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April 30, 1996
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U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

South ..s Project
Units 1 and 2
Docket Nos. STN 50-498, STN 50-499
1995 Annual Environmental &
Annual Radiological Environmental Operating Reports

Pursuant to the South Texas Project (STP) Unit 1 Operating License NPF-76, Unit 2 Operating License NPF-80 Appendix B, Environmental Protection Plan (Nonradiological), and Technical Specification 6.9.1.3, attached is the 1995 Annual Environmental & Annual Radiological Environmental Operating Reports.

If you have any questions, please contact Ms. P.L. Travis at (512) 972-8573 or me at (512) 972-7566.

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Attachment: 1995 Annual Environmental and Annual Radiological Environmental Operating Reports

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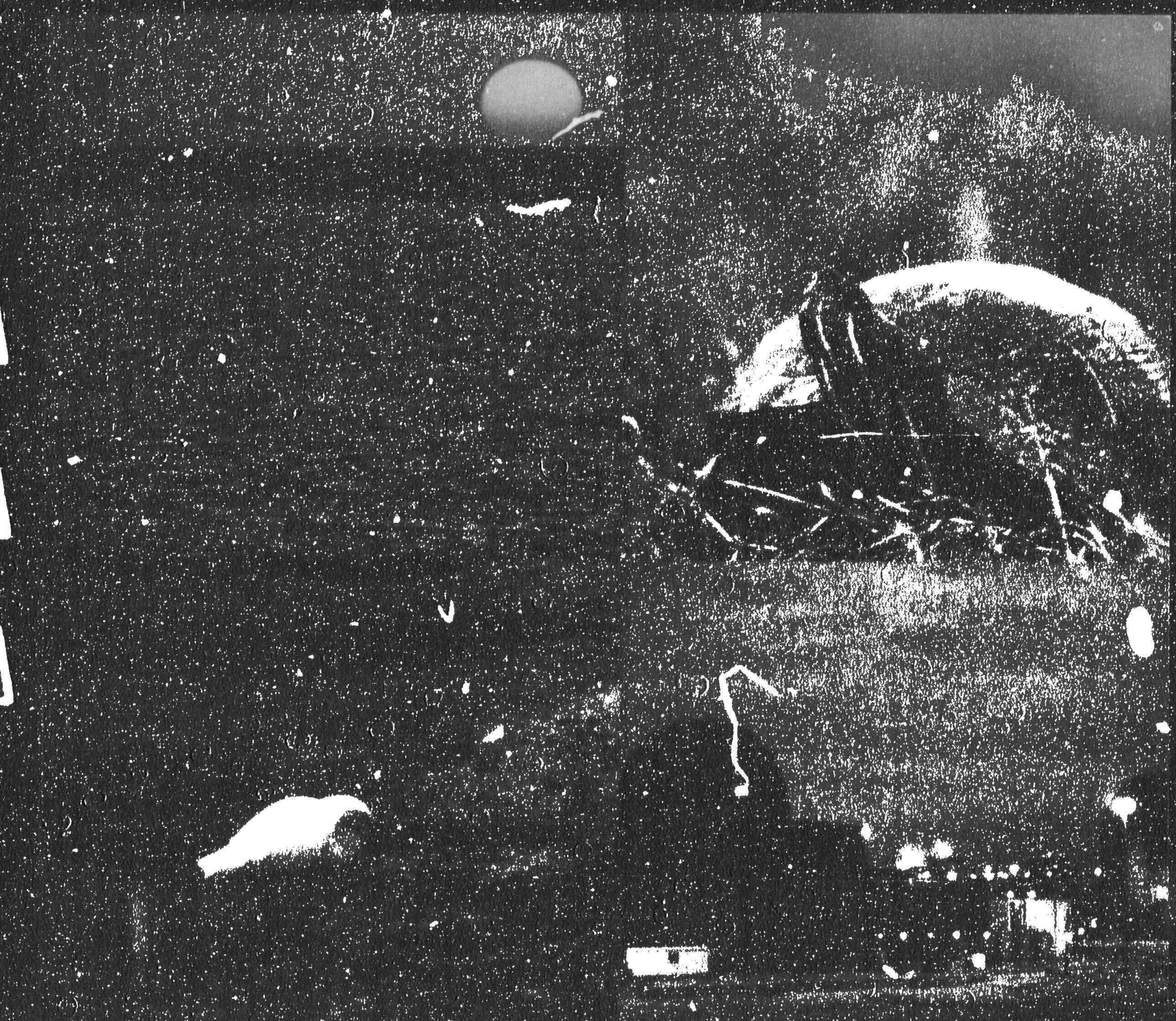

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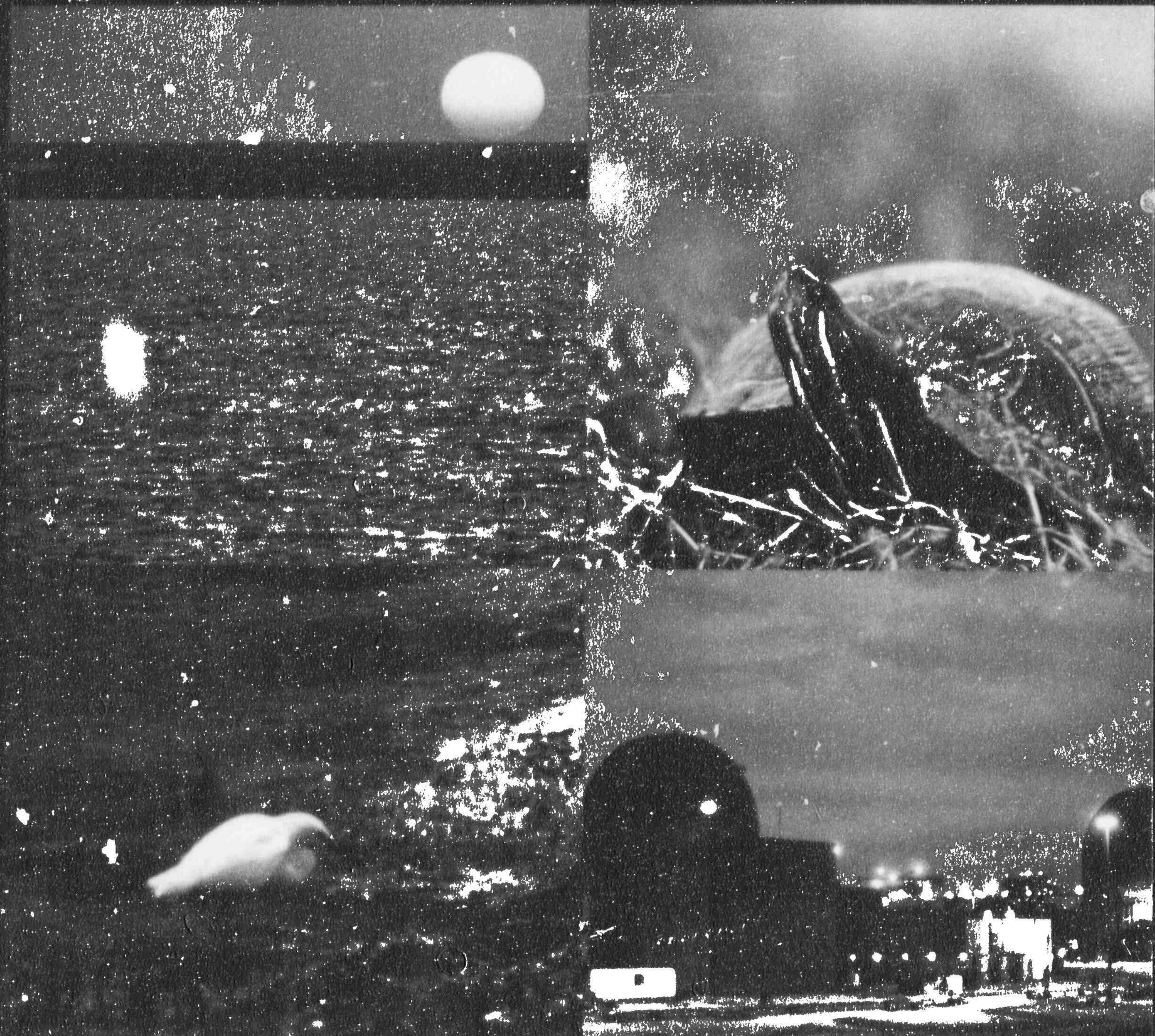

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SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

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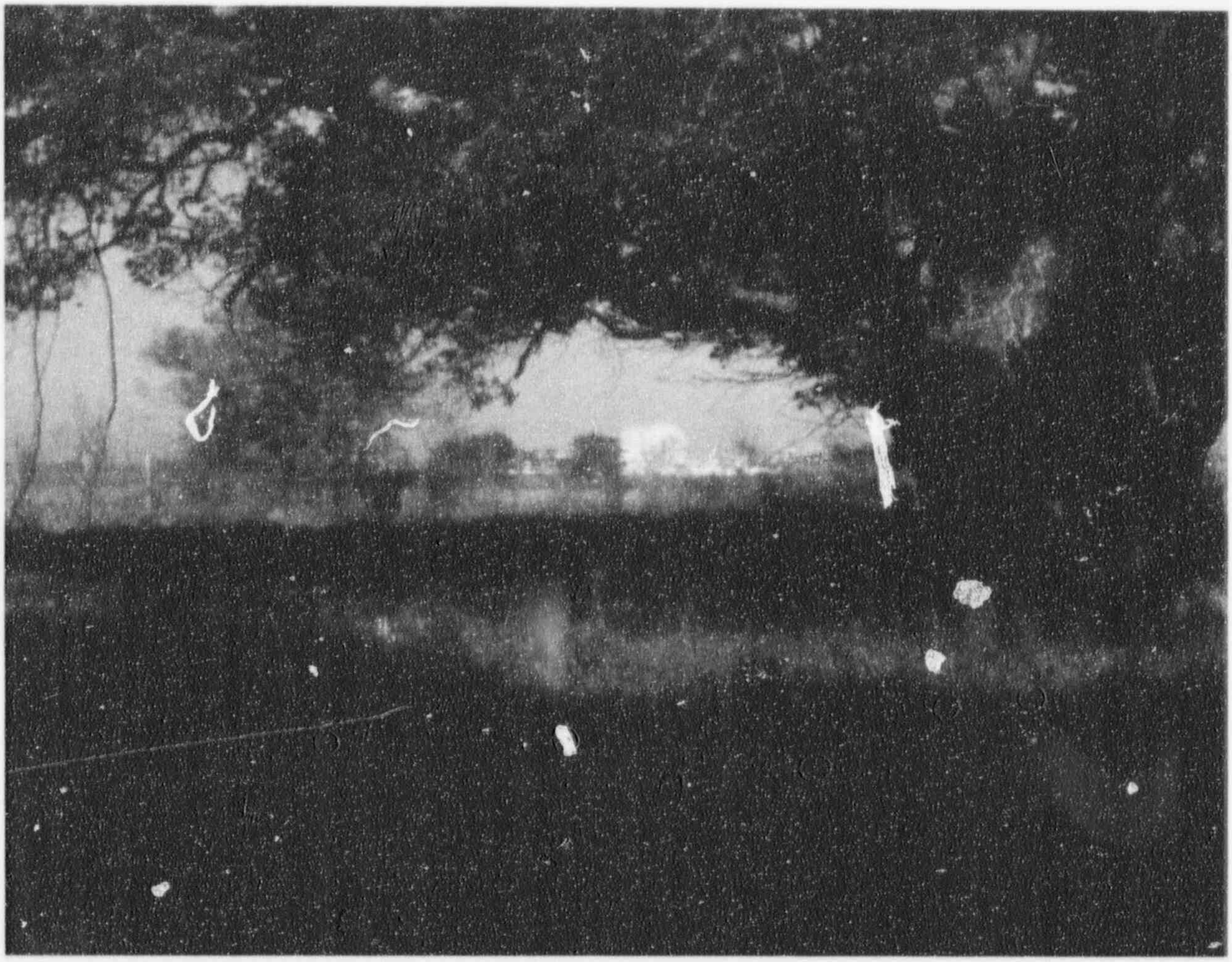

Executive Summary

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During 1995, as in previous years, 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 1995 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 man while nuclear power operations contribute less than one millirem.

This report describes the environmental monitoring programs conducted at the South Texas Project during 1995. 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 best scientific instruments. Samples with radiation levels which cannot be detected are below the Lower Limits of Detection. The United States Nuclear Regulatory Commission requires that equipment used for radiological monitoring must be able to detect specified minimum limits for certain types of samples. This ensures that radiation measurements are as accurate and consistent as possible. 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, waterborne, ingestion, and direct radiation are the four pathways that are sampled. Each pathway is described below.

- The airborne pathway is sampled in areas around the South Texas Project by measuring radioactivity of iodine and particulate air filters. The 1995 airborne results were similar to pre-operational levels with only naturally occurring radioactive material found which does not result from the operation of the South Texas Project.

- 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 Protection 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 and a reduction in the amount of radioactive material in the reservoir sediment is being observed. 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 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.

- 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.

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 are designed to 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 checked by the State of Texas, the United States Nuclear Regulatory Commission and the United States Environmental Protection Agency.

Site & Area Description

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Site & Area Description

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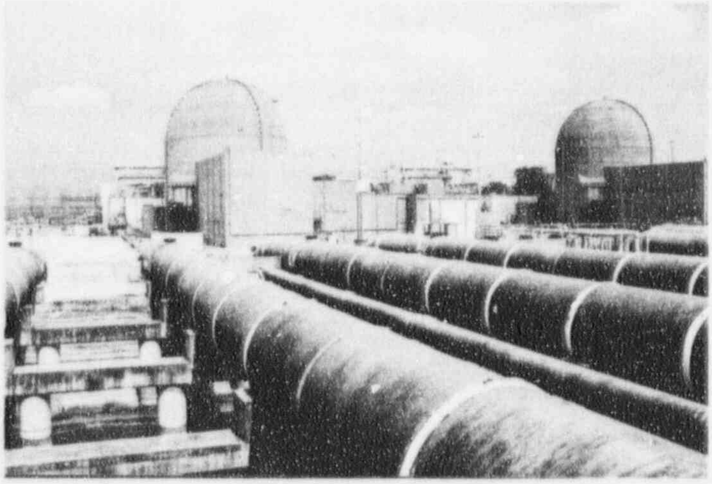
The South Texas Project is located on 12,300 acres in Matagorda County, Texas, approximately 15 miles southwest of Bay City along the west bank of the Colorado River. The South Texas Project is jointly owned by Houston Lighting & Power Company, Central Power & Light Company, the City of Austin and the 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 half-a-million homes.

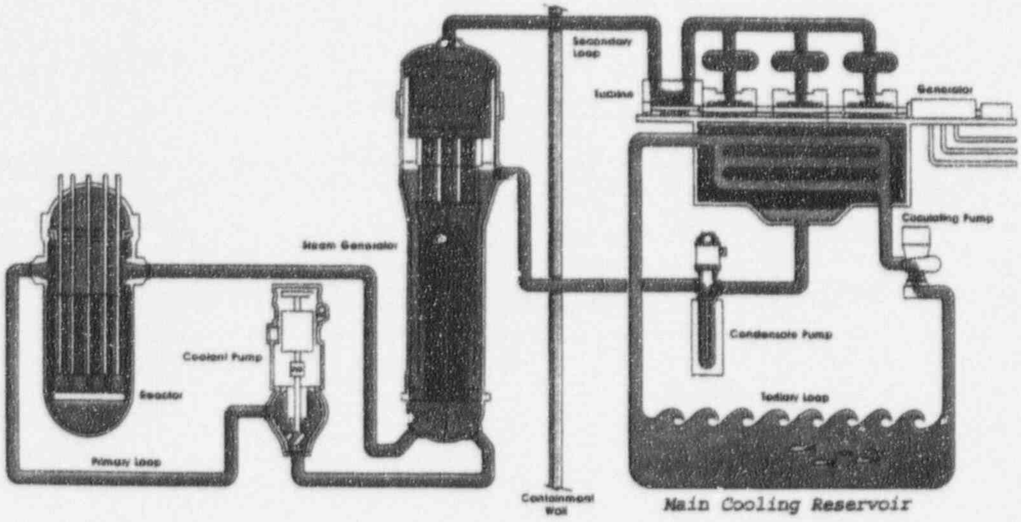
How the South Texas Project Works



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 spin 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 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."



Simplified Drawing of the South Texas Project

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 above.

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 4 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 7 feet thick and the other 3-1/2 feet thick. Then there is the reactor vessel itself, where the nuclear reaction takes place. Its steel walls vary in thickness from approximately 4 to 6 inches.

The Site

Sixty-five (65) 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. Approximately 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 twenty-three feet above sea level.

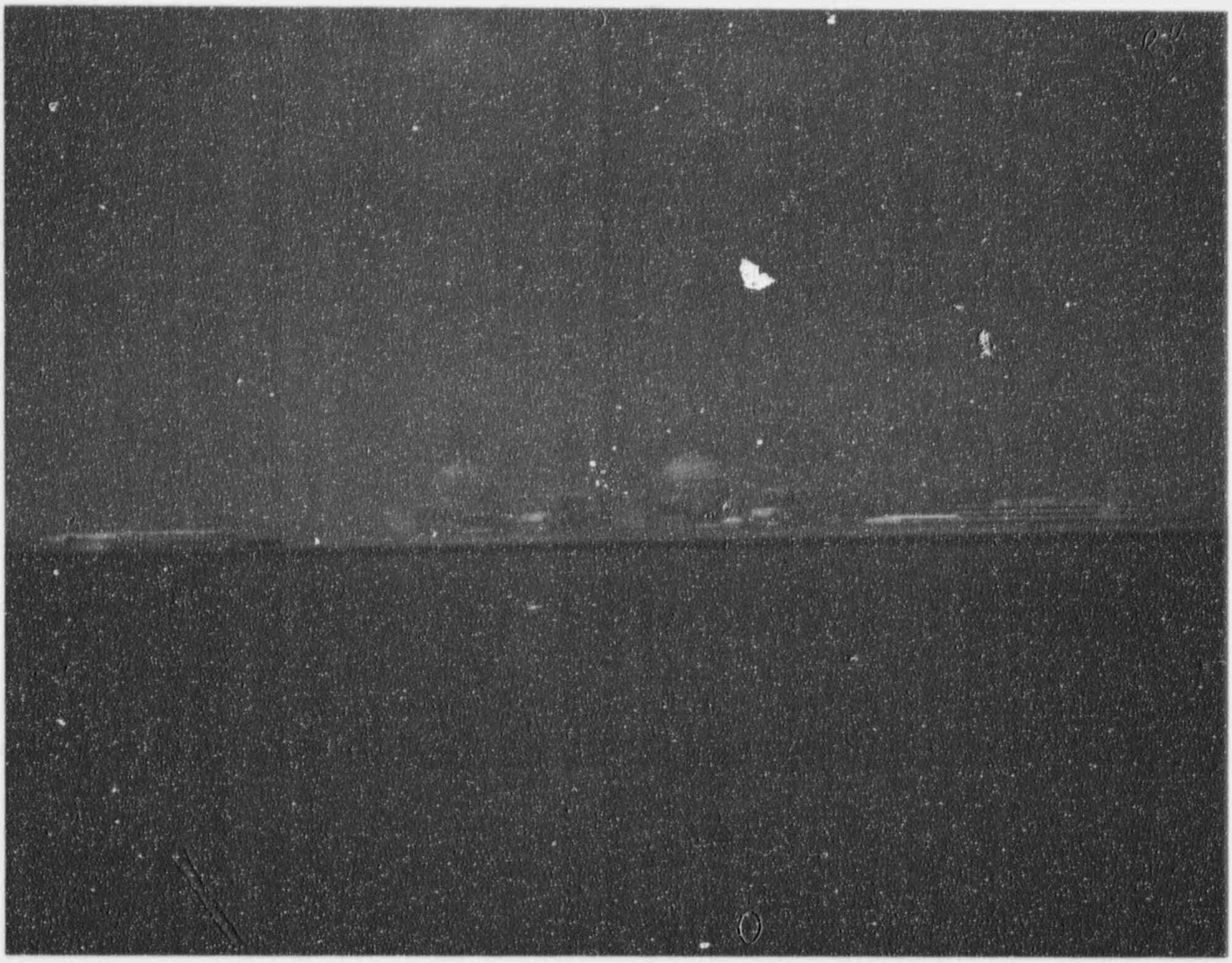
The Area

The economic base for this area is agricultural related. Therefore, most of the land near the site is used for the production of five major agricultural crops: 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 climate of the region is subtropical maritime, with continental influence. It is characterized by short mild winters and long hot and humid summers. The annual monthly temperature is approximately sixty-eight degrees. 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 & Summary

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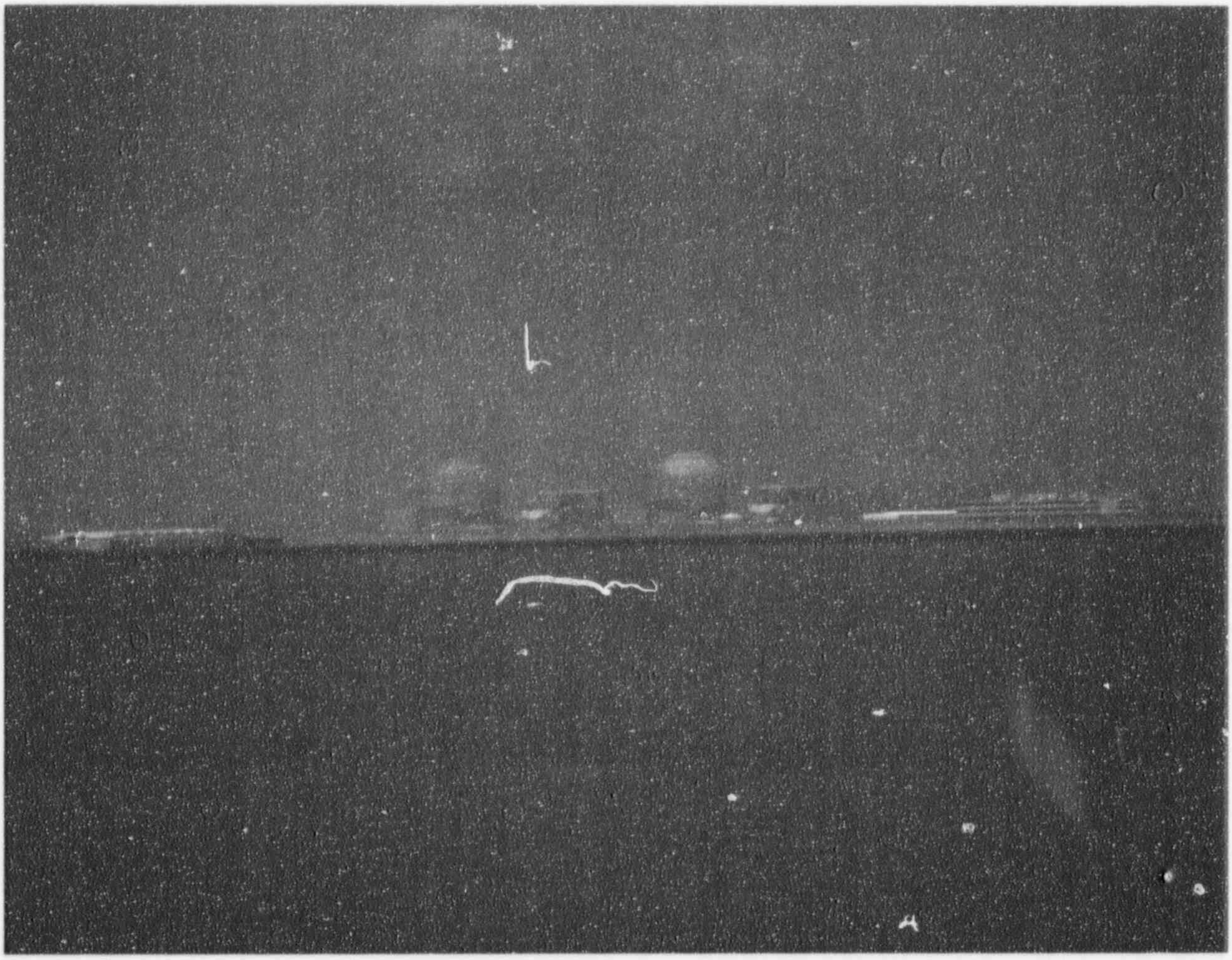

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The purpose of the Radiological Environmental Monitoring Program is to verify that the South Texas Project is operating within its design parameters and to assure plant effluents do not result in a significant radiological dose to individuals off-site. 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 1,400 analyses of air, water, sediment, vegetation, and meat samples were performed during 1995.

There were two items of interest identified by this program during 1995. Below is a short discussion of these items.

Tritium concentration in the Main Cooling Reservoir increased and then stabilized at midyear. The source of tritium was promptly identified and corrected. The increase was due to a lithium impurity in one of the demineralizer resins used for water chemistry control. The measured concentration in the reservoir was approximately 13,000 picoCuries per kilogram which is 42% of the United States Nuclear Regulatory Commission's 30,000 picoCuries per kilogram Reporting Level. The level of tritium should begin to decrease. The concentration of tritium in the ditches and sloughs was consistent with previous years except for one sample from the Little Robbins Slough which was higher than expected. Although higher than normal, this sample was only 26% of the United States Nuclear Regulatory Commission Reporting Levels. The tritium concentration returned to normal levels by the next sample period and remains at normal levels. The source of tritium was the relief wells that are part of the Main Cooling Reservoir dike system.

Operation of the South Texas Project continues to have no significant radiological impact upon 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.

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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.

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 existing 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. Sample 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

The environment surrounding the South Texas Project continues to indicate no significant radiological contribution from plant operation. Analytical values from offsite indicator sample stations continue to trend with the control stations. The other 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 1995, see Figure 3. The average of the onsite indicators trend closely with the offsite control values. The comparison illustrates that plant operations is 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 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 ten 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 which 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.

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. This indicates that the reduction in the release of radioactive material is being observed in the environment. The amount of Cobalt-58 has decreased and the amount of Cobalt-60 is expected to decrease as it undergoes radioactive decay. Current Cesium-137 measurements are approximately equal to the pre-operational values but appear to have increased slightly. The increase is not enough to determine if it is from the operation of the plants.

Tritium is the radioactive hydrogen isotope and is produced during the operation of the plants. Tritium produced in the reactors replaces non-radioactive hydrogen in water. Waste water is treated to remove impurities before release, but since 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 emission 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 since 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 1995. 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 an equilibrium value of 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 large 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. This increase in concentration should appear in the sloughs and ditches in 1996 and 1997 because it takes one to two years for water to move from the reservoir to the relief wells. There was one sample from the Little Robbins Slough that showed an unexpected tritium concentration of 7,700 picoCuries per kilogram. (Refer to Figure 7) This concentration is 26% of the United States Nuclear Regulatory Commission's 30,000 picoCuries per kilogram Reporting Level. The water in the reservoir and the effluent streams is not used as drinking water. The only way it could be introduced into man 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, he would still receive less than one millirem. This is insignificant compared to the almost twenty millirem a year each person receives from the naturally radioactive potassium in his 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 such things as 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 each year 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 sixteen sectors. Listed below 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	Citrus 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)

Listed below are items of interest that were noted during the census.

* The resident who was in the SSE sector has moved and no other resident has replaced him.

* Hoechst Celanese Petrochemical Plant, which typically employs 350 personnel, is located approximately four and a half 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.

* Irrigation practices are similar to those in the past as there has been no use of water below the Bay City Dam from the Colorado River. However, there has been an approximate increase in the amount of cotton acreage by 40% and a decrease in the grain sorghum acreage by 20-30%.

* Ranching practices remained generally unchanged in 1995. The beef population has not changed, but there has been a small increase in the number of emu and goats in the area.

* 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.

* There has been no change in the marine environment with the exception of a slight increase of oysters in the east end of West Matagorda Bay and in the Tres Palacios Bay.

* A small number of redfish have been added to the Main Cooling Reservoir at 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.

1. Nuclear Assurance and Licensing.

    - o Performs periodic surveillance of specific activities throughout the year.
    - o Performs comprehensive audits. (None performed in 1995)
    - o Provides for an independent technical review by a technical specialist. (Not performed in 1995)

2. Radiological Laboratory Quality Assurance Program.

    - o Routine instrument control checks including calibrations and calibration verification.
    - o Annual testing and analysis.
    - o Intralaboratory quality control analyses.
    - o Internal assessments.

3. Interlaboratory Measurement Assurance Programs.

    - o Participation in the United States Environmental Protection Agency Intercomparison Studies Program.
    - o Participation in the Nuclear Energy Institute/National Institute of Standards and Technology Measurement Assurance Program for the Nuclear Industry.
    - o Participation in the Battelle Pacific Northwest Laboratories' Measurement Assurance Program.
    - o Participation in an interutility measurement assurance program.

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

    - o Perform programmatic content and effectiveness reviews 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.

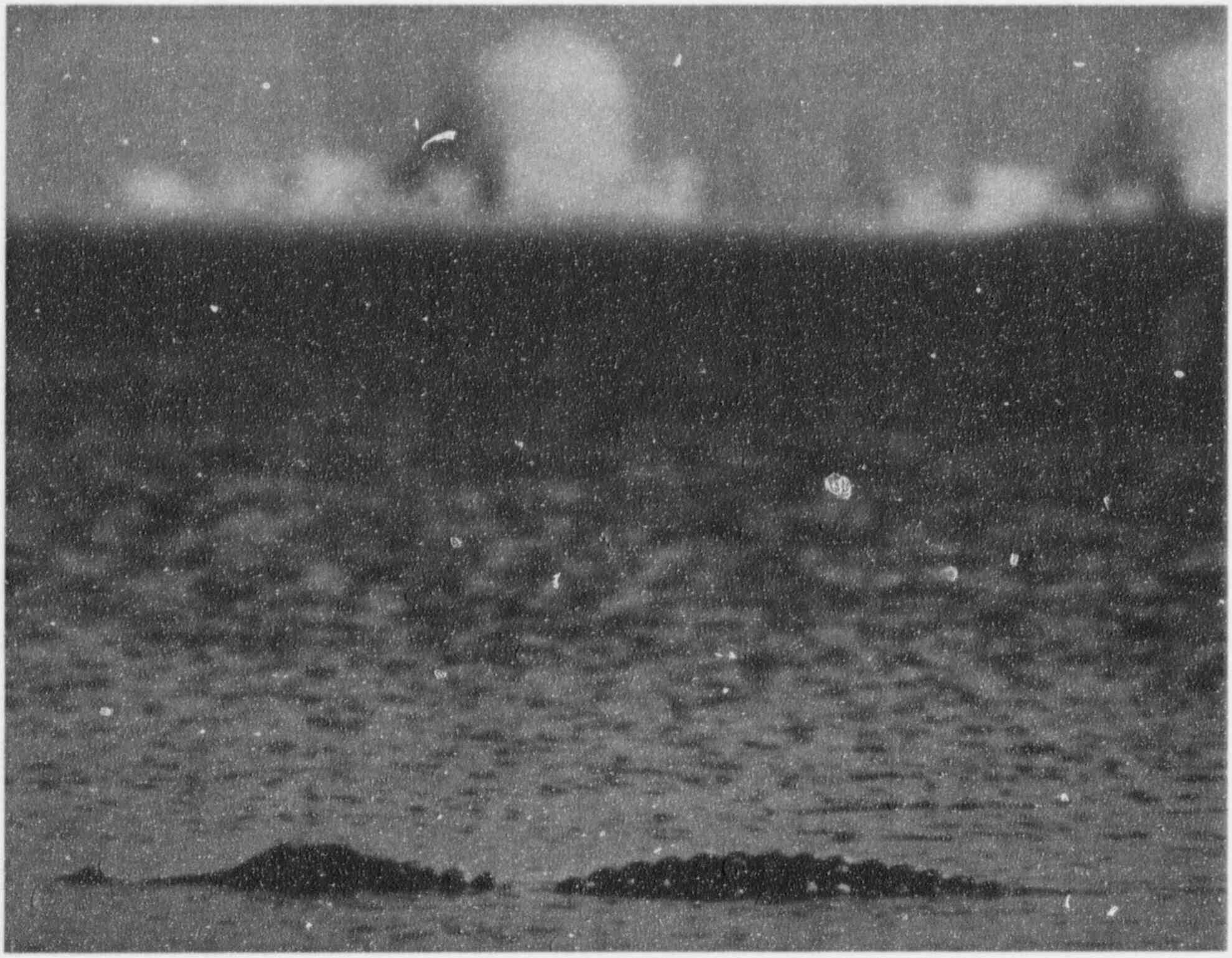
The measurement capabilities of the Radiological Laboratory are demonstrated by participating in interlaboratory measurement assurance programs. These programs provide samples that are similar to those measured for the Radiological Environmental Monitoring Program.

The laboratory continues to perform at an outstanding level in these programs. All measurements were in agreement with industry-accepted criteria. The performance is demonstrated in Figure 8 for the four intercomparison programs in which we participate. One problem was identified during the Inter-Utility Measurement Assurance Program in our gamma software when gamma energies are extremely close. The software has been replaced to correct the problem

Six performance objectives have been identified to monitor the overall success of program implementation. They include 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, 1995 Performance Objective Summary.

All of the performance objectives are consistent with the performance of previous years. The performance objective for achieving a fifteen percent accuracy for Inter- and Intra-laboratory quality control samples was 96.9%. The performance objective for achieving fifteen percent precision for Replicate Inter- and Intra-laboratory Quality Control Samples was 100.0%. The performance objective of analyzing required samples in order to meet their regulatory sensitivities was 100.0%. Samples were analyzed within thirty days of receipt 97.0% of the time. Of the required samples, 99.6% were collected and analyzed. Missed samples are identified in Figure 10. Quality control sample load was 22.7% in 1995.

In summary, this program is conducted at a high level of quality for completeness, efficiency and accuracy.



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This Annual Environmental Operating Report describes nonradiological environmental conditions and compliance monitoring programs at the South Texas Project from January 1 through December 31, 1995. During this period, the South Texas Project continued to operate in an environmentally responsible manner. The 1995 assessment included herein illustrates that the South Texas Project promptly responded to areas of concern and maintained high standards of environmental compliance throughout 1995.

The South Texas Project is committed to protecting the environment. This commitment is reflected in the organization's business plan objectives and in the efforts of the site environmental staff who develop and implement site environmental protection programs and monitor the site's environmental compliance status. Houston Lighting & Power Company's corporate environmental staff provides support and technical assistance to the South Texas Project. Environmental compliance monitoring for the South Texas Project is conducted by Houston Lighting & Power Company site and corporate staff in accordance with federal and state regulations and applicable plant procedures.

In 1995, the commitment to environmental excellence by the South Texas Project resulted in:

- No reportable environmental conditions
- Facility improvements enhancing environmental protection capabilities
- Decreased waste generation volumes
- Expanded recycling programs
- Increased site awareness of environmental issues

In keeping with the station's commitment to environmental protection, the South Texas Project continues to implement an aggressive environmental compliance program. Management goals, site procedures, self-assessment programs, employee training and communication enable the plant to continue to meet these challenges. In addition, the South Texas Project is preparing for the future by focusing on waste minimization, continuing expansion of recycling programs and addressing rapidly evolving environmental legislation. Environmental excellence continues to be a foundation of operations at the South Texas Project.

Environmental Operating Report

1995

Annual Environmental & Annual Radiological Environmental

Operating Reports

South Texas Project Electric Generating Station

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1995

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ENVIRONMENTAL CONDITIONS

Environmental conditions at the South Texas Project are routinely monitored by Houston Lighting & Power Company environmental staff at the South Texas Project. In 1995, the corporate Environmental Department conducted additional internal audits of site environmental programs and procedures. Also in 1995, members of the Texas Natural Resource Conservation Commission conducted a wastewater systems inspection and a potable water sanitary survey at the site. Any areas of concern arising from these assessments were promptly resolved. Noted areas of program improvements included increased site awareness of environmental issues, decreased waste generation volumes and facility improvements which incorporated improvements to the wastewater treatment systems and potable water systems. This section of the report discusses the South Texas Project's compliance status with applicable environmental laws and site-specific environmental programs.

MAIN COOLING RESERVOIR

Under normal plant operating conditions, cooling water for the plant 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 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 amount of annual 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 a contract between Houston Lighting & Power Company and the Lower Colorado River Authority. The South Texas Project diverted 5,692 acre-feet from the Colorado River in 1995 for the Main Cooling Reservoir fill operations. The highest Main Cooling Reservoir elevation for 1995 was 44 feet which is within normal operating levels. The structural conditions of the reservoir remained satisfactory and unchanged in 1995.

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 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 offers limited habitat for mammals and several groups of birds. Houston Lighting & Power Company environmental staff regularly monitor the site environs for changing conditions. Ecological conditions onsite in 1995 remained unchanged and satisfactory.

During informal bird surveys conducted by Houston Lighting & Power Company personnel in 1995, several bird species listed on the State and federal threatened or endangered list were observed on site. 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 limited informal surveys of the site's diverse 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. Special precautions are taken each spring to protect 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 1995. In addition, a healthy population of white-tailed deer continues to be observed.

Neither the United States Environmental Protection Agency or the State of Texas required specific site aquatic monitoring studies under the authority of the Clean Water Act for the time period of this report. However, the South Texas Project has continued to monitor populations of important wildlife species to detect population changes since early in the construction phase. Survey results indicate that the site provides high quality habitat for a wide range of animals to 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 areas, in concert with numerous additional wetland and grassland areas, offer all the ingredients necessary to sustain the extensive wildlife population at the South Texas Project.

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. In 1994, the station completed an extensive restoration of one auxiliary steam boiler unit which 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 seventeen 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 1995 to be available as a backup emergency generator during two plant outages planned for the year. Operation of these generators is authorized under Texas Natural Resource Conservation Commission Standard Exemption No. 5 as they are internal combustion engine driven generator sets used only for emergency service.

Fire-fighting Activities

The South Texas Project conducts onsite training of selected employees on proper firefighting 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 Health Department 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**. Accordingly, advance notification is provided to the appropriate jurisdictional agency--in Texas this is the Texas Department of Health--for planned and unplanned asbestos removal activities as well as for demolition activities where no asbestos is involved. Historically, the activities covered by these notifications has included construction-era building demolition and coatings removal.

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 surface water from the Main Cooling Reservoir and the Essential Cooling Pond as cooling water for plant activities. Five onsite water wells supply groundwater for onsite drinking water, makeup water for the Essential Cooling Pond, service water, firewater and other onsite industrial uses.

Wastewater discharges are monitored for pH, total suspended solids, oil and grease content, chlorine concentrations, temperature, fecal coliform levels, 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 Discharge Monitoring Reports are submitted to the Texas Natural Resource Conservation Commission and the United States Environmental Protection Agency for wastewater discharges. Monthly reports are also submitted to the Texas Natural Resource Conservation Commission regarding drinking water quality.

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 thoroughly evaluated and that appropriate measures are selected and implemented to prevent or control the discharge of pollutants in storm water runoff.

Wastewater Treatment Compliance Status

The station demobilized two sanitary waste treatment facilities no longer in service in 1995, and also replaced and enlarged another sanitary waste treatment facility. The station 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 1995.

No reportable environmental conditions were associated with any of the outfalls in 1995. Compliance data indicates that the station's aggressive campaign to prevent environmental permit parameter noncompliances was highly successful. The 1995 year marks the second consecutive year at the South Texas Project for which no reportable conditions occurred. The consistent reduction in reportable environmental conditions in the past years attests to the success of the station's efforts to ensure compliant operations of the South Texas Project wastewater treatment systems. The South Texas Project is committed to continuing this high standard.

SOLID WASTE MANAGEMENT COMPLIANCE

Solid waste management procedures for hazardous and nonhazardous wastes generated at the South Texas Project ensure that wastes are properly disposed of 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 for the state of Texas. 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 audits are conducted at the site by corporate environmental personnel. Waste handling and disposal activities are summarized and documented in the 1995 Annual Waste Summary for the South Texas Project submitted 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 used oil, waste diesel fuel, waste antifreeze solution and waste solvent for fuel blending and thermal energy recovery. 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 which might otherwise be generated. An extensive site paper recycling program results in the collection of several tons of paper each year. In 1995, the South Texas Project collected approximately 62 tons of paper for recycling which is the equivalent of 1,054 trees saved or 186 cubic yards of landfill space not utilized. The station expanded recycling activities in 1995 to include shipping non-hazardous blast grit and concrete materials for use in road paving products. Plant personnel continue to explore additional areas where recycling activities may be expanded or initiated.

Nonradioactive Waste Management Activities

Nonradioactive solid waste not shipped for recycling is shipped for disposal. Municipal-type trash is transported to a county landfill for disposal 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 approximately 25% reduction in the total amount of nonradioactive waste generated at the site from the previous year including a 72% reduction in the volume of hazardous waste generated.

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. In 1994 and 1995, employee spill awareness training was enhanced to incorporate an emphasis on spill prevention and particular focus was placed on the enhanced education of plant operations personnel in this area. Onsite spill response team members received additional training in hazardous material incident response. Increased employee awareness coupled with previous design enhancements were the key factors in preventing any consequential or reportable spills and reducing the number of non-consequential spills by approximately 70% at the South Texas Project in 1995.

Superfund Amendment and 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 the preceding calendar year to the Texas Department of Health.

CHEMICAL CONTROL

An Expendable Materials Program was established at the South Texas Project to evaluate those chemicals and products which have the potential to come in contact with plant components. Disposal requirements are evaluated and documented for approved chemicals and products listed in the STPEGS Expendable Materials Manual. Plant procedures establish disposal requirements. Alternate evaluation methods are available for those materials that fall outside the scope of the Expendable Materials Program.

Storage of product drums and gas cylinders is also controlled 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 chemicals accessible in the plant area. These restrictions 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. Internal reviews, audits, and inspections conducted in 1995 documented that the plant is in compliance with the Environmental Protection Plan.

This section also reviews nonroutine reports submitted by plant personnel and any activities which 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 which 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, which may have a significant adverse environmental impact. No unreviewed environmental questions were identified in 1995.

Events which require reports to Federal, State, or local agencies other than the Nuclear Regulatory Commission are reported in accordance with those reporting requirements. The Nuclear Regulatory Commission is provided with a copy of such reports at the same time they are submitted to the other agency. If a nonroutine event occurs and a report is not required by another agency, then a thirty-day report to the Nuclear Regulatory Commission is required by the Environmental Protection Plan.

No thirty-day reports or other non-routine reports were required in 1995.

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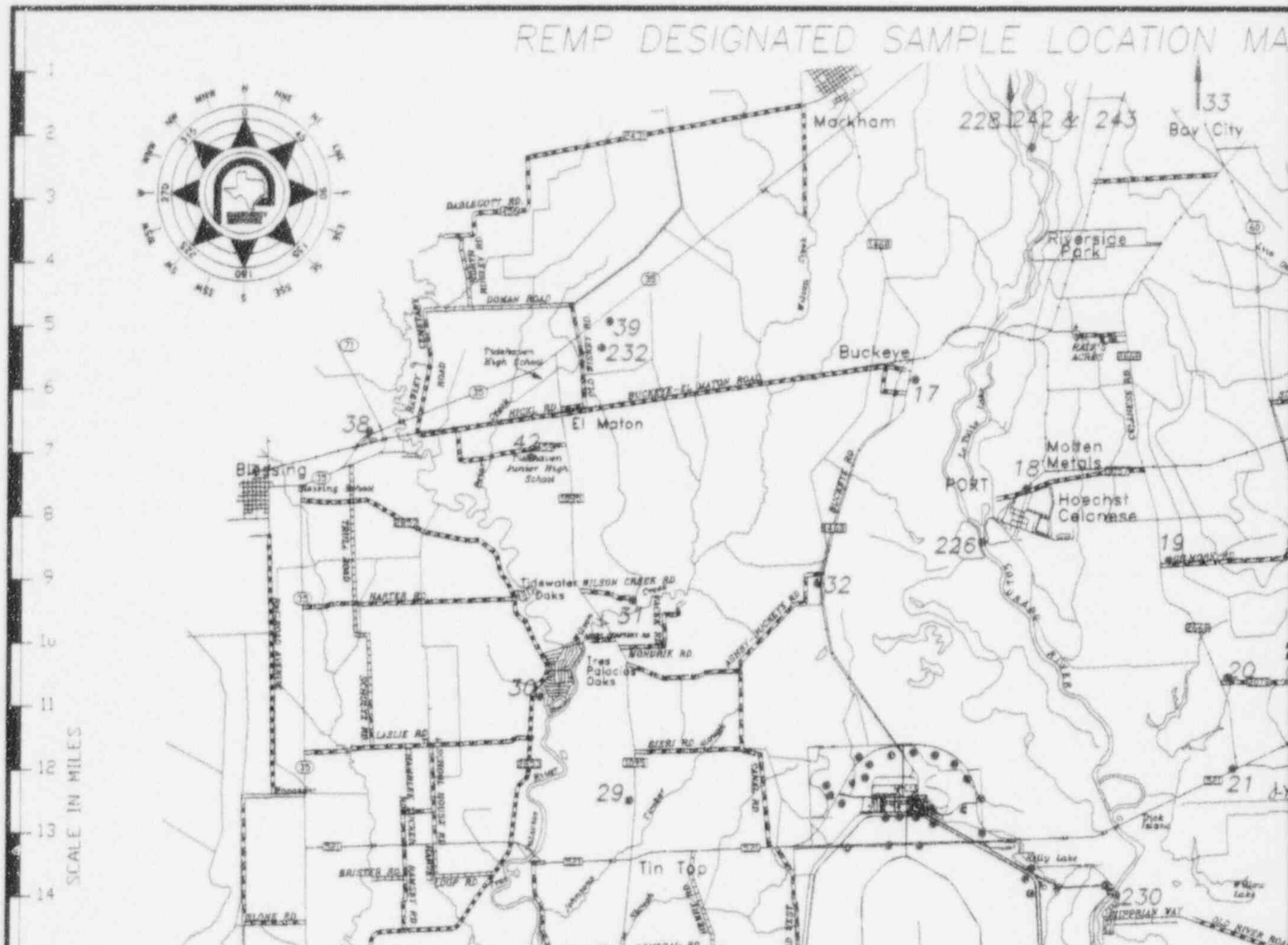
REMP DESIGNATED SAMPLE LOCATION MA
SCALE IN MILES
1
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17
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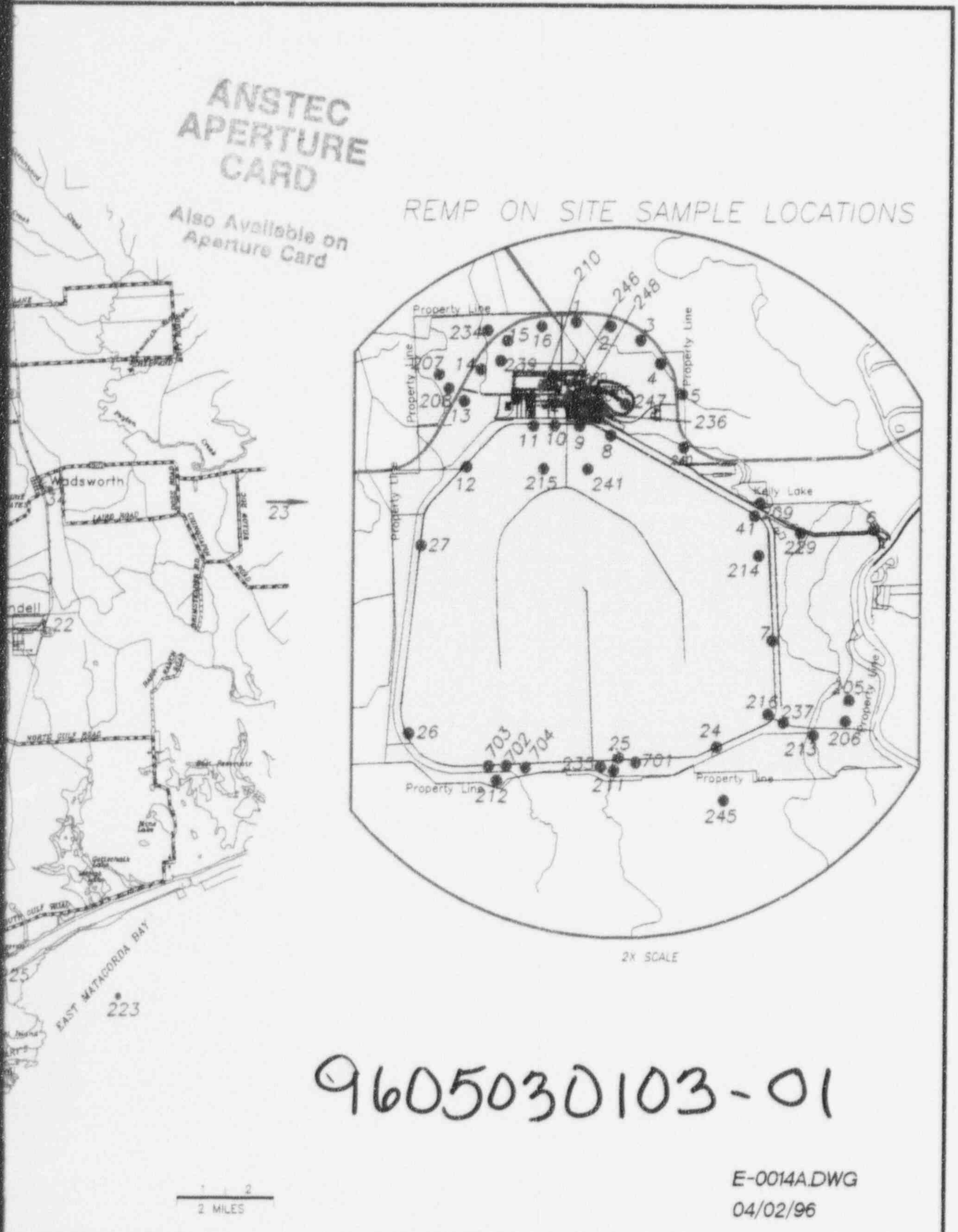
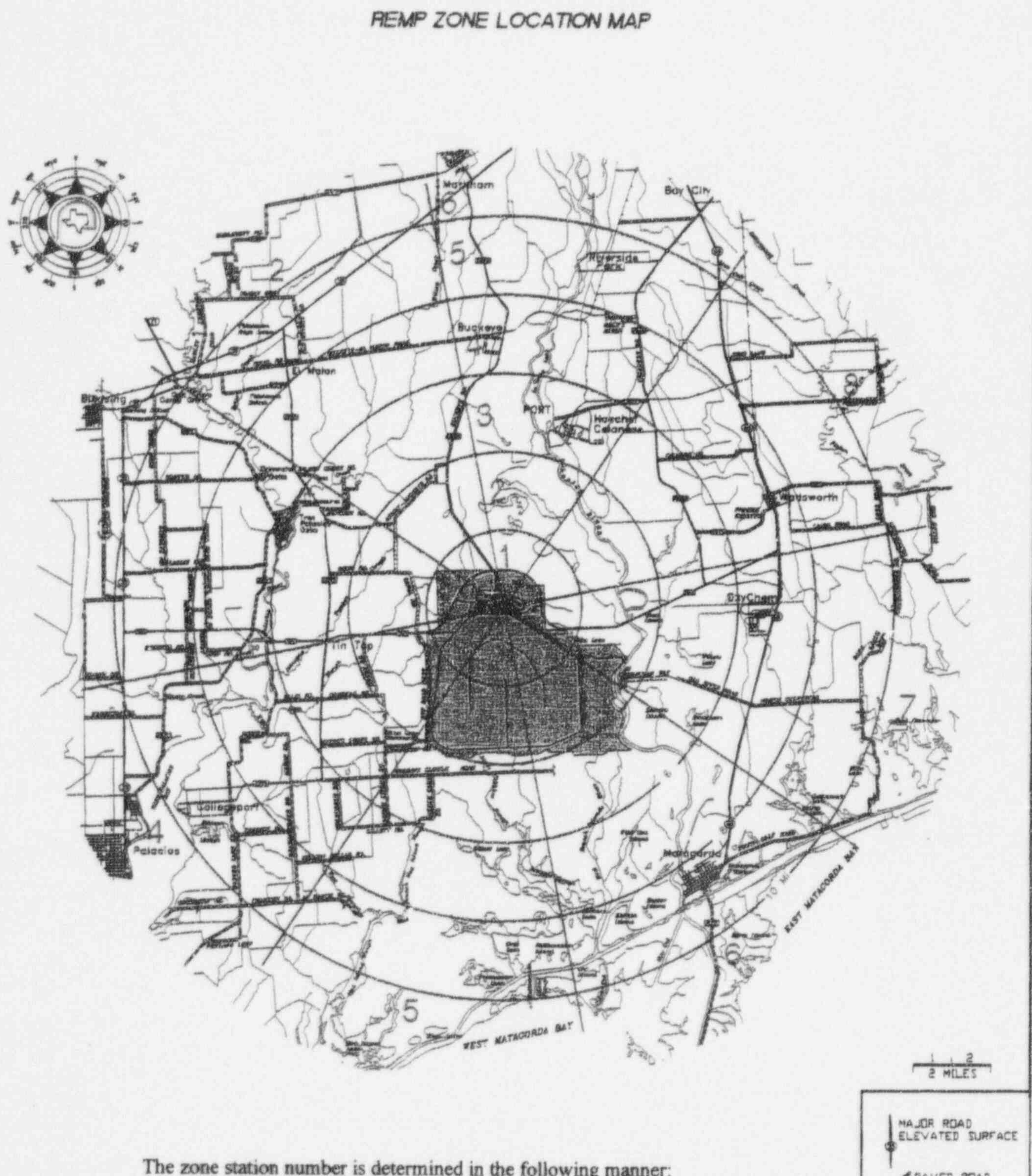
20
21
22
23
24
Markham
228,242 & 243
33
Bay City
Riverside Park
Buckeye
17
39
232
El Maton
38
42
Blessing
Molten Metals
18
PORT
Hoechst Celanese
226
19
32
Tidewater Oaks
31
Tres Palacios Oaks
30
20
29
21
Tin Top
230
28
37
233
40
227
36
Collegeport
Palacios
Matagorda
39
224
WEST MATAGORDA BAY
222
LEGEND:
MAJOR ROAD ELEVATED SURFACE
PAVED ROAD LOW SURFACE
GRAVEL SURFACE
DIRT OR GRASS SURFACE
GATE

Figure 1



9605030103-01

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 - 1995

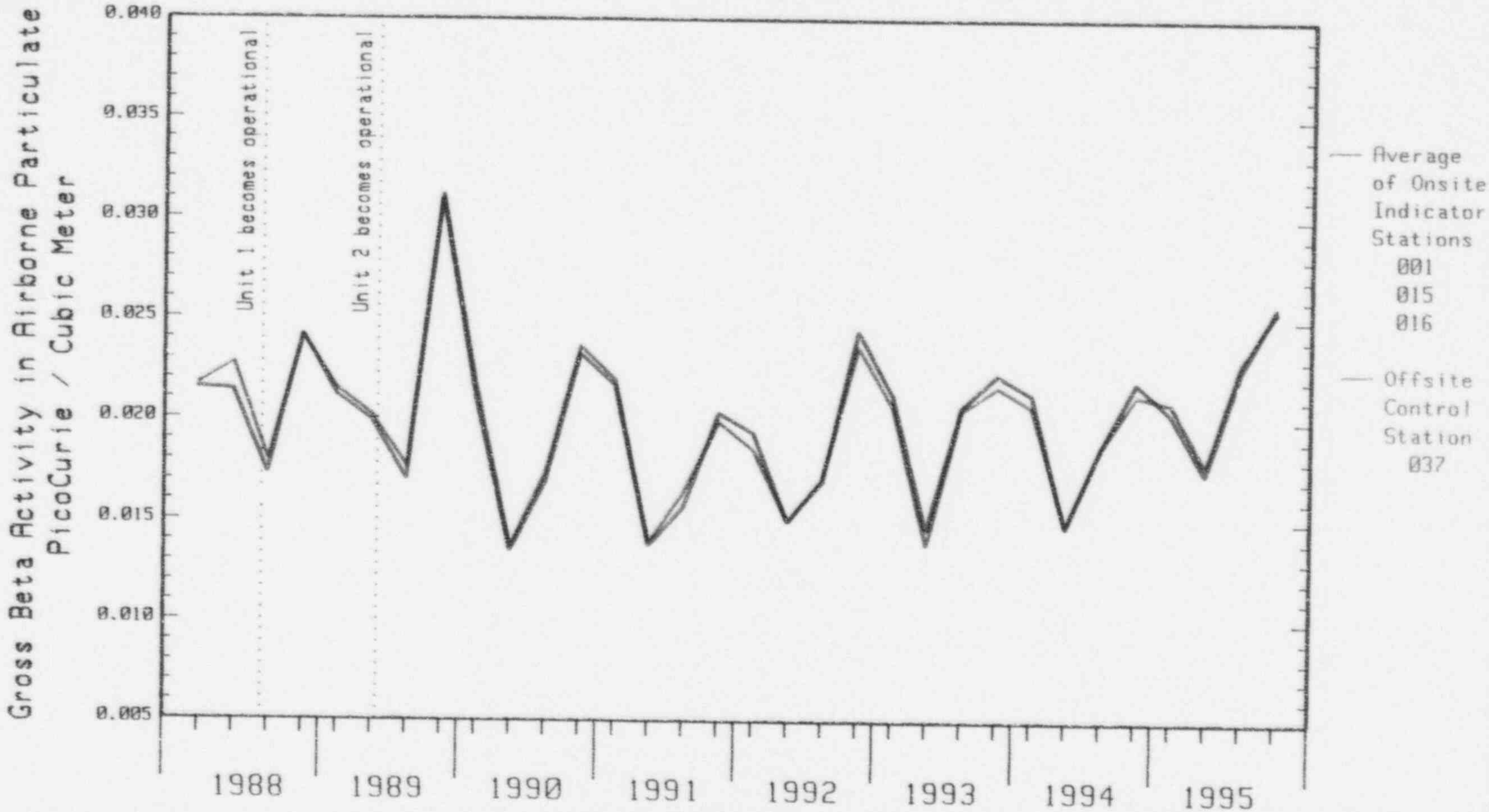


Figure 3

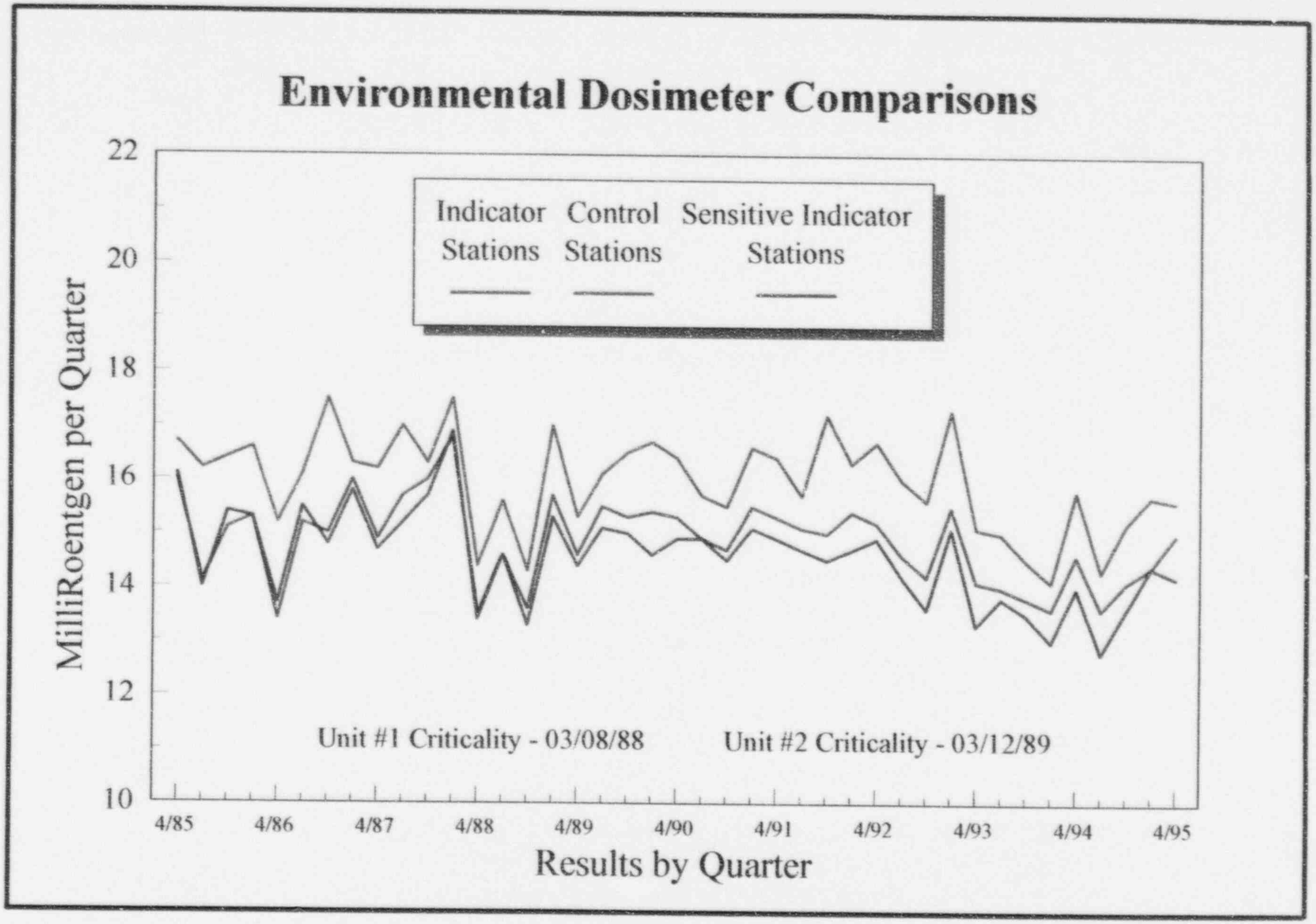

Environmental Dosimeter Comparisons
Indicator Stations
Control Stations
Sensitive Indicator Stations
MilliRoentgen per Quarter
22
20
18
16
14
12
10
Unit #1 Criticality - 03/08/88
Unit #2 Criticality - 03/12/89
4/85
4/86
4/87
4/88
4/89
4/90
4/91
4/92
4/93
4/94
4/95
Results by Quarter

Figure 4

Historical Comparison of Cobalt-58 & Cobalt-60 in Main Cooling Reservoir Sediment 1986 - 1995

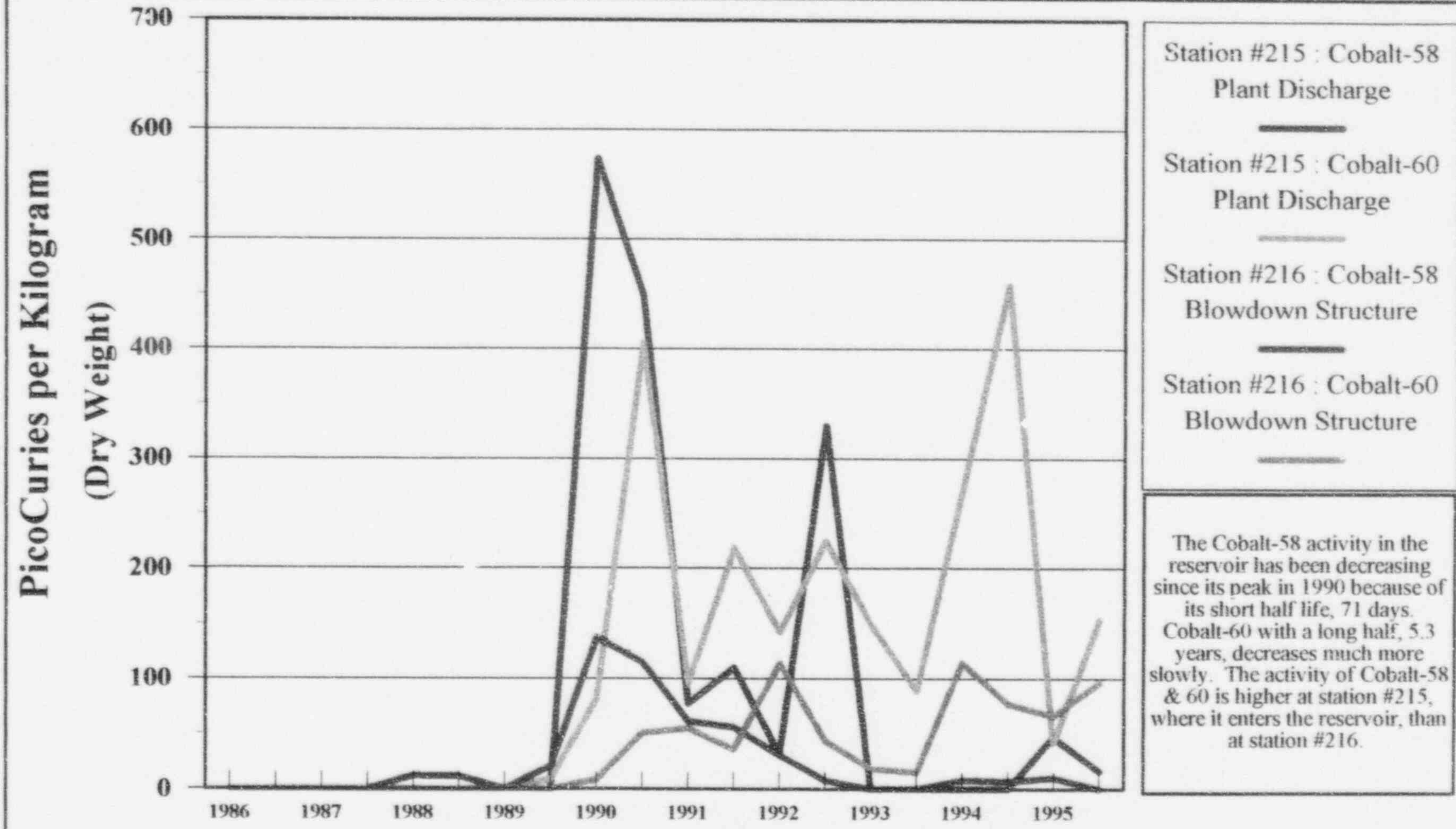
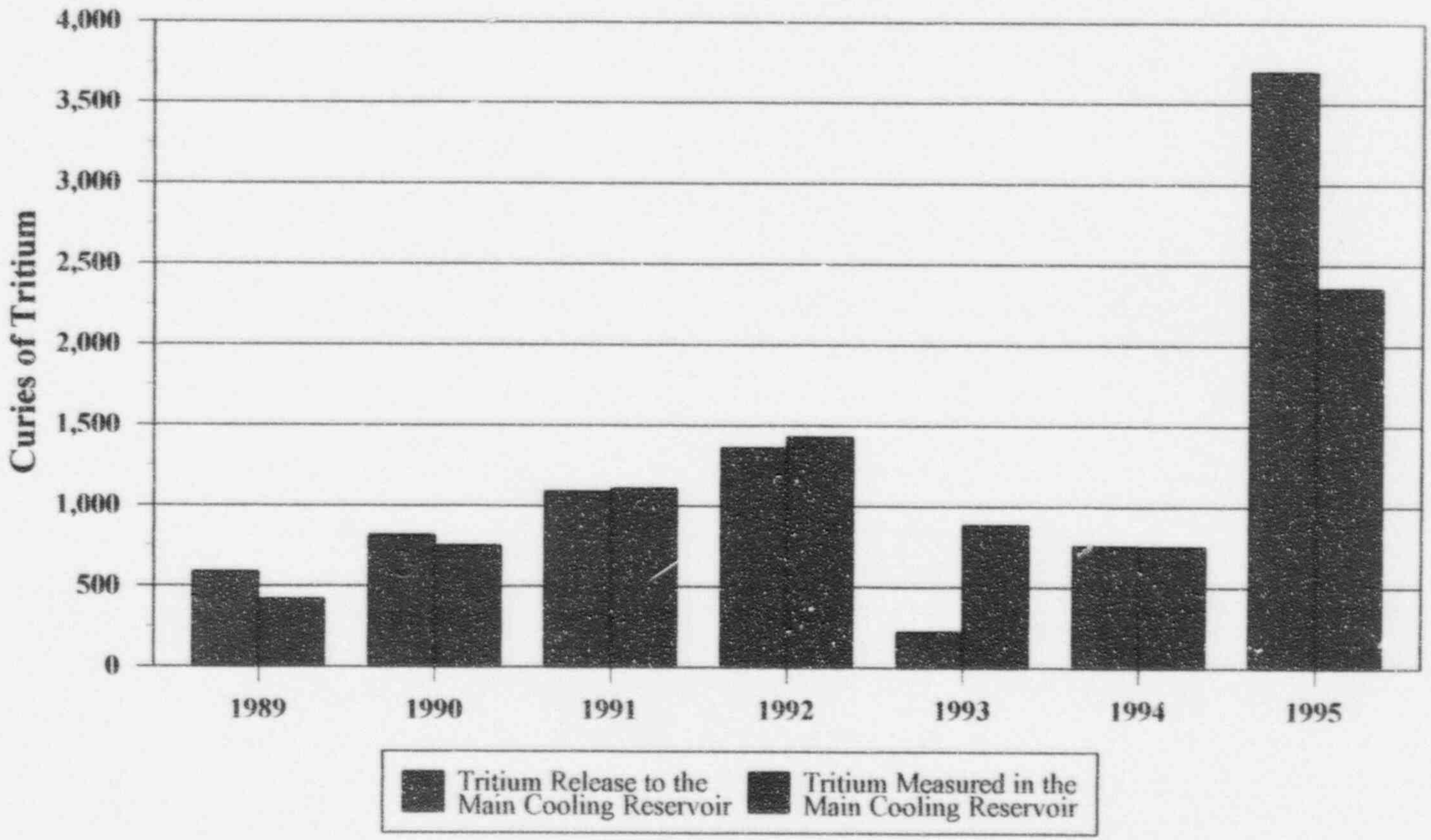


Figure 5

Figure 6

Historical Comparison of Tritium Added to and Remaining in the Main Cooling Reservoir 1989 - 1995



Historical Comparison of Tritium Activity in Surface Water 1988 - 1995

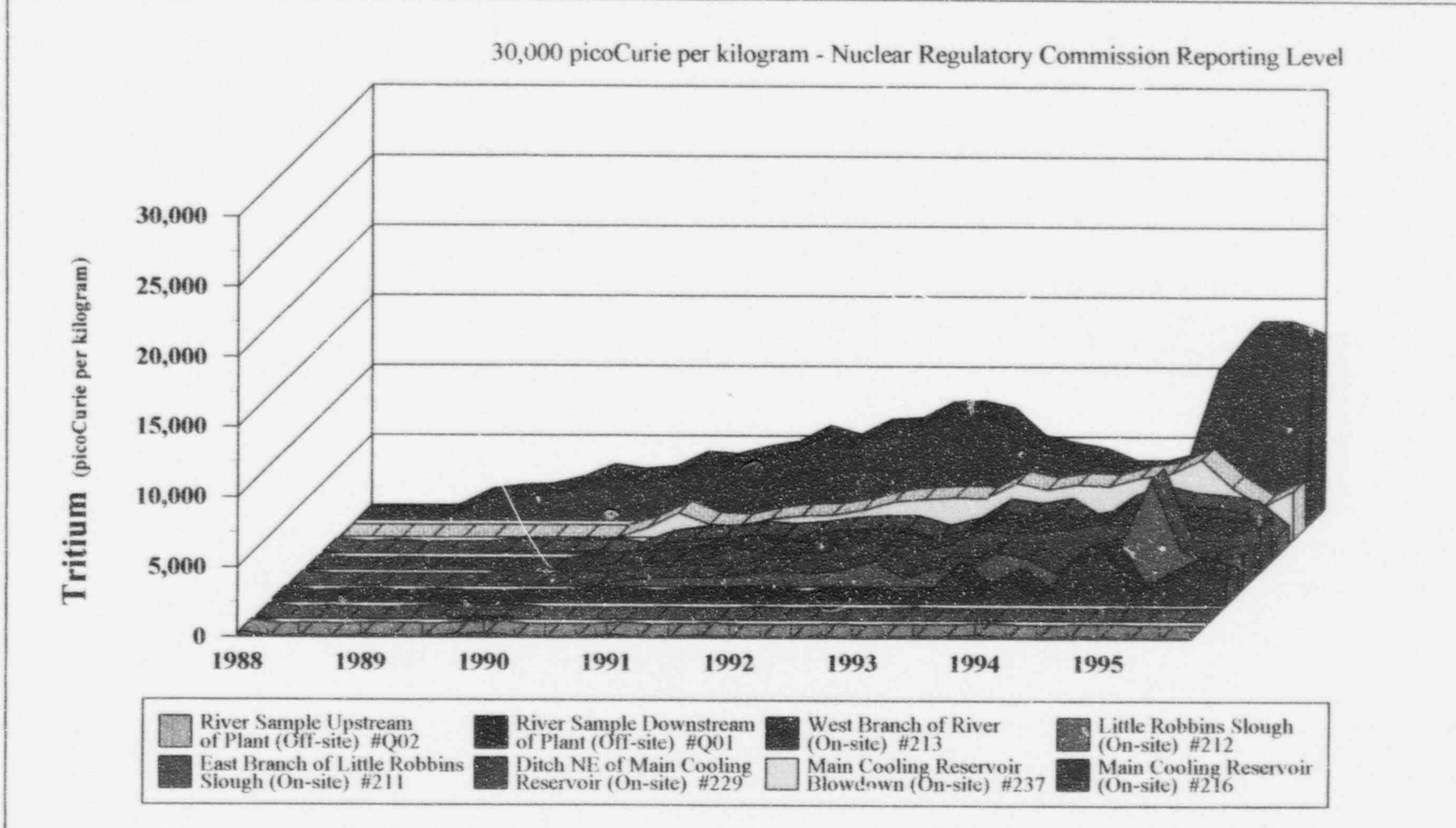
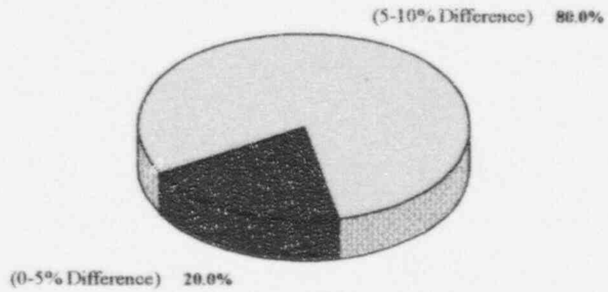
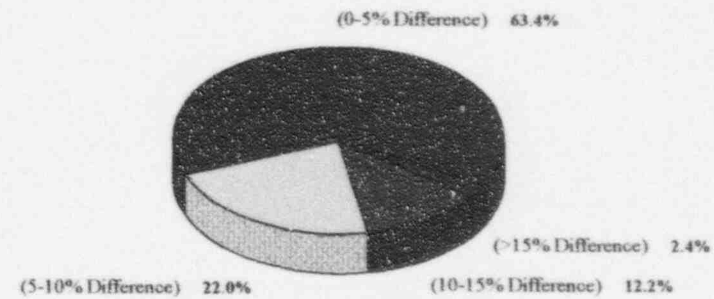


Figure 7

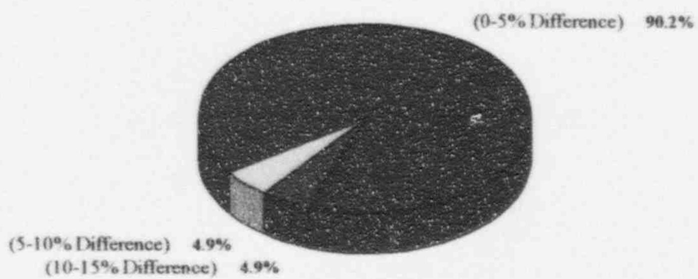
1995 Radiological Laboratory Quality Assurance Program Performance



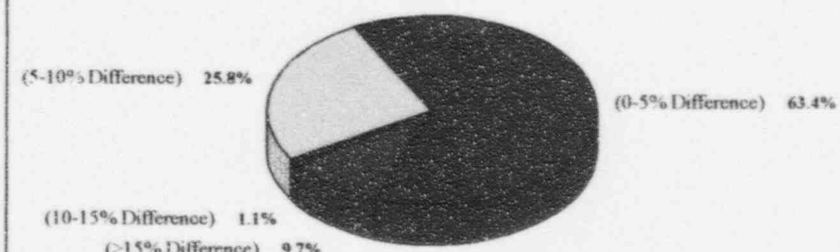
Battelle Environmental Thermoluminescent Dosimetry
(5 Analyses)



Environmental Protection Agency
(123 Analyses)



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



Inter-Utility Measurement Assurance Program
(93 Analyses)

Figure 8

1995 PERFORMANCE OBJECTIVES SUMMARY

Performance Objective	Performance
±15% Accuracy for Interlaboratory Quality Control Samples	96.9%
±15% Precision for Replicate Interlaboratory Quality Control Samples	100.0%
Analyze Required REMP Samples in Order to Meet Regulatory Sensitivities	100.0%
Perform the Analysis of REMP Samples within 30 Days of Sample Receipt	97.0%
Collect and Analyze Required REMP Samples as Scheduled	99.6%
Maintain a minimum of 20% quality control sample load which will include field duplicates and splits, reagent blanks, blinds, etc.	22.7%

Figure 9

MISSED SAMPLES

ITEM NUMBER	MEDIA CODE	FREQUENCY	TIME PERIOD	COMMENTS
1	Broadleaf Vegetation	Monthly	January 1995	Only one of the two required sampling stations were collected. Vegetation not available at the other station.
2	Broadleaf Vegetation	Monthly	February 1995	Only one of the two required sampling stations were collected. Vegetation not available at the other station.
3	Broadleaf Vegetation	Monthly	December 1995	No samples collected. Vegetation was not available at any of the stations.
4	TLD	Quarterly	2nd Qtr. 95 Station #28	TLDs wrere damaged due to moisture penetration.
5	TLD	Quarterly	4th Qtr. 95 Station #31	TLDs including the duplicate TLD set were missing from station upon collection.
6	Beef Meat	Annual	1995	Beef samples from neighboring ranches were not available.
7	Air Iodine	Weekly	02/08/95	Field instrument failure.
8	Air Particulate	Weekly	02/08/95	Field instrument failure.
9	Air Iodine	Weekly	04/06/95	Power outage at sampling station.
10	Air Particulate	Weekly	04/06/95	Power outage at sampling station.

Figure 10

Addendum of Tables

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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 (W,ENE), 10-15 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. 1- Located in Bay City, 14 miles. 1- Control Station, located in a minimal wind direction (W), 11 miles.	Continuously	Weekly	Charcoal: I-131 Particulate: Gross Beta & Gamma-Isotopic	Weekly Weekly Quarterly Composite

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, 2 miles.				
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

9 TOTAL SAMPLING STATIONS

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. 1- Located at a control station.	Grab	Monthly	Gamma-Isotopic & Gross Beta Tritium	Monthly Quarterly Composites
Sediment 1- Located above the site on the Colorado River, not influenced by plant discharge. 1- Located downstream from blowdown entrance into the Colorado River. 1- Located in MCR.	Grab	Semi-annually	Gamma-Isotopic	As collected

TABLE 1
RADIOLC' ICAL ENVIRONMENTAL MONITORING PROGRAM

EXPOSURE: INGESTI/ON

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, and 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 STPEGS. (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
Terrestrial & Aquatic Animals (edible portions)				
1- Representing commercially and/or recreational important species in vicinity of STPEGS 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 STPEGS.*				
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

* Applied to aquatic samples only.

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

AJ	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

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	STPEGS 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 - STPEGS Main Cooling Reservoir
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	OxyChem 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 Palacious 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	Palacious 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 - STPEGS Main Cooling Reservoir
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 STPEGS
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 - STPEGS Main Cooling Reservoir
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 STPEGS 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	STPEGS 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 - STPEGS Main Cooling Reservoir
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
WS	Q01	N/A	Quarterly composite of station #227 and/or alternate #233 (1)
WS	Q02	N/A	Quarterly composite of station #243 and/or alternate #242 (1)
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 - STPEGS Main Cooling Reservoir
Media codes typed in bold satisfy collection requirement described in Table 1.

* Control Station

1995 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 two values. The first value is the average achieved Lower Limit of Detection for each analysis and the second is the requirement for Detection Capabilities for Environmental Sample Analysis. 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:

- o The mean value (including negative values and values below the Lower Limit of Detection).
- o The number of analyses whose values were greater than the Lower Limit of Detection / the total number of analyses.
- o The lowest and highest values for the analysis.

The data placed in the table has been changed in 1995 from the previous reports to only include the data from the samples listed in Table 1. The number of analyses will be the same as required with the addition of four groundwater duplicate samples, two bottom sediment samples and nine duplicate surface water samples.

This change in the data causes some inconsistencies between 1994 and 1995 data that will be eliminated in the future. One example is the tritium values listed for groundwater. The values for 1994 included relief well samples which should be positive for tritium, the 1995 table only lists values for the upper aquifer which was the intent of the requirement. Also, extra sediment samples were taken in 1994 from the Main Cooling Reservoir. One sample was higher than our normal samples which distorts what is in the sediment samples. In the 1995 table, samples from the reservoir are classified as bottom sediment and the samples along the Colorado River are classified as shoreline sediment. These changes in presenting the data should improve the clarity and consistency of the report.

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Drinking Water UNITS: PicoCuries per Kilogram

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	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	1.9E+00 4.0E+00	5.5E+00 (11 / 12) (1.1E+00 - 1.8E+01)	On Site (#210)	5.5E+00 (11 / 12) (1.1E+00 - 1.8E+01)	4.6E+00 (11 / 12) (2.2E-01 - 1.2E+01)
Hydrogen-3	8/ 0	3.3E+02 3.0E+03	-7.9E+01 (0 / 4) (-2.2E+02 - 4.9E+01)	On Site (#210)	-7.9E+01 (0 / 4) (-2.2E+02 - 4.9E+01)	-1.5E+02 (0 / 4) (-2.3E+02 --6.9E+01)
Iodine-131	24/ 0	6.3E+00 ---	-1.2E+00 (0 / 12) (-8.4E+00 - 2.3E+00)	On Site (#210)	-1.2E+00 (0 / 12) (-8.4E+00 - 2.3E+00)	-1.9E+00 (0 / 12) (-2.0E+01 - 2.5E+00)
Cesium-134	24/ 0	1.6E+00 1.5E+01	-2.4E+00 (0 / 12) (-7.3E+00 - 1.5E-01)	On Site (#210)	-2.4E+00 (0 / 12) (-7.3E+00 - 1.5E-01)	-8.9E+00 (0 / 12) (-5.9E+01 --4.8E-01)
Cesium-137	24/ 0	1.8E+00 1.8E+01	-8.9E-02 (0 / 12) (-8.2E-01 - 8.7E-01)	On Site (#210)	-8.9E-02 (0 / 12) (-8.2E-01 - 8.7E-01)	-4.7E-01 (0 / 12) (-2.0E+00 - 4.1E-01)
Manganese-54	24/ 0	1.6E+00 1.5E+01	1.2E-01 (0 / 12) (-7.3E-01 - 1.1E+00)	On Site (#210)	1.2E-01 (0 / 12) (-7.3E-01 - 1.1E+00)	-3.4E-01 (0 / 12) (-1.1E+00 - 7.4E-01)
Iron-59	24/ 0	3.6E+00 3.0E+01	5.7E-01 (0 / 12) (-1.4E+00 - 3.7E+00)	On Site (#210)	5.7E-01 (0 / 12) (-1.4E+00 - 3.7E+00)	4.5E-02 (0 / 12) (-1.7E+00 - 1.1E+00)
Cobalt-58	24/ 0	1.7E+00 1.5E+01	-9.1E-03 (0 / 12) (-7.1E-01 - 1.7E+00)	On Site (#210)	-9.1E-03 (0 / 12) (-7.1E-01 - 1.7E+00)	-2.7E-01 (0 / 12) (-1.1E+00 - 8.2E-01)
Cobalt-60	24/ 0	1.6E+00 1.5E+01	1.6E-01 (0 / 12) (-9.1E-01 - 1.2E+00)	On Site (#210)	1.6E-01 (0 / 12) (-9.1E-01 - 1.2E+00)	-1.0E-01 (0 / 12) (-1.2E+00 - 1.1E+00)
Zinc-65	24/ 0	3.2E+00 3.0E+01	-1.6E+00 (0 / 12) (-6.0E+00 - 1.5E+00)	On Site (#210)	-1.6E+00 (0 / 12) (-6.0E+00 - 1.5E+00)	-5.2E+00 (0 / 12) (-3.2E+01 - 2.4E-01)
Zirconium-95	24/ 0	3.8E+00 1.5E+01	-2.5E+00 (0 / 12) (-5.1E+00 - 7.0E-01)	14 miles NNE (#228)	-1.4E+00 (0 / 12) (-3.6E+00 - 6.5E-01)	-1.4E+00 (0 / 12) (-3.6E+00 - 6.5E-01)
Niobium-95	24/ 0	2.1E+00 1.5E+01	3.6E-02 (0 / 12) (-1.2E+00 - 1.2E+00)	On Site (#210)	3.6E-02 (0 / 12) (-1.2E+00 - 1.2E+00)	-6.6E-01 (0 / 12) (-5.3E+00 - 8.5E-01)
Barium-140	24/ 0	1.3E+01 1.0E+03	-8.2E-01 (0 / 12) (-9.5E+00 - 7.9E+00)	On Site (#210)	-8.2E-01 (0 / 12) (-9.5E+00 - 7.9E+00)	-3.4E+00 (0 / 12) (-2.1E+01 - 1.2E+00)
Lanthanum-140	24/ 0	3.6E+00 1.5E+01	-2.7E-01 (0 / 12) (-3.1E+00 - 1.6E+00)	14 miles NNE (#228)	2.0E-01 (0 / 12) (-9.6E-01 - 1.1E+00)	2.0E-01 (0 / 12) (-9.6E-01 - 1.1E+00)

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)
** (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Ground Water

UNITS: PicoCuries per Kilogram

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN (f) ** RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	MEAN (f) ** RANGE	CONTROL LOCATIONS MEAN (f) ** RANGE
Hydrogen-3	8/ 0	2.9E+02 3.0E+03	-2.3E+01 (0 / 8) (-1.4E+02 - 1.1E+02)	3.8 miles S (#235)	-2.3E+01 (0 / 8) (-1.4E+02 - 1.1E+02)	no samples
Iodine-131	8/ 0	6.9E+00 ---	-1.6E+00 (0 / 8) (-1.2E+01 - 5.1E+00)	3.8 miles S (#235)	-1.6E+00 (0 / 8) (-1.2E+01 - 5.1E+00)	no samples
Cesium-134	8/ 0	1.5E+00 1.5E+01	-5.0E+00 (0 / 8) (-1.5E+01 --1.4E+00)	3.8 miles S (#235)	-5.0E+00 (0 / 8) (-1.5E+01 --1.4E+00)	no samples
Cesium-137	8/ 0	1.7E+00 1.8E+01	-2.0E-01 (0 / 8) (-6.2E-01 - 6.7E-01)	3.8 miles S (#235)	-2.0E-01 (0 / 8) (-6.2E-01 - 6.7E-01)	no samples
Manganese-54	8/ 0	1.6E+00 1.5E+01	-2.7E-03 (0 / 8) (-6.2E-01 - 7.5E-01)	3.8 miles S (#235)	-2.7E-03 (0 / 8) (-6.2E-01 - 7.5E-01)	no samples
Iron-59	8/ 0	3.4E+00 3.0E+01	3.9E-01 (0 / 8) (-3.9E-01 - 2.3E+00)	3.8 miles S (#235)	3.9E-01 (0 / 8) (-3.9E-01 - 2.3E+00)	no samples
Cobalt-58	8/ 0	1.7E+00 1.5E+01	-5.0E-02 (0 / 8) (-4.8E-01 - 5.7E-01)	3.8 miles S (#235)	-5.0E-02 (0 / 8) (-4.8E-01 - 5.7E-01)	no samples
Cobalt-60	8/ 0	1.5E+00 1.5E+01	4.1E-02 (0 / 8) (-4.0E-01 - 6.3E-01)	3.8 miles S (#235)	4.1E-02 (0 / 8) (-4.0E-01 - 6.3E-01)	no samples
Zinc-65	8/ 0	3.0E+00 3.0E+01	-3.1E+00 (0 / 8) (-1.0E+01 - 1.2E-01)	3.8 miles S (#235)	-3.1E+00 (0 / 8) (-1.0E+01 - 1.2E-01)	no samples
Zirconium-95	8/ 0	3.8E+00 1.5E+01	-1.7E+00 (0 / 8) (-3.6E+00 --4.1E-01)	3.8 miles S (#235)	-1.7E+00 (0 / 8) (-3.6E+00 --4.1E-01)	no samples
Niobium-95	8/ 0	2.0E+00 1.5E+01	-5.0E-01 (0 / 8) (-1.3E+00 - 8.4E-01)	3.8 miles S (#235)	-5.0E-01 (0 / 8) (-1.3E+00 - 8.4E-01)	no samples
Barium-140	8/ 0	1.2E+01 1.0E+03	-4.4E+00 (0 / 8) (-1.0E+01 --7.6E-01)	3.8 miles S (#235)	-4.4E+00 (0 / 8) (-1.0E+01 --7.6E-01)	no samples
Lanthanum-140	8/ 0	3.5E+00 1.5E+01	1.6E-01 (0 / 8) (-1.1E+00 - 1.7E+00)	3.8 miles S (#235)	1.6E-01 (0 / 8) (-1.1E+00 - 1.7E+00)	no samples

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)

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

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Surface Water　　　　UNITS: PicoCuries per Kilogram

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	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	3.3E+02 3.0E+03	6.4E+03 (4 / 8) (2.1E+01 - 1.4E+04)	3 miles SSE (#216)	1.3E+04 (4 / 4) (1.1E+04 - 1.4E+04)	-4.4E+01 (0 / 4) (-1.4E+02 - 4.6E+01)
Iodine-131	45/ 0	9.1E+00 ---	-1.9E+00 (0 / 40) (-1.3E+01 - 6.5E+00)	>10 miles N (#242)	9.5E-01 (0 / 5) (-4.2E-01 - 2.4E+00)	9.5E-01 (0 / 5) (-4.2E-01 - 2.4E+00)
Cesium-134	45/ 0	1.3E+00 1.5E+01	-1.9E+00 (0 / 40) (-5.5E+00 - 1.1E-01)	4.3 miles SE (#233)	-1.9E-01 (0 / 1) (-1.9E-01 --1.9E-01)	-1.6E+00 (0 / 5) (-2.5E+00 --7.7E-01)
Cesium-137	45/ 0	1.4E+00 1.8E+01	-2.4E-01 (0 / 40) (-1.1E+00 - 8.1E-01)	4.3 miles SE (#233)	-2.1E-01 (0 / 1) (-2.1E-01 --2.1E-01)	-3.9E-01 (0 / 5) (-7.1E-01 - 1.4E-01)
Manganese-54	45/ 0	1.4E+00 1.5E+01	-1.8E-01 (0 / 40) (-1.3E+00 - 5.6E-01)	>10 miles N (#242)	7.1E-02 (0 / 5) (-5.6E-01 - 6.8E-01)	7.1E-02 (0 / 5) (-5.6E-01 - 6.8E-01)
Iron-59	45/ 0	3.4E+00 3.0E+01	-1.8E-01 (0 / 40) (-3.2E+00 - 2.2E+00)	4.3 miles SE (#233)	2.2E+00 (0 / 1) (2.2E+00 - 2.2E+00)	-2.1E-01 (0 / 5) (-9.4E-01 - 5.8E-01)
Cobalt-58	45/ 0	1.6E+00 1.5E+01	-2.7E-01 (0 / 40) (-1.6E+00 - 6.2E-01)	6 miles SE (#227)	-1.5E-01 (0 / 15) (-1.6E+00 - 6.2E-01)	-2.0E-01 (0 / 5) (-1.2E+00 - 3.3E-01)
Cobalt-60	45/ 0	1.4E+00 1.5E+01	6.4E-02 (0 / 40) (-1.1E+00 - 1.4E+00)	3 miles SSE (#216)	2.8E-01 (0 / 12) (-4.9E-01 - 1.4E+00)	2.7E-01 (0 / 5) (2.0E-01 - 3.6E-01)
Zinc-65	45/ 0	2.7E+00 3.0E+01	-1.5E+00 (0 / 40) (-6.0E+00 - 3.6E-01)	>10 miles N (#242)	-7.1E-01 (0 / 5) (-1.6E+00 - 7.2E-01)	-7.1E-01 (0 / 5) (-1.6E+00 - 7.2E-01)
Zirconium-95	45/ 0	3.6E+00 1.5E+01	-1.6E+00 (0 / 40) (-5.3E+00 - 1.4E+00)	4.3 miles SE (#233)	1.3E+00 (0 / 1) (1.3E+00 - 1.3E+00)	-1.0E+00 (0 / 5) (-2.8E+00 - 3.3E-01)
Niobium-95	45/ 0	2.1E+00 1.5E+01	4.5E-02 (0 / 40) (-1.3E+00 - 1.8E+00)	4.3 miles SE (#233)	3.9E-01 (0 / 1) (3.9E-01 - 3.9E-01)	-7.4E-02 (0 / 5) (-5.5E-01 - 2.1E-01)
Barium-140	45/ 0	1.6E+01 1.0E+03	-7.8E-01 (0 / 40) (-1.3E+01 - 2.5E+01)	3 miles SSE (#216)	1.7E+00 (0 / 12) (-7.0E+00 - 2.5E+01)	-1.9E+00 (0 / 5) (-5.5E+00 - 6.9E-01)
Lanthanum-140	45/ 0	4.5E+00 1.5E+01	-7.2E-02 (0 / 40) (-3.9E+00 - 5.3E+00)	>10 miles N (#243)	4.9E-01 (0 / 12) (-3.9E+00 - 5.3E+00)	3.4E-03 (0 / 5) (-7.2E-01 - 1.1E+00)

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)
** (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

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

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	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	7.5E+00 1.5E+02	-2.7E+02 (0 / 1) (-2.7E+02 --2.7E+02)	>10 miles N (#242)	-1.4E+02 (0 / 3) (-1.9E+02 --1.1E+02)	-1.4E+02 (0 / 3) (-1.9E+02 --1.1E+02)
Cesium-137	4/ 0	9.8E+00 1.8E+02	3.7E+01 (1 / 1) (3.7E+01 - 3.7E+01)	6 miles SE (#227)	3.7E+01 (1 / 1) (3.7E+01 - 3.7E+01)	3.7E+00 (1 / 3) (-5.6E+00 - 2.1E+01)
Manganese-54	4/ 0	8.6E+00 ---	-4.7E+00 (0 / 1) (-4.7E+00 --4.7E+00)	>10 miles N (#242)	-3.2E+00 (0 / 3) (-5.6E+00 --1.9E+00)	-3.2E+00 (0 / 3) (-5.6E+00 --1.9E+00)
Iron-59	4/ 0	1.8E+01 ---	-3.4E+01 (0 / 1) (-3.4E+01 --3.4E+01)	>10 miles N (#242)	-8.3E+00 (0 / 3) (-1.4E+01 --1.9E+00)	-8.3E+00 (0 / 3) (-1.4E+01 --1.9E+00)
Cobalt-58	4/ 0	7.9E+00 ---	-1.9E+01 (0 / 1) (-1.9E+01 --1.9E+01)	>10 miles N (#242)	-3.4E+00 (0 / 3) (-9.8E+00 - 9.4E-01)	-3.4E+00 (0 / 3) (-9.8E+00 - 9.4E-01)
Cobalt-60	4/ 0	8.1E+00 ---	-3.2E+00 (0 / 1) (-3.2E+00 --3.2E+00)	>10 miles N (#242)	-2.7E+00 (0 / 3) (-4.0E+00 --9.9E-01)	-2.7E+00 (0 / 3) (-4.0E+00 --9.9E-01)
Zinc-65	4/ 0	1.9E+01 ---	-1.7E+02 (0 / 1) (-1.7E+02 --1.7E+02)	>10 miles N (#242)	-9.9E+01 (0 / 3) (-1.4E+02 --6.7E+01)	-9.9E+01 (0 / 3) (-1.4E+02 --6.7E+01)
Zirconium-95	4/ 0	1.9E+01 ---	-1.6E+02 (0 / 1) (-1.6E+02 --1.6E+02)	>10 miles N (#242)	-8.0E+01 (0 / 3) (-8.3E+01 --7.7E+01)	-8.0E+01 (0 / 3) (-8.3E+01 --7.7E+01)
Niobium-95	4/ 0	9.8E+00 ---	-2.3E+01 (0 / 1) (-2.3E+01 --2.3E+01)	>10 miles N (#242)	-1.7E+01 (0 / 3) (-2.3E+01 --1.3E+01)	-1.7E+01 (0 / 3) (-2.3E+01 --1.3E+01)
Barium-140	4/ 0	4.2E+01 ---	-6.6E+01 (0 / 1) (-6.6E+01 --6.6E+01)	>10 miles N (#242)	-5.9E+00 (0 / 3) (-3.0E+01 - 1.0E+01)	-5.9E+00 (0 / 3) (-3.0E+01 - 1.0E+01)
Lanthanum-140	4/ 0	1.1E+01 ---	3.0E+00 (0 / 1) (3.0E+00 - 3.0E+00)	6 miles SE (#227)	3.0E+00 (0 / 1) (3.0E+00 - 3.0E+00)	6.9E-02 (0 / 3) (-1.1E+00 - 1.7E+00)

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)
** (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

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

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	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	7.8E+00 1.5E+02	-2.3E+02 (0 / 4) (-3.5E+02 - -1.1E+02)	3 miles SSE (#216)	-2.2E+02 (0 / 2) (-2.4E+02 - -2.0E+02)	no samples
Cesium-137	4/ 0	1.1E+01 1.8E+02	1.1E+02 (4 / 4) (4.2E+01 - 2.0E+02)	1 mile SW (#215)	1.5E+02 (2 / 2) (1.1E+02 - 2.0E+02)	no samples
Manganese-54	4/ 0	9.6E+00 ---	2.9E+00 (0 / 4) (-8.0E-01 - 1.1E+01)	1 mile SW (#215)	5.4E+00 (0 / 2) (0.0E+00 - 1.1E+01)	no samples
Iron-59	4/ 0	1.8E+01 ---	-1.7E+01 (0 / 4) (-2.7E+01 - 3.6E+00)	1 mile SW (#215)	-8.1E+00 (0 / 2) (-2.0E+01 - 3.6E+00)	no samples
Cobalt-58	4/ 0	7.1E+00 ---	1.7E+01 (3 / 4) (-4.1E+00 - 4.7E+01)	1 mile SW (#215)	3.2E+01 (2 / 2) (1.6E+01 - 4.7E+01)	no samples
Cobalt-60	4/ 0	7.4E+00 ---	9.0E+01 (4 / 4) (4.1E+01 - 1.5E+02)	1 mile SW (#215)	9.8E+01 (2 / 2) (4.1E+01 - 1.5E+02)	no samples
Zinc-65	4/ 0	1.8E+01 ---	-1.7E+02 (0 / 4) (-2.6E+02 - -6.9E+01)	3 miles SSE (#216)	-1.6E+02 (0 / 2) (-1.8E+02 - -1.5E+02)	no samples
Zirconium-95	4/ 0	2.0E+01 ---	-1.6E+02 (0 / 4) (-2.1E+02 - -1.0E+02)	3 miles SSE (#216)	-1.3E+02 (0 / 2) (-1.5E+02 - -1.0E+02)	no samples
Niobium-95	4/ 0	1.1E+01 ---	-1.6E+01 (0 / 4) (-3.3E+01 - -7.3E-02)	1 mile SW (#215)	-1.6E+01 (0 / 2) (-2.6E+01 - -6.2E+00)	no samples
Barium-140	4/ 0	5.6E+01 ---	-4.3E+01 (0 / 4) (-6.5E+01 - -2.1E+01)	1 mile SW (#215)	-3.8E+01 (0 / 2) (-5.5E+01 - -2.1E+01)	no samples
Lanthanum-140	4/ 0	1.7E+01 ---	-4.7E+00 (0 / 4) (-6.8E+00 - -8.7E-01)	3 miles SSE (#216)	-3.1E+00 (0 / 2) (-5.2E+00 - -8.7E-01)	no samples

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)
** (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Banana Leaves UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	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	27/ 0	2.1E+01 6.0E+01	-1.0E+01 (0 / 20) (-5.6E+01 - 1.1E+01)	1 mile N (#001)	-1.4E+00 (0 / 6) (-2.1E+01 - 1.1E+01)	-2.0E+01 (0 / 7) (-1.1E+02 - 3.6E+00)
Cesium-134	27/ 0	2.7E+00 6.0E+01	-4.8E+00 (0 / 20) (-1.0E+01 --1.2E+00)	1 mile N (#001)	-3.7E+00 (0 / 6) (-1.0E+01 --1.8E+00)	-4.2E+00 (0 / 7) (-7.6E+00 --8.4E-01)
Cesium-137	27/ 0	3.1E+00 6.0E+01	-9.5E-01 (0 / 20) (-4.6E+00 - 1.5E+00)	1 mile N (#001)	-8.0E-01 (0 / 6) (-2.9E+00 - 2.4E-01)	-8.6E-01 (0 / 7) (-2.7E+00 - 6.8E-01)
Manganese-54	27/ 0	3.3E+00 ---	-8.3E-01 (0 / 20) (-2.4E+00 - 8.8E-01)	1 mile N (#001)	-6.0E-01 (0 / 6) (-2.4E+00 - 8.8E-01)	-1.5E+00 (0 / 7) (-3.0E+00 - 1.5E+00)
Iron-59	27/ 0	1.1E+01 ---	-4.6E+00 (0 / 20) (-1.1E+01 - 5.3E+00)	1 mile N (#001)	-2.8E+00 (0 / 6) (-7.7E+00 - 5.3E+00)	-5.7E+00 (0 / 7) (-1.1E+01 - 3.1E+00)
Cobalt-58	27/ 0	3.7E+00 ---	-1.3E+00 (0 / 20) (-4.8E+00 - 2.1E+00)	1 mile N (#001)	-1.4E-01 (0 / 6) (-1.3E+00 - 1.1E+00)	-1.9E+00 (0 / 7) (-3.8E+00 --8.9E-02)
Cobalt-60	27/ 0	3.6E+00 ---	-9.1E-01 (0 / 20) (-4.1E+00 - 1.2E+00)	10 miles WSW (#037)	-1.1E-01 (0 / 7) (-1.2E+00 - 1.5E+00)	-1.1E-01 (0 / 7) (-1.2E+00 - 1.5E+00)
Zinc-65	27/ 0	9.5E+00 ---	-6.7E+00 (0 / 20) (-1.6E+01 - 3.2E+00)	1 mile N (#001)	-5.7E+00 (0 / 6) (-1.6E+01 --3.9E-01)	-5.9E+00 (0 / 7) (-1.3E+01 - 9.5E-01)
Zirconium-95	27/ 0	8.0E+00 ---	-4.1E+00 (0 / 20) (-1.2E+01 - 4.4E+00)	1 mile N (#001)	-3.2E+00 (0 / 6) (-1.0E+01 - 3.9E+00)	-5.3E+00 (0 / 7) (-9.7E+00 --4.6E-01)
Niobium-95	27/ 0	4.6E+00 ---	-5.0E-01 (0 / 20) (-3.2E+00 - 2.8E+00)	1 mile N (#001)	-1.6E-01 (0 / 6) (-3.2E+00 - 1.3E+00)	-1.4E+00 (0 / 7) (-5.0E+00 - 8.0E-01)
Barium-140	27/ 0	3.3E+01 ---	-9.6E+00 (0 / 20) (-5.7E+01 - 7.8E+00)	1 mile N (#001)	-3.7E+00 (0 / 6) (-2.0E+01 - 2.7E+00)	-1.8E+01 (0 / 7) (-4.8E+01 --2.9E+00)
Lanthanum-140	27/ 0	7.1E+00 ---	-1.0E+00 (0 / 20) (-6.6E+00 - 2.2E+00)	1 mile N (#001)	-2.5E-01 (0 / 6) (-3.5E+00 - 1.8E+00)	-1.7E+00 (0 / 7) (-5.4E+00 - 9.0E-01)

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)
** (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Cana Leaves UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	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	6/ 0	1.5E+01 6.0E+01	2.2E+00 (0 / 4) (-1.4E+00 - 5.7E+00)	1 mile NNW (#016)	5.7E+00 (0 / 1) (5.7E+00 - 5.7E+00)	-5.4E+00 (0 / 2) (-5.5E+00 --5.4E+00)
Cesium-134	6/ 0	2.7E+00 6.0E+01	-3.0E+00 (0 / 4) (-5.8E+00 --5.0E-01)	1 mile NW (#015)	-5.0E-01 (0 / 1) (-5.0E-01 --5.0E-01)	-3.2E+00 (0 / 2) (-4.5E+00 --2.0E+00)
Cesium-137	6/ 0	3.2E+00 6.0E+01	-8.7E-01 (0 / 4) (-2.3E+00 - 1.0E+00)	1 mile N (#001)	-6.3E-01 (0 / 2) (-2.3E+00 - 1.0E+00)	-2.3E+00 (0 / 2) (-2.4E+00 --2.1E+00)
Manganese-54	6/ 0	3.5E+00 ---	3.2E-01 (0 / 4) (-1.3E+00 - 2.6E+00)	1 mile NW (#015)	2.6E+00 (0 / 1) (2.6E+00 - 2.6E+00)	-2.3E-01 (0 / 2) (-1.5E+00 - 1.0E+00)
Iron-59	6/ 0	1.2E+01 ---	-2.2E+00 (0 / 4) (-8.2E+00 - 3.8E+00)	1 mile NNW (#016)	3.8E+00 (0 / 1) (3.8E+00 - 3.8E+00)	-4.3E+00 (0 / 2) (-9.5E+00 - 8.3E-01)
Cobalt-58	6/ 0	3.9E+00 ---	2.6E-02 (0 / 4) (-3.0E+00 - 1.5E+00)	1 mile NW (#015)	1.5E+00 (0 / 1) (1.5E+00 - 1.5E+00)	-1.0E+00 (0 / 2) (-3.1E+00 - 1.1E+00)
Cobalt-60	6/ 0	3.8E+00 ---	3.0E-01 (0 / 4) (-1.4E+00 - 2.1E+00)	1 mile NNW (#016)	2.1E+00 (0 / 1) (2.1E+00 - 2.1E+00)	2.2E-01 (0 / 2) (-1.7E+00 - 2.2E+00)
Zinc-65	6/ 0	9.9E+00 ---	-4.6E+00 (0 / 4) (-1.2E+01 - 4.6E+00)	1 mile NW (#015)	4.6E+00 (0 / 1) (4.6E+00 - 4.6E+00)	-3.9E+00 (0 / 2) (-6.7E+00 --1.1E+00)
Zirconium-95	6/ 0	8.1E+00 ---	-3.0E+00 (0 / 4) (-8.7E+00 - 6.2E-01)	1 mile NNW (#016)	6.2E-01 (0 / 1) (6.2E-01 - 6.2E-01)	-1.4E+00 (0 / 2) (-2.9E+00 - 0.0E+00)
Niobium-95	6/ 0	4.6E+00 ---	-6.7E-01 (0 / 4) (-2.1E+00 - 1.2E+00)	10 miles WSW (#037)	8.6E-02 (0 / 2) (-2.1E+00 - 2.2E+00)	8.6E-02 (0 / 2) (-2.1E+00 - 2.2E+00)
Barium-140	6/ 0	2.9E+01 ---	-6.4E+00 (0 / 4) (-1.0E+01 - 2.0E+00)	1 mile N (#001)	-4.1E+00 (0 / 2) (-1.0E+01 - 2.0E+00)	-1.6E+01 (0 / 2) (-3.5E+01 - 3.0E+00)
Lanthanum-140	6/ 0	5.9E+00 ---	1.1E+00 (0 / 4) (-1.0E+00 - 3.2E+00)	1 mile N (#001)	1.8E+00 (0 / 2) (4.9E-01 - 3.2E+00)	1.1E+00 (0 / 2) (-2.3E+00 - 4.4E+00)

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)

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

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Turnip Greens UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	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	4/ 0	7.2E+00 6.0E+01	1.9E+00 (0 / 2) (9.3E-01 - 2.8E+00)	1 mile NNW (#016)	1.9E+00 (0 / 2) (9.3E-01 - 2.8E+00)	1.4E+00 (0 / 2) (-1.1E+00 - 3.9E+00)
Cesium-134	4/ 0	1.4E+00 6.0E+01	-1.2E+00 (0 / 2) (-1.4E+00 - -1.0E+00)	1 mile NNW (#016)	-1.2E+00 (0 / 2) (-1.4E+00 - -1.0E+00)	-2.3E+00 (0 / 2) (-3.8E+00 - -8.2E-01)
Cesium-137	4/ 0	1.8E+00 6.0E+01	9.0E-01 (0 / 2) (5.8E-01 - 1.2E+00)	1 mile NNW (#016)	9.0E-01 (0 / 2) (5.8E-01 - 1.2E+00)	3.1E-01 (0 / 2) (1.9E-02 - 6.1E-01)
Manganese-54	4/ 0	1.8E+00 ---	-5.7E-01 (0 / 2) (-1.2E+00 - 2.6E-02)	10 miles WSW (#037)	-1.3E-01 (0 / 2) (-3.9E-01 - 1.3E-01)	-1.3E-01 (0 / 2) (-3.9E-01 - 1.3E-01)
Iron-59	4/ 0	6.3E+00 ---	-4.9E-01 (0 / 2) (-1.1E+00 - 1.5E-01)	10 miles WSW (#037)	9.1E-01 (0 / 2) (-1.1E+00 - 2.9E+00)	9.1E-01 (0 / 2) (-1.1E+00 - 2.9E+00)
Cobalt-58	4/ 0	2.1E+00 ---	-1.1E-01 (0 / 2) (-4.0E-01 - 1.8E-01)	10 miles WSW (#037)	4.4E-01 (0 / 2) (2.1E-01 - 6.8E-01)	4.4E-01 (0 / 2) (2.1E-01 - 6.8E-01)
Cobalt-60	4/ 0	2.1E+00 ---	4.1E-01 (0 / 2) (9.1E-02 - 7.3E-01)	1 mile NNW (#016)	4.1E-01 (0 / 2) (9.1E-02 - 7.3E-01)	-1.1E-01 (0 / 2) (-8.2E-01 - 5.9E-01)
Zinc-65	4/ 0	5.7E+00 ---	-7.9E-01 (0 / 2) (-1.7E+00 - 1.4E-01)	1 mile NNW (#016)	-7.9E-01 (0 / 2) (-1.7E+00 - 1.4E-01)	-2.7E+00 (0 / 2) (-4.1E+00 - -1.3E+00)
Zirconium-95	4/ 0	4.3E+00 ---	-5.4E-02 (0 / 2) (-1.5E+00 - 1.4E+00)	1 mile NNW (#016)	-5.4E-02 (0 / 2) (-1.5E+00 - 1.4E+00)	-5.8E-01 (0 / 2) (-8.6E-01 - -2.9E-01)
Niobium-95	4/ 0	2.4E+00 ---	-6.0E-01 (0 / 2) (-6.6E-01 - -5.4E-01)	1 mile NNW (#016)	-6.0E-01 (0 / 2) (-6.6E-01 - -5.4E-01)	-8.1E-01 (0 / 2) (-8.8E-01 - -7.5E-01)
Barium-140	4/ 0	1.4E+01 ---	-1.0E+00 (0 / 2) (-4.5E+00 - 2.4E+00)	10 miles WSW (#037)	2.6E+00 (0 / 2) (1.2E+00 - 4.0E+00)	2.6E+00 (0 / 2) (1.2E+00 - 4.0E+00)
Lanthanum-140	4/ 0	2.2E+00 ---	0.0E+00 (0 / 2) (0.0E+00 - 0.0E+00)	10 miles WSW (#037)	7.2E-01 (0 / 2) (-1.2E-01 - 1.6E+00)	7.2E-01 (0 / 2) (-1.2E-01 - 1.6E+00)

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)

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

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Collard Greens — UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN (f) ** RANGE	LOCATION WITH HIGHEST ANNUAL MEAN		CONTROL LOCATIONS MEAN (f) ** RANGE
				LOCATION INFORMATION	MEAN (f) ** RANGE	
Iodine-131	4/ 0	6.9E+00 6.0E+01	-9.4E-01 (0 / 3) (-3.6E+00 - 2.6E+00)	10 miles WSW (#037)	-4.2E-01 (0 / 1) (-4.2E-01 - -4.2E-01)	-4.2E-01 (0 / 1) (-4.2E-01 - -4.2E-01)
Cesium-134	4/ 0	1.1E+00 6.0E+01	-5.8E-01 (0 / 3) (-9.4E-01 - -3.3E-01)	1 mile NW (#015)	-4.1E-01 (0 / 2) (-4.9E-01 - -3.3E-01)	-9.3E-01 (0 / 1) (-9.3E-01 - -9.3E-01)
Cesium-137	4/ 0	1.3E+00 6.0E+01	2.5E-01 (0 / 3) (7.1E-02 - 3.9E-01)	1 mile NNW (#016)	2.7E-01 (0 / 1) (2.7E-01 - 2.7E-01)	2.6E-01 (0 / 1) (2.6E-01 - 2.6E-01)
Manganese-54	4/ 0	1.3E+00 ---	-7.4E-02 (0 / 3) (-4.3E-01 - 5.9E-01)	10 miles WSW (#037,	8.2E-02 (0 / 1) (8.2E-02 - 8.2E-02)	8.2E-02 (0 / 1) (8.2E-02 - 8.2E-02)
Iron-59	4/ 0	4.6E+00 ---	-1.7E-01 (0 / 3) (-2.4E+00 - 1.2E+00)	1 mile NNW (#016)	6.5E-01 (0 / 1) (6.5E-01 - 6.5E-01)	-1.2E+00 (0 / 1) (-1.2E+00 - -1.2E+00)
Cobalt-58	4/ 0	1.5E+00 ---	1.8E-01 (0 / 3) (-2.3E-01 - 6.8E-01)	10 miles WSW (#037)	4.7E-01 (0 / 1) (4.7E-01 - 4.7E-01)	4.7E-01 (0 / 1) (4.7E-01 - 4.7E-01)
Cobalt-60	4/ 0	1.5E+00 ---	2.6E-01 (0 / 3) (-2.3E-02 - 5.2E-01)	1 mile NNW (#016)	5.2E-01 (0 / 1) (5.2E-01 - 5.2E-01)	3.7E-01 (0 / 1) (3.7E-01 - 3.7E-01)
Zinc-65	4/ 0	4.0E+00 ---	-1.2E+00 (0 / 3) (-2.0E+00 - 1.4E-01)	10 miles WSW (#037)	3.5E+00 (0 / 1) (3.5E+00 - 3.5E+00)	3.5E+00 (0 / 1) (3.5E+00 - 3.5E+00)
Zirconium-95	4/ 0	3.1E+00 ---	-2.2E+00 (0 / 3) (-2.8E+00 - -1.7E+00)	10 miles WSW (#037)	-1.6E+00 (0 / 1) (-1.6E+00 - -1.6E+00)	-1.6E+00 (0 / 1) (-1.[illegible]+00 - -1.6E+00)
Niobium-95	4/ 0	1.9E+00 ---	-2.6E-01 (0 / 3) (-1.1E+00 - 3.2E-01)	1 mile NW (#015)	1.5E-01 (0 / 2) (-2.2E-02 - 3.2E-01)	-1.4E-01 (0 / 1) (-1.4E-01 - -1.4E-01)
Barium-140	4/ 0	1.3E+01 ---	2.6E+00 (0 / 3) (1.2E+00 - 4.0E+00)	10 miles WSW (#037)	6.7E+00 (0 / 1) (6.7E+00 - 6.7E+00)	6.7E+00 (0 / 1) (6.7E+00 - 6.7E+00)
Lanthanum-140	4/ 0	2.2E+00 ---	-4.4E-01 (0 / 3) (-7.5E-01 - -9.8E-02)	10 miles WSW (#037)	3.5E-01 (0 / 1) (3.5E-01 - 3.5E-01)	3.5E-01 (0 / 1) (3.5E-01 - 3.5E-01)

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)

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

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Turnip Roots UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN (f) ** RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	MEAN (f) ** RANGE	CONTROL LOCATIONS MEAN (f) ** RANGE
Iodine-131	2/ 0	8.5E+00 6.0E+01	1.2E+00 (0 / 1) (1.2E+00 - 1.2E+00)	10 miles WSW (#037)	2.1E+00 (0 / 1) (2.1E+00 - 2.1E+00)	2.1E+00 (0 / 1) (2.1E+00 - 2.1E+00)
Cesium-134	2/ 0	6.6E-01 6.0E+01	-5.1E-01 (0 / 1) (-5.1E-01 --5.1E-01)	10 miles WSW (#037)	-2.3E-01 (0 / 1) (-2.3E-01 --2.3E-01)	-2.3E-01 (0 / 1) (-2.3E-01 --2.3E-01)
Cesium-137	2/ 0	8.0E-01 6.0E+01	-8.6E-02 (0 / 1) (-8.6E-02 --8.6E-02)	10 miles WSW (#037)	1.5E-01 (0 / 1) (1.5E-01 - 1.5E-01)	1.5E-01 (0 / 1) (1.5E-01 - 1.5E-01)
Manganese-54	2/ 0	8.9E-01 ---	-3.3E-01 (0 / 1) (-3.3E-01 --3.3E-01)	10 miles WSW (#037)	3.5E-01 (0 / 1) (3.5E-01 - 3.5E-01)	3.5E-01 (0 / 1) (3.5E-01 - 3.5E-01)
Iron-59	2/ 0	3.6E+00 ---	6.0E-01 (0 / 1) (6.0E-01 - 6.0E-01)	10 miles WSW (#037)	1.1E+00 (0 / 1) (1.1E+00 - 1.1E+00)	1.1E+00 (0 / 1) (1.1E+00 - 1.1E+00)
Cobalt-58	2/ 0	1.1E+00 ---	-8.4E-02 (0 / 1) (-8.4E-02 --8.4E-02)	10 miles WSW (#037)	3.4E-01 (0 / 1) (3.4E-01 - 3.4E-01)	3.4E-01 (0 / 1) (3.4E-01 - 3.4E-01)
Cobalt-60	2/ 0	9.6E-01 ---	-2.5E-01 (0 / 1) (-2.5E-01 --2.5E-01)	10 miles WSW (#037)	3.2E-01 (0 / 1) (3.2E-01 - 3.2E-01)	3.2E-01 (0 / 1) (3.2E-01 - 3.2E-01)
Zinc-65	2/ 0	2.8E+00 ---	-1.2E+00 (0 / 1) (-1.2E+00 --1.2E+00)	1 mile NNW (#016)	-1.2E+00 (0 / 1) (-1.2E+00 --1.2E+00)	-1.7E+00 (0 / 1) (-1.7E+00 --1.7E+00)
Zirconium-95	2/ 0	2.2E+00 ---	-4.7E-01 (0 / 1) (-4.7E-01 --4.7E-01)	10 miles WSW (#037)	-3.4E-01 (0 / 1) (-3.4E-01 --3.4E-01)	-3.4E-01 (0 / 1) (-3.4E-01 --3.4E-01)
Niobium-95	2/ 0	1.4E+00 ---	-2.1E-01 (0 / 1) (-2.1E-01 --2.1E-01)	10 miles WSW (#037)	8.9E-01 (0 / 1) (8.9E-01 - 8.9E-01)	8.9E-01 (0 / 1) (8.9E-01 - 8.9E-01)
Barium-140	2/ 0	1.2E+01 ---	-2.6E+00 (0 / 1) (-2.6E+00 --2.6E+00)	1 mile NNW (#016)	-2.6E+00 (0 / 1) (-2.6E+00 --2.6E+00)	-1.0E+01 (0 / 1) (-1.0E+01 --1.0E+01)
Lanthanum-140	2/ 0	1.8E+00 ---	4.1E-01 (0 / 1) (4.1E-01 - 4.1E-01)	10 miles WSW (#037)	5.9E-01 (0 / 1) (5.9E-01 - 5.9E-01)	5.9E-01 (0 / 1) (5.9E-01 - 5.9E-01)

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)
** (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Goose

UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	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	1.2E+01 1.3E+02	4.8E+00 (0 / 2) (4.0E+00 ↔ 5.6E+00)	2-4 miles SW-WS (#Z42)	4.8E+00 (0 / 2) (4.0E+00 ↔ 5.6E+00)	no samples
Cesium-137	2/ 0	9.9E+00 1.5E+02	1.4E+00 (0 / 2) (-8.5E-01 ↔ 3.6E+00)	2-4 miles SW-WS (#Z42)	1.4E+00 (0 / 2) (-8.5E-01 ↔ 3.6E+00)	no samples
Manganese-54	2/ 0	1.1E+01 1.3E+02	-3.9E+00 (0 / 2) (-7.0E+00 ↔-8.2E-01)	2-4 miles SW-WS (#Z42)	-3.9E+00 (0 / 2) (-7.0E+00 ↔-8.2E-01)	no samples
Iron-59	2/ 0	7.2E+01 2.6E+02	-2.9E+01 (0 / 2) (-5.2E+01 ↔-4.9E+00)	2-4 miles SW-WS (#Z42)	-2.9E+01 (0 / 2) (-5.2E+01 ↔-4.9E+00)	no samples
Cobalt-58	2/ 0	1.8E+01 1.3E+02	3.9E+00 (0 / 2) (-1.6E+00 ↔ 9.3E+00)	2-4 miles SW-WS (#Z42)	3.9E+00 (0 / 2) (-1.6E+00 ↔ 9.3E+00)	no samples
Cobalt-60	2/ 0	1.2E+01 1.3E+02	2.6E+00 (0 / 2) (3.0E-01 ↔ 4.9E+00)	2-4 miles SW-WS (#Z42)	2.6E+00 (0 / 2) (3.0E-01 ↔ 4.9E+00)	no samples
Zinc-65	2/ 0	2.7E+01 2.6E+02	7.8E+00 (0 / 2) (-1.9E+00 ↔ 1.7E+01)	2-4 miles SW-WS (#Z42)	7.8E+00 (0 / 2) (-1.9E+00 ↔ 1.7E+01)	no samples
Zirconium-95	2/ 0	3.4E+01 ---	-1.9E+00 (0 / 2) (-5.8E+00 ↔ 2.0E+00)	2-4 miles SW-WS (#Z42)	-1.9E+00 (0 / 2) (-5.8E+00 ↔ 2.0E+00)	no samples
Niobium-95	2/ 0	3.8E+01 ---	4.1E+00 (0 / 2) (8.2E+00 ↔ 8.2E+00)	2-4 miles SW-WS (#Z42)	4.1E+00 (0 / 2) (8.2E+00 ↔ 8.2E+00)	no samples
Barium-140	2/ 0	1.9E+03 ---	9.1E+02 (0 / 2) (1.9E+02 ↔ 1.6E+03)	2-4 miles SW-WS (#Z42)	9.1E+02 (0 / 2) (1.9E+02 ↔ 1.6E+03)	no samples
Lanthanum-140	2/ 0	5.4E+02 ---	-5.9E+01 (0 / 2) (-7.8E+01 ↔-3.9E+01)	2-4 miles SW-WS (#Z42)	-5.9E+01 (0 / 2) (-7.8E+01 ↔-3.9E+01)	no samples

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)

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

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Dove UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	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	2.0E+01 1.3E+02	7.2E+00 (0 / 1) (7.2E+00 ↔ 7.2E+00)	0-2 miles NW-NN (#Z21)	7.2E+00 (0 / 1) (7.2E+00 ↔ 7.2E+00)	no samples
Cesium-137	1/ 0	1.7E+01 1.5E+02	1.3E+00 (0 / 1) (1.3E+00 ↔ 1.3E+00)	0-2 miles NW-NN (#Z21)	1.3E+00 (0 / 1) (1.3E+00 ↔ 1.3E+00)	no samples
Manganese-54	1/ 0	2.0E+01 1.3E+02	1.1E+01 (0 / 1) (1.1E+01 ↔ 1.1E+01)	0-2 miles NW-NN (#Z21)	1.1E+01 (0 / 1) (1.1E+01 ↔ 1.1E+01)	no samples
Iron-59	1/ 0	1.4E+02 2.6E+02	1.3E+01 (0 / 1) (1.3E+01 ↔ 1.3E+01)	0-2 miles NW-NN (#Z21)	1.3E+01 (0 / 1) (1.3E+01 ↔ 1.3E+01)	no samples
Cobalt-58	1/ 0	3.1E+01 1.3E+02	-1.9E+00 (0 / 1) (-1.9E+00 ↔-1.9E+00)	0-2 miles NW-NN (#Z21)	-1.9E+00 (0 / 1) (-1.9E+00 ↔-1.9E+00)	no samples
Cobalt-60	1/ 0	2.0E+01 1.3E+02	5.0E+00 (0 / 1) (5.0E+00 ↔ 5.0E+00)	0-2 miles NW-NN (#Z21)	5.0E+00 (0 / 1) (5.0E+00 ↔ 5.0E+00)	no samples
Zinc-65	1/ 0	4.7E+01 2.6E+02	-3.2E+01 (0 / 1) (-3.2E+01 ↔-3.2E+01)	0-2 miles NW-NN (#Z21)	-3.2E+01 (0 / 1) (-3.2E+01 ↔-3.2E+01)	no samples
Zirconium-95	1/ 0	5.9E+01 ---	7.7E+00 (0 / 1) (7.7E+00 ↔ 7.7E+00)	0-2 miles NW-NN (#Z21)	7.7E+00 (0 / 1) (7.7E+00 ↔ 7.7E+00)	no samples
Niobium-95	1/ 0	6.9E+01 ---	4.4E+01 (0 / 1) (4.4E+01 ↔ 4.4E+01)	0-2 miles NW-NN (#Z21)	4.4E+01 (0 / 1) (4.4E+01 ↔ 4.4E+01)	no samples
Barium-140	1/ 0	3.3E+03 ---	1.2E+03 (0 / 1) (1.2E+03 ↔ 1.2E+03)	0-2 miles NW-NN (#Z21)	1.2E+03 (0 / 1) (1.2E+03 ↔ 1.2E+03)	no samples
Lanthanum-140	1/ 0	9.7E+02 ---	-3.9E+02 (0 / 1) (-3.9E+02 ↔-3.9E+02)	0-2 miles NW-NN (#Z21)	-3.9E+02 (0 / 1) (-3.9E+02 ↔-3.9E+02)	no samples

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)
** (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Quail UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	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	2.2E+01 1.3E+02	9.2E+00 (0 / 1) (9.2E+00 - 9.2E+00)	2-4 miles SE-SS (#Z62)	9.2E+00 (0 / 1) (9.2E+00 - 9.2E+00)	no samples
Cesium-137	1/ 0	1.9E+01 1.5E+02	-1.6E+00 (0 / 1) (-1.6E+00 --1.6E+00)	2-4 miles SE-SS (#Z62)	-1.6E+00 (0 / 1) (-1.6E+00 --1.6E+00)	no samples
Manganese-54	1/ 0	2.4E+01 1.3E+02	9.8E+00 (0 / 1) (9.8E+00 - 9.8E+00)	2-4 miles SE-SS (#Z62)	9.8E+00 (0 / 1) (9.8E+00 - 9.8E+00)	no samples
Iron-59	1/ 0	1.5E+02 2.6E+02	5.5E+01 (0 / 1) (5.5E+01 - 5.5E+01)	2-4 miles SE-SS (#Z62)	5.5E+01 (0 / 1) (5.5E+01 - 5.5E+01)	no samples
Cobalt-58	1/ 0	3.6E+01 1.3E+02	-4.9E+00 (0 / 1) (-4.9E+00 --4.9E+00)	2-4 miles SE-SS (#Z62)	-4.9E+00 (0 / 1) (-4.9E+00 --4.9E+00)	no samples
Cobalt-60	1/ 0	2.1E+01 1.3E+02	-2.5E+00 (0 / 1) (-2.5E+00 --2.5E+00)	2-4 miles SE-SS (#Z62)	-2.5E+00 (0 / 1) (-2.5E+00 --2.5E+00)	no samples
Zinc-65	1/ 0	5.3E+01 2.6E+02	7.8E-01 (0 / 1) (7.8E-01 - 7.8E-01)	2-4 miles SE-SS (#Z62)	7.8E-01 (0 / 1) (7.8E-01 - 7.8E-01)	no samples
Zirconium-95	1/ 0	6.8E+01 ---	-7.4E+00 (0 / 1) (-7.4E+00 --7.4E+00)	2-4 miles SE-SS (#Z62)	-7.4E+00 (0 / 1) (-7.4E+00 --7.4E+00)	no samples
Niobium-95	1/ 0	7.7E+01 ---	2.8E+01 (0 / 1) (2.8E+01 - 2.8E+01)	2-4 miles SE-SS (#Z62)	2.8E+01 (0 / 1) (2.8E+01 - 2.8E+01)	no samples
Barium-140	1/ 0	3.4E+03 ---	-4.5E+02 (0 / 1) (-4.5E+02 --4.5E+02)	2-4 miles SE-SS (#Z62)	-4.5E+02 (0 / 1) (-4.5E+02 --4.5E+02)	no samples
Lanthanum-140	1/ 0	9.9E+02 ---	-8.7E+00 (0 / 1) (-8.7E+00 --8.7E+00)	2-4 miles SE-SS (#Z62)	-8.7E+00 (0 / 1) (-8.7E+00 --8.7E+00)	no samples

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)

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

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Pigeon UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	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	1.9E+01 1.3E+02	-4.9E+01 (0 / 1) (-4.9E+01 ↔-4.9E+01)	0-2 miles N-NNE (#Z11)	-4.9E+01 (0 / 1) (-4.9E+01 ↔-4.9E+01)	no samples
Cesium-137	1/ 0	2.0E+01 1.5E+02	-9.6E+00 (0 / 1) (-9.6E+00 ↔-9.6E+00)	0-2 miles N-NNE (#Z11)	-9.6E+00 (0 / 1) (-9.6E+00 ↔-9.6E+00)	no samples
Manganese-54	1/ 0	2.5E+01 1.3E+02	-1.3E+01 (0 / 1) (-1.3E+01 ↔-1.3E+01)	0-2 miles N-NNE (#Z11)	-1.3E+01 (0 / 1) (-1.3E+01 ↔-1.3E+01)	no samples
Iron-59	1/ 0	1.0E+02 2.6E+02	-2.5E+01 (0 / 1) (-2.5E+01 ↔-2.5E+01)	0-2 miles N-NNE (#Z11)	-2.5E+01 (0 / 1) (-2.5E+01 ↔-2.5E+01)	no samples
Cobalt-58	1/ 0	3.5E+01 1.3E+02	-3.6E+01 (0 / 1) (-3.6E+01 ↔-3.6E+01)	0-2 miles N-NNE (#Z11)	-3.6E+01 (0 / 1) (-3.6E+01 ↔-3.6E+01)	no samples
Cobalt-60	1/ 0	2.0E+01 1.3E+02	-9.2E+00 (0 / 1) (-9.2E+00 ↔-9.2E+00)	0-2 miles N-NNE (#Z11)	-9.2E+00 (0 / 1) (-9.2E+00 ↔-9.2E+00)	no samples
Zinc-65	1/ 0	5.2E+01 2.6E+02	-3.7E+01 (0 / 1) (-3.7E+01 ↔-3.7E+01)	0-2 miles N-NNE (#Z11)	-3.7E+01 (0 / 1) (-3.7E+01 ↔-3.7E+01)	no samples
Zirconium-95	1/ 0	9.3E+01 ---	-6.1E+01 (0 / 1) (-6.1E+01 ↔-6.1E+01)	0-2 miles N-NNE (#Z11)	-6.1E+01 (0 / 1) (-6.1E+01 ↔-6.1E+01)	no samples
Niobium-95	1/ 0	7.5E+01 ---	2.4E+01 (0 / 1) (2.4E+01 ↔ 2.4E+01)	0-2 miles N-NNE (#Z11)	2.4E+01 (0 / 1) (2.4E+01 ↔ 2.4E+01)	no samples
Barium-140	1/ 0	2.3E+03 ---	4.0E+02 (0 / 1) (4.0E+02 ↔ 4.0E+02)	0-2 miles N-NNE (#Z11)	4.0E+02 (0 / 1) (4.0E+02 ↔ 4.0E+02)	no samples
Lanthanum-140	1/ 0	7.4E+02 ---	1.5E+02 (0 / 1) (1.5E+02 ↔ 1.5E+02)	0-2 miles N-NNE (#Z11)	1.5E+02 (0 / 1) (1.5E+02 ↔ 1.5E+02)	no samples

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)
** (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Piscivorous Fish   UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	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	1.7E+01 1.3E+02	-3.6E+01 (0 / 1) (-3.6E+01 --3.6E+01)	3 miles SSE (#216)	-3.6E+01 (0 / 1) (-3.6E+01 --3.6E+01)	no samples
Cesium-137	1/ 0	2.1E+01 1.5E+02	3.6E+00 (0 / 1) (3.6E+00 - 3.6E+00)	3 miles SSE (#216)	3.6E+00 (0 / 1) (3.6E+00 - 3.6E+00)	no samples
Manganese-54	1/ 0	1.7E+01 1.3E+02	-1.0E+01 (0 / 1) (-1.0E+01 --1.0E+01)	3 miles SSE (#216)	-1.0E+01 (0 / 1) (-1.0E+01 --1.0E+01)	no samples
Iron-59	1/ 0	5.4E+01 2.6E+02	8.4E+00 (0 / 1) (8.4E+00 - 8.4E+00)	3 miles SSE (#216)	8.4E+00 (0 / 1) (8.4E+00 - 8.4E+00)	no samples
Cobalt-58	1/ 0	2.3E+01 1.3E+02	-4.2E+00 (0 / 1) (-4.2E+00 --4.2E+00)	3 miles SSE (#216)	-4.2E+00 (0 / 1) (-4.2E+00 --4.2E+00)	no samples
Cobalt-60	1/ 0	2.0E+01 1.3E+02	9.1E+00 (0 / 1) (9.1E+00 - 9.1E+00)	3 miles SSE (#216)	9.1E+00 (0 / 1) (9.1E+00 - 9.1E+00)	no samples
Zinc-65	1/ 0	3.9E+01 2.6E+02	-4.7E+01 (0 / 1) (-4.7E+01 --4.7E+01)	3 miles SSE (#216)	-4.7E+01 (0 / 1) (-4.7E+01 --4.7E+01)	no samples
Zirconium-95	1/ 0	5.3E+01 ---	-3.7E+01 (0 / 1) (-3.7E+01 --3.7E+01)	3 miles SSE (#216)	-3.7E+01 (0 / 1) (-3.7E+01 --3.7E+01)	no samples
Niobium-95	1/ 0	3.3E+01 ---	-2.0E+00 (0 / 1) (-2.0E+00 --2.0E+00)	3 miles SSE (#216)	-2.0E+00 (0 / 1) (-2.0E+00 --2.0E+00)	no samples
Barium-140	1/ 0	2.9E+02 ---	-5.8E+01 (0 / 1) (-5.8E+01 --5.8E+01)	3 miles SSE (#216)	-5.8E+01 (0 / 1) (-5.8E+01 --5.8E+01)	no samples
Lanthanum-140	1/ 0	9.1E+01 ---	6.7E+00 (0 / 1) (6.7E+00 - 6.7E+00)	3 miles SSE (#216)	6.7E+00 (0 / 1) (6.7E+00 - 6.7E+00)	no samples

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)
** (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Arthropodivorous Fish UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	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	5/ 0	2.8E+01 1.3E+02	-1.9E+01 (0 / 3) (-2.9E+01 --6.5E+00)	S N/A (#249)	4.0E+00 (0 / 2) (-6.5E+00 - 1.5E+01)	4.0E+00 (0 / 2) (-6.5E+00 - 1.5E+01)
Cesium-137	5/ 0	3.0E+01 1.5E+02	1.1E+00 (0 / 3) (-1.4E+01 - 1.6E+01)	3 miles SSE (#216)	8.7E+00 (0 / 2) (1.8E+00 - 1.6E+01)	3.0E-01 (0 / 2) (-2.2E+00 - 2.8E+00)
Manganese-54	5/ 0	2.7E+01 1.3E+02	-5.7E+00 (0 / 3) (-1.7E+01 - 4.0E+00)	3 miles SSE (#216)	-2.9E-01 (0 / 2) (-4.6E+00 - 4.0E+00)	-8.5E+00 (0 / 2) (-1.2E+01 --4.9E+00)
Iron-59	5/ 0	9.0E+01 2.6E+02	6.2E+00 (0 / 3) (-2.5E+01 - 2.6E+01)	3 miles SSE (#216)	2.2E+01 (0 / 2) (1.7E+01 - 2.6E+01)	-1.2E+01 (0 / 2) (-1.8E+01 --6.8E+00)
Cobalt-58	5/ 0	3.4E+01 1.3E+02	-7.4E+00 (0 / 3) (-2.2E+01 - 4.8E+00)	S N/A (#249)	1.2E+00 (0 / 2) (-2.9E+00 - 5.4E+00)	1.2E+00 (0 / 2) (-2.9E+00 - 5.4E+00)
Cobalt-60	5/ 0	3.0E+01 1.3E+02	1.2E+01 (0 / 3) (7.7E+00 - 1.4E+01)	2 miles E (#214)	1.4E+01 (0 / 1) (1.4E+01 - 1.4E+01)	2.7E-01 (0 / 2) (-1.6E+00 - 2.1E+00)
Zinc-65	5/ 0	6.1E+01 2.6E+02	-8.5E+00 (0 / 3) (-3.6E+01 - 1.0E+01)	3 miles SSE (#216)	5.2E+00 (0 / 2) (1.0E+01 - 1.0E+01)	-6.1E+00 (0 / 2) (-2.0E+01 - 7.6E+00)
Zirconium-95	5/ 0	7.1E+01 ---	-5.5E+01 (0 / 3) (-9.7E+01 --2.3E+01)	S N/A (#249)	-1.3E+01 (0 / 2) (-1.5E+01 --1.1E+01)	-1.3E+01 (0 / 2) (-1.5E+01 --1.1E+01)
Niobium-95	5/ 0	4.6E+01 ---	-1.3E+01 (0 / 3) (-3.4E+01 - 7.0E+00)	S N/A (#249)	4.7E+00 (0 / 2) (3.7E+00 - 5.8E+00)	4.7E+00 (0 / 2) (3.7E+00 - 5.8E+00)
Barium-140	5/ 0	5.1E+02 ---	-7.1E+01 (0 / 3) (-4.5E+02 - 1.9E+02)	3 miles SSE (#216)	1.2E+02 (0 / 2) (4.6E+01 - 1.9E+02)	9.7E+01 (0 / 2) (8.9E+01 - 1.1E+02)
Lanthanum-140	5/ 0	1.6E+02 ---	-1.4E+01 (0 / 3) (-6.7E+01 - 1.6E+01)	S N/A (#249)	1.1E+02 (0 / 2) (3.8E+00 - 2.2E+02)	1.1E+02 (0 / 2) (3.8E+00 - 2.2E+02)

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)
** (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Crustacean Shrimp UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	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	2.0E+01 1.3E+02	5.4E-01 (0 / 2) (-4.4E+00 - 5.5E+00)	>10 miles (#222)	5.4E-01 (0 / 2) (-4.4E+00 - 5.5E+00)	no samples
Cesium-137	2/ 0	1.7E+01 1.5E+02	-8.0E+00 (0 / 2) (-1.3E+01 --3.2E+00)	>10 miles (#222)	-8.0E+00 (0 / 2) (-1.3E+01 --3.2E+00)	no samples
Manganese-54	2/ 0	1.8E+01 1.3E+02	-4.8E+00 (0 / 2) (-7.4E+00 --2.2E+00)	>10 miles (#222)	-4.8E+00 (0 / 2) (-7.4E+00 --2.2E+00)	no samples
Iron-59	2/ 0	5.9E+01 2.6E+02	-1.2E+01 (0 / 2) (-3.0E+01 - 6.6E+00)	>10 miles (#222)	-1.2E+01 (0 / 2) (-3.0E+01 - 6.6E+00)	no samples
Cobalt-58	2/ 0	2.2E+01 1.3E+02	-8.9E-01 (0 / 2) (-1.7E+00 --8.4E-02)	>10 miles (#222)	-8.9E-01 (0 / 2) (-1.7E+00 --8.4E-02)	no samples
Cobalt-60	2/ 0	1.9E+01 1.3E+02	-2.5E+00 (0 / 2) (-3.3E+00 --1.7E+00)	>10 miles (#222)	-2.5E+00 (0 / 2) (-3.3E+00 --1.7E+00)	no samples
Zinc-65	2/ 0	4.2E+01 2.6E+02	-6.1E+00 (0 / 2) (-1.2E+01 --5.8E-01)	>10 miles (#222)	-6.1E+00 (0 / 2) (-1.2E+01 --5.8E-01)	no samples
Zirconium-95	2/ 0	5.1E+01 ---	1.0E+01 (0 / 2) (3.5E+00 - 1.7E+01)	>10 miles (#222)	1.0E+01 (0 / 2) (3.5E+00 - 1.7E+01)	no samples
Niobium-95	2/ 0	3.1E+01 ---	4.5E+00 (0 / 2) (-4.9E+00 - 1.4E+01)	>10 miles (#222)	4.5E+00 (0 / 2) (-4.9E+00 - 1.4E+01)	no samples
Barium-140	2/ 0	3.9E+02 ---	2.7E+02 (0 / 2) (1.4E+02 - 3.9E+02)	>10 miles (#222)	2.7E+02 (0 / 2) (1.4E+02 - 3.9E+02)	no samples
Lanthanum-140	2/ 0	1.1E+02 ---	-7.2E+01 (0 / 2) (-1.4E+02 --7.9E+00)	>10 miles (#222)	-7.2E+01 (0 / 2) (-1.4E+02 --7.9E+00)	no samples

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)
** (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Wild Swine

UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	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	3.8E+00 1.3E+02	-2.7E+00 (0 / 1) (-2.7E+00 ↔-2.7E+00)	4-6 miles SE-SS (#Z63)	-2.7E+00 (0 / 1) (-2.7E+00 ↔-2.7E+00)	no samples
Cesium-137	1/ 0	5.1E+00 1.5E+02	6.9E+00 (1 / 1) (6.9E+00 ↔ 6.9E+00)	4-6 miles SE-SS (#Z63)	6.9E+00 (1 / 1) (6.9E+00 ↔ 6.9E+00)	no samples
Manganese-54	1/ 0	4.9E+00 1.3E+02	-1.5E+00 (0 / 1) (-1.5E+00 ↔-1.5E+00)	4-6 miles SE-SS (#Z63)	-1.5E+00 (0 / 1) (-1.5E+00 ↔-1.5E+00)	no samples
Iron-59	1/ 0	2.6E+01 2.6E+02	-1.1E+00 (0 / 1) (-1.1E+00 ↔-1.1E+00)	4-6 miles SE-SS (#Z63)	-1.1E+00 (0 / 1) (-1.1E+00 ↔-1.1E+00)	no samples
Cobalt-58	1/ 0	7.8E+00 1.3E+02	-3.2E+00 (0 / 1) (-3.2E+00 ↔-3.2E+00)	4-6 miles SE-SS (#Z63)	-3.2E+00 (0 / 1) (-3.2E+00 ↔-3.2E+00)	no samples
Cobalt-60	1/ 0	5.1E+00 1.3E+02	4.2E-01 (0 / 1) (4.2E-01 ↔ 4.2E-01)	4-6 miles SE-SS (#Z63)	4.2E-01 (0 / 1) (4.2E-01 ↔ 4.2E-01)	no samples
Zinc-65	1/ 0	1.2E+01 2.6E+02	-9.9E+00 (0 / 1) (-9.9E+00 ↔-9.9E+00)	4-6 miles SE-SS (#Z63)	-9.9E+00 (0 / 1) (-9.9E+00 ↔-9.9E+00)	no samples
Zirconium-95	1/ 0	1.8E+01 ---	-1.8E+00 (0 / 1) (-1.8E+00 ↔-1.8E+00)	4-6 miles SE-SS (#Z63)	-1.8E+00 (0 / 1) (-1.8E+00 ↔-1.8E+00)	no samples
Niobium-95	1/ 0	1.5E+01 ---	-3.4E+00 (0 / 1) (-3.4E+00 ↔-3.4E+00)	4-6 miles SE-SS (#Z63)	-3.4E+00 (0 / 1) (-3.4E+00 ↔-3.4E+00)	no samples
Barium-140	1/ 0	4.5E+02 ---	-1.3E+02 (0 / 1) (-1.3E+02 ↔-1.3E+02)	4-6 miles SE-SS (#Z63)	-1.3E+02 (0 / 1) (-1.3E+02 ↔-1.3E+02)	no samples
Lanthanum-140	1/ 0	1.1E+02 ---	-2.3E+01 (0 / 1) (-2.3E+01 ↔-2.3E+01)	4-6 miles SE-SS (#Z63)	-2.3E+01 (0 / 1) (-2.3E+01 ↔-2.3E+01)	no samples

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)

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

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Rabbit   UNITS: PicoCuries per Kilogram wet weight

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	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	1.7E+01 1.3E+02	-1.4E+01 (0 / 1) (-1.4E+01 ↔-1.4E+01)	2-4 miles E-ESE (#272)	-1.4E+01 (0 / 1) (-1.4E+01 ↔-1.4E+01)	no samples
Cesium-137	1/ 0	1.7E+01 1.5E+02	2.4E+00 (0 / 1) (2.4E+00 ↔ 2.4E+00)	2-4 miles E-ESE (#272)	2.4E+00 (0 / 1) (2.4E+00 ↔ 2.4E+00)	no samples
Manganese-54	1/ 0	1.9E+01 1.3E+02	-4.9E+00 (0 / 1) (-4.9E+00 ↔-4.9E+00)	2-4 miles E-ESE (#272)	-4.9E+00 (0 / 1) (-4.9E+00 ↔-4.9E+00)	no samples
Iron-59	1/ 0	1.1E+02 2.6E+02	-1.0E+01 (0 / 1) (-1.0E+01 ↔-1.0E+01)	2-4 miles E-ESE (#272)	-1.0E+01 (0 / 1) (-1.0E+01 ↔-1.0E+01)	no samples
Cobalt-58	1/ 0	3.7E+01 1.3E+02	1.6E+01 (0 / 1) (1.6E+01 ↔ 1.6E+01)	2-4 miles E-ESE (#272)	1.6E+01 (0 / 1) (1.6E+01 ↔ 1.6E+01)	no samples
Cobalt-60	1/ 0	1.9E+01 1.3E+02	3.2E+00 (0 / 1) (3.2E+00 ↔ 3.2E+00)	2-4 miles E-ESE (#272)	3.2E+00 (0 / 1) (3.2E+00 ↔ 3.2E+00)	no samples
Zinc-65	1/ 0	4.1E+01 2.6E+02	-2.9E+01 (0 / 1) (-2.9E+01 ↔-2.9E+01)	2-4 miles E-ESE (#272)	-2.9E+01 (0 / 1) (-2.9E+01 ↔-2.9E+01)	no samples
Zirconium-95	1/ 0	8.2E+01 ---	-4.8E+01 (0 / 1) (-4.8E+01 ↔-4.8E+01)	2-4 miles E-ESE (#272)	-4.8E+01 (0 / 1) (-4.8E+01 ↔-4.8E+01)	no samples
Niobium-95	1/ 0	7.9E+01 ---	-3.5E+01 (0 / 1) (-3.5E+01 ↔-3.5E+01)	2-4 miles E-ESE (#272)	-3.5E+01 (0 / 1) (-3.5E+01 ↔-3.5E+01)	no samples
Barium-140	1/ 0	5.0E+03 ---	1.9E+03 (0 / 1) (1.9E+03 ↔ 1.9E+03)	2-4 miles E-ESE (#272)	1.9E+03 (0 / 1) (1.9E+03 ↔ 1.9E+03)	no samples
Lanthanum-140	1/ 0	1.4E+03 ---	-8.2E+02 (0 / 1) (-8.2E+02 ↔-8.2E+02)	2-4 miles E-ESE (#272)	-8.2E+02 (0 / 1) (-8.2E+02 ↔-8.2E+02)	no samples

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)
** (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Airborne Particulate UNITS: PicoCuries per Cubic Meter

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	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	258/ 0	1.2E-03 1.0E-02	2.1E-02 (207 / 207) (9.9E-03 - 4.2E-02)	1 mile N (#001)	2.2E-02 (51 / 51) (9.9E-03 - 4.2E-02)	2.2E-02 (51 / 51) (1.1E-02 - 4.2E-02)
Cesium-134	20/ 0	2.2E-04 5.0E-02	-2.3E-04 (0 / 16) (-1.1E-03 - 3.7E-05)	14 miles NNE (#033)	-1.3E-04 (0 / 4) (-2.6E-04 --1.5E-05)	-2.4E-04 (0 / 4) (-5.4E-04 --4.4E-05)
Cesium-137	20/ 0	2.1E-04 6.0E-02	5.5E-07 (0 / 16) (-9.7E-05 - 2.5E-04)	14 miles NNE (#033)	5.1E-05 (0 / 4) (-6.3E-05 - 2.5E-04)	-3.1E-05 (0 / 4) (-1.5E-04 - 7.3E-05)
Manganese-54	20/ 0	2.3E-04 ---	-2.8E-05 (0 / 16) (-2.0E-04 - 1.8E-04)	1 mile NNW (#016)	1.2E-05 (0 / 4) (-9.0E-05 - 9.2E-05)	-7.5E-06 (0 / 4) (-1.0E-04 - 4.9E-05)
Iron-59	20/ 0	1.1E-03 ---	-3.7E-05 (0 / 16) (-9.4E-04 - 7.5E-04)	1 mile N (#001)	-1.1E-05 (0 / 4) (-2.2E-04 - 4.3E-04)	-3.4E-05 (0 / 4) (-3.2E-04 - 2.5E-04)
Cobalt-58	20/ 0	3.7E-04 ---	-5.5E-05 (0 / 16) (-2.0E-04 - 1.5E-04)	14 miles NNE (#033)	6.1E-05 (0 / 4) (-4.9E-05 - 1.5E-04)	-7.9E-05 (0 / 4) (-3.4E-04 - 1.5E-04)
Cobalt-60	20/ 0	2.2E-04 ---	-1.1E-05 (0 / 16) (-3.4E-04 - 1.3E-04)	1 mile NW (#015)	3.1E-05 (0 / 4) (-3.0E-05 - 7.4E-05)	1.5E-05 (0 / 4) (-3.5E-05 - 1.1E-04)
Zinc-65	20/ 0	5.1E-04 ---	-2.4E-04 (0 / 16) (-8.9E-04 - 7.7E-05)	14 miles NNE (#033)	-7.4E-05 (0 / 4) (-2.1E-04 - 7.7E-05)	-3.8E-04 (0 / 4) (-7.7E-04 --1.4E-04)
Zirconium-95	20/ 0	8.4E-04 ---	-3.5E-04 (0 / 16) (-1.1E-03 - 2.1E-04)	10 miles WSW (#037)	4.9E-05 (0 / 4) (-5.6E-04 - 6.8E-04)	4.9E-05 (0 / 4) (-5.6E-04 - 6.8E-04)
Niobium-95	20/ 0	6.9E-04 ---	-5.7E-05 (0 / 16) (-3.5E-04 - 3.0E-04)	10 miles WSW (#037)	5.4E-05 (0 / 4) (-5.8E-04 - 5.9E-04)	5.4E-05 (0 / 4) (-5.8E-04 - 5.9E-04)
Barium-140	20/ 0	1.4E-02 ---	-8.1E-04 (0 / 16) (-8.4E-03 - 6.3E-03)	1 mile NNW (#016)	3.5E-04 (0 / 4) (-3.8E-03 - 6.3E-03)	5.1E-05 (0 / 4) (-7.4E-03 - 1.0E-02)
Lanthanum-140	20/ 0	4.5E-03 ---	4.7E-04 (0 / 16) (-4.7E-03 - 2.5E-03)	14 miles NNE (#033)	6.7E-04 (0 / 4) (-1.2E-03 - 2.5E-03)	3.2E-04 (0 / 4) (-1.8E-04 - 7.7E-04)

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)

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

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Air Iodine UNITS: PicoCuries per Cubic Meter

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN (f) ** RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	MEAN (f) ** RANGE	CONTROL LOCATIONS MEAN (f) ** RANGE
Iodine-131	258/ 0	7.6E-03 7.0E-02	-1.3E-03 (0 / 207) (-1.7E-02 - 1.4E-02)	1 mile NNW (#016)	-9.8E-04 (0 / 52) (-8.7E-03 - 4.9E-03)	-2.2E-03 (0 / 51) (-1.8E-02 - 5.4E-03)

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)
** (f) NUMBER OF POSITIVE MEASUREMENTS / TOTAL MEASUREMENTS AT SPECIFIED LOCATIONS.

TABLE 3

1995 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM ANALYSIS SUMMARY

MEDIUM: Immersion Dose by Thermolumenescent Dosemetry UNITS: MilliRoentgen/Standard Quarter

ANALYSIS TYPE	TOTAL ANALYSES /NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN (f) ** RANGE	LOCATION WITH HIGHEST ANNUAL MEAN		CONTROL LOCATIONS MEAN (f) ** RANGE
				LOCATION INFORMATION	MEAN (f) ** RANGE	
Gamma	172/ 0	* ---	1.4E+01 (164 / 164) (1.2E+01 - 1.9E+01)	1 mile W (#013)	1.8E+01 (5 / 5) (1.7E+01 - 1.9E+01)	1.5E+01 (8 / 8) (1.3E+01 - 1.7E+01)

* AVERAGE MEASURED LOWER LIMIT OF DETECTION AND REQUIRED LOWER LIMIT OF DETECTION VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)

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

Supplementary Information for 1994

Sample location 228 was inadvertently omitted in the 1994 Annual Environmental & Annual Radiological Environmental Operating Reports for the station, but has been added for 1995 in Figure 1.

Sediment samples were collected from the entire Main Cooling Reservoir during 1994 in addition to the normal locations. The data was included in the data tables but was not explained in the text of the 1994 Annual Environmental & Annual Radiological Environmental Operating Reports for the station. This information is included in this supplement.

The 1994 data indicates that Cobalt-60 in the sediment has migrated to cover much of the reservoir bottom. The concentration decreases from the plant discharge into the reservoir to the plant intake structure area following the coolant flow around the Y-dike. There are a few areas of increased concentration in the northwest quadrant of the reservoir that are created by re-direction of the coolant flow pathway when it encounters the dike. This information can be used to predict future movements of radioactive material in sediment of the Main Cooling Reservoir.