	GOOSE	N1	PECANS
B6	DOVE	N2	ACORNS
B7	QUAIL	OY	OYSTER
B8	PIGEON	PK	PLANKTON
CC	CRUSTACEAN CRAB	RA	ROOTED AQUATIC VEGETATION
CS	CRUSTACEAN SHRIMP	R4	TURNIP
C1	CRAB SHELL	SB	SOYBEAN
DR	DIRECT RADIATION	SO	SOIL
FD	FOOD	S1	SEDIMENT - SHORELINE
FM	FECAL MATERIAL	S2	SEDIMET - BOTTOM
F1	FISH - PISCIVOROUS	UR	URINE
F2	FISH - CRUSTACEAN & INSECT FEEDERS	VB	BROADLEAF VEGETATION
F3	FISH - PLANTIVORES & DETRITUS FEEDERS	VC	CORN
L1	BANANA LEAVES	VP	PASTURE GRASS
L2	CANA LEAVES	VR	RICE
L3	LETTUCE	VS	GRAIN SORGHUM
L4	TURNIP GREENS	WD	DRINKING WATER
L5	CABBAGE	WG	GROUND WATER
L6	COLLARD GREENS	WR	RAIN WATER
MC	COW MILK	WS	SURFACE WATER
MG	GOAT MILK	WW	RELIEF WELL WATER

TABLE 2
SAMPLE MEDIA AND LOCATION DESCRIPTIONS

MEDIA CODE	STATION CODE	VECTOR (Approximate)	LOCATION DESCRIPTION
DR AI AP VB VP SO	001	1 mile N	FM 521
DR	002	1 mile NNE	FM 521
DR	003	1 mile NE	FM 521
DR	004	1 mile ENE	FM 521
DR	005	1 mile ESE	STP Visitor Center on FM 521
DR AI AP SO	006	3.5 miles ESE	Site near reservoir makeup pumping facility
DR	007	3.5 miles SE	MCR Dike
DR	008	0.25 mile SSE	MCR Dike
DR	009	0.25 mile S	MCR Dike
DR	010	0.25 mile SSW	MCR Dike
DR	011	0.5 mile SW	MCR Dike
DR	012	1.5 mile WSW	MCR Dike
DR	013	1.5 mile W	FM 521
DR	014	1.5 mile WNW	FM 521
DR AI AP VB SO VP	015	1 mile NW	FM 521
DR AI AP VB SO VP	016	1 mile NNW	FM 521
DR	017	6.5 miles N	Buckeye - FM 1468
DR AI AP SO	018	5.5 miles NNE	Hoescht Celanese Plant - FM 3057
DR	019	5.5 miles NE	FM 2668
DR	020	5 miles ENE	FM 2668 & FM 2078
DR	021	5 miles E	FM 521& FM 2668

MCR - STP Main Cooling Reservoir 10
Media codes typed in bold satisfy collection requirement described in Table 1.

* Control Station

TABLE 2
SAMPLE MEDIA AND LOCATION DESCRIPTIONS

MEDIA CODE	STATION CODE	VECTOR (Approximate)	LOCATION DESCRIPTION
DR	022	7 miles E	Lyondell Chemical Plant
DR	*023	16 miles ENE	Intersection of FM 521 and FM 2540
DR	024	4 miles SSE	MCR Dike
DR	025	4 miles S	MCR Dike
DR	026	4 miles SSW	MCR Dike
DR	027	2.5 miles SW	MCR Dike
DR	028	5 miles WSW	FM 1095 & Ellis Road
DR SO	029	4.5 miles W	FM 1095
DR	030	6 miles WNW	Tres Palacios Oaks, FM 2853
DR	031	5.5 miles NW	Wilson Creek Road
DR	032	3.5 miles NNW	FM 1468
DR AI AP SO	033	14 miles NNE	Microwave Tower at end of Kilowatt road in Bay City
DR	034	7.5 miles ENE	Wadsworth Water Supply Pump Station
DR AI AP SO	035	8.5 miles SSE	Matagorda
DR	036	9 miles WSW	College Port
DR AI AP VB VP SO	*037	10 miles WSW	Palacios CP&L Substation
DR	038	10.5 miles NW	CP&L Substation on TX 71 near Blessing
DR AI AP SO	039	9 miles NW	TX 35 under High Voltage Power lines near Tidehaven High School
DR	040	4.5 miles SW	Citrus Grove
DR	041	2.0 miles ESE	MCR Dike

MCR - STP Main Cooling Reservoir 11
Media codes typed in bold satisfy collection requirement described in Table 1.

* Control Station

TABLE 2
SAMPLE MEDIA AND LOCATION DESCRIPTIONS

MEDIA CODE	STATION CODE	VECTOR (Approximate)	LOCATION DESCRIPTION
DR	042	8.5 miles NW	FM 459 at Tidehaven Intermediate School
WG	205	4 miles SE	Well #446A, 0.5 mile north of MCR blowdown canal (30' deep)
WG	206	4 miles SE	Well #446, 0.5 mile north of MCR blowdown canal (75' deep)
WG	*207	1.5 miles W	Well #603A, 0.25 mile west of TX 521 (75' deep)
WG	*208	1.5 miles W	Well #603B, 0.25 mile west of TX 521 (150' deep)
WS	209	2 miles ESE	Kelly Lake
WD	210	On Site	Approved drinking water supply from STP
WS S1	211	3.5 miles S	Site, E. Branch Little Robbins Slough
WS S1	212	4 miles S	Little Robbins Slough
WS S1	213	4 miles SE	W. Branch Colorado River
F (1,2, or 3) CC	214	2.5 miles SE	MCR at Makeup Water Discharge
F(1, 2, or 3) **S2**	215	0.5 mile SW	MCR at Circulating Water Discharge
F(1, 2, or 3) WS S2	216	3.5 miles SSE	MCR at blowdown structure
F (1, 2, or 3) CC **CS** OY	222	10.5 miles S	West Matagorda Bay
F (1, 2, or 3)	223	10.5 miles SE	East Matagorda Bay
F (1, 2, or 3)	224	9.2 miles SSE	West Intracoastal Canal

MCR - STP Main Cooling Reservoir 12
Media codes typed in bold satisfy collection requirement described in Table 1.

* Control Station

TABLE 2
SAMPLE MEDIA AND LOCATION DESCRIPTIONS

MEDIA CODE	STATION CODE	VECTOR (Approximate)	LOCATION DESCRIPTION
F (1, 2, or 3)	225	9.2 miles SE	East Intercoastal Canal
WS	*226	4.5 miles NNE	Colorado River at Hoescht Celanese Plant
WS S(1 or 2)	227	5-6 miles SE	West bank of Colorado River downstream of STP across from channel marker #22
WD	*228	14 miles NNE	Le Tulle Park Public water supply
WS S1	229	2-3 miles ESE	Drainage ditch north of the reservoir that empties into Colorado River upstream of the reservoir makeup pumping facility
S(1 or 2)	230	3.5 miles ESE	Colorado River at point where drainage ditch (#229) empties into it
SO	232	9 miles NW	Farmland behind station #39
S(1 or 2) WS	233	4.5 miles SE	Colorado River where MCR blowdown discharge channel empties into it.
SO	234	1 mile NW	Farm across FM521 from station #15
WG	235	3.8 miles S	Well B-3 directly south from MCR
B8	236	N/A	STP Protected Area
WS	237	3.7 miles SSE	Blowdown discharge channel from MCR
WG	*239	1 mile NW	Well B-1B, Near REMP sampling station #15
WS SO S1	240	1 mile ESE	Drainage ditch originating NE of protected area that crosses Hwy 521 south of main entrance road and empties into Kelly Lake.

MCR - STP Main Cooling Reservoir 13
Media codes typed in bold satisfy collection requirement described in Table 1.

* Control Station

TABLE 2
SAMPLE MEDIA AND LOCATION DESCRIPTIONS

MEDIA CODE	STATION CODE	VECTOR (Approximate)	LOCATION DESCRIPTION
F (1, 2, or 3)	241	<1 mile S	MCR circulating water intake
S(1 or 2) WS	*242	14 miles N	Colorado River where it intersects Highway 35
WS	*243	14 miles N	Colorado River upstream of Bay City Dam at the LCRA pumping station
WG	245	4.5 miles SSE	Water well (approx. 60' deep) located on John Savage's property 1 mile south of MCR reservoir
WS S1	246	< 1 mile N	Drainage ditch originating at protected area fence north of Unit 2
WS	247	<1 mile E	Essential Cooling Pond
S1 WS	248	<1 mile N	Point in drainage ditch north of protected area downstream of Unit #1 Protected Area storm drains discharge
F(1,2, or 3)	*249	N/A	Control sample purchased from a local retailer
WW	701	4 miles S	MCR Relief Well # 440
WW	702	4 miles S	MCR Relief Well # 500
WW	703	4 miles S	MCR Relief Well # 505
WW	704	4 miles S	MCR Relief Well # 497

MCR - STP Main Cooling Reservoir 14
Media codes typed in bold satisfy collection requirement described in Table 1.

* Control Station

1996 Radiological Environmental Monitoring Program Analysis Summary

An analysis summary for all of the required samples is given in Table 3. The table has been formatted to resemble a United States Nuclear Regulatory Commission industry standard. Modifications have been made for the sole purpose of reading ease. Negative values are reported in this table as recommended by the United States Nuclear Regulatory Commission. Reported negative values are required to do long term studies where the true values are near zero or when there exists a negative bias in the measurement.

Media type is printed at the top left of each page, and the units of measurement are printed at the top right. The first column lists the activity or specific radionuclide for which each sample was analyzed. Total analyses performed for the indicated nuclide/ the total number of nonroutine samples analyzed is given in the second column. (A nonroutine measurement is a sample indicating a value greater than the reporting levels for Radioactivity Concentrations in Environmental Samples.) The "LOWER LIMIT OF DETECTION" column lists required values. Not all of the listed analyses or radionuclides have required lower limits of detection. Typically, the values achieved are significantly lower than the required.

A set of statistical parameters are listed for each radionuclide in the remaining columns. The parameters contain information from the indicator locations, the location having the highest annual mean, and information from the control stations. For each of these groups of data, the following is calculated:

- The mean value (including negative values and values below the lower limit of detection).
- The number of analyses whose values were greater than the lower limit of detection / the total number of analyses.
- The lowest and highest values for the analysis.

The data placed in the table was changed in 1995 from the previous reports to only include the data from the samples listed in Table 1. Additional thermoluminescent dosimetry is utilized each quarter for quality control purposes. The number of analyses will be the same as required with the addition of four groundwater duplicate samples, seven bottom sediment samples and six duplicate surface water samples. Vegetation and wildlife samples vary in number according to availability.

This change in the data may appear to cause some inconsistencies between current and past data but will provide for more consistency in the future.

TABLE 3

1996 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Direct Radiation UNITS: MilliRoentgen/Standard Quarter

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	REQUIRED LOWER LIMIT OF DETECTION	INDICATOR LOCATIONS MEAN (f) * RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	LOCATION WITH HIGHEST ANNUAL MEAN MEAN (f) * RANGE	CONTROL LOCATIONS MEAN (f) * RANGE
Gamma	174/ 0	---	1.4E+01 (166 / 166) (1.1E+01 - 2.0E+01)	1 mile W (#013)	2.0E+01 (5 / 5) (1.8E+01 - 2.0E+01)	1.5E+01 (8 / 8) (1.3E+01 - 1.7E+01)

* (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1996 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Air Iodine UNITS: PicoCuries per Cubic Meter

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	REQUIRED LOWER LIMIT OF DETECTION	INDICATOR LOCATIONS MEAN (f) * RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	LOCATION WITH HIGHEST ANNUAL MEAN MEAN (f) * RANGE	CONTROL LOCATIONS MEAN (f) * RANGE
Iodine-131	265/ 0	7.0E-02	3.3E-04 (0 / 212) (-6.5E-03 to 7.6E-03)	1 mile NW (#015)	4.5E-04 (0 / 53) (-6.5E-03 to 6.5E-03)	1.7E-04 (0 / 53) (-5.6E-03 to 7.8E-03)

* (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1996 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Airborne Particulate UNITS: PicoCuries per Cubic Meter

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	REQUIRED LOWER LIMIT OF DETECTION	INDICATOR LOCATIONS MEAN (f) * RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	LOCATION WITH HIGHEST ANNUAL MEAN MEAN (f) * RANGE	CONTROL LOCATIONS MEAN (f) * RANGE
Gross Beta	265/ 0	1.0E-02	1.9E-02 (212 / 212) (7.0E-03 ~ 4.0E-02)	14 miles NNE (#033)	1.9E-02 (53 / 53) (7.0E-03 ~ 3.8E-02)	1.9E-02 (53 / 53) (8.2E-03 ~ 3.6E-02)
Cesium-134	20/ 0	5.0E-02	1.8E-05 (0 / 16) (-5.9E-05 ~ 1.5E-04)	10 miles WSW (#037)	4.6E-05 (0 / 4) (3.1E-05 ~ 5.8E-05)	4.6E-05 (0 / 4) (3.1E-05 ~ 5.8E-05)
Cesium-137	20/ 0	6.0E-02	1.4E-05 (0 / 16) (-6.1E-05 ~ 1.5E-04)	1 mile NW (#015)	3.7E-05 (0 / 4) (-6.1E-05 ~ 1.5E-04)	-1.0E-06 (0 / 4) (-4.3E-05 ~ 5.2E-05)
Manganese-54	20/ 0	---	8.4E-07 (0 / 16) (-1.1E-04 ~ 1.2E-04)	14 miles NNE (#033)	7.2E-05 (0 / 4) (7.3E-06 ~ 1.2E-04)	-1.0E-05 (0 / 4) (-1.2E-04 ~ 1.4E-04)
Iron-59	20/ 0	---	2.8E-04 (0 / 16) (-8.2E-04 ~ 2.1E-03)	1 mile NW (#015)	1.1E-03 (0 / 4) (4.2E-04 ~ 2.1E-03)	1.3E-04 (0 / 4) (-5.8E-04 ~ 6.5E-04)
Cobalt-58	20/ 0	---	9.3E-06 (0 / 16) (-4.2E-04 ~ 2.8E-04)	1 mile NW (#015)	1.1E-04 (0 / 4) (-1.2E-04 ~ 2.8E-04)	-3.0E-05 (0 / 4) (-1.7E-04 ~ 9.0E-05)
Cobalt-60	20/ 0	---	4.4E-06 (0 / 16) (-2.0E-04 ~ 1.4E-04)	1 mile NNW (#016)	5.7E-05 (0 / 4) (-8.4E-05 ~ 1.4E-04)	-1.7E-05 (0 / 4) (-6.6E-05 ~ 3.0E-05)
Zinc-65	20/ 0	---	-1.6E-04 (0 / 16) (-4.7E-04 ~ 2.4E-04)	1 mile N (#001)	-5.7E-05 (0 / 4) (-3.8E-04 ~ 2.4E-04)	-6.8E-05 (0 / 4) (-1.7E-04 ~ 1.1E-05)
Zirconium-95	20/ 0	---	-6.5E-05 (0 / 16) (-3.8E-04 ~ 1.4E-04)	1 mile NW (#015)	1.3E-06 (0 / 4) (-1.2E-04 ~ 1.4E-04)	-2.7E-05 (0 / 4) (-1.9E-04 ~ 1.5E-04)
Niobium-95	20/ 0	---	3.7E-05 (0 / 16) (-3.7E-04 ~ 3.8E-04)	10 miles WSW (#037)	2.0E-04 (0 / 4) (-2.1E-04 ~ 6.1E-04)	2.0E-04 (0 / 4) (-2.1E-04 ~ 6.1E-04)
Lanthanum/ Barium-140	20/ 0	---	-8.0E-04 (0 / 16) (-4.8E-03 ~ 5.5E-03)	14 miles NNE (#033)	8.3E-04 (0 / 4) (-5.7E-04 ~ 1.9E-03)	-3.2E-04 (0 / 4) (-1.1E-03 ~ 7.3E-04)

* (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1996 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Surface Water UNITS: PicoCuries per Kilogram

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	REQUIRED LOWER LIMIT OF DETECTION	INDICATOR LOCATIONS MEAN (f) * RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	LOCATION WITH HIGHEST ANNUAL MEAN MEAN (f) * RANGE	CONTROL LOCATIONS MEAN (f) * RANGE
Hydrogen-3	12/ 0	3.0E+03	7.2E+03 (4 / 8) (-1.2E+02 ~ 1.7E+04)	3 miles SSE (#216)	1.4E+04 (4 / 4) (9.7E+03 ~ 1.7E+04)	-9.0E+01 (0 / 4) (-1.8E+02 ~ 6.6E+00)
Iodine-131	43/ 0	---	3.4E-02 (0 / 29) (-3.4E+00 ~ 5.7E+00)	>10 miles N (#243)	1.9E+00 (0 / 13) (-6.8E+00 ~ 1.7E+01)	1.8E+00 (0 / 14) (-6.8E+00 ~ 1.7E+01)
Cesium-134	43/ 0	1.5E+01	2.8E-01 (0 / 29) (-1.4E+00 ~ 1.7E+00)	6 miles SE (#227)	5.6E-01 (0 / 13) (-1.1E-01 ~ 1.7E+00)	1.8E-01 (0 / 14) (-4.8E-01 ~ 1.1E+00)
Cesium-137	43/ 0	1.8E+01	2.0E-01 (0 / 29) (-8.3E-01 ~ 1.1E+00)	3 miles SSE (#216)	2.7E-01 (0 / 15) (-4.4E-01 ~ 1.1E+00)	1.4E-01 (0 / 14) (-5.0E-01 ~ 1.2E+00)
Manganese-54	43/ 0	1.5E+01	-4.6E-02 (0 / 29) (-9.0E-01 ~ 1.6E+00)	>10 miles N (#242)	4.2E-01 (0 / 1) (4.2E-01 ~ 4.2E-01)	-2.2E-01 (0 / 14) (-9.8E-01 ~ 4.2E-01)
Iron-59	43/ 0	3.0E+01	-1.1E-01 (0 / 29) (-3.8E+00 ~ 2.6E+00)	6 miles SE (#227)	8.4E-01 (0 / 13) (-9.5E-01 ~ 2.6E+00)	2.7E-01 (0 / 14) (-3.4E+00 ~ 2.9E+00)
Cobalt-58	43/ 0	1.5E+01	-1.4E-01 (0 / 29) (-1.2E+00 ~ 2.0E+00)	>10 miles N (#242)	6.1E-02 (0 / 1) (6.1E-02 ~ 6.1E-02)	-1.8E-02 (0 / 14) (-9.7E-01 ~ 1.1E+00)
Cobalt-60	43/ 0	1.5E+01	3.9E-02 (0 / 29) (-8.4E-01 ~ 1.0E+00)	4.3 miles SE (#233)	2.2E-01 (0 / 1) (2.2E-01 ~ 2.2E-01)	1.1E-01 (0 / 14) (-6.3E-01 ~ 8.9E-01)
Zinc-65	43/ 0	3.0E+01	-3.1E-01 (0 / 29) (-3.4E+00 ~ 1.5E+00)	3 miles SSE (#216)	-1.3E-01 (0 / 15) (-2.0E+00 ~ 1.5E+00)	-1.2E+00 (0 / 14) (-3.5E+00 ~ 1.2E+00)
Zirconium-95	43/ 0	1.5E+01	-6.7E-02 (0 / 29) (-2.4E+00 ~ 1.5E+00)	4.3 miles SE (#233)	1.0E+00 (0 / 1) (1.0E+00 ~ 1.0E+00)	1.5E-01 (0 / 14) (-1.0E+00 ~ 1.1E+00)
Niobium-95	43/ 0	1.5E+01	5.1E-01 (0 / 29) (-1.6E+00 ~ 1.7E+00)	4.3 miles SE (#233)	8.6E-01 (0 / 1) (8.6E-01 ~ 8.6E-01)	7.0E-01 (0 / 14) (-3.1E-01 ~ 2.8E+00)
Lanthanum/ Barium-140	43/ 0	1.5E+01	-3.4E-02 (0 / 29) (-3.1E+00 ~ 2.9E+00)	4.3 miles SE (#233)	9.7E-01 (0 / 1) (9.7E-01 ~ 9.7E-01)	6.0E-01 (0 / 14) (-2.4E+00 ~ 4.5E+00)

* (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1996 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Ground Water UNITS: PicoCuries per Kilogram

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	REQUIRED LOWER LIMIT OF DETECTION	INDICATOR LOCATIONS MEAN (f) * RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	LOCATION WITH HIGHEST ANNUAL MEAN MEAN (f) * RANGE	CONTROL LOCATIONS MEAN (f) * RANGE
Hydrogen-3	8/ 0	3.0E+03	1.2E+02 (0 / 8) (-6.2E+01 to 3.8E+02)	3.8 miles S (#235)	1.2E+02 (0 / 8) (-6.2E+01 to 3.8E+02)	no samples
Iodine-131	8/ 0	---	-4.6E-01 (0 / 8) (-8.0E+00 to 4.9E+00)	3.8 miles S (#235)	-4.6E-01 (0 / 8) (-8.0E+00 to 4.9E+00)	no samples
Cesium-134	8/ 0	1.5E+01	1.6E-01 (0 / 8) (-1.4E+00 to 1.0E+00)	3.8 miles S (#235)	1.6E-01 (0 / 8) (-1.4E+00 to 1.0E+00)	no samples
Cesium-137	8/ 0	1.8E+01	-2.5E-02 (0 / 8) (-8.9E-01 to 1.2E+00)	3.8 miles S (#235)	-2.5E-02 (0 / 8) (-8.9E-01 to 1.2E+00)	no samples
Manganese-54	8/ 0	1.5E+01	1.3E-01 (0 / 8) (-7.2E-01 to 1.5E+00)	3.8 miles S (#235)	1.3E-01 (0 / 8) (-7.2E-01 to 1.5E+00)	no samples
Iron-59	8/ 0	3.0E+01	-1.7E-01 (0 / 8) (-5.4E+00 to 2.0E+00)	3.8 miles S (#235)	-1.7E-01 (0 / 8) (-5.4E+00 to 2.0E+00)	no samples
Cobalt-58	8/ 0	1.5E+01	3.7E-02 (0 / 8) (-6.5E-01 to 4.7E-01)	3.8 miles S (#235)	3.7E-02 (0 / 8) (-6.5E-01 to 4.7E-01)	no samples
Cobalt-60	8/ 0	1.5E+01	1.3E-01 (0 / 8) (-1.6E-01 to 7.5E-01)	3.8 miles S (#235)	1.3E-01 (0 / 8) (-1.6E-01 to 7.5E-01)	no samples
Zinc-65	8/ 0	3.0E+01	-3.1E-01 (0 / 8) (-2.8E+00 to 1.5E+00)	3.8 miles S (#235)	-3.1E-01 (0 / 8) (-2.8E+00 to 1.5E+00)	no samples
Zirconium-95	8/ 0	1.5E+01	1.3E-01 (0 / 8) (-1.7E+00 to 2.1E+00)	3.8 miles S (#235)	1.3E-01 (0 / 8) (-1.7E+00 to 2.1E+00)	no samples
Niobium-95	8/ 0	1.5E+01	8.5E-01 (0 / 8) (-1.2E-02 to 2.3E+00)	3.8 miles S (#235)	8.5E-01 (0 / 8) (-1.2E-02 to 2.3E+00)	no samples
Lanthanum/ Barium-140	8/ 0	1.5E+01	-8.2E-03 (0 / 8) (-3.5E+00 to 2.2E+00)	3.8 miles S (#235)	-8.2E-03 (0 / 8) (-3.5E+00 to 2.2E+00)	no samples

* (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1996 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Drinking Water UNITS: PicoCuries per Kilogram

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	REQUIRED LOWER LIMIT OF DETECTION	INDICATOR LOCATIONS MEAN (f) * RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	LOCATION WITH HIGHEST ANNUAL MEAN MEAN (f) * RANGE	CONTROL LOCATIONS MEAN (f) * RANGE
Gross Beta	24/ 0	4.0E+00	3.1E+00 (8 / 12) (-7.1E-02 ↔ 7.7E+00)	14 miles NNE (#228)	4.8E+00 (11 / 12) (1.5E+00 ↔ 1.2E+01)	4.8E+00 (11 / 12) (1.5E+00 ↔ 1.2E+01)
Hydrogen-3	8/ 0	3.0E+03	-3.4E+01 (0 / 4) (-2.1E+02 ↔ 7.4E+01)	On Site (#210)	-3.4E+01 (0 / 4) (-2.1E+02 ↔ 7.4E+01)	-8.8E+01 (0 / 4) (-4.1E+02 ↔ 1.0E+02)
Iodine-131	24/ 0	---	1.4E+00 (0 / 12) (-1.4E+00 ↔ 4.3E+00)	On Site (#210)	1.4E+00 (0 / 12) (-1.4E+00 ↔ 4.3E+00)	-7.4E-01 (0 / 12) (-6.8E+00 ↔ 3.4E+00)
Cesium-134	24/ 0	1.5E+01	-1.8E-01 (0 / 12) (-1.5E+00 ↔ 1.3E+00)	14 miles NNE (#228)	2.8E-01 (0 / 12) (-1.2E+00 ↔ 1.7E+00)	2.8E-01 (0 / 12) (-1.2E+00 ↔ 1.7E+00)
Cesium-137	24/ 0	1.8E+01	-1.4E-01 (0 / 12) (-1.2E+00 ↔ 4.5E-01)	14 miles NNE (#228)	9.2E-03 (0 / 12) (-1.5E+00 ↔ 1.8E+00)	9.2E-03 (0 / 12) (-1.5E+00 ↔ 1.8E+00)
Manganese-54	24/ 0	1.5E+01	-1.5E-01 (0 / 12) (-1.0E+00 ↔ 8.0E-01)	14 miles NNE (#228)	3.5E-02 (0 / 12) (-8.0E-01 ↔ 1.2E+00)	3.5E-02 (0 / 12) (-8.0E-01 ↔ 1.2E+00)
Iron-59	24/ 0	3.0E+01	-1.5E-01 (0 / 12) (-4.2E+00 ↔ 5.6E+00)	14 miles NNE (#228)	-6.2E-02 (0 / 12) (-3.8E+00 ↔ 2.7E+00)	-6.2E-02 (0 / 12) (-3.8E+00 ↔ 2.7E+00)
Cobalt-58	24/ 0	1.5E+01	-2.7E-01 (0 / 12) (-1.7E+00 ↔ 9.9E-01)	14 miles NNE (#228)	-8.2E-02 (0 / 12) (-7.4E-01 ↔ 6.7E-01)	-8.2E-02 (0 / 12) (-7.4E-01 ↔ 6.7E-01)
Cobalt-60	24/ 0	1.5E+01	1.0E-01 (0 / 12) (-8.4E-01 ↔ 1.3E+00)	On Site (#210)	1.0E-01 (0 / 12) (-8.4E-01 ↔ 1.3E+00)	7.6E-02 (0 / 12) (-9.4E-01 ↔ 1.2E+00)
Zinc-65	24/ 0	3.0E+01	-8.6E-02 (0 / 12) (-2.8E+00 ↔ 3.4E+00)	On Site (#210)	-8.6E-02 (0 / 12) (-2.8E+00 ↔ 3.4E+00)	-5.7E-01 (0 / 12) (-3.7E+00 ↔ 1.0E+00)
Zirconium-95	24/ 0	1.5E+01	-6.1E-02 (0 / 12) (-1.6E+00 ↔ 1.2E+00)	On Site (#210)	-6.1E-02 (0 / 12) (-1.6E+00 ↔ 1.2E+00)	-5.1E-01 (0 / 12) (-2.3E+00 ↔ 9.3E-01)
Niobium-95	24/ 0	1.5E+01	1.3E+00 (0 / 12) (-4.9E-01 ↔ 7.3E+00)	On Site (#210)	1.3E+00 (0 / 12) (-4.9E-01 ↔ 7.3E+00)	5.3E-01 (0 / 12) (-2.9E-01 ↔ 1.2E+00)
Lanthanum/ Barium-140	24/ 0	1.5E+01	1.6E-02 (0 / 12) (-2.9E+00 ↔ 2.8E+00)	On Site (#210)	1.6E-02 (0 / 12) (-2.9E+00 ↔ 2.8E+00)	-6.6E-01 (0 / 12) (-9.0E+00 ↔ 2.7E+00)

* (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1996 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Sediment-Shoreline UNITS: PicoCuries per Kilogram dry weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	REQUIRED LOWER LIMIT OF DETECTION	INDICATOR LOCATIONS MEAN (f) * RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	MEAN (f) * RANGE	CONTROL LOCATIONS MEAN (f) * RANGE
Cesium-134	4/ 0	1.5E+02	4.3E+01 (0 / 2) (4.2E+01 - 4.3E+01)	>10 miles N (#242)	5.6E+01 (0 / 2) (5.1E+01 - 6.2E+01)	5.6E+01 (0 / 2) (5.1E+01 - 6.2E+01)
Cesium-137	4/ 0	1.8E+02	2.6E+01 (1 / 2) (2.2E+01 - 3.0E+01)	>10 miles N (#242)	4.6E+01 (2 / 2) (3.8E+01 - 5.4E+01)	4.6E+01 (2 / 2) (3.8E+01 - 5.4E+01)
Manganese-54	4/ 0	---	-4.2E-01 (0 / 2) (-8.4E-01 - 8.4E-01)	>10 miles N (#242)	4.3E+00 (0 / 2) (0.0E+00 - 8.6E+00)	4.3E+00 (0 / 2) (0.0E+00 - 8.6E+00)
Iron-59	4/ 0	---	-1.4E+01 (0 / 2) (-1.7E+01 - -1.0E+01)	6 miles SE (#227)	-1.4E+01 (0 / 2) (-1.7E+01 - -1.0E+01)	-3.3E+01 (0 / 2) (-3.7E+01 - -3.0E+01)
Cobalt-58	4/ 0	---	-9.9E+00 (0 / 2) (-1.1E+01 - -8.4E+00)	6 miles SE (#227)	-9.9E+00 (0 / 2) (-1.1E+01 - -8.4E+00)	-1.3E+01 (0 / 2) (-1.4E+01 - -1.3E+01)
Cobalt-60	4/ 0	---	-8.3E-01 (0 / 2) (-5.8E+00 - 4.1E+00)	>10 miles N (#242)	6.1E+00 (0 / 2) (5.4E+00 - 6.7E+00)	6.1E+00 (0 / 2) (5.4E+00 - 6.7E+00)
Zinc-65	4/ 0	---	2.8E+00 (0 / 2) (-3.2E+00 - 8.8E+00)	6 miles SE (#227)	2.8E+00 (0 / 2) (-3.2E+00 - 8.8E+00)	-7.6E+00 (0 / 2) (-1.0E+01 - -4.9E+00)
Zirconium-95	4/ 0	---	5.4E+00 (0 / 2) (4.2E+00 - 6.6E+00)	6 miles SE (#227)	5.4E+00 (0 / 2) (4.2E+00 - 6.6E+00)	4.2E+00 (0 / 2) (-1.2E+01 - 2.0E+01)
Niobium-95	4/ 0	---	9.0E+01 (0 / 2) (4.6E+01 - 1.3E+02)	6 miles SE (#227)	9.0E+01 (0 / 2) (4.6E+01 - 1.3E+02)	6.2E+01 (0 / 2) (4.6E+01 - 7.8E+01)
Lanthanum/ Barium-140	4/ 0	---	3.4E+02 (0 / 2) (1.6E+01 - 6.6E+02)	6 miles SE (#227)	3.4E+02 (0 / 2) (1.6E+01 - 6.6E+02)	1.6E+02 (0 / 2) (1.3E+02 - 2.0E+02)

* (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1996 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Sediment-Bottom UNITS: PicoCuries per Kilogram dry weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	REQUIRED LOWER LIMIT OF DETECTION	INDICATOR LOCATIONS MEAN (f) * RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	MEAN (f) * RANGE	CONTROL LOCATIONS MEAN (f) * RANGE
Cesium-134	9/ 0	1.5E+02	6.3E+01 (0 / 9) (4.9E+01 -- 7.5E+01)	3 miles SSE (#216)	6.7E+01 (0 / 2) (6.4E+01 -- 7.0E+01)	no samples
Cesium-137	9/ 0	1.8E+02	1.1E+02 (9 / 9) (2.6E+01 -- 2.0E+02)	3 miles SSE (#216)	1.5E+02 (2 / 2) (1.4E+02 -- 1.6E+02)	no samples
Manganese-54	9/ 0	---	1.4E+00 (0 / 9) (0.0E+00 -- 1.3E+01)	1 mile SW (#215)	1.8E+00 (0 / 7) (0.0E+00 -- 1.3E+01)	no samples
Iron-59	9/ 0	---	-8.2E+00 (0 / 9) (-3.9E+01 -- 2.9E+01)	1 mile SW (#215)	-6.2E+00 (0 / 7) (-3.9E+01 -- 2.9E+01)	no samples
Cobalt-58	9/ 0	---	-4.4E+00 (0 / 9) (-1.3E+01 -- 7.2E+00)	3 miles SSE (#216)	-1.8E+00 (0 / 2) (-2.8E+00 --8.0E-01)	no samples
Cobalt-60	9/ 0	---	5.4E+02 (9 / 9) (5.5E+01 -- 1.8E+03)	1 mile SW (#215)	6.5E+02 (7 / 7) (5.5E+01 -- 1.8E+03)	no samples
Zinc-65	9/ 0	---	6.8E+00 (0 / 9) (-4.8E+01 -- 2.2E+01)	1 mile SW (#215)	8.2E+00 (0 / 7) (-4.8E+01 -- 2.2E+01)	no samples
Zirconium-95	9/ 0	---	6.8E+00 (0 / 9) (-2.8E+01 -- 2.5E+01)	1 mile SW (#215)	7.9E+00 (0 / 7) (-2.8E+01 -- 2.5E+01)	no samples
Niobium-95	9/ 0	---	8.1E+01 (0 / 9) (3.1E+01 -- 1.2E+02)	1 mile SW (#215)	9.2E+01 (0 / 7) (6.0E+01 -- 1.2E+02)	no samples
Lanthanum/ Barium-140	9/ 0	---	2.8E+02 (0 / 9) (6.5E+01 -- 5.9E+02)	1 mile SW (#215)	3.3E+02 (0 / 7) (6.5E+01 -- 5.9E+02)	no samples

* (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1996 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Piscivorous Fish UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	REQUIRED LOWER LIMIT OF DETECTION	INDICATOR LOCATIONS MEAN (f) * RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	LOCATION WITH HIGHEST ANNUAL MEAN MEAN (f) * RANGE	CONTROL LOCATIONS MEAN (f) * RANGE
Cesium-134	4/ 0	1.3E+02	-4.3E-01 (0 / 2) (-6.4E+00 to 5.5E+00)	2 miles E (#214)	5.5E+00 (0 / 1) (5.5E+00 to 5.5E+00)	-2.6E+00 (0 / 2) (-6.6E+00 to 1.5E+00)
Cesium-137	4/ 0	1.5E+02	3.4E+00 (0 / 2) (-5.0E-01 to 7.3E+00)	2 miles E (#214)	7.3E+00 (0 / 1) (7.3E+00 to 7.3E+00)	7.3E+00 (0 / 2) (6.5E+00 to 8.0E+00)
Manganese-54	4/ 0	1.3E+02	-1.5E+00 (0 / 2) (-3.0E+00 to 1.9E-02)	3 miles SSE (#216)	1.9E-02 (0 / 1) (1.9E-02 to 1.9E-02)	-2.9E+00 (0 / 2) (-6.6E+00 to 8.3E-01)
Iron-59	4/ 0	2.6E+02	-2.3E+01 (0 / 2) (-3.2E+01 to-1.4E+01)	South (#249)	7.9E-01 (0 / 2) (-6.5E+00 to 8.1E+00)	7.9E-01 (0 / 2) (-6.5E+00 to 8.1E+00)
Cobalt-58	4/ 0	1.3E+02	4.2E+00 (0 / 2) (9.6E-02 to 8.3E+00)	3 miles SSE (#216)	8.3E+00 (0 / 1) (8.3E+00 to 8.3E+00)	-9.1E+00 (0 / 2) (-1.0E+01 to-8.1E+00)
Cobalt-60	4/ 0	1.3E+02	1.8E+00 (0 / 2) (-3.4E+00 to 7.0E+00)	2 miles E (#214)	7.0E+00 (0 / 1) (7.0E+00 to 7.0E+00)	5.0E+00 (0 / 2) (3.3E+00 to 6.7E+00)
Zinc-65	4/ 0	2.6E+02	-3.5E+01 (0 / 2) (-4.7E+01 to-2.4E+01)	South (#249)	-1.5E+01 (0 / 2) (-2.3E+01 to-6.6E+00)	-1.5E+01 (0 / 2) (-2.3E+01 to-6.6E+00)
Zirconium-95	4/ 0	---	1.2E+01 (0 / 2) (8.2E+00 to 1.5E+01)	2 miles E (#214)	1.5E+01 (0 / 1) (1.5E+01 to 1.5E+01)	5.5E+00 (0 / 2) (-1.7E+00 to 1.3E+01)
Niobium-95	4/ 0	---	5.3E+00 (0 / 2) (-9.4E-01 to 1.1E+01)	2 miles E (#214)	1.1E+01 (0 / 1) (1.1E+01 to 1.1E+01)	-9.2E+00 (0 / 2) (-1.2E+01 to-6.1E+00)
Lanthanum/ Barium-140	4/ 0	---	7.4E+00 (0 / 2) (-4.9E+00 to 2.0E+01)	South (#249)	2.4E+01 (0 / 2) (-1.6E+01 to 6.3E+01)	2.4E+01 (0 / 2) (-1.6E+01 to 6.3E+01)

* (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1996 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Crustacean Shrimp UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	REQUIRED LOWER LIMIT OF DETECTION	INDICATOR LOCATIONS MEAN (f) * RANGE	LOCATION WITH HIGHEST ANNUAL MEAN		CONTROL LOCATIONS MEAN (f) * RANGE
				LOCATION INFORMATION	MEAN (f) * RANGE	
Cesium-134	2/ 0	1.3E+02	3.8E+00 (0 / 2) (-6.2E-01 to 8.2E+00)	>10 miles (#222)	3.8E+00 (0 / 2) (-6.2E-01 to 8.2E+00)	no samples
Cesium-137	2/ 0	1.5E+02	1.2E+00 (0 / 2) (-2.1E+00 to 4.5E+00)	>10 miles (#222)	1.2E+00 (0 / 2) (-2.1E+00 to 4.5E+00)	no samples
Manganese-54	2/ 0	1.3E+02	-5.0E-02 (0 / 2) (-6.6E+00 to 6.5E+00)	>10 miles (#222)	-5.0E-02 (0 / 2) (-6.6E+00 to 6.5E+00)	no samples
Iron-59	2/ 0	2.6E+02	-2.7E+01 (0 / 2) (-4.7E+01 to -5.7E+00)	>10 miles (#222)	-2.7E+01 (0 / 2) (-4.7E+01 to -5.7E+00)	no samples
Cobalt-58	2/ 0	1.3E+02	6.1E+00 (0 / 2) (3.9E+00 to 8.3E+00)	>10 miles (#222)	6.1E+00 (0 / 2) (3.9E+00 to 8.3E+00)	no samples
Cobalt-60	2/ 0	1.3E+02	-1.7E+00 (0 / 2) (-7.1E+00 to 3.7E+00)	>10 miles (#222)	-1.7E+00 (0 / 2) (-7.1E+00 to 3.7E+00)	no samples
Zinc-65	2/ 0	2.6E+02	-1.2E+00 (0 / 2) (-5.0E+00 to 2.6E+00)	>10 miles (#222)	-1.2E+00 (0 / 2) (-5.0E+00 to 2.6E+00)	no samples
Zirconium-95	2/ 0	---	9.2E+00 (0 / 2) (-2.2E+00 to 2.1E+01)	>10 miles (#222)	9.2E+00 (0 / 2) (-2.2E+00 to 2.1E+01)	no samples
Niobium-95	2/ 0	---	1.6E-01 (0 / 2) (-8.4E-01 to 1.2E+00)	>10 miles (#222)	1.6E-01 (0 / 2) (-8.4E-01 to 1.2E+00)	no samples
Lanthanum/ Barium-140	2/ 0	---	8.3E+01 (0 / 2) (-4.4E+00 to 1.7E+02)	>10 miles (#222)	8.3E+01 (0 / 2) (-4.4E+00 to 1.7E+02)	no samples

* (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1996 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Beef Meat UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	REQUIRED LOWER LIMIT OF DETECTION	INDICATOR LOCATIONS MEAN (f) * RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	LOCATION WITH HIGHEST ANNUAL MEAN MEAN (f) * RANGE	CONTROL LOCATIONS MEAN (f) * RANGE
Cesium-134	2/ 0	1.3E+02	4.3E+00 (0 / 2) (2.3E+00 to 6.2E+00)	0-2 miles NE-ENE (#Z81)	4.3E+00 (0 / 2) (2.3E+00 to 6.2E+00)	no samples
Cesium-137	2/ 0	1.5E+02	1.5E-01 (0 / 2) (-1.7E+00 to 2.0E+00)	0-2 miles NE-ENE (#Z81)	1.5E-01 (0 / 2) (-1.7E+00 to 2.0E+00)	no samples
Manganese-54	2/ 0	1.3E+02	-1.7E+00 (0 / 2) (-5.5E+00 to 2.0E+00)	0-2 miles NE-ENE (#Z81)	-1.7E+00 (0 / 2) (-5.5E+00 to 2.0E+00)	no samples
Iron-59	2/ 0	2.6E+02	-2.0E+01 (0 / 2) (-7.8E+01 to 3.8E+01)	0-2 miles NE-ENE (#Z81)	-2.0E+01 (0 / 2) (-7.8E+01 to 3.8E+01)	no samples
Cobalt-58	2/ 0	1.3E+02	-5.7E+00 (0 / 2) (-9.6E+00 to -1.7E+00)	0-2 miles NE-ENE (#Z81)	-5.7E+00 (0 / 2) (-9.6E+00 to -1.7E+00)	no samples
Cobalt-60	2/ 0	1.3E+02	3.7E+00 (0 / 2) (1.1E+00 to 8.5E+00)	0-2 miles NE-ENE (#Z81)	3.7E+00 (0 / 2) (1.1E+00 to 8.5E+00)	no samples
Zinc-65	2/ 0	2.6E+02	-2.7E+01 (0 / 2) (-3.4E+01 to -2.0E+01)	0-2 miles NE-ENE (#Z81)	-2.7E+01 (0 / 2) (-3.4E+01 to -2.0E+01)	no samples
Zirconium-95	2/ 0	---	-1.6E+00 (0 / 2) (-2.8E+01 to 2.5E+01)	0-2 miles NE-ENE (#Z81)	-1.6E+00 (0 / 2) (-2.8E+01 to 2.5E+01)	no samples
Niobium-95	2/ 0	---	3.6E+01 (0 / 2) (1.9E+00 to 6.9E+01)	0-2 miles NE-ENE (#Z81)	3.6E+01 (0 / 2) (1.9E+00 to 6.9E+01)	no samples
Lanthanum/ Barium-140	2/ 0	---	-2.4E+02 (0 / 2) (-7.0E+02 to 2.3E+02)	0-2 miles NE-ENE (#Z81)	-2.4E+02 (0 / 2) (-7.0E+02 to 2.3E+02)	no samples

* (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1996 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Wild Swine UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	REQUIRED LOWER LIMIT OF DETECTION	INDICATOR LOCATIONS MEAN (f) * RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	LOCATION WITH HIGHEST ANNUAL MEAN MEAN (f) * RANGE	CONTROL LOCATIONS MEAN (f) * RANGE
Cesium-134	2/ 0	1.3E+02	-2.0E+00 (0 / 2) (-9.2E+00 to 5.1E+00)	4-6 miles SE-SSE (#Z63)	-2.0E+00 (0 / 2) (-9.2E+00 to 5.1E+00)	no samples
Cesium-137	2/ 0	1.5E+02	8.6E+00 (0 / 2) (7.5E+00 to 9.7E+00)	4-6 miles SE-SSE (#Z63)	8.6E+00 (0 / 2) (7.5E+00 to 9.7E+00)	no samples
Manganese-54	2/ 0	1.3E+02	-3.3E+00 (0 / 2) (-8.3E+00 to 1.7E+00)	4-6 miles SE-SSE (#Z63)	-3.3E+00 (0 / 2) (-8.3E+00 to 1.7E+00)	no samples
Iron-59	2/ 0	2.6E+02	-4.9E+01 (0 / 2) (-9.3E+01 to-5.8E+00)	4-6 miles SE-SSE (#Z63)	-4.9E+01 (0 / 2) (-9.3E+01 to-5.8E+00)	no samples
Cobalt-58	2/ 0	1.3E+02	-1.2E+00 (0 / 2) (-2.3E+00 to 2.2E-02)	4-6 miles SE-SSE (#Z63)	-1.2E+00 (0 / 2) (-2.3E+00 to 2.2E-02)	no samples
Cobalt-60	2/ 0	1.3E+02	7.0E-01 (0 / 2) (-2.3E+00 to 3.7E+00)	4-6 miles SE-SSE (#Z63)	7.0E-01 (0 / 2) (-2.3E+00 to 3.7E+00)	no samples
Zinc-65	2/ 0	2.6E+02	-3.7E+00 (0 / 2) (-7.5E+00 to 6.6E-02)	4-6 miles SE-SSE (#Z63)	-3.7E+00 (0 / 2) (-7.5E+00 to 6.6E-02)	no samples
Zirconium-95	2/ 0	---	3.1E+00 (0 / 2) (-8.9E-02 to 6.3E+00)	4-6 miles SE-SSE (#Z63)	3.1E+00 (0 / 2) (-8.9E-02 to 6.3E+00)	no samples
Niobium-95	2/ 0	---	2.3E+00 (0 / 2) (-8.5E+00 to 1.3E+01)	4-6 miles SE-SSE (#Z63)	2.3E+00 (0 / 2) (-8.5E+00 to 1.3E+01)	no samples
Lanthanum/ Barium-140	2/ 0	---	3.5E+01 (0 / 2) (-2.6E+01 to 9.6E+01)	4-6 miles SE-SSE (#Z63)	3.5E+01 (0 / 2) (-2.6E+01 to 9.6E+01)	no samples

* (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1996 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Game Deer UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	REQUIRED LOWER LIMIT OF DETECTION	INDICATOR LOCATIONS MEAN (f) * RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	LOCATION WITH HIGHEST ANNUAL MEAN MEAN (f) * RANGE	CONTROL LOCATIONS MEAN (f) * RANGE
Cesium-134	1/ 0	1.3E+02	4.0E+00 (0 / 1) (4.0E+00 to 4.0E+00)	4-6 miles SE-SSE (#Z63)	4.0E+00 (0 / 1) (4.0E+00 to 4.0E+00)	no samples
Cesium-137	1/ 0	1.5E+02	-7.3E+00 (0 / 1) (-7.3E+00 to-7.3E+00)	4-6 miles SE-SSE (#Z63)	-7.3E+00 (0 / 1) (-7.3E+00 to-7.3E+00)	no samples
Manganese-54	1/ 0	1.3E+02	-2.4E+00 (0 / 1) (-2.4E+00 to-2.4E+00)	4-6 miles SE-SSE (#Z63)	-2.4E+00 (0 / 1) (-2.4E+00 to-2.4E+00)	no samples
Iron-59	1/ 0	2.6E+02	-8.2E-01 (0 / 1) (-8.2E-01 to-8.2E-01)	4-6 miles SE-SSE (#Z63)	-8.2E-01 (0 / 1) (-8.2E-01 to-8.2E-01)	no samples
Cobalt-58	1/ 0	1.3E+02	5.2E+00 (0 / 1) (5.2E+00 to 5.2E+00)	4-6 miles SE-SSE (#Z63)	5.2E+00 (0 / 1) (5.2E+00 to 5.2E+00)	no samples
Cobalt-60	1/ 0	1.3E+02	-1.4E+01 (0 / 1) (-1.4E+01 to-1.4E+01)	4-6 miles SE-SSE (#Z63)	-1.4E+01 (0 / 1) (-1.4E+01 to-1.4E+01)	no samples
Zinc-65	1/ 0	2.6E+02	-1.4E+01 (0 / 1) (-1.4E+01 to-1.4E+01)	4-6 miles SE-SSE (#Z63)	-1.4E+01 (0 / 1) (-1.4E+01 to-1.4E+01)	no samples
Zirconium-95	1/ 0	---	6.5E+00 (0 / 1) (6.5E+00 to 6.5E+00)	4-6 miles SE-SSE (#Z63)	6.5E+00 (0 / 1) (6.5E+00 to 6.5E+00)	no samples
Niobium-95	1/ 0	---	1.0E+01 (0 / 1) (1.0E+01 to 1.0E+01)	4-6 miles SE-SSE (#Z63)	1.0E+01 (0 / 1) (1.0E+01 to 1.0E+01)	no samples
Lanthanum/ Barium-140	1/ 0	---	-1.4E+01 (0 / 1) (-1.4E+01 to-1.4E+01)	4-6 miles SE-SSE (#Z63)	-1.4E+01 (0 / 1) (-1.4E+01 to-1.4E+01)	no samples

* (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1996 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Rabbit UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	REQUIRED LOWER LIMIT OF DETECTION	INDICATOR LOCATIONS MEAN (f) * RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	LOCATION WITH HIGHEST ANNUAL MEAN MEAN (f) * RANGE	CONTROL LOCATIONS MEAN (f) * RANGE
Cesium-134	1/ 0	1.3E+02	2.7E+00 (0 / 1) (2.7E+00 to 2.7E+00)	0-2 miles N-NNE (#Z11)	2.7E+00 (0 / 1) (2.7E+00 to 2.7E+00)	no samples
Cesium-137	1/ 0	1.5E+02	1.1E+00 (0 / 1) (1.1E+00 to 1.1E+00)	0-2 miles N-NNE (#Z11)	1.1E+00 (0 / 1) (1.1E+00 to 1.1E+00)	no samples
Manganese-54	1/ 0	1.3E+02	6.1E+00 (0 / 1) (6.1E+00 to 6.1E+00)	0-2 miles N-NNE (#Z11)	6.1E+00 (0 / 1) (6.1E+00 to 6.1E+00)	no samples
Iron-59	1/ 0	2.6E+02	1.5E+01 (0 / 1) (1.5E+01 to 1.5E+01)	0-2 miles N-NNE (#Z11)	1.5E+01 (0 / 1) (1.5E+01 to 1.5E+01)	no samples
Cobalt-58	1/ 0	1.3E+02	-4.4E+00 (0 / 1) (-4.4E+00 to-4.4E+00)	0-2 miles N-NNE (#Z11)	-4.4E+00 (0 / 1) (-4.4E+00 to-4.4E+00)	no samples
Cobalt-60	1/ 0	1.3E+02	-2.0E+00 (0 / 1) (-2.0E+00 to-2.0E+00)	0-2 miles N-NNE (#Z11)	-2.0E+00 (0 / 1) (-2.0E+00 to-2.0E+00)	no samples
Zinc-65	1/ 0	2.6E+02	-1.8E+01 (0 / 1) (-1.8E+01 to-1.8E+01)	0-2 miles N-NNE (#Z11)	-1.8E+01 (0 / 1) (-1.8E+01 to-1.8E+01)	no samples
Zirconium-95	1/ 0	---	2.4E+00 (0 / 1) (2.4E+00 to 2.4E+00)	0-2 miles N-NNE (#Z11)	2.4E+00 (0 / 1) (2.4E+00 to 2.4E+00)	no samples
Niobium-95	1/ 0	---	4.5E+00 (0 / 1) (4.5E+00 to 4.5E+00)	0-2 miles N-NNE (#Z11)	4.5E+00 (0 / 1) (4.5E+00 to 4.5E+00)	no samples
Lanthanum/ Barium-140	1/ 0	---	1.5E+01 (0 / 1) (1.5E+01 to 1.5E+01)	0-2 miles N-NNE (#Z11)	1.5E+01 (0 / 1) (1.5E+01 to 1.5E+01)	no samples

* (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1996 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Resident Dabbler Duck UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	REQUIRED LOWER LIMIT OF DETECTION	INDICATOR LOCATIONS MEAN (f) * RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	MEAN (f) * RANGE	CONTROL LOCATIONS MEAN (f) * RANGE
Cesium-134	1/ 0	1.3E+02	-6.0E-01 (0 / 1) (-6.0E-01 to -6.0E-01)	On Site (#236)	-6.0E-01 (0 / 1) (-6.0E-01 to -6.0E-01)	no samples
Cesium-137	1/ 0	1.5E+02	-7.2E+00 (0 / 1) (-7.2E+00 to -7.2E+00)	On Site (#236)	-7.2E+00 (0 / 1) (-7.2E+00 to -7.2E+00)	no samples
Manganese-54	1/ 0	1.3E+02	2.3E+01 (0 / 1) (2.3E+01 to 2.3E+01)	On Site (#236)	2.3E+01 (0 / 1) (2.3E+01 to 2.3E+01)	no samples
Iron-59	1/ 0	2.6E+02	4.4E+01 (0 / 1) (4.4E+01 to 4.4E+01)	On Site (#236)	4.4E+01 (0 / 1) (4.4E+01 to 4.4E+01)	no samples
Cobalt-58	1/ 0	1.3E+02	-2.6E+01 (0 / 1) (-2.6E+01 to -2.6E+01)	On Site (#236)	-2.6E+01 (0 / 1) (-2.6E+01 to -2.6E+01)	no samples
Cobalt-60	1/ 0	1.3E+02	-1.6E+01 (0 / 1) (-1.6E+01 to -1.6E+01)	On Site (#236)	-1.6E+01 (0 / 1) (-1.6E+01 to -1.6E+01)	no samples
Zinc-65	1/ 0	2.6E+02	-6.7E+00 (0 / 1) (-6.7E+00 to -6.7E+00)	On Site (#236)	-6.7E+00 (0 / 1) (-6.7E+00 to -6.7E+00)	no samples
Zirconium-95	1/ 0	---	6.5E+00 (0 / 1) (6.5E+00 to 6.5E+00)	On Site (#236)	6.5E+00 (0 / 1) (6.5E+00 to 6.5E+00)	no samples
Niobium-95	1/ 0	---	2.4E+01 (0 / 1) (2.4E+01 to 2.4E+01)	On Site (#236)	2.4E+01 (0 / 1) (2.4E+01 to 2.4E+01)	no samples
Lanthanum/ Barium-140	1/ 0	---	-4.7E+01 (0 / 1) (-4.7E+01 to -4.7E+01)	On Site (#236)	-4.7E+01 (0 / 1) (-4.7E+01 to -4.7E+01)	no samples

* (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1996 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Migratory Dabbler Duck UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	REQUIRED LOWER LIMIT OF DETECTION	INDICATOR LOCATIONS MEAN (f) * RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	MEAN (f) * RANGE	CONTROL LOCATIONS MEAN (f) * RANGE
Cesium-134	1/ 0	1.3E+02	-1.4E+01 (0 / 1) (-1.4E+01 to -1.4E+01)	2-4 miles SW-WSW (#Z42)	-1.4E+01 (0 / 1) (-1.4E+01 to -1.4E+01)	no samples
Cesium-137	1/ 0	1.5E+02	2.5E+00 (0 / 1) (2.5E+00 to 2.5E+00)	2-4 miles SW-WSW (#Z42)	2.5E+00 (0 / 1) (2.5E+00 to 2.5E+00)	no samples
Manganese-54	1/ 0	1.3E+02	4.5E+00 (0 / 1) (4.5E+00 to 4.5E+00)	2-4 miles SW-WSW (#Z42)	4.5E+00 (0 / 1) (4.5E+00 to 4.5E+00)	no samples
Iron-59	1/ 0	2.6E+02	1.5E+01 (0 / 1) (1.5E+01 to 1.5E+01)	2-4 miles SW-WSW (#Z42)	1.5E+01 (0 / 1) (1.5E+01 to 1.5E+01)	no samples
Cobalt-58	1/ 0	1.3E+02	1.3E+01 (0 / 1) (1.3E+01 to 1.3E+01)	2-4 miles SW-WSW (#Z42)	1.3E+01 (0 / 1) (1.3E+01 to 1.3E+01)	no samples
Cobalt-60	1/ 0	1.3E+02	-3.8E+00 (0 / 1) (-3.8E+00 to -3.8E+00)	2-4 miles SW-WSW (#Z42)	-3.8E+00 (0 / 1) (-3.8E+00 to -3.8E+00)	no samples
Zinc-65	1/ 0	2.6E+02	1.7E+01 (0 / 1) (1.7E+01 to 1.7E+01)	2-4 miles SW-WSW (#Z42)	1.7E+01 (0 / 1) (1.7E+01 to 1.7E+01)	no samples
Zirconium-95	1/ 0	---	-1.8E+01 (0 / 1) (-1.8E+01 to -1.8E+01)	2-4 miles SW-WSW (#Z42)	-1.8E+01 (0 / 1) (-1.8E+01 to -1.8E+01)	no samples
Niobium-95	1/ 0	---	4.4E+01 (0 / 1) (4.4E+01 to 4.4E+01)	2-4 miles SW-WSW (#Z42)	4.4E+01 (0 / 1) (4.4E+01 to 4.4E+01)	no samples
Lanthanum/ Barium-140	1/ 0	---	1.9E+02 (0 / 1) (1.9E+02 to 1.9E+02)	2-4 miles SW-WSW (#Z42)	1.9E+02 (0 / 1) (1.9E+02 to 1.9E+02)	no samples

* (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1996 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Goose UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	REQUIRED LOWER LIMIT OF DETECTION	INDICATOR LOCATIONS MEAN (f) * RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	LOCATION WITH HIGHEST ANNUAL MEAN MEAN (f) * RANGE	CONTROL LOCATIONS MEAN (f) * RANGE
Cesium-134	3/ 0	1.3E+02	no samples	8-10 miles NE-ENE (#Z85)	-5.9E+00(0 / 3) (-1.1E+01 -- -2.5E+00)	-5.9E+00 (0 / 3) (-1.1E+01 -- -2.5E+00)
Cesium-137	3/ 0	1.5E+02	no samples	8-10 miles NE-ENE (#Z85)	7.2E+00(0 / 3) (-1.5E-01 -- 1.5E+01)	7.2E+00 (0 / 3) (-1.5E-01 -- 1.5E+01)
Manganese-54	3/ 0	1.3E+02	no samples	8-10 miles NE-ENE (#Z85)	1.4E+00(0 / 3) (-1.5E+00 -- 5.8E+00)	1.4E+00 (0 / 3) (-1.5E+00 -- 5.8E+00)
Iron-59	3/ 0	2.6E+02	no samples	8-10 miles NE-ENE (#Z85)	9.9E+00(0 / 3) (-4.7E+00 -- 1.9E+01)	9.9E+00 (0 / 3) (-4.7E+00 -- 1.9E+01)
Cobalt-58	3/ 0	1.3E+02	no samples	8-10 miles NE-ENE (#Z85)	-4.3E+00(0 / 3) (-1.3E+01 -- 7.9E+00)	-4.3E+00 (0 / 3) (-1.3E+01 -- 7.9E+00)
Cobalt-60	3/ 0	1.3E+02	no samples	8-10 miles NE-ENE (#Z85)	-1.3E-01(0 / 3) (-4.3E+00 -- 3.3E+00)	-1.3E-01 (0 / 3) (-4.3E+00 -- 3.3E+00)
Zinc-65	3/ 0	2.6E+02	no samples	8-10 miles NE-ENE (#Z85)	4.6E-01(0 / 3) (-2.0E+01 -- 1.7E+01)	4.6E-01 (0 / 3) (-2.0E+01 -- 1.7E+01)
Zirconium-95	3/ 0	---	no samples	8-10 miles NE-ENE (#Z85)	3.0E+00(0 / 3) (-2.7E+01 -- 2.6E+01)	3.0E+00 (0 / 3) (-2.7E+01 -- 2.6E+01)
Niobium-95	3/ 0	---	no samples	8-10 miles NE-ENE (#Z85)	2.6E+01(0 / 3) (5.6E+00 -- 6.2E+01)	2.6E+01 (0 / 3) (5.6E+00 -- 6.2E+01)
Lanthanum/ Barium-140	3/ 0	---	no samples	8-10 miles NE-ENE (#Z85)	-4.7E+02(0 / 3) (-6.7E+02 -- -1.6E+02)	-4.7E+02 (0 / 3) (-6.7E+02 -- -1.6E+02)

* (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1996 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Dove UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	REQUIRED LOWER LIMIT OF DETECTION	INDICATOR LOCATIONS MEAN (f) * RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	LOCATION WITH HIGHEST ANNUAL MEAN MEAN (f) * RANGE	CONTROL LOCATIONS MEAN (f) * RANGE
Cesium-134	1/ 0	1.3E+02	3.2E+00 (0 / 1) (3.2E+00 to 3.2E+00)	2-4 miles SW-WSW (#Z42)	3.2E+00 (0 / 1) (3.2E+00 to 3.2E+00)	no samples
Cesium-137	1/ 0	1.5E+02	2.0E+00 (0 / 1) (2.0E+00 to 2.0E+00)	2-4 miles SW-WSW (#Z42)	2.0E+00 (0 / 1) (2.0E+00 to 2.0E+00)	no samples
Manganese-54	1/ 0	1.3E+02	3.7E-01 (0 / 1) (3.7E-01 to 3.7E-01)	2-4 miles SW-WSW (#Z42)	3.7E-01 (0 / 1) (3.7E-01 to 3.7E-01)	no samples
Iron-59	1/ 0	2.6E+02	-1.9E+01 (0 / 1) (-1.9E+01 to-1.9E+01)	2-4 miles SW-WSW (#Z42)	-1.9E+01 (0 / 1) (-1.9E+01 to-1.9E+01)	no samples
Cobalt-58	1/ 0	1.3E+02	-1.3E+01 (0 / 1) (-1.3E+01 to-1.3E+01)	2-4 miles SW-WSW (#Z42)	-1.3E+01 (0 / 1) (-1.3E+01 to-1.3E+01)	no samples
Cobalt-60	1/ 0	1.3E+02	4.4E+00 (0 / 1) (4.4E+00 to 4.4E+00)	2-4 miles SW-WSW (#Z42)	4.4E+00 (0 / 1) (4.4E+00 to 4.4E+00)	no samples
Zinc-65	1/ 0	2.6E+02	-6.4E+00 (0 / 1) (-6.4E+00 to-6.4E+00)	2-4 miles SW-WSW (#Z42)	-6.4E+00 (0 / 1) (-6.4E+00 to-6.4E+00)	no samples
Zirconium-95	1/ 0	---	-7.1E+00 (0 / 1) (-7.1E+00 to-7.1E+00)	2-4 miles SW-WSW (#Z42)	-7.1E+00 (0 / 1) (-7.1E+00 to-7.1E+00)	no samples
Niobium-95	1/ 0	---	3.0E+01 (0 / 1) (3.0E+01 to 3.0E+01)	2-4 miles SW-WSW (#Z42)	3.0E+01 (0 / 1) (3.0E+01 to 3.0E+01)	no samples
Lanthanum/ Barium-140	1/ 0	---	0.0E+00 (0 / 1) (0.0E+00 to 0.0E+00)	2-4 miles SW-WSW (#Z42)	0.0E+00 (0 / 1) (0.0E+00 to 0.0E+00)	no samples

* (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1996 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Pigeon UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	REQUIRED LOWER LIMIT OF DETECTION	INDICATOR LOCATIONS MEAN (f) * RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	LOCATION WITH HIGHEST ANNUAL MEAN MEAN (f) * RANGE	CONTROL LOCATIONS MEAN (f) * RANGE
Cesium-134	1/ 0	1.3E+02	5.4E+00 (0 / 1) (5.4E+00 to 5.4E+00)	On Site (#236)	5.4E+00 (0 / 1) (5.4E+00 to 5.4E+00)	no samples
Cesium-137	1/ 0	1.5E+02	3.3E+00 (0 / 1) (3.3E+00 to 3.3E+00)	On Site (#236)	3.3E+00 (0 / 1) (3.3E+00 to 3.3E+00)	no samples
Manganese-54	1/ 0	1.3E+02	1.0E+01 (0 / 1) (1.0E+01 to 1.0E+01)	On Site (#236)	1.0E+01 (0 / 1) (1.0E+01 to 1.0E+01)	no samples
Iron-59	1/ 0	2.6E+02	4.2E+01 (0 / 1) (4.2E+01 to 4.2E+01)	On Site (#236)	4.2E+01 (0 / 1) (4.2E+01 to 4.2E+01)	no samples
Cobalt-58	1/ 0	1.3E+02	-6.2E+00 (0 / 1) (-6.2E+00 to-6.2E+00)	On Site (#236)	-6.2E+00 (0 / 1) (-6.2E+00 to-6.2E+00)	no samples
Cobalt-60	1/ 0	1.3E+02	4.8E-02 (0 / 1) (4.8E-02 to 4.8E-02)	On Site (#236)	4.8E-02 (0 / 1) (4.8E-02 to 4.8E-02)	no samples
Zinc-65	1/ 0	2.6E+02	-9.8E+00 (0 / 1) (-9.8E+00 to-9.8E+00)	On Site (#236)	-9.8E+00 (0 / 1) (-9.8E+00 to-9.8E+00)	no samples
Zirconium-95	1/ 0	---	4.7E+01 (0 / 1) (4.7E+01 to 4.7E+01)	On Site (#236)	4.7E+01 (0 / 1) (4.7E+01 to 4.7E+01)	no samples
Niobium-95	1/ 0	---	2.9E+01 (0 / 1) (2.9E+01 to 2.9E+01)	On Site (#236)	2.9E+01 (0 / 1) (2.9E+01 to 2.9E+01)	no samples
Lanthanum/ Barium-140	1/ 0	---	0.0E+00 (0 / 1) (0.0E+00 to 0.0E+00)	On Site (#236)	0.0E+00 (0 / 1) (0.0E+00 to 0.0E+00)	no samples

* (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

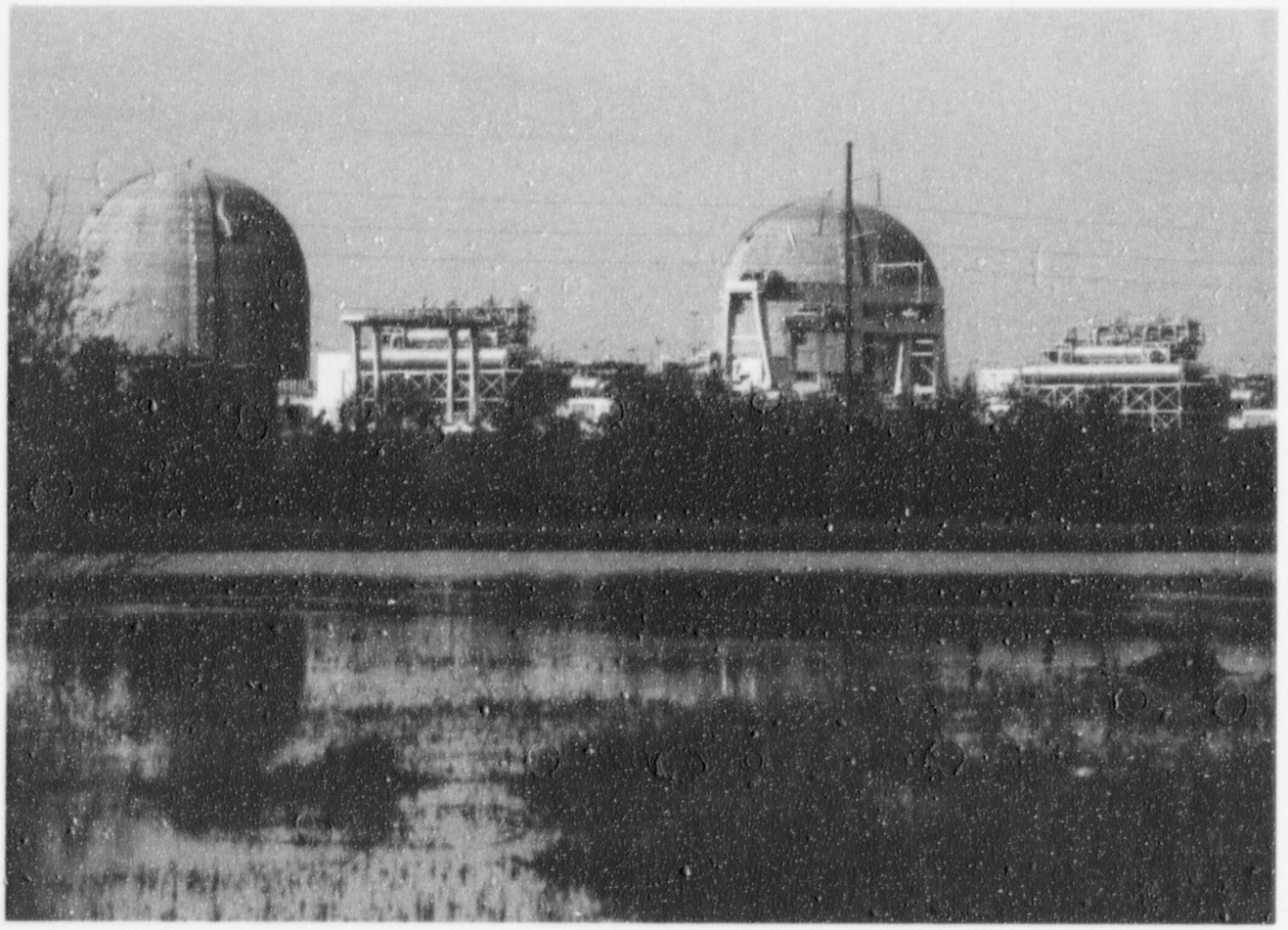
TABLE 3

1996 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Banana Leaves UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	REQUIRED LOWER LIMIT OF DETECTION	INDICATOR LOCATIONS MEAN (f) * RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	LOCATION WITH HIGHEST ANNUAL MEAN MEAN (f) * RANGE	CONTROL LOCATIONS MEAN (f) * RANGE
Iodine-131	23/ 0	6.0E+01	-1.2E+00 (0 / 15) (-1.7E+01 to 5.8E+00)	10 miles WSW (#037)	4.1E+00 (0 / 8) (-1.2E+00 to 1.7E+01)	4.1E+00 (0 / 8) (-1.2E+00 to 1.7E+01)
Cesium-134	23/ 0	6.0E+01	1.4E-01 (0 / 15) (-6.2E-01 to 1.3E+00)	10 miles WSW (#037)	4.0E-01 (0 / 8) (-1.3E+00 to 1.4E+00)	4.0E-01 (0 / 8) (-1.3E+00 to 1.4E+00)
Cesium-137	23/ 0	6.0E+01	8.9E-02 (0 / 15) (-1.0E+00 to 1.2E+00)	10 miles WSW (#037)	3.4E-01 (0 / 8) (1.3E-01 to 6.5E-01)	3.4E-01 (0 / 8) (1.3E-01 to 6.5E-01)
Manganese-54	23/ 0	---	-5.6E-02 (0 / 15) (-7.3E-01 to 8.8E-01)	10 miles WSW (#037)	3.4E-01 (0 / 8) (-2.7E-01 to 1.2E+00)	3.4E-01 (0 / 8) (-2.7E-01 to 1.2E+00)
Iron-59	23/ 0	---	-7.7E-02 (0 / 15) (-4.7E+00 to 4.1E+00)	1 mile N (#001)	7.5E-01 (0 / 4) (-4.7E+00 to 4.1E+00)	-4.2E-01 (0 / 8) (-4.4E+00 to 7.2E+00)
Cobalt-58	23/ 0	---	-2.7E-02 (0 / 15) (-1.3E+00 to 2.0E+00)	1 mile NW (#015)	4.2E-01 (0 / 7) (-3.6E-01 to 2.0E+00)	-2.8E-01 (0 / 8) (-1.2E+00 to 6.9E-01)
Cobalt-60	23/ 0	---	1.0E-01 (0 / 15) (-1.2E+00 to 1.0E+00)	1 mile NW (#015)	3.5E-01 (0 / 7) (-1.6E-01 to 7.5E-01)	-3.5E-01 (0 / 8) (-7.1E-01 to 9.3E-02)
Zinc-65	23/ 0	---	-1.1E+00 (0 / 15) (-4.2E+00 to 1.8E+00)	1 mile NW (#015)	-5.6E-01 (0 / 7) (-2.9E+00 to 1.8E+00)	-1.4E+00 (0 / 8) (-4.7E+00 to 1.4E+00)
Zirconium-95	23/ 0	---	-2.4E-01 (0 / 15) (-2.4E+00 to 1.5E+00)	10 miles WSW (#037)	4.4E-01 (0 / 8) (-1.4E+00 to 2.3E+00)	4.4E-01 (0 / 8) (-1.4E+00 to 2.3E+00)
Niobium-95	23/ 0	---	7.0E-01 (0 / 15) (-6.6E-01 to 2.0E+00)	10 miles WSW (#037)	1.0E+00 (0 / 8) (-8.4E-02 to 2.5E+00)	1.0E+00 (0 / 8) (-8.4E-02 to 2.5E+00)
Lanthanum/ Barium-140	23/ 0	---	-1.1E+00 (0 / 15) (-1.3E+01 to 5.6E+00)	1 mile N (#001)	2.8E+00 (0 / 4) (2.2E-02 to 5.6E+00)	-4.8E-01 (0 / 8) (-4.2E+00 to 3.2E+00)

* (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.



"There are a number of people from various organizations that deservedly take pride and satisfaction in the creation of the Texas Prairie Wetlands Project at the South Texas Project. These 110-acres of waterfowl habitat are more than a place for geese, ducks, egrets, herons and other birds. This project is a testament to what people can do together when they wish to enhance the community and protect the environment in which they live and work."

— Bill Cottle, Executive Vice President
and General Manager, Nuclear
South Texas Project