

# The Light company

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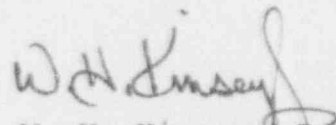
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South Texas Project  
Units 1 and 2  
Docket Nos. STN 50-498; STN 50-499  
1992 Annual Environmental & Annual Radiological  
Environmental Operating Reports

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 1992 Annual Environmental & Annual Radiological Environmental Operating Reports.

If you have any questions, please contact Mr. J. M. Pinzon at (512) 972-8027.

  
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Attachment: 1992 Annual Environmental & Annual Radiological  
Environmental Operating Reports

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South Texas Project Electric Generating Station

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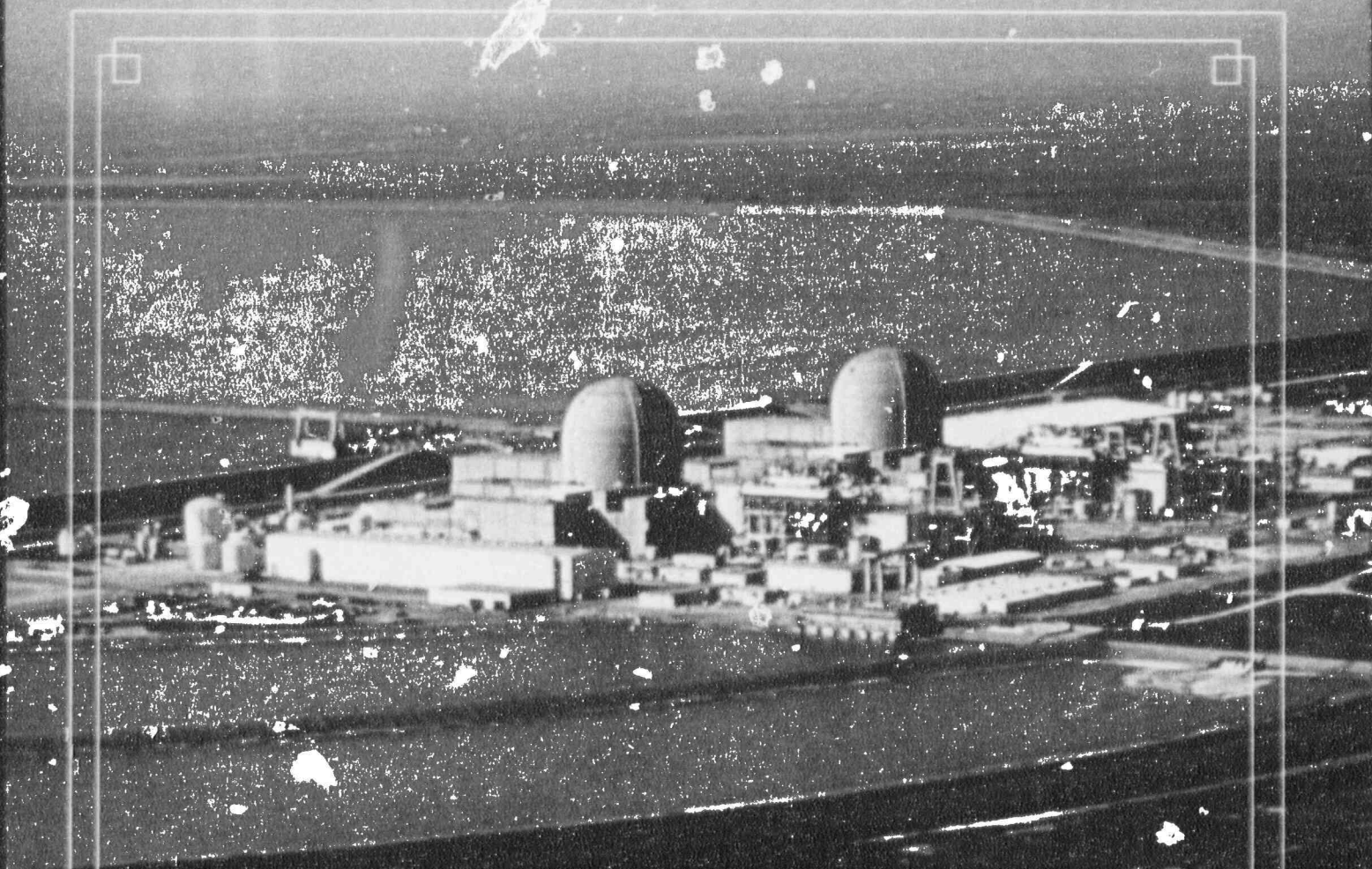
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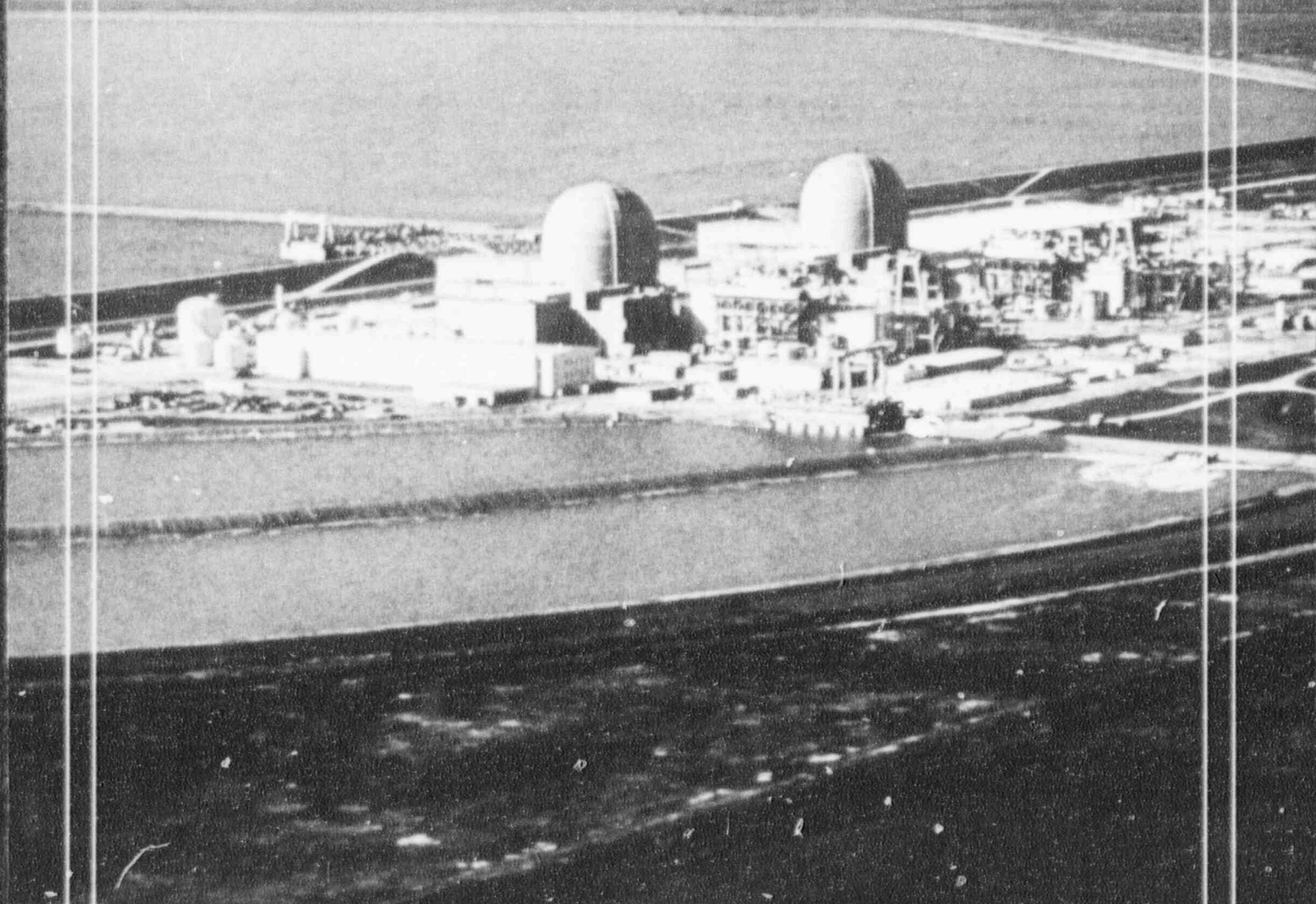


# 1992

**Annual Environmental &  
Annual Radiological Environmental  
Operating Reports**



South Texas Project Electric Generating Station



# 1992

## Annual Environmental & Annual Radiological Environmental Operating Reports



South Texas Project Electric Generating Station

Completed By the  
Technical Services Department  
In Accordance with  
Technical Specifications  
for NRC Licenses  
NPF-76 and NPF-80  
April 1993

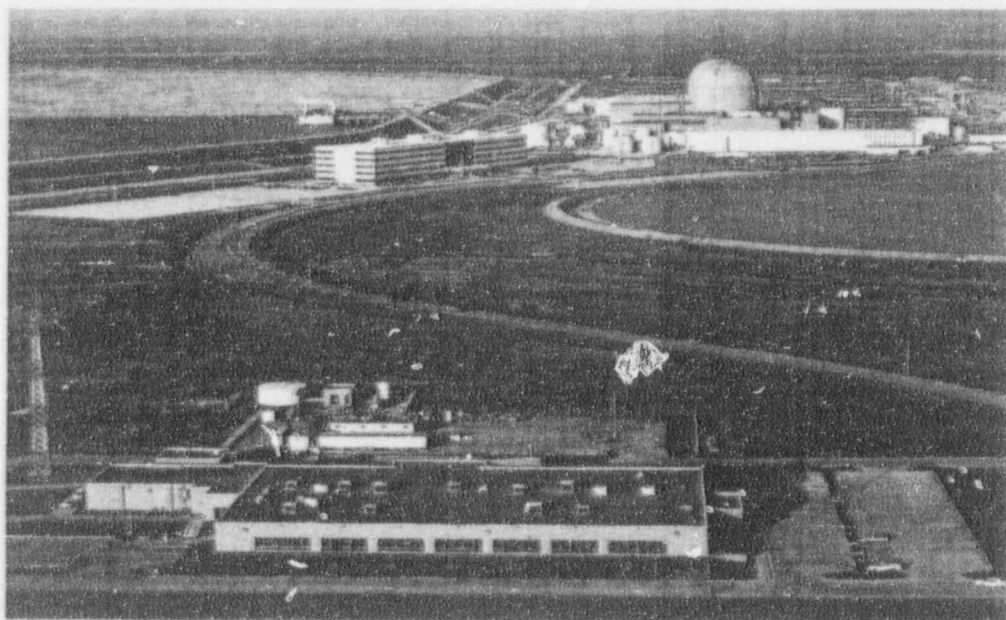
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# Site and Area Description

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South Texas Project Electric Generating Station

The South Texas Project Electric Generating Station (STPEGS) is located in rural southwest Matagorda County approximately 12 miles south of Bay City and 90 miles southwest of Houston. Matagorda County has a population of approximately 38,000. The site is approximately 11 miles north of Matagorda Bay/Gulf of Mexico and lies on the west bank of the Colorado River.

STPEGS consists of two 1250 megawatt Westinghouse Corporation pressurized water reactors (PWR). 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 HL&P management 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.

The units are situated on an approximately 12,300-acre site. Sixty-five (65) acres are modified or occupied by the plant and plant facilities while approximately 7,000 acres make up the aboveground cooling reservoir. Numerous smaller bodies of water on-site include the essential cooling pond, Kelly Lake and a number of drainage ditches, sloughs and depressions. The majority of the land east of the cooling reservoir and bounded by the Colorado River is leased for cattle grazing. Approximately 1700 acres remain in a more natural state as a lowland habitat. The surrounding area is characterized by coastal plain with farmland and pasture predominating. The local relief of the area is characterized by flat land, approximately 23 feet above sea level.

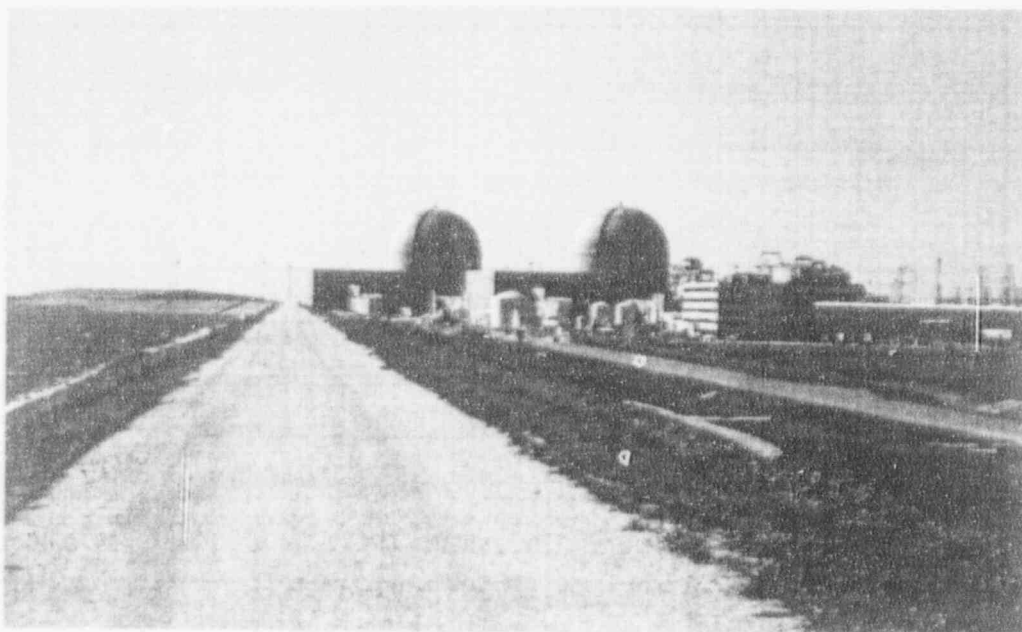


The economic base for this area is agricultural related. Therefore, the majority of the land in the vicinity of the site is utilized for the production of five major agricultural crops: beef, rice, milo, soybeans and cotton. In addition to the agriculture industry, there is commercial fishing in the lower Colorado River, East and West Matagorda Bays, Inter-coastal Canal and the Gulf of Mexico. Currently shrimp, oysters, and crab are the target commercial fish while

fin fishes have been less important commercially 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 hosts an abundance of migratory birds while the local estuary environments provide the necessary habitat for a variety of fish types to complete their life cycles. The area is well suited for recreational hunting and fishing.

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 winter season's average temperature is fifty five degrees and the summer's average temperature is eighty degrees. The annual monthly temperature is sixty eight degrees. Rainfall is usually abundant throughout the year with a annual average rainfall of approximately forty two inches. The prevailing wind direction is from south-southeast from spring to fall, shifting to north-northeast during the winter months.



# Environmental Summary

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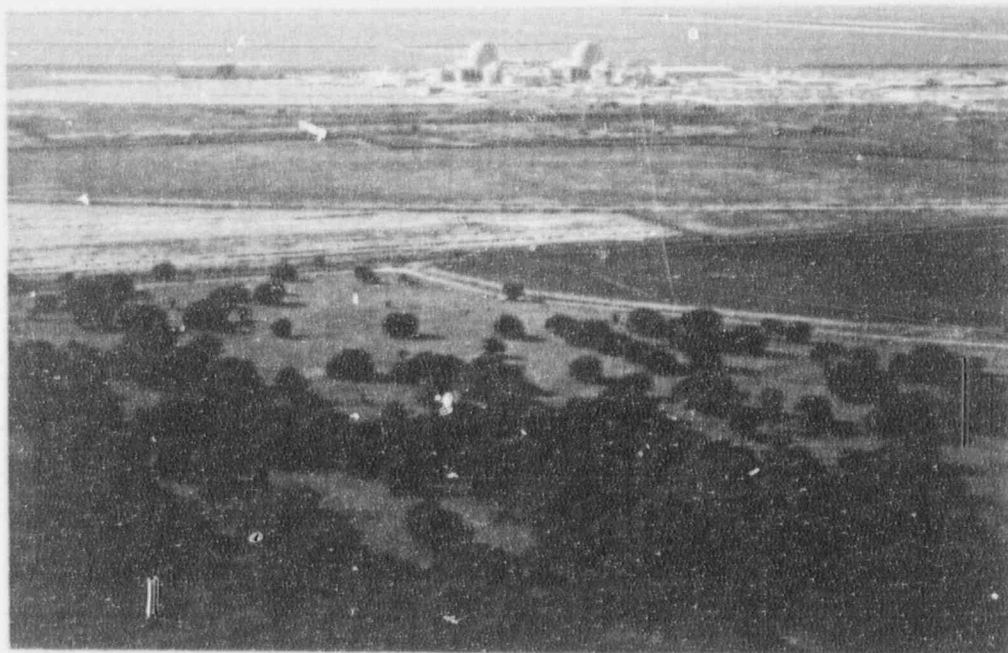


South Texas Project Electric Generating Station

The Annual Environmental Operating Report is a detailed report on the implementation of the South Texas Project Environmental Protection Plan. The report describes nonradiological environmental conditions and compliance monitoring programs at the South Texas Project Electric Generating Station (STPEGS) from January 1 through December 31, 1992. Environmental compliance monitoring for STPEGS is conducted by plant and corporate HL&P personnel in accordance with federal and state regulations and applicable plant procedures. The 1992 report shows that STPEGS promptly responded to areas of concern, addressed new and changing regulations, and maintained its high standards of environmental compliance throughout 1992 while serving the needs of the public with efficient and reliable energy production.

STPEGS has been committed to environmental responsibility since project inception. Formalized management objectives emphasize leadership in environmental protection. STPEGS employs a staff of professional environmental personnel who are responsible for developing and implementing environmental protection programs and monitoring environmental compliance status. HL&P's corporate environmental staff provides support and technical assistance to STPEGS and acts as liaison with regulatory agencies, exclusive of the Nuclear Regulatory Commission, for nonradiological environmental issues.

Many environmental challenges are expected in 1993, and STPEGS is prepared to address them. These include specific waste minimization targeting, expansion of recycling programs, and rapidly changing and expanding environmental legislation. In keeping with project management's commitment to environmental responsibility, STPEGS has initiated an aggressive environmental compliance program. Management goals, site procedures, self auditing programs, employee training, and communications enable the plant to master these challenges. These efforts have launched STPEGS into the forefront of environmental protection. Environmental excellence is and continues to be a foundation of operations.



# Environmental Operating Report

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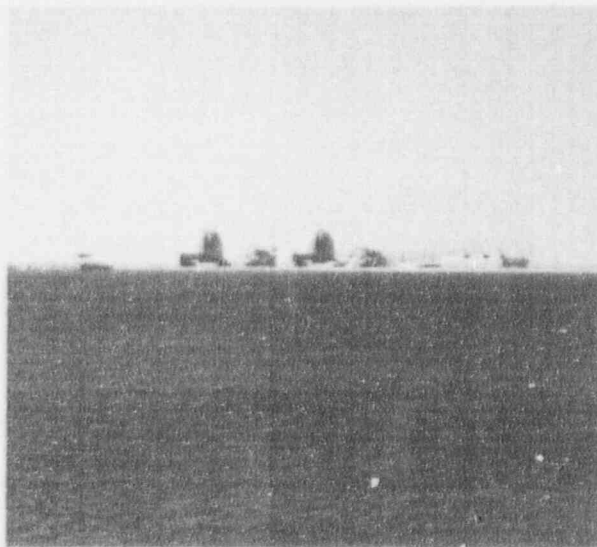
South Texas Project Electric Generating Station

## ENVIRONMENTAL CONDITIONS

Environmental conditions at STPEGS are intensively monitored. Plant personnel routinely monitored site environmental conditions during 1992. Corporate and plant personnel conducted internal audits of site environmental programs and procedures. Representatives from the environmental departments of the Central Power & Light Company, the City of Austin, and the City of San Antonio participated in the annual Quality Assurance audit of site environmental programs. Also in 1992, members of the Texas Water Commission conducted wastewater and potable water systems inspections at the site. The compliance status for STPEGS with applicable environmental laws and site-specific environmental programs are discussed in this section.

### 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 175,000 acre-feet of water at an operating pool elevation of 45 feet above mean sea level (MSL). Reservoir makeup water is withdrawn intermittently from the adjacent Colorado River. The Essential Cooling Pond (ECP) is a 49.2 acre, below grade, off-channel reservoir impounding 388 acre-feet of water at a maximum operating level of 26 feet MSL. The ECP provides a source of cooling water for safe plant operation, and is the normal heat sink for plant auxiliary heat loads during plant operation. Permit No. 3233, issued by the Texas Water Rights Commission (predecessor to the Texas Water 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 limits the rate of diversion from the Colorado River. Other documents describing STPEGS's water rights and with which STPEGS complies include Certificate of Adjudication 14-5437 issued by the Texas Water Commission, Contractual Permit No. CP-327, and contracts between HL&P and the Lower Colorado River Authority. Approximately 6,877 acre-feet of surface water was diverted from the Colorado River in January of 1992 for the Main Cooling Reservoir fill operations. The highest Main Cooling Reservoir elevation for 1992 was 45 feet which is within normal operating levels. With the exception of two surface slides identified on the north and southwest



embankments of the Main Cooling Reservoir, the structural condition of the reservoir remains satisfactory and unchanged in 1992. Temporary repairs to these shallow slides were completed in 1992 and more extensive actions are scheduled in 1993.

## AQUATIC AND ECOLOGICAL MONITORING

The STPEGS 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 which occupies approximately nine percent of the total site near the Colorado River. This area provides an important habitat for birds, amphibians and reptiles. A spoil impoundment constructed in 1972 by the U.S. Army Corps of Engineers is included in this area. The upland area comprises the remaining ninety percent of the site and offers limited habitat for mammals and several groups of birds. Site and corporate personnel regularly monitor the site environs for changing conditions. Ecological conditions onsite in 1992 remained unchanged and satisfactory.

Throughout the construction phase of STPEGS on into plant operations, STPEGS has and continues to monitor populations of important wildlife species to detect population changes. Survey results indicated that the site provided high quality habitat for a wide range of animals to live. Today, the site continues to attract extensive wildlife populations, offering a refuge for resident species as well as seasonal migrants.

During bird surveys conducted by corporate Environmental Department personnel in 1992, several bird species listed on the state and federal threatened or endangered list were observed on site. Those include the bald eagle, peregrine falcon, wood stork, white-faced ibis, and white-tailed hawk. An additional 150 bird species were observed through limited 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 primary reason the site attracts such a variety of wildlife is its high quality, diverse habitat. Approximately 1,400 acres of prime lowland habitat located between the Colorado River and the

east bank of the Main Cooling Reservoir offers a significant source of water year-round. These natural resource areas, in concert with numerous additional wetland and grassland areas, offer all the ingredients necessary to sustain the extensive wildlife population at STPEGS.

No aquatic monitoring was required by the U.S. Environmental Protection Agency or the State of Texas under the authority of the Clean Water Act for the time period of this report.

## AIR QUALITY COMPLIANCE

Air emission sources at STPEGS 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 safeguard air resources from pollution by controlling or abating air pollution and emissions. Of particular significance at STPEGS are emission sources from fossil-fueled boilers and generators, emissions resulting from onsite fire-fighting training, and asbestos removal from renovation and demolition projects. Asbestos removal is also strictly regulated by the Occupational Safety and Health Protection Administration for worker protection.

### *Fossil-fueled Emission Sources*

STPEGS uses two oil-fired auxiliary steam boilers to furnish steam for deaerator startup and turbine gland seals. The auxiliary boilers are permitted to operate under U.S. Environmental Protection Agency Permit No. PSD-TX-209 and Texas Air Control Board Permit No. R-7410. Except for a brief period in December of 1992 when Auxiliary Boiler No. 12 was used to support Unit 1 startup operations following outage activities, the boilers were operated for maintenance purposes only.

In addition to the two auxiliary steam boilers, 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. These generators are exempt from Texas Air Control Board licensing under Standard Exemption No. 5 as they are internal combustion engine driven generator sets used only for emergency service.

### *Fire-fighting Activities*

STPEGS conducts onsite training of selected employees on proper fire-fighting techniques. Most onsite instruction consists of training on the proper use of a fire extinguisher. Advance notification of fire fighting training sessions is provided to the Matagorda County Health Department and the Texas Air Control Board. Other than routine training activities, no reportable events occurred in 1992.

### *Asbestos Removal*

Advance notification is provided to the Texas Air Control Board of the scheduled demolition of buildings onsite and also for the removal of certain coatings containing fixed asbestos. Buildings are inspected for the presence of asbestos prior to demolition.

Regulations governing asbestos removal are found in the U.S. Environmental Protection Agency **National Emission Standards for Hazardous Air Pollutants**. Demobilization of construction phase structures at STPEGS was essentially completed in 1992. Asbestos surveys conducted in 1992 in accordance with U.S. Environmental Protection Agency regulations identified the presence of asbestos in some floor tile and mastics, roofing materials, and some caulking sealants. These were removed and shipped for disposal in accordance with applicable regulations. Dry removal of coatings with some fixed amounts of asbestos commenced in 1992 in accordance with authorization provided by the Texas Department of Health.

### **WATER QUALITY COMPLIANCE**

Water usage and wastewater treatment at STPEGS are regulated under the federal **Safe Drinking Water Act**, the **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. STPEGS uses surface water and groundwater for industrial uses. Groundwater supplies onsite drinking water. Cooling water for plant activities uses surface water from the Main Cooling Reservoir and the Essential Cooling Pond, while five onsite water wells supply groundwater. These water wells supply potable water for the plant, makeup water for the Essential Cooling Pond, service water, firewater, and water for other onsite industrial uses.



Reports identifying ground and surface water use are submitted annually to the Texas Water Commission and the Texas Water Development Board. Monthly Discharge Monitoring Reports are submitted to the Texas Water Commission and the U.S. Environmental Protection Agency for wastewater discharges. Monthly reports are also submitted to the Texas Water Commission regarding drinking water quality. These reports contain sample dates and analytical results.

Drinking water is routinely monitored for bacteriological contamination, volatile organic compounds, pesticides, herbicides, heavy metals, and radioactivity to ensure the health and

safety of site workers. Operation of the potable water systems is maintained by the Plant Operations Department and the Facilities Management Division and monitored--daily, weekly, or quarterly as applicable--by chemistry and environmental personnel. Wastewater discharges are monitored for pH, total suspended solids, oil and grease content, chlorine concentrations, temperature, fecal coliform levels, and/or biochemical oxygen demand as required by permit. Wastewater operations are conducted by the Chemical Operations section and the Facilities Management Division and monitored weekly--or more frequently if required or warranted--by chemistry and environmental personnel.

#### *Wastewater Treatment Compliance Status*

STPEGS is committed to being a leader in environmental protection. A review of the compliance data for 1992 indicates that the site continues to address the reduction of environmental permit parameters noncompliances associated with sanitary waste facilities and the Oily Waste Treatment System. The reduction in reportable environmental conditions for the past four years attests to the success of corrective actions implemented to date to ensure compliant operations of the South Texas Project wastewater treatment systems. The South Texas Project is committed to continuing this positive trend.

STPEGS currently has eight wastewater outfalls. The seven active outfalls include sanitary waste discharges, discharge from the Neutralization Basin of the Nonradioactive Chemical Waste Treatment System, and discharge from the Oily Waste Treatment System. One outfall, from the Main Cooling Reservoir (Outfall 001), is not yet activated. Outfall 001 (Cooling Pond Discharge) and Outfall 002 (Construction Sanitary Waste Treatment System) discharge to the Colorado River. No discharges from these two outfalls took place in 1992. All other outfalls are internal and discharge to the Main Cooling Reservoir. The compliance status for each outfall in 1992 is included in the following descriptions.

**OUTFALL 001 (COOLING POND DISCHARGE).** STPEGS's cooling pond discharge system transports water by gravity from the Main Cooling Reservoir to the Colorado River. Outfall 001 is not yet activated. No reportable environmental conditions were associated with this outfall in 1992.

**OUTFALL 002 (CONSTRUCTION SANITARY WASTE TREATMENT SYSTEM).** Outfall 002 represents a 60,000 gallon per day sewage treatment facility which discharges to a tidal segment of the lower Colorado River. Effluent is chlorinated prior to discharge in accordance with the applicable permit requirements. Late in 1989, as capacity needs decreased, this treatment system was removed from service. No reportable environmental conditions were associated with this outfall in 1992.

**OUTFALL 101 (NEUTRALIZATION BASIN).** The Neutralization Basin is a low volume waste treatment system which collects nonradioactive liquid waste consisting primarily of demineralizer regenerate, as well as the effluent from Outfall 501, for treatment prior to discharge to the Main Cooling Reservoir. Two reportable environmental conditions were associated with this outfall in 1992.

On May 17, 1992, a bypass of Outfall 101 was reported when condensate (demineralized water) overflowed a resin box to the storm drain system. The clogged screen which caused the overflow was cleaned, the flow path restored, and a perimeter berm installed to route area drainage to the Neutralization Basin.

On August 22, 1992, 55,000 gallons of wastewater discharged from the Neutralization Basin exceeded the lower pH parameter limits as a result of inadequate operation of a recirculation valve during the neutralization process. The valve was subsequently repaired and compliant operations resumed.

**OUTFALL 201 (OILY WASTE TREATMENT SYSTEM).** Outfall 201 represents an approximately 15,000 to 30,000 gallon per day floor drainage treatment facility which discharges to the Main Cooling Reservoir. Oily wastewater from normal equipment leakoff is processed and effluent is pumped to the Main Cooling Reservoir. Separated oil is transferred to a storage tank for offsite disposal. There was one reported environmental condition associated with this outfall in 1992.



On May 10, 1992, the discharge from the Oily Waste Treatment System exceeded the maximum oil and grease parameter limit. On this occasion, an emulsified oil solution entered the system. Polymer addition was adjusted to compensate and accumulated oil was removed from the collection system.

**OUTFALL 301 (EAST SANITARY WASTE TREATMENT SYSTEM).** The East Sanitary Waste Treatment System is a 15,000 gallon per day sewage treatment facility which discharges to the Main Cooling Reservoir. This treatment system was removed from service in mid-1989 due to decreased capacity needs. No reportable environmental conditions were associated with this outfall in 1992.

**OUTFALL 401 (WEST SANITARY WASTE TREATMENT SYSTEM).** The West Sanitary Waste Treatment System is a 60,000 gallon per day sewage treatment facility which discharges to the Main Cooling Reservoir. Three reported environmental conditions occurred at this treatment system in 1992. These three conditions resulted from two upset conditions of the treatment system.

On June 6, 1992, a loss of electrical power resulted in the overflow of partially treated wastewater to the storm drain system. Power was restored and the system resumed normal operations.

On November 25, 1992, excessive flows through the treatment system resulted in discharge which exceeded the Total Suspended Solids parameter limitations. This also resulted in a monthly average in excess of permit limits. The system resumed normal operations when the source of flow was identified and terminated.

**OUTFALL 501 (METAL CLEANING WASTE).** Wastewater generated from flushing and chemical cleaning of piping and equipment is collected in the Inorganics or Organics Basin (Outfall 501) and routed to the Neutralization Basin (Outfall 101), after applicable iron, copper, and pH requirements are met, for ultimate discharge to the Main Cooling Reservoir. One reportable environmental condition was associated with this outfall in 1992.

On November 23, 1992, the pH of discharge from Outfall 501 exceeded the maximum permit parameter limitations due to inadequate neutralization of one tank of wastewater in the batch treatment process. However the discharge was terminated upon discovery and pH was adjusted in the Neutralization Basin before discharge to the Main Cooling Reservoir.

**OUTFALL 601 (TRAINING FACILITY SANITARY WASTE TREATMENT SYSTEM).** The Outfall 601 sewage treatment facility is a 60,000 gallon per day capacity unit which discharges to the Main Cooling Reservoir. No reportable environmental conditions occurred at this treatment system during the course of 1992.

Each of these reported conditions were isolated incidents reported by HL&P and corrected upon discovery. None of these incidents presented a recurring problem in 1992.

## SOLID WASTE MANAGEMENT COMPLIANCE

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

STPEGS is registered with the Texas Water Commission as a large quantity generator of industrial solid wastes including hazardous wastes. Texas Water Commission regulations require that all industrial solid wastes generated at STPEGS be identified to the Commission. These wastes are identified in the Texas Water Commission Notice of Registration No. 30651 issued for STPEGS. The registration is revised whenever there is a change in waste management practices at the site. As a registered large quantity generator of hazardous waste, STPEGS is limited to a maximum storage period of 90 days for hazardous waste. The **Resource Conservation and Recovery Act** and **Texas Solid Waste Disposal Act** also mandate other requirements for large quantity generators, such as the use of proper storage and shipping containers, labels, manifests, reports, personnel training, a spill control plan and an accident contingency plan. Plant environmental 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 1992 Annual Waste Summary for the South Texas Project submitted to the Texas Water Commission.

### *Nonradioactive Waste Management Activities*

Nonradioactive waste activities during 1992 included the shipment of 152 drums of hazardous waste for disposal. This increase in the amount of hazardous waste shipped from the site was due to the continued demobilization of construction phase structures in 1992. Municipal-type trash was transported to the county landfill for disposal while construction-related non-combustible, inert debris was placed in the onsite landfill as specified on STPEGS's solid waste notice of registration. State regulations promulgated under the Texas Department of Health in 1991 regarding scrap tire disposal were incorporated into the Texas Water Commission in 1992. STPEGS shipped 177 tires to the county landfill for shredding and disposal in 1992.

### *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. In 1992, STPEGS shipped 73,211 gallons of waste oil and 1,870 gallons of waste solvent for fuel blending and thermal energy recovery. Although no lead-acid batteries were shipped in 1992, they 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. The site paper recycling program initiated in 1991 resulted in the collection of approximately 73 tons of paper. This is the equivalent of 1,241 trees saved. Plant personnel continue to explore areas where recycling activities may be expanded or initiated.

### UNDERGROUND STORAGE TANKS

The **Resource Conservation and Recovery Act** also regulates the removal of underground storage tanks and establishes standards for new tanks and for those that remain below ground. An underground storage tank includes the tank system and its piping. These requirements which include notification, leak detection and monitoring requirements, performance standards for new tanks, financial coverage, and reporting requirements were implemented to prevent damage to the environment from leaking tank contents.

STPEGS currently has three emergency diesel underground storage tanks. Regulation of underground storage tank systems associated with emergency generator systems at nuclear power plants has been deferred with the exception of corrective action requirements and interim prohibitions. These tanks are currently scheduled to be replaced with above ground tank systems in 1993.



### CERCLA COMPLIANCE

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 U.S. Environmental Protection Agency. This 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 (SARA)**.

STPEGS conducted 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 by March 1 for the preceding calendar year to the Texas Department of Health.

## CHEMICAL CONTROL

The STPEGS Expendable Materials Program was established to evaluate those chemicals and products which have the potential to come in contact with plant components. Disposal requirements for each of these chemicals or products are evaluated prior to approval and are described on the evaluation form. Approved chemicals and products are listed in the STPEGS Expendable Materials Manual which is easily consulted for the proper disposal requirements of that particular material. Alternate disposal requirement evaluation methods are available for those materials that fall outside the scope of the Expendable Materials Program.

Strict restrictions regarding the storage of product drums and gas cylinders are also proceduralized at STPEGS. No more than the amount of material necessary to perform a job is allowed to remain within the Protected Area unless prior authorization is obtained. Weekly inspections are conducted to ensure that unauthorized chemicals or products are not stored within the Protected Area unless in use. These restrictions aid in minimizing the amount of waste generated at STPEGS.

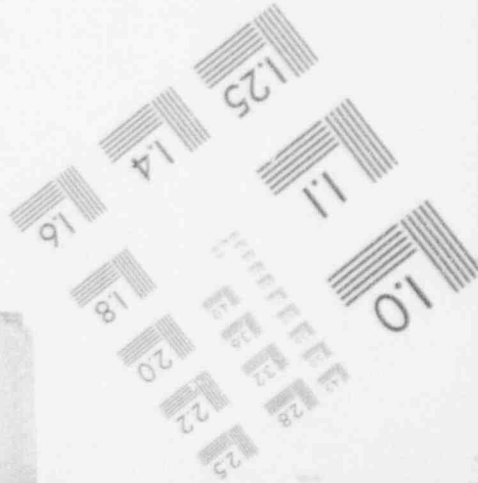
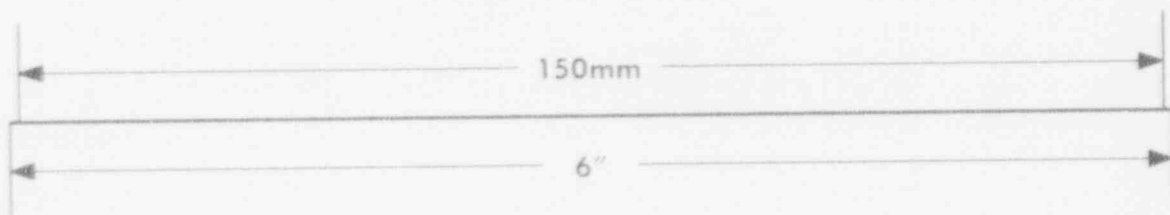
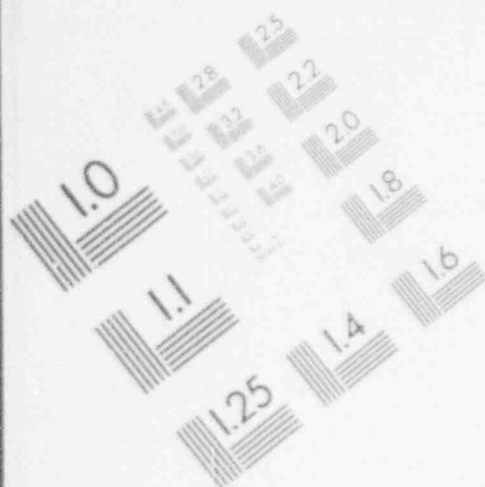
## ENVIRONMENTAL PROTECTION PLAN STATUS

The Environmental Protection Plan, issued in March of 1989, requires HL&P to provide for the protection of environmental values during operation of STPEGS. Internal reviews, audits, and inspections conducted in 1992 documented that the plant is in compliance with the Environmental Protection Plan. Potential nonconformities are quickly addressed when identified to maintain operations in an environmentally acceptable manner. The Effluents & Waste Management Division reviews Environmental Protection Plan noncompliances identified by the plant and associated corrective actions to prevent recurrence. Additionally, the division reviews nonroutine reports submitted by plant personnel and any activities which involved a potentially significant unreviewed environmental question. No unreviewed environmental questions were identified in 1992. No other nonroutine reports than those associated with wastewater discharge permit noncompliances discussed earlier were submitted in 1992.



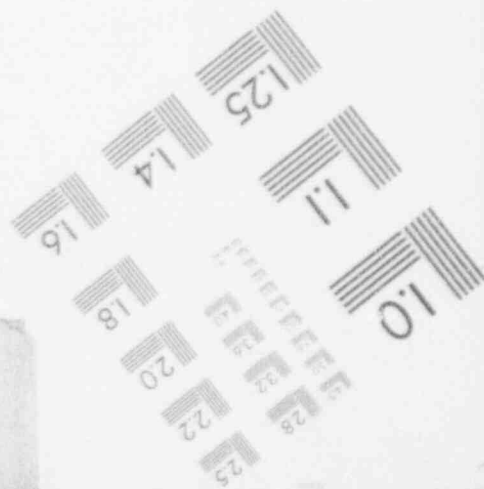
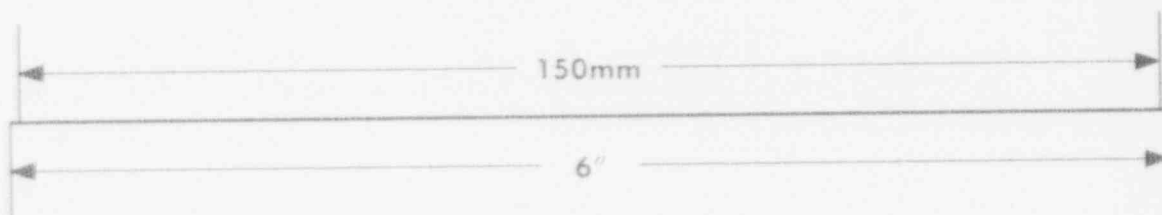
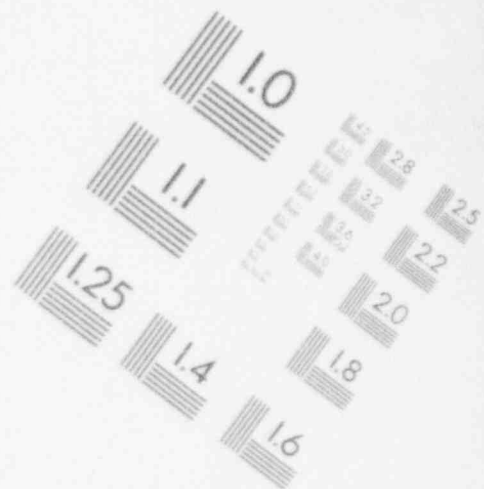
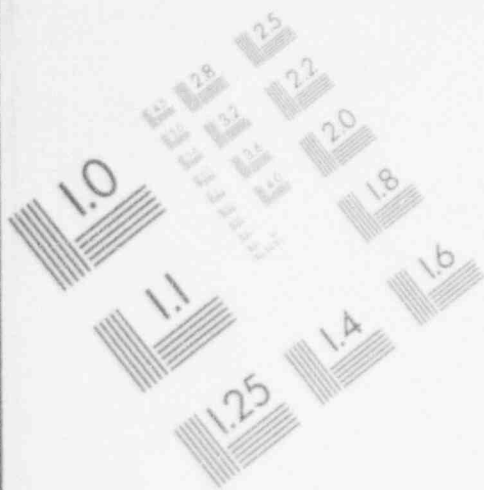
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IMAGE EVALUATION  
TEST TARGET (MT-3)



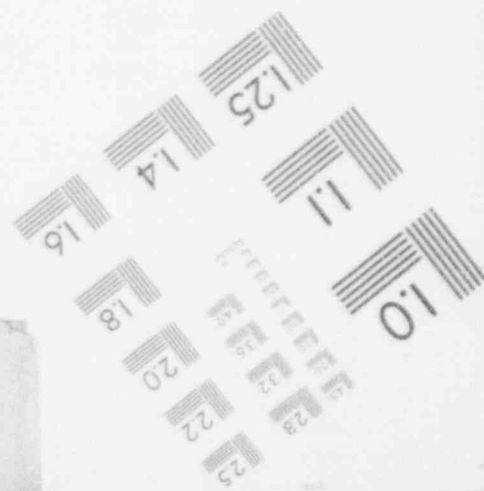
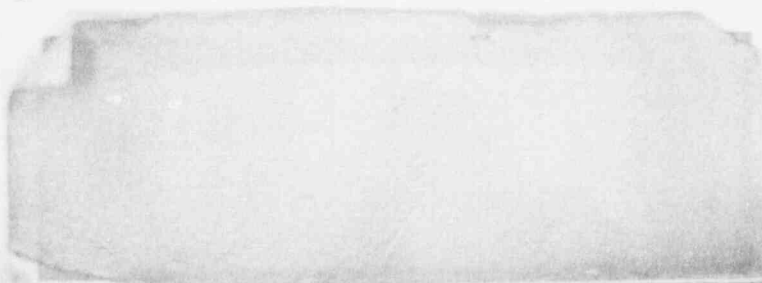
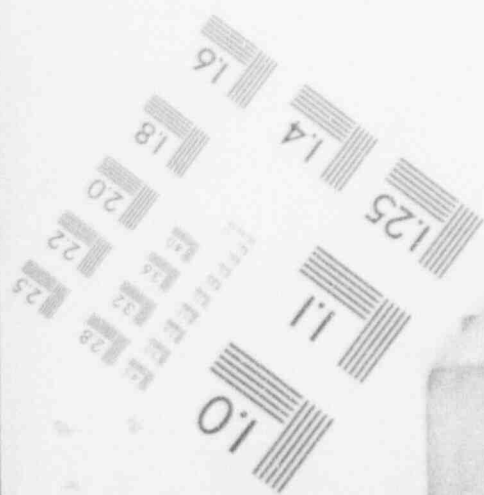
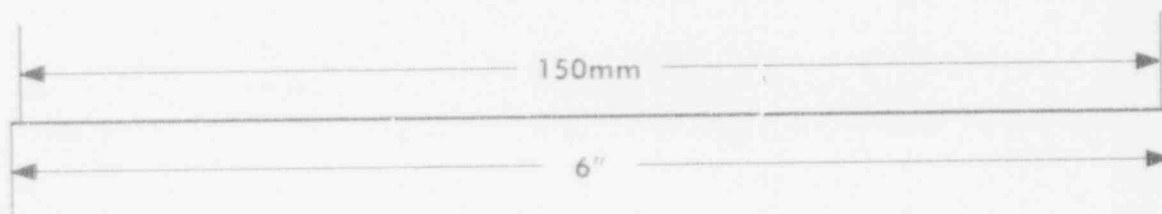
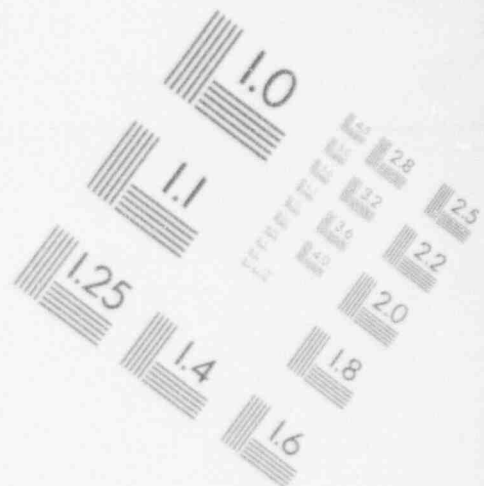
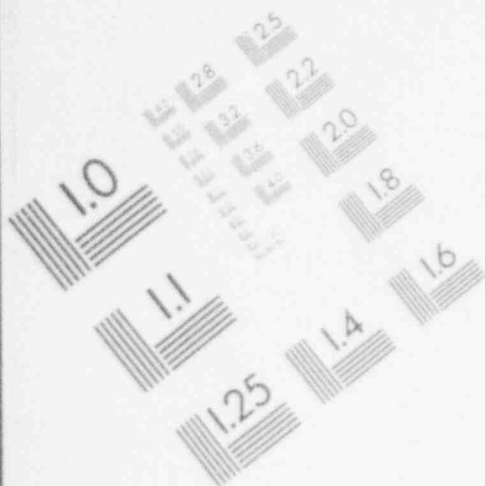
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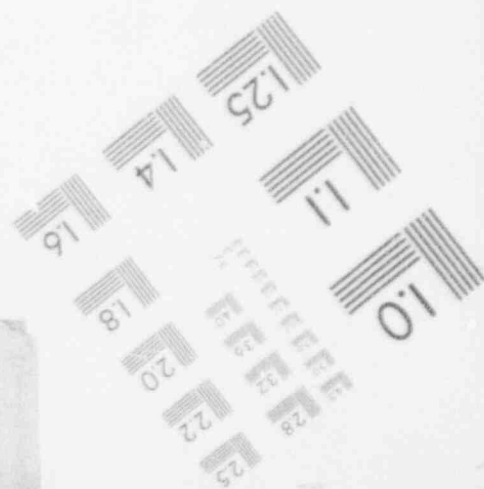
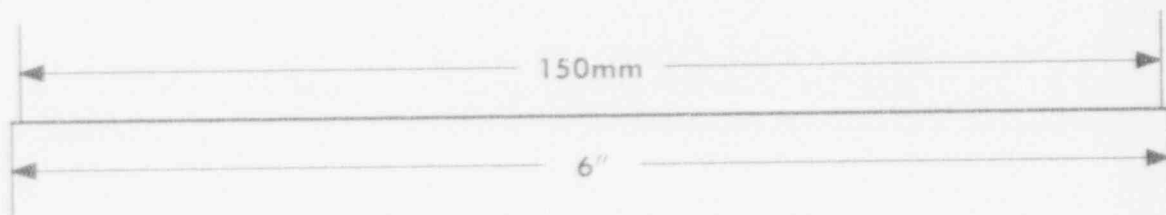
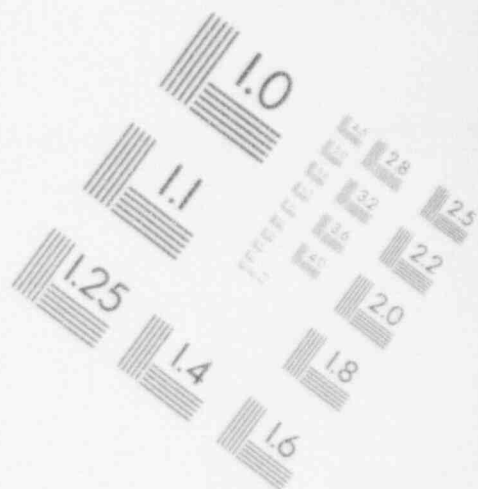
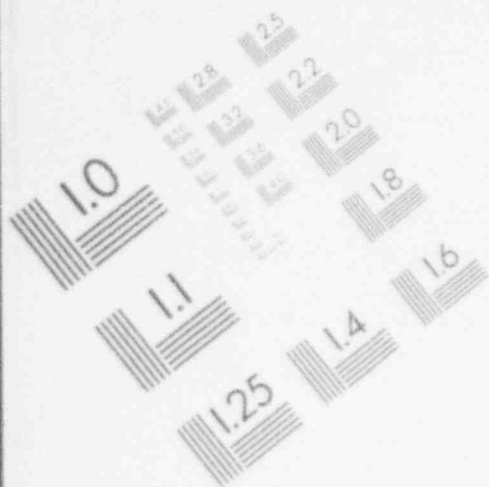
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IMAGE EVALUATION  
TEST TARGET (MT-3)



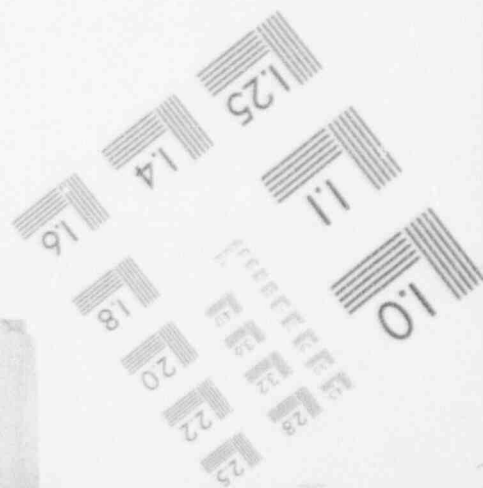
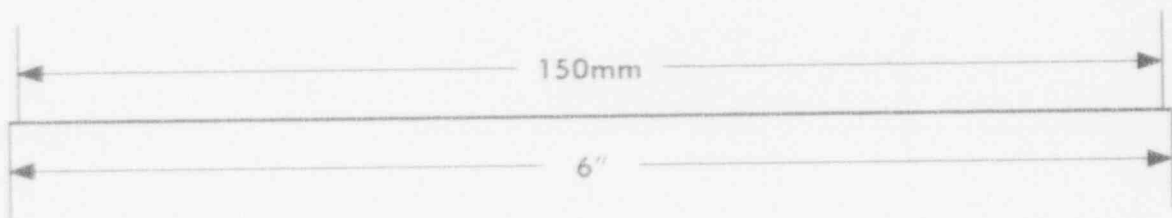
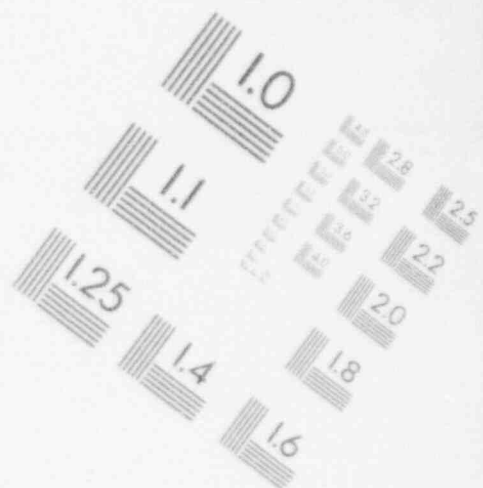
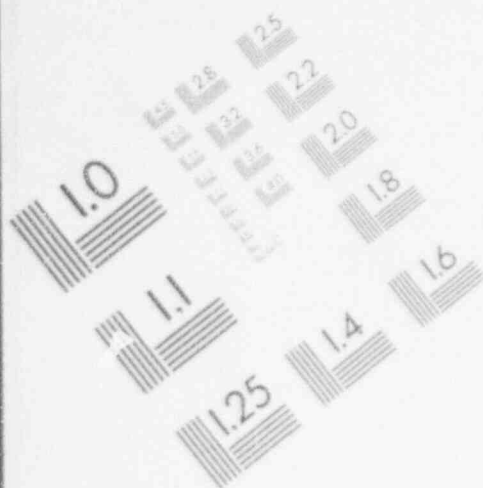
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IMAGE EVALUATION  
TEST TARGET (MT-3)



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IMAGE EVALUATION  
TEST TARGET (MT-3)



# 1

## IMAGE EVALUATION TEST TARGET (MT-3)

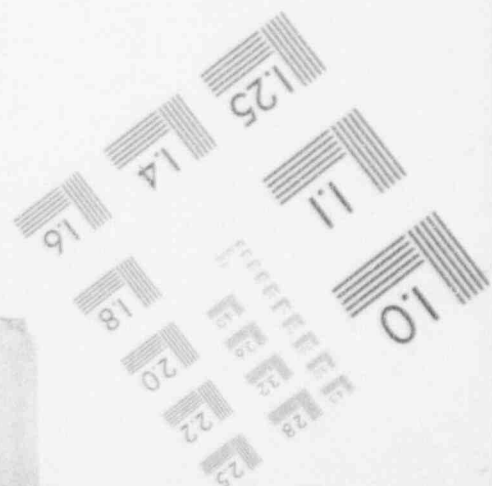
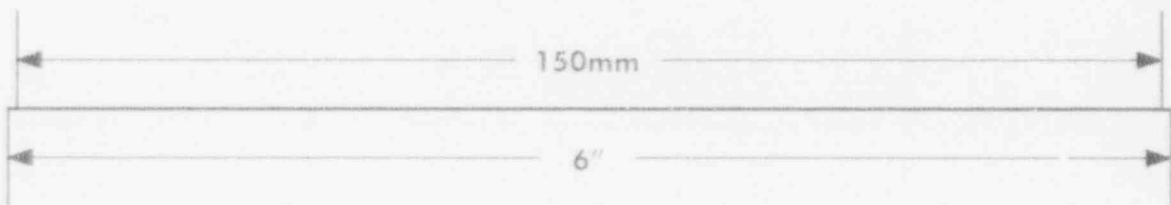
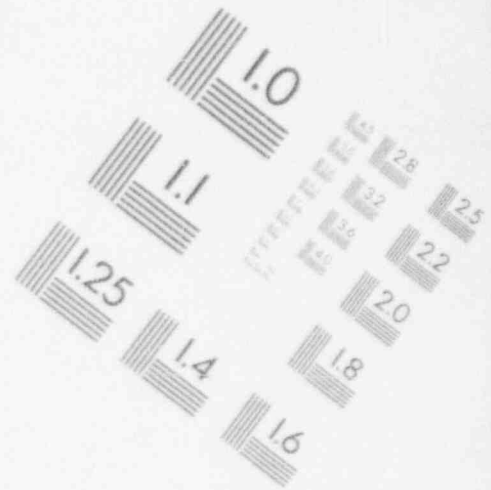
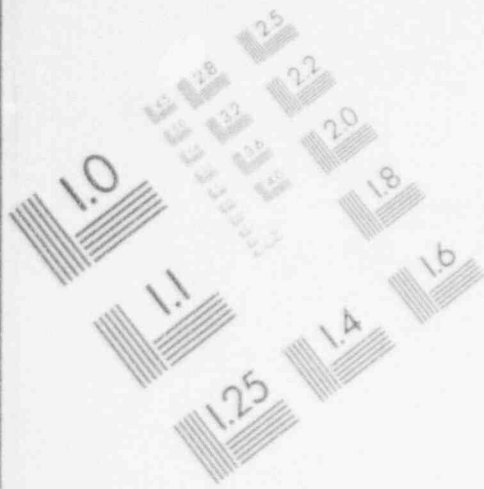
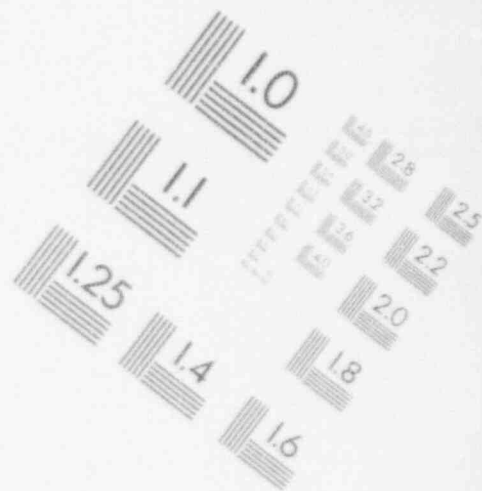
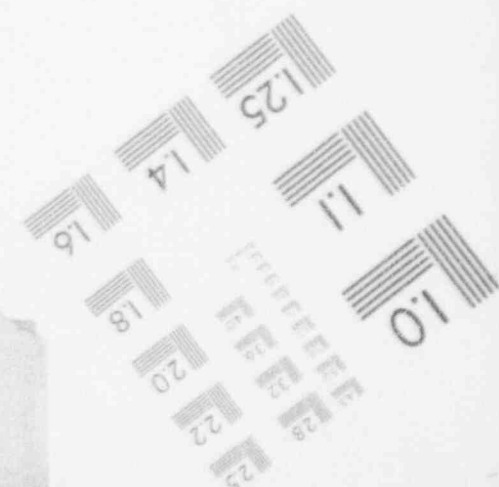


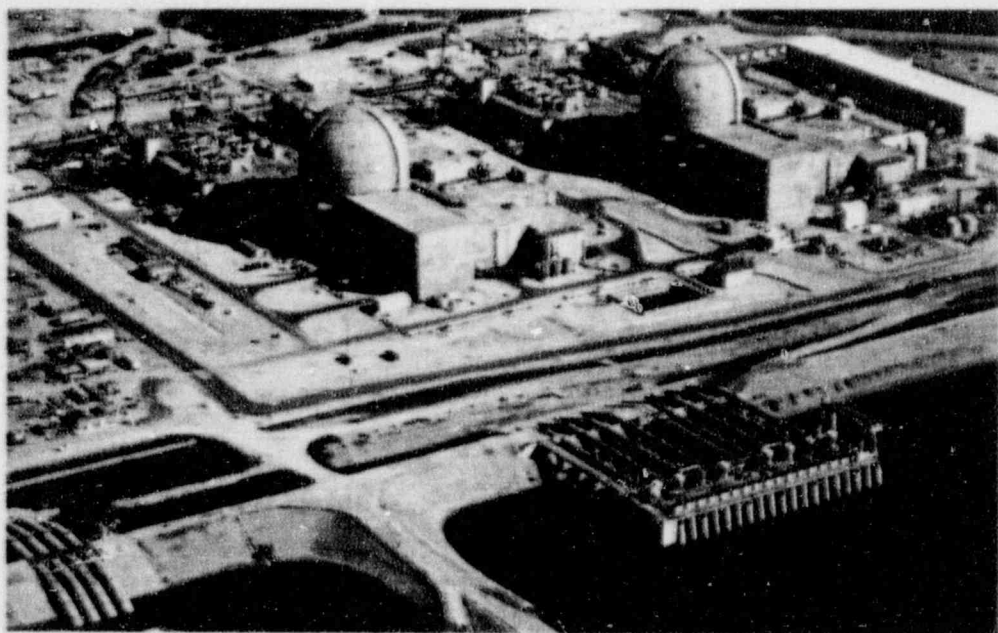
IMAGE EVALUATION  
TEST TARGET (MT-3)



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6





# **Radiological Environmental Summary**

**1992**

Annual Environmental &  
Annual Radiological Environmental  
Operating Reports



South Texas Project Electric Generating Station

The 1992 Radiological Environmental Operating Report provides the results of data collected and analyzed for the Radiological Environmental Monitoring Program (REMP) during 1992.

The purpose of the REMP is to verify that the South Texas Project Electric Generating Station (STPEGS) is operating within its design parameters and to assure plant effluents do not result in a significant 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 2,000 analyses of air, water, soils, sediments, vegetation, and meat products were performed during 1992.

No nuclides of interest or elevated levels of radioactivity were measured in samples taken from off-site stations. This has special significance since the analysis levels of detection were significantly lower than required. The tritium level measured on-site in the Main Cooling Reservoir (MCR) was one third of the concentration predicted in the Updated Final Safety Analysis Report (UFSAR).

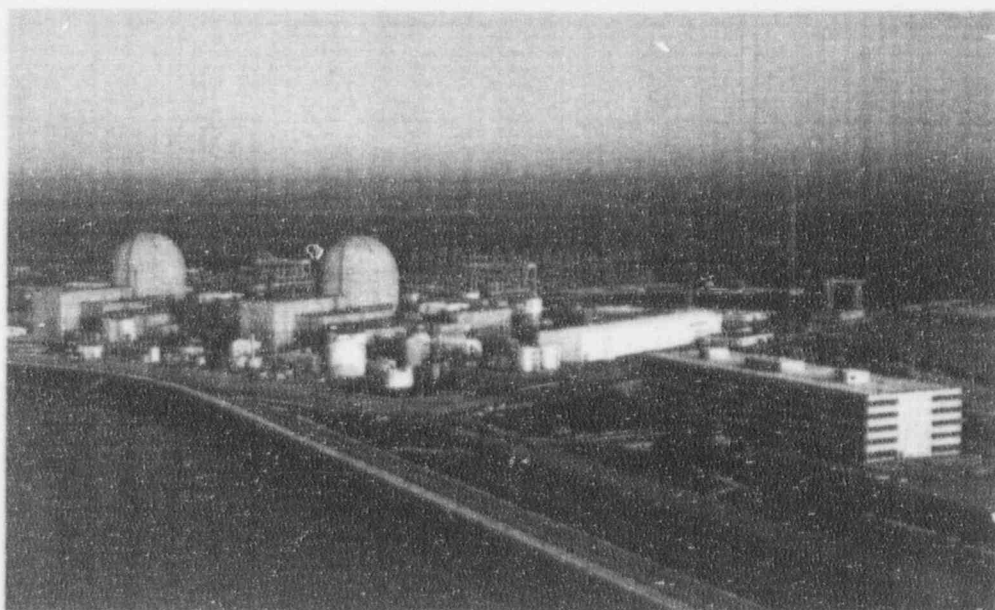
The data indicates no measurable radioactive material originating from STPEGS has been deposited in the environment off-site. The doses calculated based on measured effluents in 1992 also indicated that STPEGS operations continue to have no adverse effect on the general public and the environment.

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# Radiological Environmental Operating Report

**1992**

Annual Environmental &  
Annual Radiological Environmental  
Operating Reports



South Texas Project Electric Generating Station

## PROGRAM DESCRIPTION

The South Texas Project Electric Generating Station (STPEGS) initiated a comprehensive and fully implemented pre-operational Radiological Environmental Monitoring Program (REMP) 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 aquatic, atmospheric, and terrestrial environments. Samples of various media are selected to obtain data for evaluation of potential radiation dose to man. Sample types are based on established pathways and through experience gained at existing nuclear facilities. A special study was also performed by Houston Lighting & Power 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 were further evaluated and modified according to field and analysis experience.

Sampling locations may be referred to as an indicator or control station. Indicator stations are locations on- or off-site that are assumed to 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 will ultimately be evaluated with respect to analogous fluctuations at control stations. Indicator stations are compared and evaluated relative to characteristics identified during the pre-operational REMP and meteorological conditions.

A number of maps and sample collection location methods are used to implement the program. Figure 1 includes two maps that identify permanent sample stations. Figure 2 illustrates the zones used when collection locations are not permanent sample stations. Station information found in Tables 2 and 3 can be located on Figure 1 or 2.

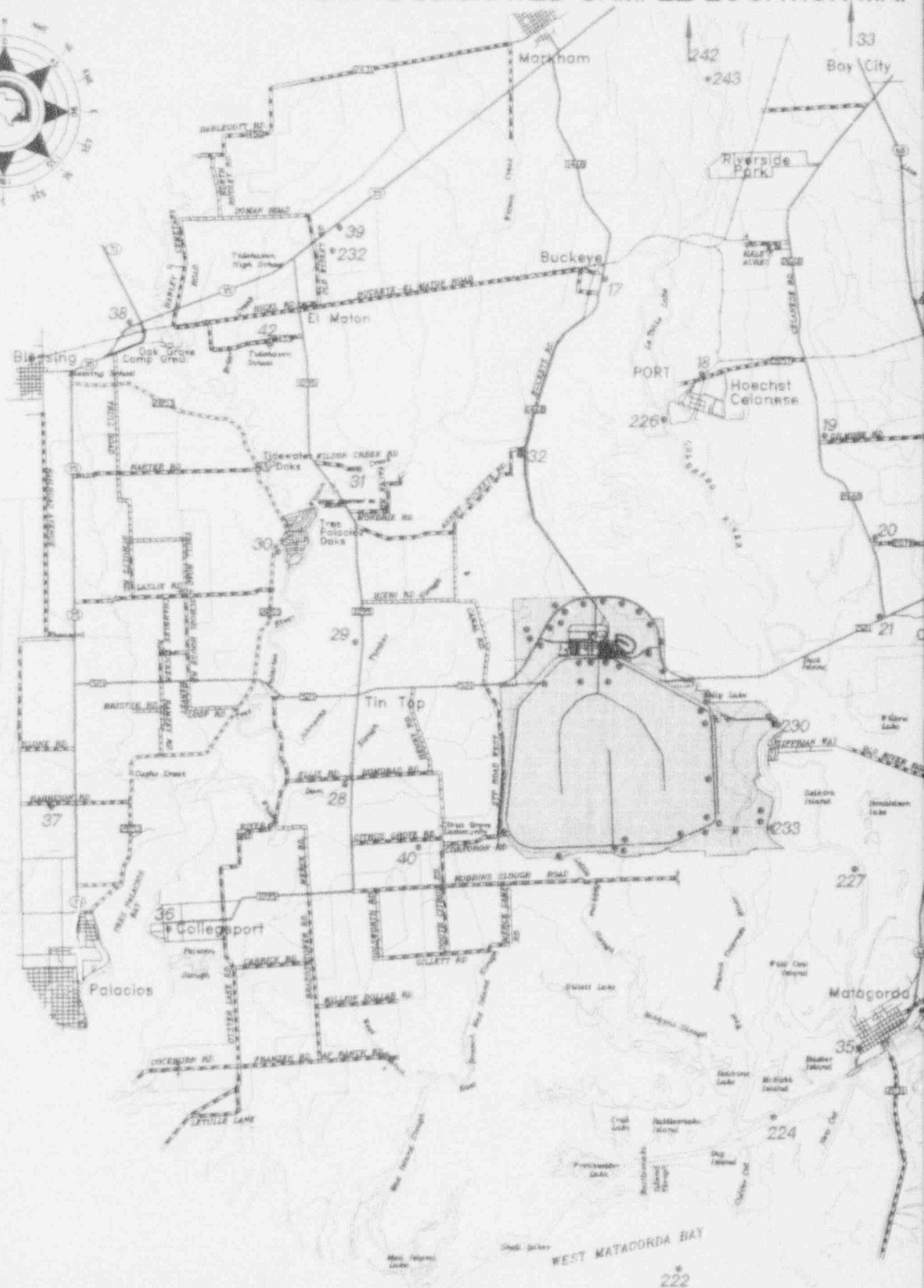
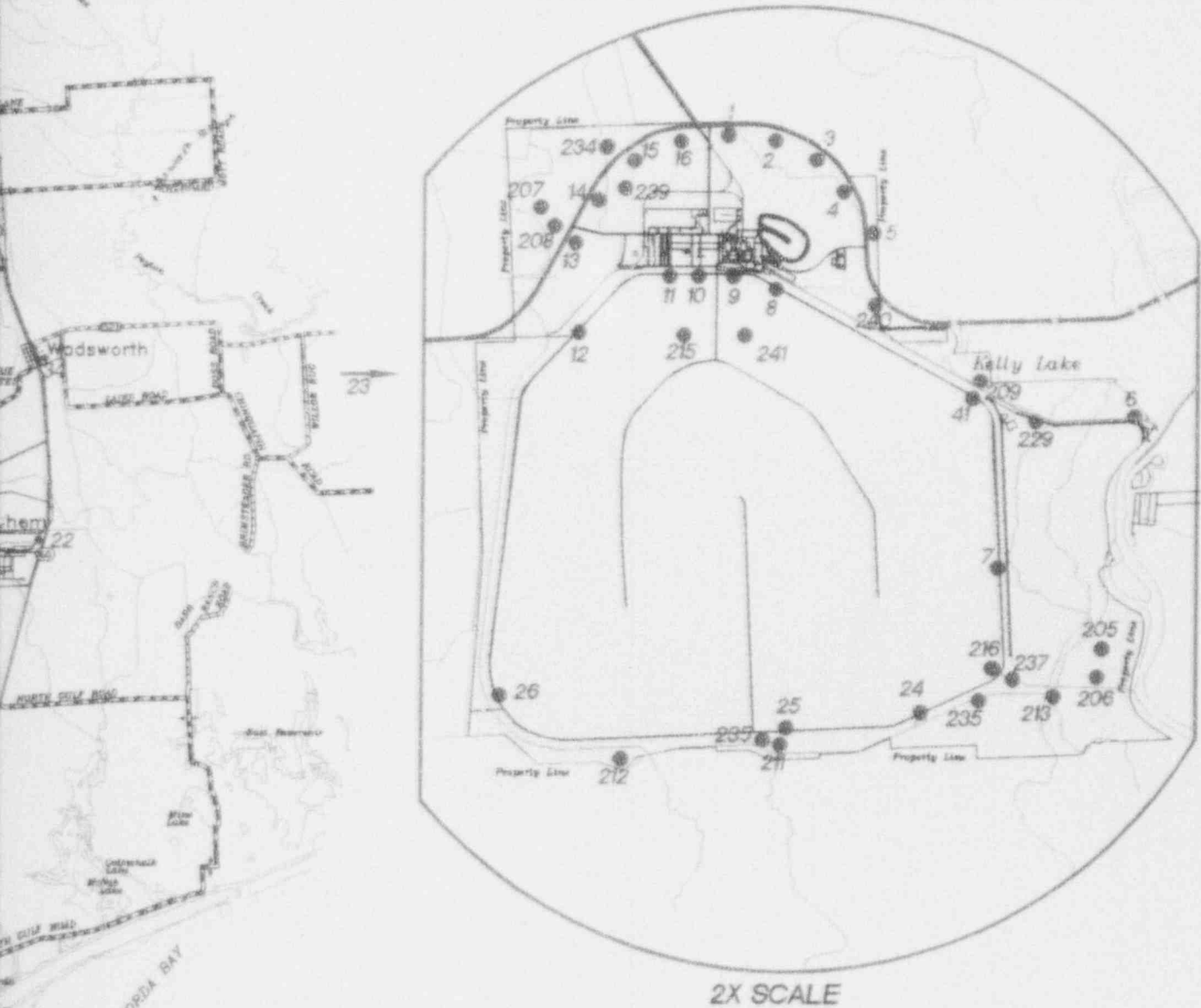


FIGURE 1

SI  
APERTURE  
CARD

Also Available On  
Aperture Card

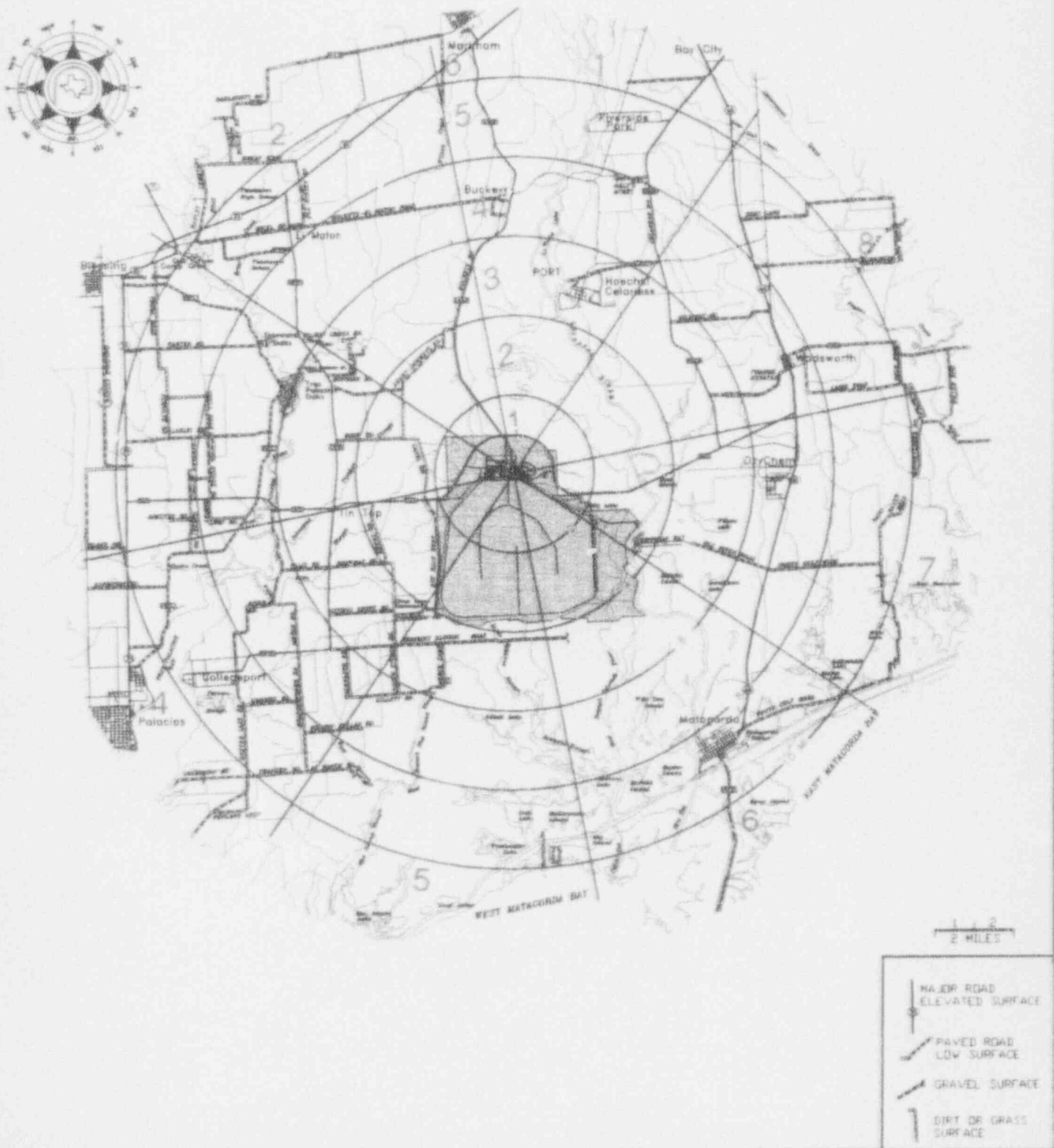
REMP ON SITE SAMPLE LOCATIONS



9305030399-01

1 2  
2 MILE

(FIGURE 2)  
REMP ZONE LOCATION MAP



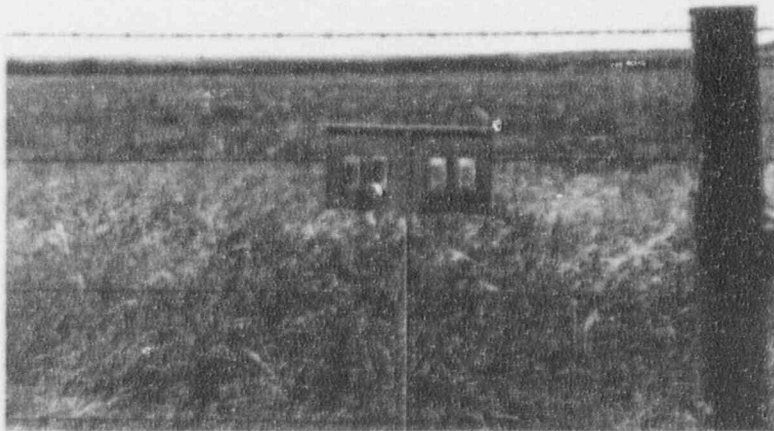
## ANALYSIS OF RESULTS AND TRENDS

The environs surrounding STPEGS continues to indicate no significant radiological contribution from plant operation. The analytical values for indicator sample stations trend with the control stations. The positive measurements (e.g. tritium in the main cooling reservoir (MCR) and Co-60 in the MCR bottom sediments) were within anticipated ranges. There were no positive measurements of nuclides of interest from samples collected off-site.

The average monthly beta activity from three on-site indicator stations and a single control station for air particulate samples has been compared historically from 1985 through 1992, see Figure 3. The control data trends identically to on-site data in pre-operational and operational years. This analysis demonstrates that plant operation is not having an impact on particulate contamination even at the key indicator stations (#001, #015, #016). (These stations are located in close proximity to the plant and are in a leeward direction.) The average activity from each station varied up to fifteen percent each month until 1987. New, more reliable air samplers were placed in service in 1987. The variation of the activities since 1987 are usually between one and five percent. The monthly averaged beta activity for 1992 was typical compared to the previous years.

The annual average gross beta activity in air particulate samples for each of the nine stations is illustrated in relation to wind direction from the site by Figure 4. The average activity from each station varied little during 1992. All values were between 0.018 and 0.020 pCi/ cubic meter. The previous years also had a small range with a mean of approximately 0.019 pCi/ cubic meter. There were no significant differences between indicator stations and control stations. The key indicator stations (#001, #015, #016) continues to have one of the lower annual average gross beta activities. Their analytical results indicates the values obtained were not influenced by plant operation.

Direct gamma radiation as measured by thermoluminescent dosimetry (TLD) is depicted in Figure 5. The data from the key indicator stations (#001, #015, #016) shows no influence from plant operations. The values obtained by TLD trend very closely to the control station.

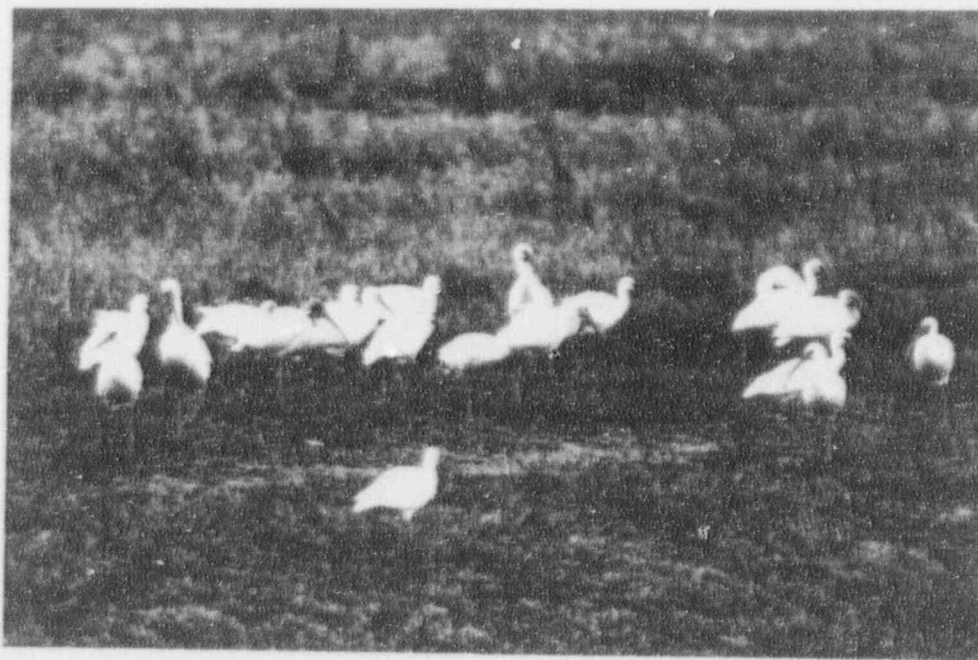


Data from the tritium concentrations in eight composite surface and ground water samples is shown in Figure 6 for 1987 through 1992. Stations #226 is an off-site control station and station #227 is an off-site indicator stations. The other stations are on-site indicators with #216 representing the MCR and the others representing adjacent ditches and sloughs. The tritium

concentration in the MCR is increasing at a predictable rate and will reach an equilibrium at a level below the predicted 21,000 pCi/ L stated in the UFSAR. Tritium enters the sloughs and ditches by way of the MCR relief well system. The activity at these locations is considerably less than in the MCR and is variable depending on how much run-off (rain) has occurred. With the exception of a single analysis resulting in a Co-60 concentration of  $<2$  pCi/ L for a MCR sample, no other nuclide of interest has been identified in any surface water sample.

There were five samples that were not collected in 1992. These samples are listed in Figure 7, Samples Collection and Analysis Deviations 1992. (The Media Codes are listed in Table 2.) The locations for these required sample stations are being reviewed to enable samples to be obtained on a more regular basis. The five samples comprise less than one percent of the required samples for the REMP.

There was one monthly beta analysis for a drinking water sample that was not performed. This deviation was documented as an analysis deviation for the REMP during 1992.



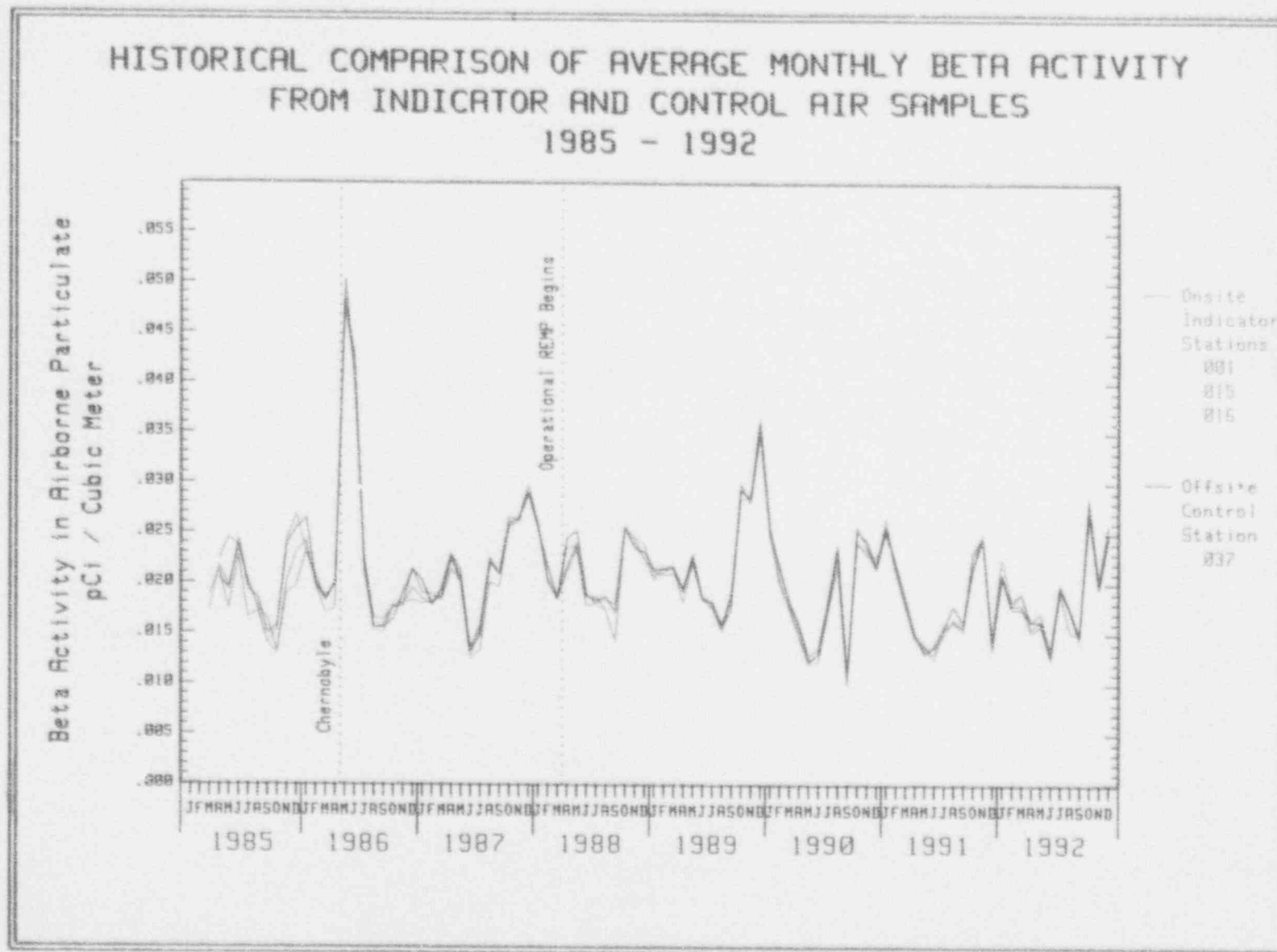
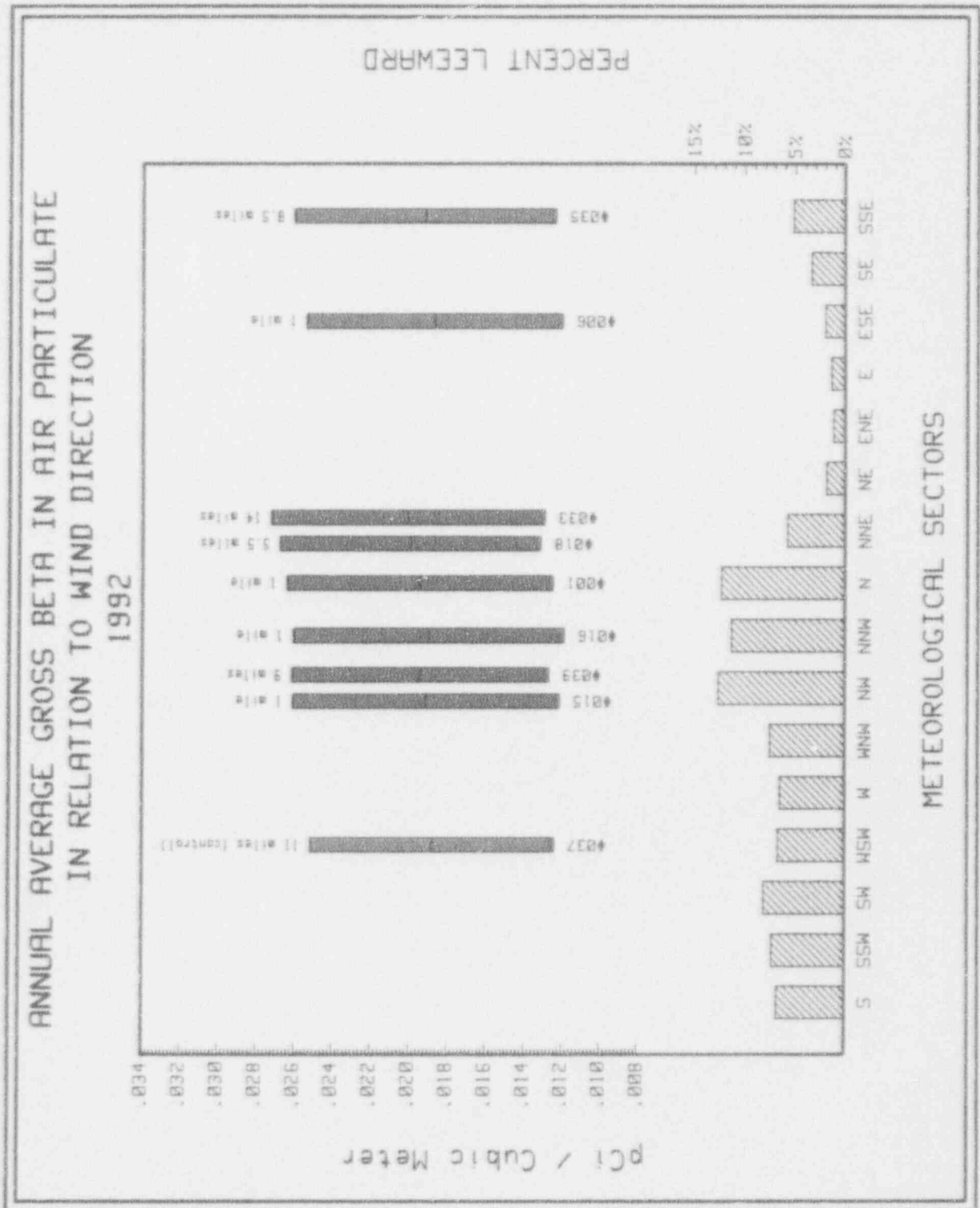
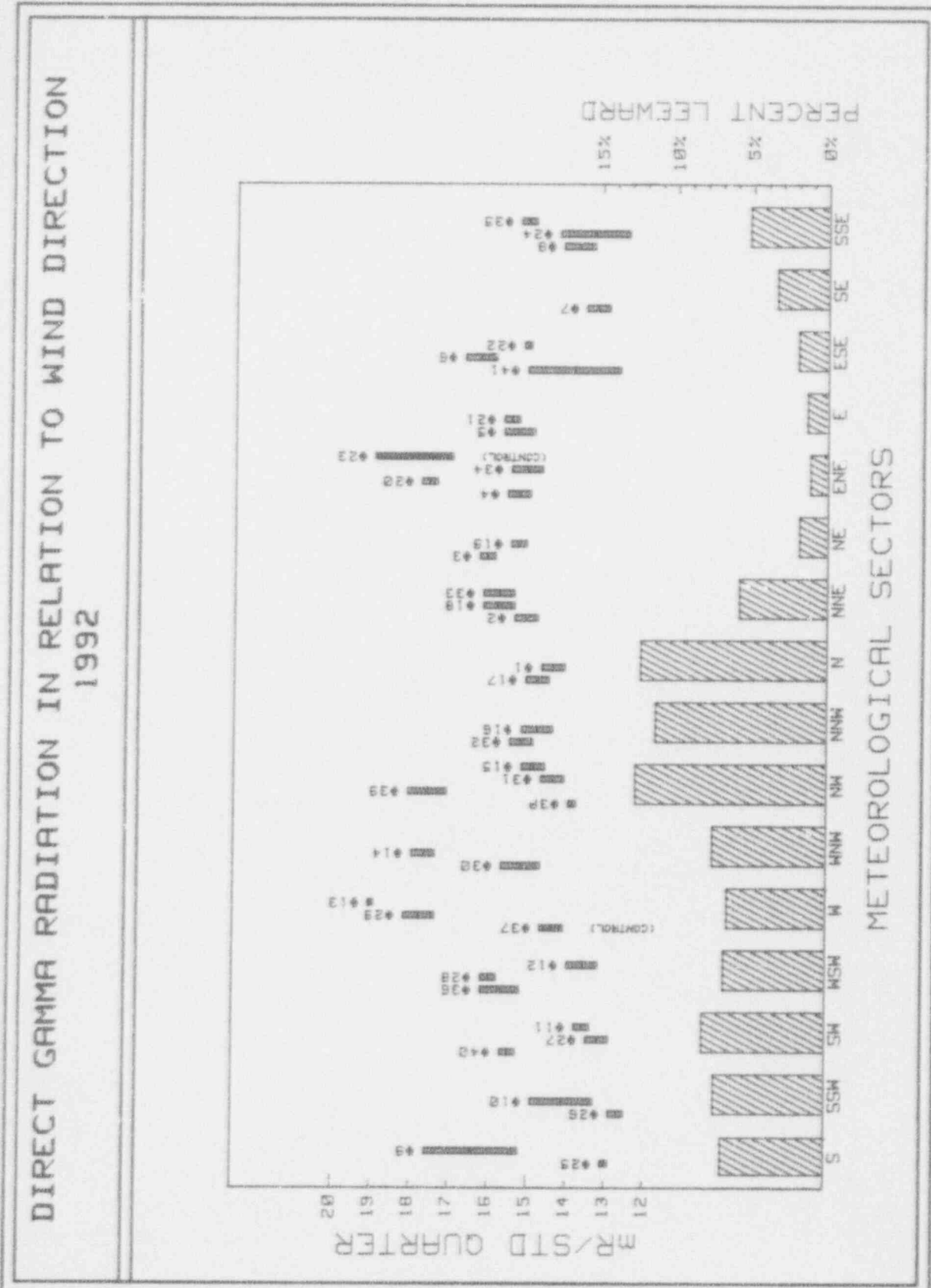


FIGURE 3

FIGURE 4



5-8



# HISTORICAL COMPARISON OF TRITIUM ACTIVITY IN SURFACE AND GROUND WATER 1987 - 1992

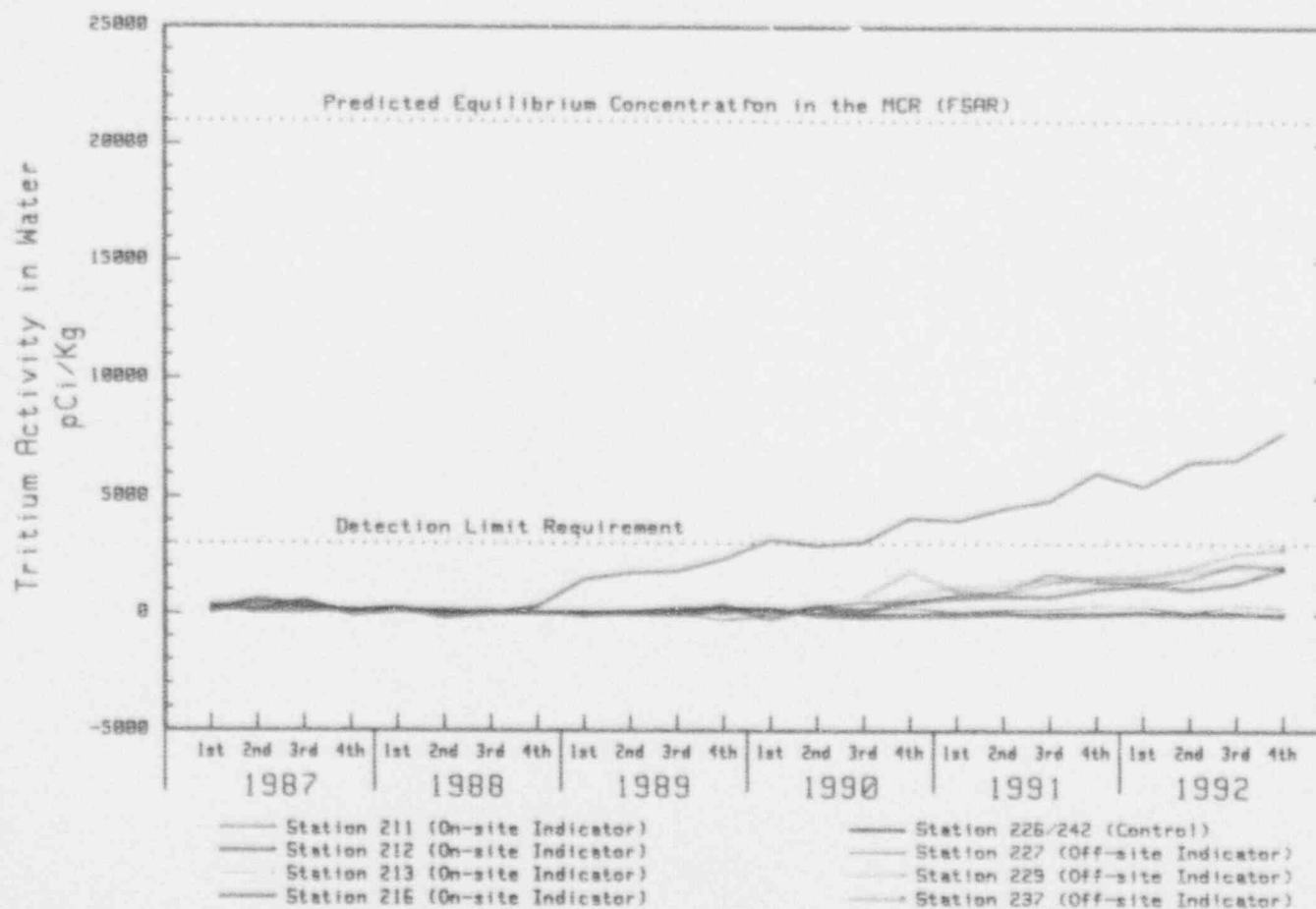


FIGURE 6

# SAMPLE COLLECTION AND ANALYSIS DEVIATIONS 1992

ITEM	MEDIA CODES	LOCATION	PRESCRIBED REMP ACTIVITY	DEVIATION AND/OR DEFICIENCY	COMMENTS
1	WG	#235	Quarterly sample collection. Gamma isotopic and tritium analysis.	1st Quarter Sample Not Collected	The sample location was inaccessible due to local flooding.
2	WG	#235	Quarterly sample collection. Gamma isotopic and tritium analysis.	4th Quarter Sample Not Collected	The sample location was inaccessible due to local flooding.
3	WG	#239	Quarterly sample collection. Gamma isotopic and tritium analysis.	1st Quarter Sample Not Collected	The sample location was inaccessible due to local flooding.
4	WG	#239	Quarterly sample collection. Gamma isotopic and tritium analysis.	3rd Quarter Sample Not Collected	Unable to pump well due to low water level.
5	WG	#239	Quarterly sample collection. Gamma isotopic and tritium analysis.	4th Quarter Sample Not Collected	The sample location was inaccessible due to local flooding.
6	WD	#210	Monthly beta analysis.	October Sample Not Analyzed	Improper analysis designation recorded on collection form.

FIGURE 7

## LAND USE CENSUS

The annual land use census process serves as an opportunity to assess the REMP and determine if program modifications are deemed necessary. This assures that the surveillance activities are relevant and based on current conditions. Information is obtained primarily from local authorities via direct contact or phone conversations. Additional sources included contact with utility personnel and information obtained while performing routine REMP field activities.

The five-mile radius area surrounding STPEGS was also surveyed by car. The primary objective was to verify the nearest resident in the sixteen meteorological sectors and also obtain other relevant information.

The 1992 Land Use Census was submitted as a reference for the most current revision to the ODCM and the Semiannual Effluent Report. Highlights of the land use census are as follows:

- o Broadleaf vegetation sampling is performed at key indicator stations and at a control location in lieu of the garden census. Broadleaf vegetation samples also satisfy the collection requirement when milk samples are not available.
- o No commercial dairies are located in Matagorda County. Milk from a dedicated cow and used exclusively for family consumption is not commonly practiced. No milk supply of this type was located.
- o Hoechst Celanese Petrochemical Plant, which employs 350 personnel is located approximately 4.5 miles NNE of the STPEGS
- o OxyChem Petrochemical Plant, which employs 150-200 personnel is located approximately six miles E of the STPEGS.
- o Progress is being made in locating a permanent control composite surface water sample station for the Colorado River. The Lower Colorado River Authority was to integrate this need into a Lower Colorado River Authority/U.S. Geological Survey river sampling station sometime in 1992. However, LCRA engineers and



scientists have determine their original sampling concept was not compatible with the analytical tests to be performed and therefore have scrubbed the project. LCRA is now looking to locate our composite sampler at the new Bay City dam site which is scheduled for completion in late 1993 or early 1994.

- o The number of home sites within the five mile radius is approximately 200; and over 100 of these are located on Selkirk Island four miles east of STPEGS. Matagorda County population was approximately 38,000 in 1990; virtually unchanged from the 1980 census.
- o The 1992 Land Use Census identifies the nearest resident in nine of the sixteen sectors within the five-mile radius of STPEGS. The results are shown below. Two additional sectors are also included because of the residents' close proximity to the five-mile radius reference. No changes are noted from the 1991 Land Use Census.

SECTOR	DISTANCE (APPROXIMATE 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
NNW	3.5	REYNOLDS RANCH OFF FM 1468
N	3.5	REYNOLDS RANCH OFF FM 1468
NW	4.5	WONDIRK ROAD
E	5.5	FM 521
ENE	5.2	FM 2668

- o The Colorado River has been diverted so that it empties into West Matagorda Bay. The Army Corp. of Engineers along with other agencies are currently evaluating changes in the salinity gradient in the bay resulting from the diversion. A determination will then be made for artificial reefs in the bay sometime in 1993. The artificial reefs are being deployed in order to create a substrate

beneficial to the production of oysters. The enhanced habitat should also benefit other commercial and recreational fisheries.

The 1992 Land Use Census did not produce any new information that would result in changes to the REMP. There were no open items in the 1991 Annual Report to address. The existing surveillance requirements continue to be effective in assessing the radiological environmental quality of STPEGS environs. However, with future fisheries development in West Matagorda Bay, increased sampling may be necessary.



## QUALITY ASSURANCE

Quality assurance for the Radiological Laboratory (RL) is measured and assessed by four distinct methods.

1. Houston Lighting & Power Nuclear Assurance Department.

- o Performs periodic surveillance of specific REMP activities throughout the year.
- o Performs an annual comprehensive audit of the REMP.
- o Provides for an independent technical review by a technical specialist.

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 U.S. Environmental Protection Agency (USEPA) Intercomparison Studies Program.
- o Participation in the U.S. Citizens for Energy Awareness/National Institute of Standards and Technology (USCEA/NIST) 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. NRC, ANI, INPO, etc.).

- o Perform programmatic content and effectiveness reviews in order to assure license compliance and establish the degree of compliance with select operational guidelines.

The assessment process determined the radiological environmental program has sufficient depth to accurately monitor the plant's influence on the radiological quality of the environment. The program complies with licensing and regulatory requirements. The provisions to initiate corrective action to prevent or limit departures from the requirements are effective.

Radioanalytical capabilities were demonstrated by periodic testing of environmental media similar to the analysis required by the REMP. Two acceptable laboratory measurement assurance programs specifically designed to measure environmental radioanalytical capabilities are the USEPA Interlaboratory Comparison Program and the Battelle Pacific Northwest Laboratories Direct Radiation Testing Program. The radiological laboratory's performance in these programs is illustrated in Figures 8 and 9. A fifteen percent acceptance criteria for accuracy and precision (where applicable) has been applied. Where the criteria has not been met, the percent difference from the known is printed in red. In four test situations, the accuracy criteria was not met. Figure 8 shows positive bias for gross beta in water. This bias is attributed to multiple nuclides with multiple beta energies present in the test sample, in comparison to the reference calibration which uses a single nuclide with a dominant energy. Figure 8 shows a positive bias for Cs-134 in water. This bias is attributed to one of the other gamma isotopes in the samples, having an energy near the one used for Cs-134. The activity from the two energies are added together making the Cs-134 activity too large. These results are excellent when compared with the other participants in the program.



The first USEPA sample of the year, illustrated on Figure 8, was a beta in water analysis. An incorrect dilution factor was used for the sample's activity calculation. This resulted in the RL being +119.9% for the analysis. The RL recalculated the sample's activity with the correct dilution factor and was within ten percent of the known value. This was consistent with previous beta in water analyses as mentioned above.

Six performance objectives have been identified to ensure a successful REMP surveillance program. 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 10, 1992 REMP Laboratory Performance.

The performance objective for achieving a fifteen percent accuracy for Inter- and Intra-laboratory quality control samples was ninety five percent. The performance objective for achieving fifteen percent precision for Replicate Inter- and Intra-laboratory Quality Control Samples was ninety nine percent. The three sets of samples that did not meet the goal, each had one sample with low accuracy. The other samples in each set had high accuracy, causing each of the three sets to have low precision. The accuracy and precision performances are favorable results and were both the same as in 1991.

The performance objective of analyzing REMP samples in order to meet their required sensitivities was one hundred percent complete. This is the same level of performance as in 1991.

The performance objective of collecting and analyzing the required samples as scheduled was completed ninety nine percent. The one percent of the samples missed during 1992 can be found in Figure 7. The ninety nine percent performance was the same as in 1991.

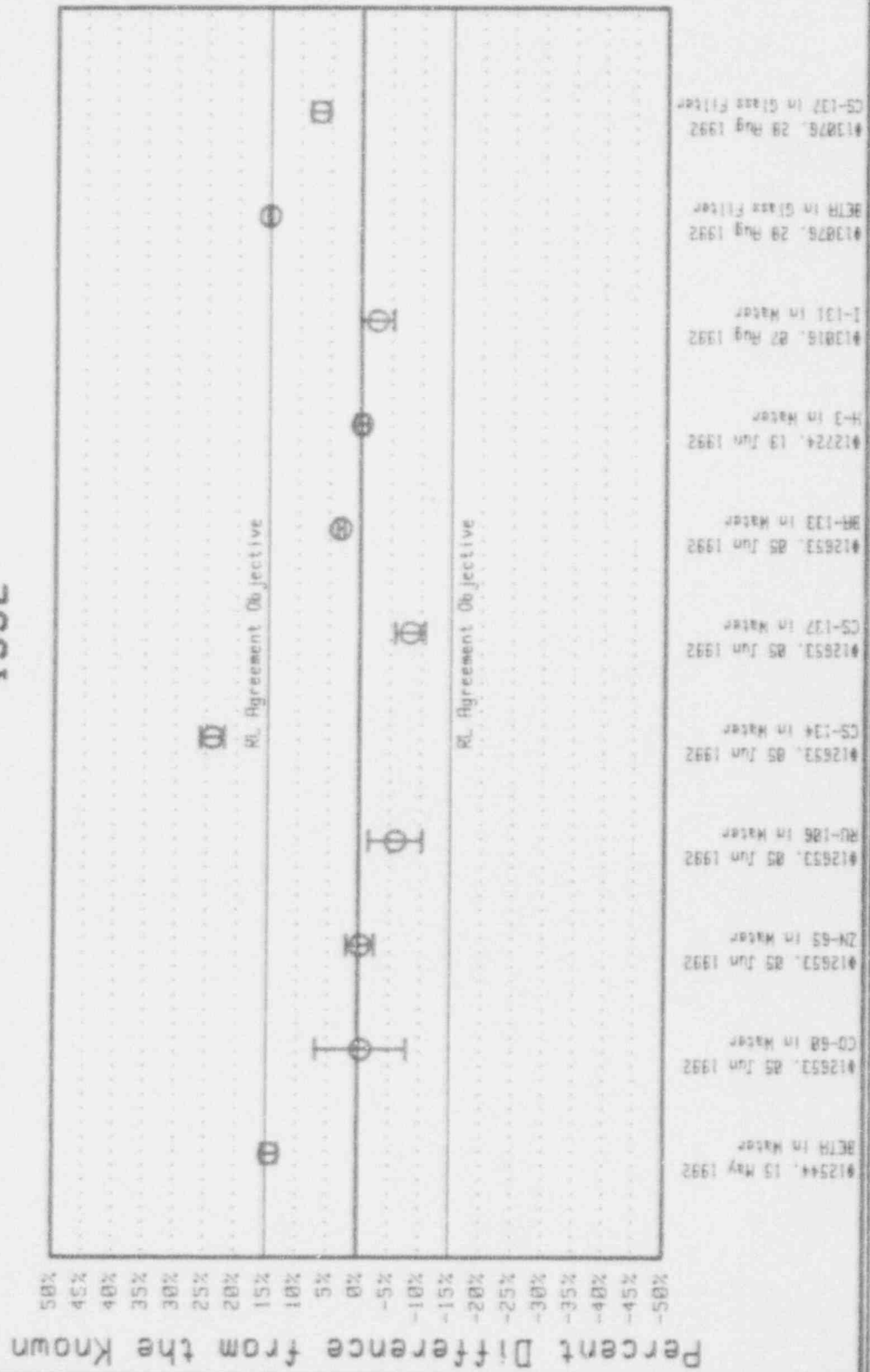
The performance objective of performing the REMP sample analyses within thirty days of receipt was completed ninety nine percent of the time. The sample analyses not completed within thirty days were a gamma analysis on three bird samples, one fish sample, nine gross beta in water analyses, and one tritium in water analysis. The samples were not able to be analyzed within thirty days due to the volume of sample to be analyzed during the time period. Although the samples were analyzed later than thirty days after receipt, all LLD's were met for all of the samples. The performance is a one percent improvement from 1992's performance of ninety eight percent.

The performance objective of maintaining a minimum of twenty percent quality control sample load was met. The quality control sample load was thirty one percent for all REMP samples analyzed in 1992.

Page 1 of 3



# RL PERFORMANCE IN THE EPA INTERCOMPARISON PROGRAM 1992



# RL PERFORMANCE IN THE EPA INTERCOMPARISON PROGRAM 1992

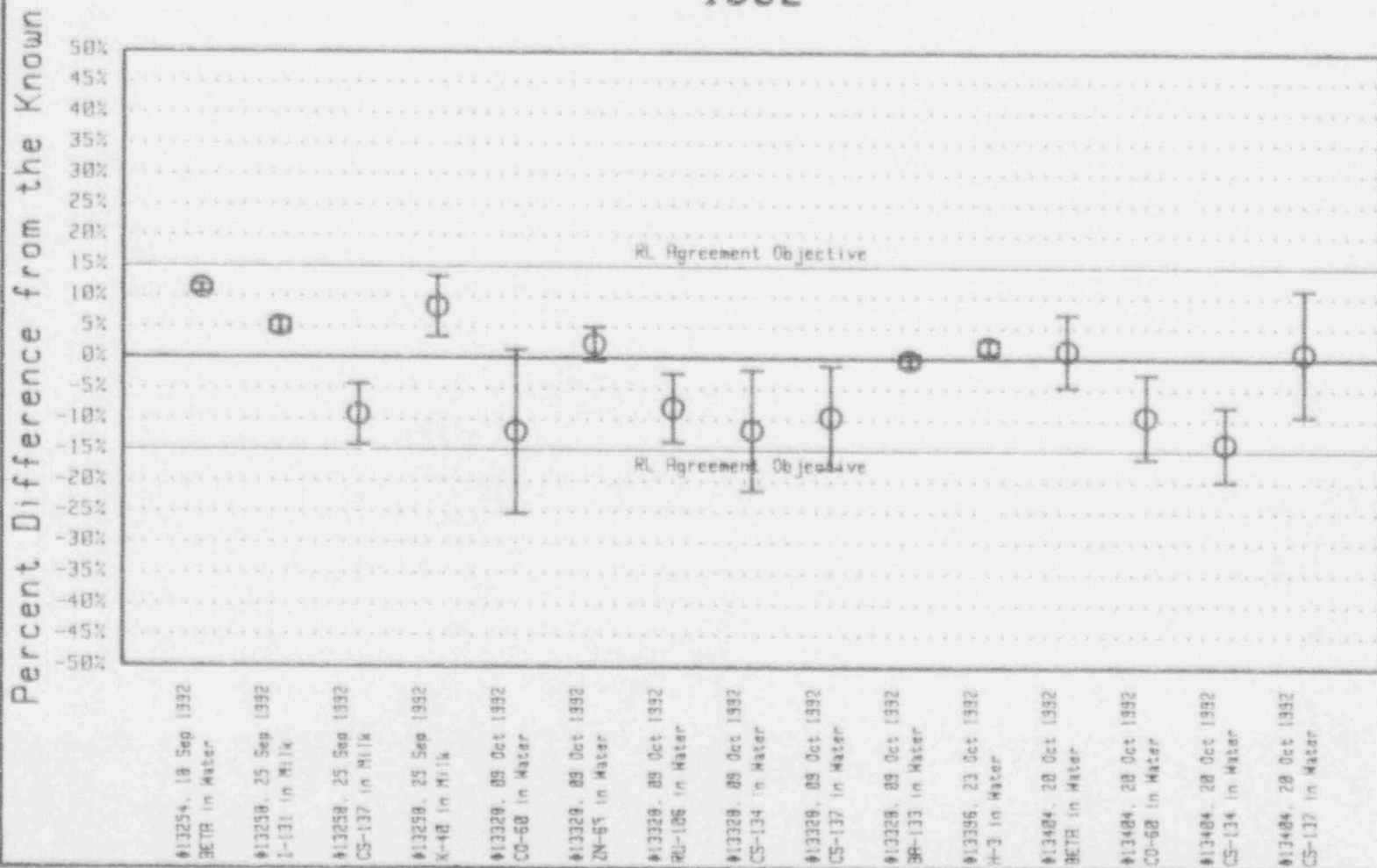
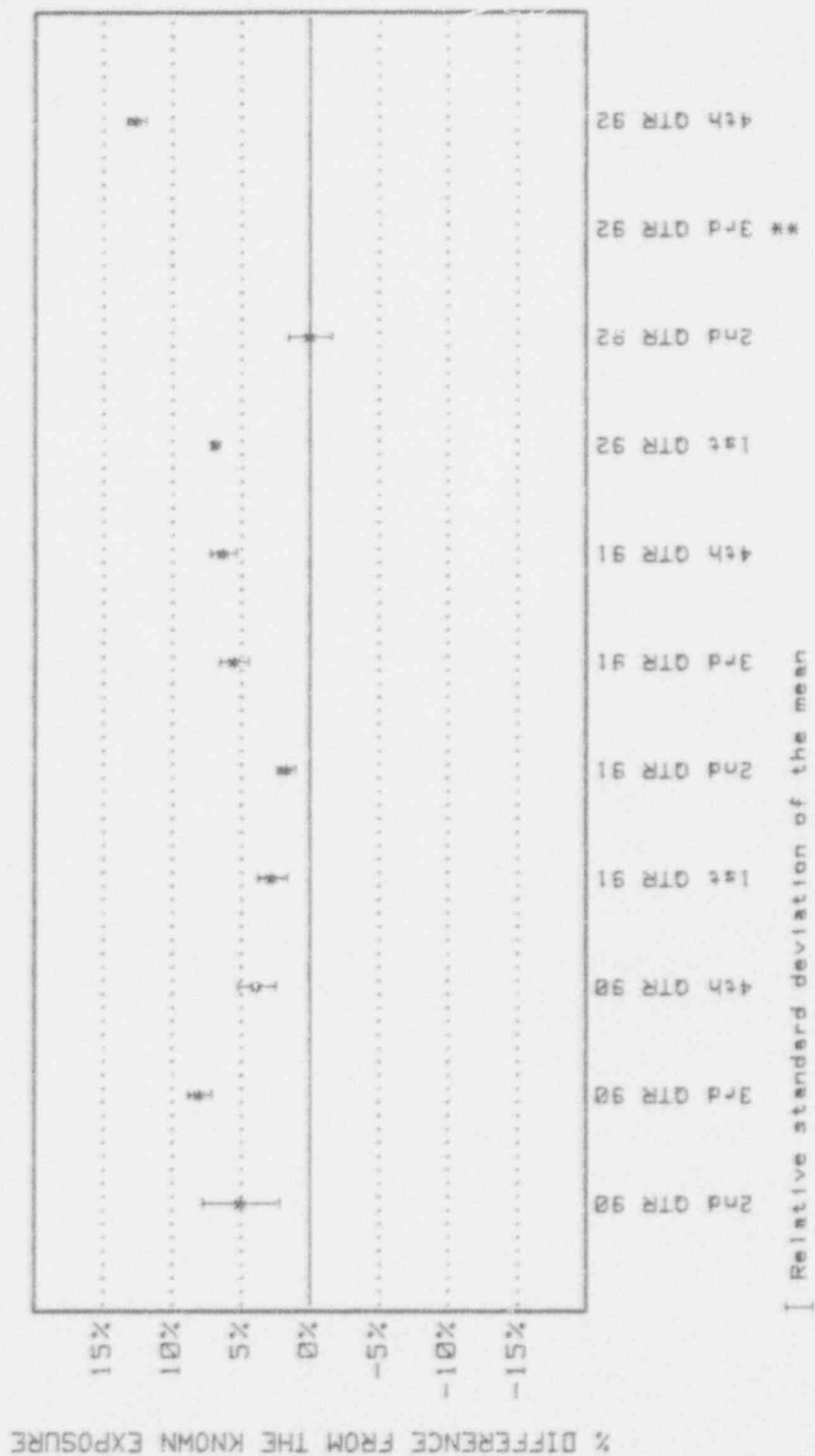


FIGURE 9

PERFORMANCE IN THE BATTELLE ENVIRONMENTAL TLD INTERCOMPARISON PROGRAM



I Relative standard deviation of the mean

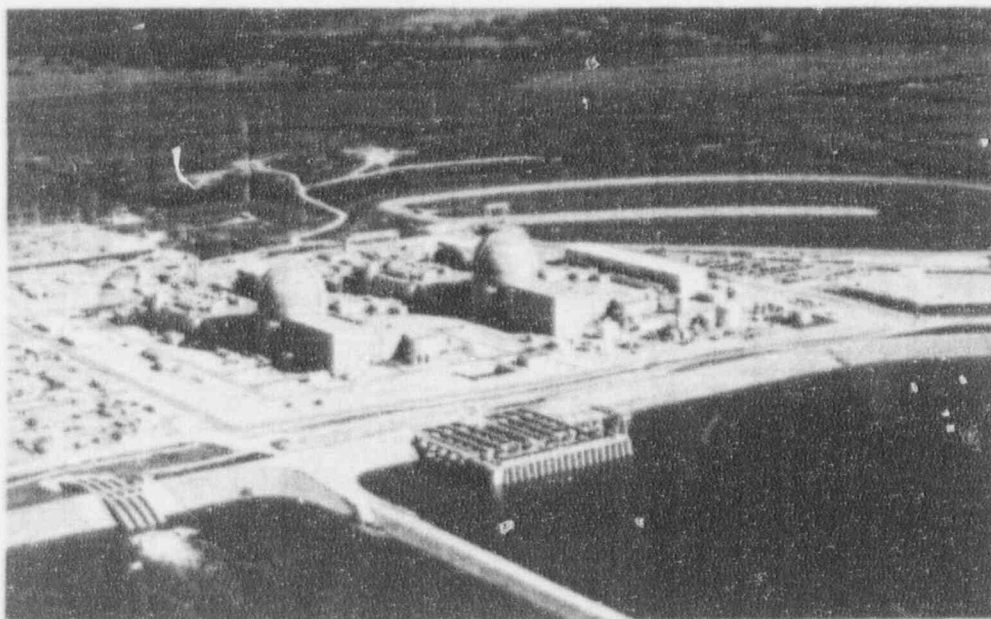
\* % Difference from the known exposure

\*\* Testing not performed this quarter to allow for other testing

## PERFORMANCE OBJECTIVES SUMMARY

Performance Objective	Performance
$\pm 15\%$ Accuracy for Inter- and Intralaboratory Quality Control Samples	98%
$\pm 15\%$ Precision for Replicate Inter- and Intralaboratory Quality Control Samples	100%
Analyze REMP Samples in Order to Meet Required Sensitivities	100%
Perform the Analysis of REMP Samples Within 30 Days of Sample Receipt	98%
Collect and analyze REMP required samples as scheduled	99%
Maintain a minimum of 20% quality control sample load which will include field duplicates and splits, reagent blanks, blinds, etc.	100%

FIGURE 10



# Addendum of Tables

**1992**

Annual Environmental &  
Annual Radiological Environmental  
Operating Reports



South Texas Project Electric Generating Station

TABLE 1  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

EXPOSURE: DIRECT RADIATION

40 TOTAL SAMPLING STATIONS

Number And Approximate Location of Sample Stations from Containment.	Routine Sampling Mode	Nominal Collection Frequency	Analysis Type	Minimum Analysis Frequency
<p>Exposure Media: TLD</p> <p><u>10</u>- Located in all 16 sectors, 1 mile.</p> <p><u>16</u>- Located in all 16 sectors, 4-6 miles.</p> <p><u>6</u>- Located in special interest areas (e.g. school, population centers), within 14 miles.</p> <p><u>2</u>- Control stations located in areas of minimal wind direction (W,ENE), 10-15 miles.</p>	Continuously	Quarterly	Gamma	Quarterly

TABLE 1  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

EXPOSURE: AIRBORNE

12 TOTAL SAMPLING STATIONS

Sample Media, Number And Approximate Location of Sample Stations from Containment.	Routine Sampling Mode	Nominal Collection Frequency	Analysis Type	Minimum Analysis Frequency
<u>Radioiodine and Particulate</u>  <u>3</u> - Located at the exclusion zone, N, NNW, NW Sectors, 1 mile.  <u>1</u> - Located in Bay City, 14 miles.  <u>1</u> - Control Station, located in a minimal wind direction (W), 11 miles.	Continuously	Weekly	<u>Iodine:</u> I-131  <u>Part:</u> Gross Beta  Gamma-Isotopic	Weekly  Weekly  Quarterly Composite
<u>Soils</u>  <u>5</u> - Same as the air stations.  <u>2</u> - Located adjacent to farms, 5 miles.	Grab	Annually	Gamma-Isotopic	Annually

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

EXPOSURE: WATERBORNE

### 21 TOTAL SAMPLING STATIONS

Sample Media, Number And Approximate Location of Sample Stations	Routine Sampling Mode	Nominal Collection Frequency	Analysis Type	Minimum Analysis Frequency
<u>Surface</u>  <u>1</u> - Located in MCR at point of MCR blowdown to Colorado River.  <u>1</u> - Located above the site on the Colorado River not influenced by plant discharge.  <u>1</u> - Located downstream from blowdown entrance into the Colorado River, 2 miles.  <u>1</u> - Located near site boundary in the Little Robbins Slough.  <u>1</u> - Located near site boundary in the E. Fork of the Little Robbins slough.  <u>1</u> - Located near site boundary in the W. Branch of the Colorado River.  <u>1</u> - Located in drainage ditch north of MCR that empties into Colorado River upstream of the MCR makeup pumping facility.	Composite (grab if not available)           Grab	Monthly          Quarterly	Gamma-Isotopic  Tritium       Gamma-Isotopic  Tritium	Monthly          Quarterly Composite       As collected

TABLE 1  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

EXPOSURE: WATERBORNE

21 TOTAL SAMPLING STATIONS

Sample Media, Number And Approximate Location of Sample Stations	Routine Sampling Mode	Nominal Collection Frequency	Analysis Type	Minimum Analysis Frequency
<u>Ground</u> <u>1-</u> Located at well upgradient from the MCR in the shallow aquifer. <u>1-</u> Located at well downgradient in the shallow aquifer.	Grab	Quarterly	Gamma-Isotopic Tritium	As collected
<u>Potable Water</u> <u>1-</u> Located on site. <u>1-</u> Located in Bay City.	Grab	Monthly	Gamma-Isotopic Gross Beta Tritium	Monthly  Quarterly Composite
<u>Sediment</u> <u>1-</u> Located near site boundary in the Little Robbins slough. <u>1-</u> Located near site boundary in the E. Fork of the Little Robbins Slough. <u>1-</u> Located near site boundary in the W. Branch of the Colorado River.	Grab	Semi-annually	Gamma-Isotopic	As collected

TABLE 1  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

EXPOSURE: WATERBORNE

21 TOTAL SAMPLING STATIONS

Sample Media, Number And Approximate Location of Sample Stations	Routine Sampling Mode	Nominal Collection Frequency	Analysis Type	Minimum Analysis Frequency
<u>1</u> - Located above the site on the Colorado River, not influenced by plant discharge.  <u>1</u> - Located downstream from blowdown entrance into the Colorado River.  <u>1</u> - Located in MCR at point of MCR blowdown to Colorado River.  <u>1</u> - Located in the Colorado River where drainage ditch empties into it, North of the MCR makeup pumping facility.  <u>1</u> - Located in the Colorado River where spillway discharge channel empties.  <u>1</u> - Located in drainage ditch NE of protected area that crosses Hwy. 521 south of maintenance road and empties into Kelly Lake (a soil sample maybe taken in lieu of sediment sample when needed).  <u>1</u> - Located in MCR near circulating water discharge.	Grab	Semi-annually	Gamma-Isotopic	As collected

TABLE 1  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

EXPOSURE: INGESTION

10 TOTAL SAMPLING STATIONS

Sample Media, Number And Approximate Location of Sample Stations	Routine Sampling Mode	Nominal Collection Frequency	Analysis Type	Minimum Analysis Frequency
<u>Milk</u> *	Grab	Semi-monthly on pasture, monthly at other times.	Gamma-Isotopic  Low Level I-131	As collected
<u>Broadleaf Vegetation</u> <u>3</u> - Located at the exclusion zone, N, NW, and NNW sectors. <u>1</u> - Located in a minimal wind direction west.	Grab	Monthly during growing season (When available)	Gamma-Isotopic	As collected
<u>Agricultural Products</u> **				

\* 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

10 TOTAL SAMPLING STATIONS

Sample Media, Number And Approximate Location of Sample Stations	Routine Sampling Mode	Nominal Collection Frequency	Analysis Type	Minimum Analysis Frequency
<u>Terrestrial &amp; Aquatic Animals (edible portions)</u>  <u>1</u> - Representing commercially and/or recreational important species in vicinity of STPEGS that maybe influenced by plant operation.  <u>1</u> - Same or analogous species in area not influenced by STPEGS.  <u>1</u> - Same or analogous species in the MCR.	Grab	Sample in season or semi-annually if not seasonal	Gamma-Isotopic	As collected
<u>Pasture Grass</u>  <u>1</u> - Located at the exclusion zone, in any of the three sectors (N, NW, NNW).  <u>1</u> - Located 11 miles west.	Grab	Quarterly (When cattle are on pasture)	Gamma-Isotopic	As collected
<u>Domestic Meat</u>  <u>1</u> - Represents domestic stock fed on crops grown exclusively within 10 miles of the plant.	Grab	Annually	Gamma-Isotopic	As collected

## TABLE 2

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

TABLE 2

SAMPLE SUBMISSION CODE INFORMATION LIS'				
MEDIA CODE	FIG	STATION CODE	VECTOR	LOCATION DESCRIPTION
DR AI AP VB VP SO	1	001	1 mile N	Exclusion Zone - FM 521
DR	1	002	1 mile NNE	Exclusion Zone - FM 521
DR	1	003	1 mile NE	Exclusion Zone - FM 521
DR	1	004	1 mile ENE	Exclusion Zone - FM 521
DR	1	005	1 mile E	STPEGS Visitor Center - FM 521
DR AI AP SO	1	006	3.5 miles ESE	Site near reservoir makeup pumping facility
DR	1	007	3.5 miles SE	Site on MCR DiKE
DR	1	008	0.5 mile SSE	Site on MCR DiKE
DR	1	009	0.25 mile S	Site on MCR DiKE
DR	1	010	0.25 mile SSW	Site on MCR DiKE
DR	1	011	0.5 mile SW	Site on MCR DiKE
DR	1	012	1 mile WSW	Site on MCR DiKE
DR	1	013	1 mile W	Exclusion Zone - FM 521
DR	1	014	1 mile WNW	Exclusion Zone - FM 521
DR AI AP VB SO VP	1	015	1 mile NW	Exclusion Zone - FM 521
DR AI AP VB SO VP	1	016	1 mile NNW	Exclusion Zone - FM 521

† This station may be used to obtain the required aquatic samples in the vicinity of STPEGS that may be influenced by plant operations.

‡ This station is not found on one of the figures.

\* Control Station

MCR - STPEGS Main Cooling Reservoir

Media codes typed in bold satisfy collection requirement described in Table 1.

Station codes printed in bold identify offsite locations.

TABLE 2

SAMPLE SUBMISSION CODE INFORMATION LIST				
MEDIA CODE	FIG	STATION CODE	VECTOR	LOCATION DESCRIPTION
DR	1	017	6 miles N	Buckeye - FM 1468
DR AI AP SO	1	018	5.5 miles NNE	Hoescht Celanese Plant - FM 3057
DR	1	019	5 miles NE	FM 2668
DR	1	020	5 miles ENE	FM 2668
DR	1	021	5 miles E	FM 521
DR	1	022	7 miles ESE	Cain Chemical Plant, TX 60
DR	1	*023	16 miles ENE	Intersection of FM 521 and FM 2540
DR	1	024	4 miles SSE	Site on MCR Dike
DR	1	025	4 miles S	Site on MCR Dike
DR	1	026	4 miles SSW	Site on MCR Dike
DR	1	027	2.5 miles SW	Site on MCR Dike
DR	1	028	5 miles WSW	FM 1095
DR SO	1	029	4.5 miles W	FM 1095
DR	1	030	6 miles WNW	Tres Palacios Oaks, FM 2853
DR	1	031	5.6 miles NW	Wilson Creek Road
DR	1	032	3.5 miles NNW	FM 1468
DR AI AP SO	1	033	14 miles NNE	Bay City

♦ This station may be used to obtain the required aquatic samples in the vicinity of STPEGS that may be influenced by plant operations.

⚙ This station is not found on one of the figures.

\* Control Station

MCR - STPEGS Main Cooling Reservoir

Media codes typed in bold satisfy collection requirement described in table 1.

Station codes printed in bold identify offsite locations.

TABLE 2

SAMPLE SUBMISSION CODE INFORMATION LIST				
MEDIA CODE	FIG	STATION CODE	VECTOR	LOCATION DESCRIPTION
DR	1	034	8 miles ENE	Wadsworth
DR AI AP SO	1	035	8.5 miles SSE	Matagorda
DR	1	036	10 miles WSW	College Port
DR AI AP VB VP SO	1	*037	11 miles W	Palacios Substation
DR	1	038	11 miles NW	Blessing
DR AI AP SO	1	039	9 miles NW	El Maton
DR	1	040	4.5 miles SW	Citrus Grove
DR	1	041	2.6 miles ESE	Site on Dike
DR	1	042	8.2 miles NW	FM 459 at Tidehaven Intermediate School
DR	*	094	on site	REMP Storage Building (TLD Control)
DR	*	095	on site	REMP Storage Building (TLD Control)
DR	*	096	N/A	Storage Control
DR	*	097	N/A	Storage Control
DR	*	098	N/A	Travel Control
DR	*	099	N/A	Travel Control
WG	1	205	4 miles SE	Well #446A, .5 Mile north of MCR blowdown canal (30' deep)

\* This station may be used to obtain the required aquatic samples in the vicinity of STPEGS that may be influenced by plant operations.

\* This station is not found on one of the figures.

\* Control Station

MCR - STPEGS Main Cooling Reservoir

Media codes typed in bold satisfy collection requirement described in Table 1.

Station codes printed in bold identify offsite locations.

TABLE 2

SAMPLE SUBMISSION CODE INFORMATION LIST				
MEDIA CODE	FIG	STATION CODE	VECTOR	LOCATION DESCRIPTION
WG	1	206	4 miles SE	Well #446, .5 Mile north of MCR blowdown canal (75' deep)
WG	1	*207	1.5 miles W	Well #603A, .25 mile west of TX 521 (75' deep)
WG	1	*208	1.5 miles W	Well #603B, .25 mile west of TX 521 (150' deep)
WS	1	209	2 miles E	Kelly Lake
WD	*	210	On Site	Approved drinking water supply from STPEGS
WS SS	1	211	3.5 miles S	Site, E. Branch Little Robbins Slough
WS SS	1	212	3.5 miles S	Little Robbins Slough
WS SS	1	213	3 miles SE	Site, W. Branch Colorado River
	1	214*	2 miles E	MCR Makeup Water Discharge
SS	1	215*	1 mile SW	MCR Circulating water discharge
WS SS	1	216*	3 miles SSE	MCR blowdown
WS SS	*	217*	3 miles SSE	Region 1 (mouth of Colorado River to marker 1)
WS F1 F2 F3 CC	*	218*	3 miles SSE	Region 2 (marker #1 to marker #27)

\* This station may be used to obtain the required aquatic samples in the vicinity of STPEGS that may be influenced by plant operations.

\* This station is not found on one of the figures.

\* Control Station

MCR - STPEGS Main Cooling Reservoir

Media codes typed in bold satisfy collection requirement described in Table 1.

Station codes printed in bold identify offsite locations.

TABLE 2

SAMPLE SUBMISSION CODE INFORMATION LIST				
MEDIA CODE	FIG	STATION CODE	VECTOR	LOCATION DESCRIPTION
WS F1 F2 F3 CC	♣	219♣	3 miles SSE	Region 3 (marker #27 to Highway 521 overpass)
CC	♣	*220♣	3 miles SSE	Region 4 (Highway 521 overpass to Bay City Dam)
SS F1 F2 F3 WS	♣	*221	3 miles SSE	Region 5 (Above Bay City Dam)
F1 F2 F3 CC CS OY	♣	222♣	>10 miles	West Matagorda Bay
	1	223♣	>10 miles	East Matagorda Bay
	1	224♣	>10 miles	West Intercoastal Canal
	1	225♣	>10 miles	East Intercoastal Canal
WS	1	*226	5.5 miles NNE	Colorado River at Hoescht Celanese Plant
WS SS	1	227	6 miles SE	West bank of Colorado River 1.5 miles downstream of STPEGS across from channel marker #22
WD	♣	*228	14 miles NNE	Bay City Public water supply
WS	1	229	1 mile SE	Drainage ditch north of reservoir that empties into the Colorado River upstream of the reservoir makeup pumping facility

♣ This station may be used to obtain the required aquatic samples in the vicinity of STPEGS that may be influenced by plant operations.

♣ This station is not found on one of the figures.

\* Control Station

MCR - STPEGS Main Cooling Reservoir

Media codes typed in bold satisfy collection requirement described in Table 1.

Station codes printed in bold identify offsite locations.

TABLE 2

SAMPLE SUBMISSION CODE INFORMATION LIST				
MEDIA CODE	FIG	STATION CODE	VECTOR	LOCATION DESCRIPTION
SS	1	230	3.5 miles ESE	Colorado River at point where drainage ditch (station #229) empties into it
SO	2	231	11 miles W	Soil in vegetation plot at station #37
SO	1	232	9 miles NW	Farmland behind station #39
F1 F2 F3 CC SS WS	1	233*	4.3 miles SE	Colorado River where MCR blowdown discharge channel empties into it
SO	1	234	1 mile NW	Farm across from station #15
WG	1	235	3.8 miles S	Well B-3 directly south from MCR
B8	2	236	3.8 miles S	STPEGS Protected Area
WS	1	237	3.7 miles SE	Blowdown discharge channel from MCR
WG	2	238	3.7 miles S	MCR relief well (fast side of south wall)
WG	1	*239	1 mile NW	Well B-1B, near REMP sampling station #15
WS SC SS	1	240	1 mile E	Drainage ditch originating NE of protected area that crosses Hwy 521 south of main entrance road and empties into Kelly Lake

\* This station may be used to obtain the required aquatic samples in the vicinity of STPEGS that may be influenced by plant operations.

2 This station is not found on one of the figures.

\* Control Station

MCR - STPEGS Main Cooling Reservoir

Media codes typed in bold satisfy collection requirement described in Table 1.

Station codes printed in bold identify offsite locations.

TABLE 2

SAMPLE SUBMISSION CODE INFORMATION LIST				
MEDIA CODE	FIG	STATION CODE	VECTOR	LOCATION DESCRIPTION
	1	241	<1 mile S	MCR circulating water intake
<b>SS WS</b>	1	<b>*242</b>	>10 miles NNE	Colorado River where it intersects Highway 35
<b>WS</b>	1	<b>243</b>	>10 miles N	Colorado River upstream of Bay City Dam at the LCRA pumping station
<b>WG</b>	♣	244	3.7 miles SSW	MCR relief wells (west side of south wall)
<b>F1 F2 F3 CC</b>	1	<b>300♣</b>	<1 mile S	STPEGS Main Cooling Reservoir
<b>SS F1 F2 F3 CC</b>	♣	<b>301-631♣</b>	<1 mile S	Grids located in main cooling reservoir. One SS shall be taken at any of the grids 304, 305, 312-314, 323-326 and another one at any of the grids 364-566 or 584-586.

♣ This station may be used to obtain the required aquatic samples in the vicinity of STPEGS that may be influenced by plant operations.

♣ This station is not found on one of the figures.

\* Control Station

MCR - STPEGS Main Cooling Reservoir

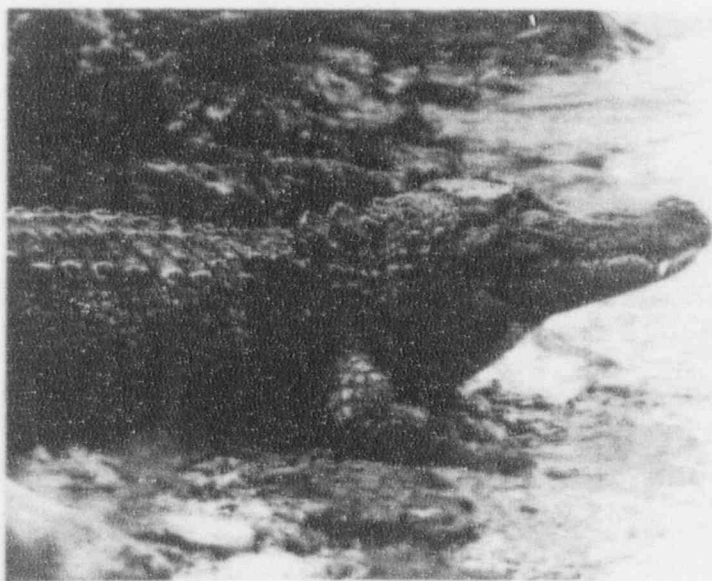
Media codes typed in bold satisfy collection requirement described in Table 1.

Station codes printed in bold identify offsite locations.

## 1992 REMP Analysis Summary

Table 3 is a complete listing of the REMP's analytical data. All environmental analyses have been included in this evaluation including additional analyses not required by the minimal program. The summary has been formatted to resemble an NRC and industry standard. Modifications were made for the sole purpose of reading ease.

The type of media 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. The second column gives the total analyses performed for the indicated nuclide/ the total number of nonroutine samples analyzed. (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 (LLD) for each analysis and the second is the LLD requirement for Detection Capabilities for Environmental Sample Analysis. Typically, the achieved LLD's are significantly lower than the required limits.



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 LLD).
- o The number of analyses whose values were greater than three times the standard deviation/ the total number of analyses.
- o The lowest and highest values for the analyses.

TABLE 3  
1992 REMP ANALYSIS SUMMARY

MEDIUM: Drinking Water

UNITS: pCi/Kg

ANALYSIS TYPE	TOTAL ANALYSES/ NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN ( f ) ** RANGE	LOCATION WITH HIGHEST ANNUAL LOCATION INFORMATION MEAN ( f ) ** RANGE	CONTROL LOCATIONS MEAN ( f ) ** RANGE
Beta	23/ 0	1.7E+00 4.0E+00	3.1E+00 ( 7 / 11 ) ( 6.3E-01 ~ 8.7E+00 )	14 miles NNE (#228)	5.6E+00 ( 9 / 12 ) ( 1.6E+00 ~ 1.1E+01 )
H-3	8/ 0	2.9E+02 3.0E+03	5.9E+01 ( 0 / 4 ) ( 7.7E+01 ~ 2.0E+02 )	On Site (#210)	2.1E+01 ( 0 / 4 ) ( 8.7E+01 ~ 7.4E+01 )
I-131	24/ 0	6.6E+00 ---	4.7E-01 ( 0 / 12 ) ( 4.4E+00 ~ 9.5E-01 )	On Site (#210)	2.9E+00 ( 0 / 12 ) ( 2.2E+01 ~ 9.0E-01 )
Cs-134	24/ 0	1.9E+00 1.5E+01	2.5E+00 ( 0 / 12 ) ( 8.5E+00 ~ 3.2E-01 )	On Site (#210)	3.3E+00 ( 0 / 12 ) ( 6.1E+00 ~ 9.1E-01 )
Cs-137	24/ 0	2.0E+00 1.8E+01	7.5E-02 ( 0 / 12 ) ( 9.5E-01 ~ 1.5E+00 )	On Site (#210)	9.1E-02 ( 0 / 12 ) ( 1.4E+00 ~ 1.6E+00 )
Mn-54	24/ 0	2.0E+00 1.5E+01	1.4E-01 ( 0 / 12 ) ( 7.8E-01 ~ 3.7E-01 )	14 miles NNE (#228)	2.9E-01 ( 0 / 12 ) ( 8.5E-01 ~ 1.1E+00 )
Fe-59	24/ 0	4.2E+00 3.0E+01	2.3E-01 ( 0 / 12 ) ( 1.1E+00 ~ 2.5E+00 )	On Site (#210)	7.5E-02 ( 0 / 12 ) ( 1.2E+00 ~ 1.8E+00 )
Co-58	24/ 0	2.0E+00 1.5E+01	5.4E-01 ( 0 / 12 ) ( 1.8E+00 ~ 1.1E-01 )	14 miles NNE (#228)	1.3E-01 ( 0 / 12 ) ( 1.5E+00 ~ 8.3E-01 )
Co-60	24/ 0	1.9E+00 1.5E+01	1.3E-01 ( 0 / 12 ) ( 1.4E+00 ~ 1.1E+00 )	On Site (#210)	2.7E-01 ( 0 / 12 ) ( 1.2E+00 ~ 5.2E-01 )
Zn-65	24/ 0	3.9E+00 3.0E+01	1.0E+00 ( 0 / 12 ) ( 2.8E+00 ~ 3.2E+00 )	On Site (#210)	1.8E+00 ( 0 / 12 ) ( 4.0E+00 ~ 5.5E-01 )
Zr-95	24/ 0	3.6E+00 1.5E+01	2.4E-01 ( 0 / 12 ) ( 3.1E+00 ~ 1.8E+00 )	On Site (#210)	6.7E-01 ( 0 / 12 ) ( 3.0E+00 ~ 2.4E+00 )
Nb-95	24/ 0	2.4E+00 1.5E+01	1.4E-02 ( 0 / 12 ) ( 8.8E-01 ~ 1.1E+00 )	On Site (#210)	4.6E-01 ( 0 / 12 ) ( 1.7E+00 ~ 6.5E-01 )
Ba-140	24/ 0	1.4E+01 1.0E+03	1.3E+00 ( 0 / 12 ) ( 1.1E+01 ~ 5.4E+00 )	On Site (#210)	2.0E+00 ( 0 / 12 ) ( 1.5E+01 ~ 7.7E+00 )
La-140	24/ 0	3.9E+00 1.5E+01	1.3E-01 ( 0 / 12 ) ( 2.2E+00 ~ 7.9E-01 )	On Site (#210)	5.3E-01 ( 0 / 12 ) ( 4.4E+00 ~ 1.5E+00 )

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (---) USED WHEN THERE IS NO REQUIREMENT.  
\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

TABLE 3  
1992 REMP ANALYSIS SUMMARY

UNITS: pci/Kg

MEDIUM: Ground Water

ANALYSIS TYPE	TOTAL ANALYSES/ NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN ( f ) ** RANGE	LOCATION WITH LOCATION INFORMATION	HIGHEST ANNUAL MEAN MEAN ( f ) ** RANGE	CONTROL LOCATIONS MEAN ( f ) ** RANGE
H-3	15/ 0	2.9E+02 3.0E+03	5.2E+02 ( 4 / 15 ) ( -1.6E+02 ~ 2.6E+03 )	3.7 miles S (#238)	2.4E+03 ( 3 / 3 ) ( 2.1E+03 ~ 2.6E+03 )	no samples
I-131	12/ 0	1.3E+01 ...	-1.3E+00 ( 0 / 12 ) ( -5.5E+00 ~ 3.1E+00 )	3.7 miles S (#238)	9.4E-01 ( 0 / 3 ) ( -1.3E+00 ~ 3.1E+00 )	no samples
Cs-134	12/ 0	1.9E+00 1.5E+01	-2.5E+00 ( 0 / 12 ) ( -1.1E+01 ~ -5.7E-01 )	1 mile NW (#239)	-9.0E-01 ( 0 / 2 ) ( -1.2E+00 ~ -5.7E-01 )	no samples
Cs-137	12/ 0	2.2E+00 1.8E+01	-2.9E-01 ( 0 / 12 ) ( -9.7E-01 ~ 7.0E-01 )	3.7 miles S (#238)	3.1E-01 ( 0 / 3 ) ( 2.4E-01 ~ 7.0E-01 )	no samples
Mn-54	12/ 0	2.0E+00 1.5E+01	-2.7E-01 ( 0 / 12 ) ( -1.9E+00 ~ 7.2E-01 )	1 mile NW (#239)	3.9E-01 ( 0 / 2 ) ( 5.1E-02 ~ 7.2E-01 )	no samples
Fe-59	12/ 0	4.9E+00 3.0E+01	-5.4E-02 ( 0 / 12 ) ( -3.5E+00 ~ 1.9E+00 )	1 mile NW (#239)	8.8E-01 ( 0 / 2 ) ( 0.0E+00 ~ 1.8E+00 )	no samples
Co-58	12/ 0	2.2E+00 1.5E+01	-5.0E-01 ( 0 / 12 ) ( -2.0E+00 ~ 1.0E+00 )	3.7 miles S (#238)	-1.3E-01 ( 0 / 3 ) ( -1.5E+00 ~ 1.0E+00 )	no samples
Co-60	12/ 0	2.0E+00 1.5E+01	-2.4E-01 ( 0 / 12 ) ( -1.7E+00 ~ 1.5E+00 )	3.7 miles S (#238)	1.0E-01 ( 0 / 3 ) ( -1.6E+00 ~ 1.5E+00 )	no samples
Zn-65	12/ 0	3.8E+00 3.0E+01	-2.2E+00 ( 0 / 12 ) ( -6.5E+00 ~ 1.8E-01 )	1 mile NW (#239)	-2.0E+00 ( 0 / 2 ) ( -2.9E+00 ~ -1.1E+00 )	no samples
Zr-95	12/ 0	4.0E+00 1.5E+01	-4.4E-01 ( 0 / 12 ) ( -1.6E+00 ~ 6.8E-01 )	3.8 miles S (#235)	-5.0E-02 ( 0 / 5 ) ( -9.3E-01 ~ 6.8E-01 )	no samples
Nb-95	12/ 0	2.8E+00 1.5E+01	-1.0E-01 ( 0 / 12 ) ( -1.4E+00 ~ 1.4E+00 )	3.7 miles SSW (#244)	6.6E-01 ( 0 / 2 ) ( 5.3E-01 ~ 7.9E-01 )	no samples
Ba-140	12/ 0	2.1E+01 1.0E+03	-1.4E+00 ( 0 / 12 ) ( -3.5E+01 ~ 9.0E+00 )	3.7 miles S (#238)	5.2E+00 ( 0 / 3 ) ( -1.7E+00 ~ 9.0E+00 )	no samples
La-140	12/ 0	7.0E+00 1.5E+01	6.1E-01 ( 0 / 12 ) ( -2.8E+00 ~ 3.5E+00 )	3.7 miles SSW (#244)	1.5E+00 ( 0 / 2 ) ( 1.1E+00 ~ 1.8E+00 )	no samples

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)  
\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

TABLE 3

## 1992 REMP ANALYSIS SUMMARY

UNITS: pCi/Kg

MEDIUM: Surface Water

ANALYSIS TYPE	TOTAL ANALYSES/ NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN ( f ) ** RANGE	LOCATION WITH HIGHEST LOCATION INFORMATION	ANNUAL MEAN MEAN ( f ) ** RANGE	CONTROL LOCATIONS MEAN ( f ) ** RANGE
H-3	46/ 0	2.8E+02 3.0E+03	1.6E+03 ( 26 / 42 ) (-1.1E+02 ~ 7.7E+03)	3 miles SSE (#216)	6.5E+03 ( 5 / 5 ) ( 5.4E+03 ~ 7.7E+03)	6.9E+00 ( 0 / 4 ) (-8.4E+01 ~ 7.7E+01)
I-131	77/ 0	8.7E+00 ---	-2.1E+00 ( 0 / 62 ) (-1.7E+01 ~ 6.1E+00)	3.5 miles S (#212)	4.3E-01 ( 0 / 5 ) (-7.5E-01 ~ 1.5E+00)	-3.9E-01 ( 0 / 15 ) (-7.1E+00 ~ 8.2E+00)
Cs-134	77/ 0	1.7E+00 1.5E+01	-1.1E+00 ( 0 / 62 ) (-3.1E+00 ~ 2.1E-01)	3 miles SE (#213)	-7.8E-01 ( 0 / 4 ) (-1.7E+00 ~ 2.7E-01)	-1.4E+00 ( 0 / 15 ) (-3.1E+00 ~ 1.7E-01)
Cs-137	77/ 0	1.9E+00 1.8E+01	-1.6E-01 ( 0 / 62 ) (-1.6E+00 ~ 1.0E+00)	3.5 miles S (#212)	5.4E-02 ( 0 / 5 ) (-5.5E-01 ~ 5.2E-01)	-2.8E-01 ( 0 / 15 ) (-1.9E+00 ~ 9.3E-01)
Mn-54	77/ 0	1.7E+00 1.5E+01	-3.4E-02 ( 0 / 62 ) (-1.6E+00 ~ 1.3E+00)	4.3 miles SE (#233)	1.9E-01 ( 0 / 10 ) (-7.6E-01 ~ 9.2E-01)	-1.7E-01 ( 0 / 15 ) (-2.1E+00 ~ 1.0E+00)
Fe-59	77/ 0	3.9E+00 3.0E+01	-2.2E-01 ( 0 / 62 ) (-6.0E+00 ~ 4.1E+00)	1 mile SE (#229)	1.3E+00 ( 0 / 4 ) (-4.0E-01 ~ 4.1E+00)	-1.1E-01 ( 0 / 15 ) (-3.6E+00 ~ 2.1E+00)
Co-58	77/ 0	1.9E+00 1.5E+01	-2.6E-01 ( 0 / 62 ) (-1.8E+00 ~ 1.4E+00)	3.7 miles SE (#237)	-7.3E-02 ( 0 / 5 ) (-9.2E-01 ~ 6.1E-01)	-8.1E-02 ( 0 / 15 ) (-1.3E+00 ~ 1.1E+00)
Co-60	77/ 0	1.8E+00 1.5E+01	-3.6E-02 ( 1 / 62 ) (-2.4E+00 ~ 9.0E-01)	3.7 miles SE (#237)	5.2E-01 ( 0 / 5 ) ( 2.4E-01 ~ 9.0E-01)	-1.6E-01 ( 0 / 15 ) (-1.1E+00 ~ 1.2E+00)
Zn-65	77/ 0	3.4E+00 3.0E+01	-1.1E+00 ( 0 / 62 ) (-6.7E+00 ~ 2.8E+00)	3.7 miles SE (#237)	-1.8E-02 ( 0 / 5 ) (-1.1E+00 ~ 8.3E-01)	-1.1E+00 ( 0 / 15 ) (-5.6E+00 ~ 1.2E+00)
Zr-95	77/ 0	3.5E+00 1.5E+01	-1.2E-01 ( 0 / 62 ) (-2.0E+00 ~ 2.5E+00)	3 miles SE (#213)	2.7E-01 ( 0 / 4 ) (-2.4E-01 ~ 1.2E+00)	-6.7E-01 ( 0 / 15 ) (-2.9E+00 ~ 1.1E+00)
Nb-95	77/ 0	2.3E+00 1.5E+01	-1.1E-01 ( 0 / 62 ) (-1.9E+00 ~ 1.5E+00)	3.5 miles S (#212)	2.6E-01 ( 0 / 5 ) (-1.5E-01 ~ 9.4E-01)	-1.9E-01 ( 0 / 15 ) (-9.7E-01 ~ 1.3E+00)
Ba-140	77/ 0	1.6E+01 1.0E+03	-2.2E+00 ( 0 / 62 ) (-3.9E+01 ~ 1.2E+01)	3.7 miles SE (#237)	1.5E+00 ( 0 / 5 ) (-6.0E+00 ~ 6.0E+00)	-3.1E+00 ( 0 / 15 ) (-1.6E+01 ~ 3.8E+00)
La-140	77/ 0	4.7E+00 1.5E+01	-2.9E-01 ( 0 / 62 ) (-5.2E+00 ~ 4.0E+00)	2 miles E (#209)	9.7E-01 ( 0 / 4 ) (-5.2E-01 ~ 3.3E+00)	6.3E-01 ( 0 / 15 ) (-2.2E+00 ~ 7.8E+00)

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (---) USED WHEN THERE IS NO REQUIREMENT.)

\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

TABLE 3  
1992 REMP ANALYSIS SUMMARY

UNITS: pci/Kg

MEDIUM: Rain Water

ANALYSIS TYPE	TOTAL ANALYSES/ NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN ( f ) ** RANGE	LOCATION WITH HIGHEST LOCATION INFORMATION	ANNUAL MEAN MEAN ( f ) ** RANGE	CONTROL LOCATIONS MEAN ( f ) ** RANGE
H-3	8/ 0	2.9E+02 3.0E+03	-3.0E+01 ( 0 / 4 ) (-1.0E+02 ~ 2.2E+01)	1 mile NNW (#016)	-3.0E+01 ( 0 / 4 ) (-1.0E+02 ~ 2.2E+01)	-5.2E+01 ( 0 / 4 ) (-2.1E+02 ~ 8.8E+01)
I-131	8/ 0	1.4E+01 ---	-1.0E+00 ( 0 / 4 ) (-3.4E+00 ~ -3.9E-01)	1 mile NNW (#016)	-1.0E+00 ( 0 / 4 ) (-3.4E+00 ~ -3.9E-01)	-2.6E+00 ( 0 / 4 ) (-1.1E+01 ~ 1.7E+00)
Cs-134	8/ 0	1.7E+00 1.5E+01	-1.3E+00 ( 0 / 4 ) (-1.7E+00 ~ -7.2E-01)	1 mile NNW (#016)	-1.3E+00 ( 0 / 4 ) (-1.7E+00 ~ -7.2E-01)	-1.8E+00 ( 0 / 4 ) (-2.1E+00 ~ -1.0E+00)
Cs-137	8/ 0	2.1E+00 1.8E+01	-2.8E-01 ( 0 / 4 ) (-9.7E-01 ~ 5.6E-01)	11 miles W (#037)	4.1E-01 ( 0 / 4 ) (-7.1E-01 ~ 1.3E+00)	4.1E-01 ( 0 / 4 ) (-7.1E-01 ~ 1.3E+00)
Mn-54	8/ 0	1.9E+00 1.5E+01	-1.2E-01 ( 0 / 4 ) (-7.2E-01 ~ 7.7E-01)	1 mile NNW (#016)	-1.2E-01 ( 0 / 4 ) (-7.2E-01 ~ 7.7E-01)	-1.4E-01 ( 0 / 4 ) (-9.8E-01 ~ 5.3E-01)
Fe-59	8/ 0	4.5E+00 3.0E+01	-7.3E-02 ( 0 / 4 ) (-1.0E+00 ~ 8.4E-01)	11 miles W (#037)	1.2E-04 ( 0 / 4 ) (-1.3E+00 ~ 1.1E+00)	1.2E-04 ( 0 / 4 ) (-1.3E+00 ~ 1.1E+00)
Co-58	8/ 0	1E+00 1.5E+01	-2.8E-01 ( 0 / 4 ) (-1.9E+00 ~ 1.3E+00)	1 mile NNW (#016)	-2.8E-01 ( 0 / 4 ) (-1.9E+00 ~ 1.3E+00)	-4.9E-01 ( 0 / 4 ) (-1.1E+00 ~ 4.0E-01)
Co-60	8/ 0	1.9E+00 1.5E+01	-9.2E-02 ( 0 / 4 ) (-9.2E-01 ~ 8.9E-01)	11 miles W (#037)	1.7E-01 ( 0 / 4 ) (-6.9E-01 ~ 6.1E-01)	1.7E-01 ( 0 / 4 ) (-6.9E-01 ~ 6.1E-01)
Zn-65	8/ 0	3.9E+00 3.0E+01	-6.2E-01 ( 0 / 4 ) (-1.4E+00 ~ 2.4E-01)	1 mile NNW (#016)	-6.2E-01 ( 0 / 4 ) (-1.4E+00 ~ 2.4E-01)	-8.1E-01 ( 0 / 4 ) (-1.3E+00 ~ -5.3E-01)
Zr-95	8/ 0	3.8E+00 1.5E+01	6.7E-01 ( 0 / 4 ) (-5.3E-01 ~ 1.8E+00)	1 mile NNW (#016)	6.7E-01 ( 0 / 4 ) (-5.3E-01 ~ 1.8E+00)	-6.2E-01 ( 0 / 4 ) (-2.1E+00 ~ 9.5E-01)
Nb-95	8/ 0	2.8E+00 1.5E+01	3.7E-01 ( 0 / 4 ) (-3.2E-01 ~ 1.6E+00)	1 mile NNW (#016)	3.7E-01 ( 0 / 4 ) (-3.2E-01 ~ 1.6E+00)	-5.0E-01 ( 0 / 4 ) (-1.3E+00 ~ -3.6E-01)
Ba-140	8/ 0	2.2E+01 1.0E+03	4.9E+00 ( 0 / 4 ) (-1.5E+00 ~ 1.2E+01)	1 mile NNW (#016)	4.9E+00 ( 0 / 4 ) (-1.5E+00 ~ 1.2E+01)	-2.7E+00 ( 0 / 4 ) (-6.6E+00 ~ 2.1E+00)
La-140	8/ 0	7.1E+00 1.5E+01	3.1E+00 ( 0 / 4 ) (-7.8E-01 ~ 8.6E+00)	1 mile NNW (#016)	3.1E+00 ( 0 / 4 ) (-7.8E-01 ~ 8.6E+00)	-1.1E+00 ( 0 / 4 ) (-3.2E+00 ~ 0.0E+00)

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)

\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

TABLE 3

## 1992 REMP ANALYSIS SUMMARY

MEDIUM: Sediment

UNITS: pCi/Kg dry wt

ANALYSIS TYPE	TOTAL ANALYSES/ NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN ( f ) ** RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION RANGE	CONTROL LOCATIONS MEAN ( f ) ** RANGE
I-131	27/ 0	1.4E+02 ---	-8.0E+00 ( 0 / 25 ) ( -1.3E+02 ~ 5.9E+01 )	>10 miles NNE (#242)	5.3E+01 ( 0 / 2 ) ( 3.7E+01 ~ 6.8E+01 )
Cs-134	27/ 0	1.1E+01 1.5E+02	-1.7E+02 ( 0 / 25 ) ( -3.2E+02 ~ 3.8E+00 )	1 mile SW (#215)	-1.9E+02 ( 0 / 2 ) ( -1.9E+02 ~ 1.9E+02 )
Cs-137	27/ 0	1.4E+01 1.8E+02	4.2E+01 ( 18 / 25 ) ( -8.1E+00 ~ 2.2E+02 )	3.5 miles S (#212)	4.9E+01 ( 2 / 2 ) ( 2.4E+01 ~ 7.4E+01 )
Mn-54	22/ 0	1.2E+01 ---	6.4E+00 ( 5 / 20 ) ( -1.3E+00 ~ 3.6E+01 )	6 miles SE (#227)	1.5E+00 ( 0 / 2 ) ( -9.5E-01 ~ 4.0E+00 )
Fe-59	27/ 0	3.3E+01 ---	-4.2E+00 ( 0 / 25 ) ( -3.7E+01 ~ 8.8E+00 )	3.5 miles S (#211)	-1.2E+01 ( 0 / 2 ) ( -2.3E+01 ~ -1.8E+00 )
Co-58	27/ 0	1.4E+01 ---	1.7E+01 ( 4 / 25 ) ( -1.3E+01 ~ 3.3E+02 )	1 mile SW (#215)	2.3E+00 ( 0 / 2 ) ( -1.3E+00 ~ 5.9E+00 )
Co-60	27/ 0	1.1E+01 ---	2.8E+01 ( 6 / 25 ) ( -4.3E+00 ~ 2.2E+02 )	1 mile SW (#215)	5.0E+00 ( 0 / 2 ) ( 4.8E+00 ~ 5.2E+00 )
Zn-65	27/ 0	2.7E+01 ---	-1.3E+02 ( 0 / 25 ) ( -2.3E+02 ~ 9.1E+00 )	4.3 miles SE (#233)	-1.6E+02 ( 0 / 2 ) ( -1.6E+02 ~ -1.5E+02 )
Zr-95	20/ 0	2.8E+01 ---	2.2E+01 ( 0 / 18 ) ( 8.3E+00 ~ 4.2E+01 )	3.5 miles S (#212)	† 2.9E+01 ( 0 / 2 ) ( 2.0E+01 ~ 3.8E+01 )
Nb-95	27/ 0	2.0E+01 ---	-3.6E+01 ( 0 / 25 ) ( -5.3E+01 ~ -2.1E+01 )	3 miles SSE (#216)	-3.4E+01 ( 0 / 2 ) ( -3.9E+01 ~ -2.9E+01 )
Ba-140	25/ 0	1.8E+02 ---	2.4E+01 ( 0 / 23 ) ( -5.9E+01 ~ 1.5E+02 )	3 miles SE (#213)	-8.5E+00 ( 0 / 2 ) ( -4.4E+01 ~ 2.7E+01 )
La-140	25/ 0	5.7E+01 ---	2.2E+01 ( 0 / 23 ) ( -2.2E+01 ~ 4.7E+01 )	>10 miles NNE (#242)	3.5E+01 ( 0 / 2 ) ( 9.4E+00 ~ 6.1E+01 )

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (---) USED WHEN THERE IS NO REQUIREMENT. )

\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

† Manual corrections made per D.M. Harris/4-27-93.

TABLE 3  
1992 REMP ANALYSIS SUMMARY

UNITS: pCi/Kg dry wt

MEDIUM: Soil

ANALYSIS TYPE	TOTAL ANALYSES/ NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN ( f ) ** RANGE	LOCATION WITH HIGHEST LOCATION INFORMATION	ANNUAL MEAN MEAN ( f ) ** RANGE	CONTROL LOCATIONS MEAN ( f ) ** RANGE
I-131	16/ 0	2.4E+02 ...	1.6E+01 ( 0 / 15 ) ( -5.2E+01 -- 2.6E+02 )	8.5 miles SSE (#035)	1.5E+02 ( 0 / 2 ) ( 4.8E+01 -- 2.6E+02 )	3.5E+01 ( 0 / 1 ) ( 3.5E+01 -- 3.5E+01 )
Cs-134	16/ 0	1.2E+01 1.5E+02	-2.0E+02 ( 0 / 15 ) ( -2.5E+02 -- 1.3E+02 )	14 miles NNE (#033)	-1.5E+02 ( 0 / 2 ) ( -1.8E+02 -- 1.3E+02 )	-2.1E+02 ( 0 / 1 ) ( -2.1E+02 -- 2.1E+02 )
Cs-137	16/ 0	1.8E+01 1.8E+02	2.2E+02 ( 15 / 15 ) ( 5.9E+01 -- 5.0E+02 )	14 miles NNE (#033)	2.8E+02 ( 2 / 2 ) ( 5.9E+01 -- 5.0E+02 )	2.2E+02 ( 1 / 1 ) ( 2.2E+02 -- 2.2E+02 )
Mn-54	16/ 0	1.4E+01 ...	4.4E+00 ( 0 / 15 ) ( -5.2E-01 -- 8.3E+00 )	1 mile NW (#234)	7.5E+00 ( 0 / 1 ) ( 7.5E+00 -- 7.5E+00 )	-3.0E-01 ( 0 / 1 ) ( -3.0E-01 -- 3.0E-01 )
Fe-59	16/ 0	3.7E+01 ...	-9.5E+00 ( 0 / 15 ) ( -5.2E+01 -- 1.1E+01 )	11 miles W (#037)	2.4E+01 ( 0 / 1 ) ( 2.4E+01 -- 2.4E+01 )	2.4E+01 ( 0 / 1 ) ( 2.4E+01 -- 2.4E+01 )
Co-58	16/ 0	1.5E+01 ...	7.3E-01 ( 0 / 15 ) ( -8.8E+00 -- 6.8E+00 )	3.5 miles ESE (#006)	5.7E+00 ( 0 / 2 ) ( 4.7E+00 -- 6.8E+00 )	-5.0E+00 ( 0 / 1 ) ( -5.0E+00 -- 5.0E+00 )
Co-60	16/ 0	1.2E+01 ...	6.4E-01 ( 0 / 15 ) ( -2.9E+00 -- 8.3E+00 )	3.5 miles ESE (#006)	3.6E+00 ( 0 / 2 ) ( -1.2E+00 -- 8.3E+00 )	-4.0E+00 ( 0 / 1 ) ( -4.0E+00 -- 4.0E+00 )
Zn-65	16/ 0	2.8E+01 ...	-1.5E+02 ( 0 / 15 ) ( -2.1E+02 -- 8.0E+01 )	8.5 miles SSE (#035)	-1.1E+02 ( 0 / 2 ) ( -1.5E+02 -- 8.0E+01 )	-1.5E+02 ( 0 / 1 ) ( -1.5E+02 -- 1.5E+02 )
Zr-95	14/ 0	3.2E+01 ...	† 2.8E+01 ( 0 / 13 ) ( 9.4E+00 -- 4.9E+01 )	1 mile NNW (#016)	† 4.0E+01 ( 0 / 1 ) ( 4.0E+01 -- 4.0E+01 )	2.2E+01 ( 0 / 1 ) ( 2.2E+01 -- 2.2E+01 )
Nb-95	16/ 0	2.3E+01 ...	-3.8E+01 ( 0 / 15 ) ( -7.8E+01 -- 1.8E+01 )	14 miles NNE (#033)	-2.3E+01 ( 0 / 2 ) ( -2.8E+01 -- 1.8E+01 )	-2.9E+01 ( 0 / 1 ) ( -2.9E+01 -- 2.9E+01 )
Ba-140	16/ 0	2.5E+02 ...	-1.2E+01 ( 0 / 15 ) ( -4.7E+02 -- 8.7E+01 )	11 miles W (#037)	9.3E+01 ( 0 / 1 ) ( 9.3E+01 -- 9.3E+01 )	9.3E+01 ( 0 / 1 ) ( 9.3E+01 -- 9.3E+01 )
La-140	15/ 0	8.0E+01 ...	† 3.1E+01 ( 0 / 14 ) ( -2.3E+01 -- 1.0E+02 )	8.5 miles SSE (#035)	1.1E+02 ( 0 / 2 ) ( 3.6E+01 -- 1.8E+02 )	8.2E+01 ( 0 / 1 ) ( 8.2E+01 -- 8.2E+01 )

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)  
\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

† Manual corrections made per D.M. Harris/4-27-93. 6-22

TABLE 3  
1992 REMP ANALYSIS SUMMARY

UNITS: pCi/Kg wet wt

MEDIUM: Banana Leaves

ANALYSIS TYPE	TOTAL ANALYSES/ NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN ( f ) ** RANGE	LOCATION WITH HIGHEST LOCATION INFORMATION	ANNUAL MEAN MEAN ( f ) ** RANGE	CONTROL LOCATIONS MEAN ( f ) ** RANGE
I-131	22/ 0	1.9E+01 6.0E+01	-6.2E+00 ( 0 / 13 ) ( -4.4E+01 ~ 9.3E+00 )	1 mile N (#001)	2.6E+00 ( 0 / 3 ) ( -3.0E+00 ~ 9.3E+00 )	-4.6E+00 ( 0 / 9 ) ( -2.6E+01 ~ 3.3E+00 )
Cs-134	22/ 0	2.5E+00 6.0E+01	-1.7E+00 ( 0 / 13 ) ( -3.7E+00 ~ -1.5E-01 )	1 mile NW (#016)	-1.3E+00 ( 0 / 4 ) ( -2.4E+00 ~ -6.2E-01 )	-1.9E+00 ( 0 / 9 ) ( -4.7E+00 ~ 1.8E-01 )
Cs-137	22/ 0	2.9E+00 8.0E+01	8.6E-02 ( 0 / 13 ) ( -2.9E+00 ~ 1.8E+00 )	1 mile N (#001)	1.2E+00 ( 0 / 3 ) ( 8.4E-01 ~ 1.8E+00 )	-2.8E-01 ( 0 / 9 ) ( -5.0E+00 ~ 3.4E+00 )
Mn-54	22/ 0	3.1E+00 ...	-5.8E-02 ( 0 / 13 ) ( -3.1E+00 ~ 1.4E+00 )	1 mile N (#001)	8.4E-01 ( 0 / 3 ) ( -1.8E-01 ~ 1.4E+00 )	-1.0E+00 ( 0 / 9 ) ( -5.2E+00 ~ 5.4E-01 )
Fe-59	22/ 0	1.1E+01 ...	4.1E-01 ( 0 / 13 ) ( -5.6E+00 ~ 5.0E+00 )	1 mile NW (#016)	1.1E+00 ( 0 / 4 ) ( -5.6E+00 ~ 5.0E+00 )	-3.9E+00 ( 0 / 9 ) ( -1.0E+01 ~ -7.6E-01 )
Co-58	22/ 0	3.7E+00 ...	5.6E-01 ( 0 / 13 ) ( -3.1E+00 ~ 3.4E+00 )	1 mile NW (#015)	1.4E+00 ( 0 / 6 ) ( -1.3E-01 ~ 3.4E+00 )	-9.0E-01 ( 0 / 9 ) ( -4.3E+00 ~ 6.6E-01 )
Co-60	22/ 0	3.5E+00 ...	-1.5E-01 ( 0 / 13 ) ( -3.7E+00 ~ 1.6E+00 )	1 mile NW (#016)	-1.0E-01 ( 0 / 4 ) ( -3.7E+00 ~ 1.6E+00 )	-3.7E-01 ( 0 / 9 ) ( -3.4E+00 ~ 8.5E-01 )
Zn-65	22/ 0	9.3E+00 ...	-1.8E+00 ( 0 / 13 ) ( -1.0E+01 ~ 1.9E+00 )	1 mile N (#001)	1.9E-01 ( 0 / 3 ) ( -2.3E+00 ~ 1.9E+00 )	-3.4E+00 ( 0 / 9 ) ( -1.7E+01 ~ 1.5E+00 )
Zn-95	22/ 0	6.3E+00 ...	-1.4E-01 ( 0 / 13 ) ( -3.4E+00 ~ 2.0E+00 )	1 mile N (#001)	9.0E-01 ( 0 / 3 ) ( 5.8E-02 ~ 1.6E+00 )	-4.3E-01 ( 0 / 9 ) ( -1.3E+01 ~ 2.7E+00 )
Nb-95	22/ 0	4.4E+00 ...	-9.0E-01 ( 0 / 13 ) ( -3.1E+00 ~ 1.1E+00 )	1 mile NW (#015)	-3.0E-01 ( 0 / 6 ) ( -1.4E+00 ~ 7.0E-01 )	-6.4E-01 ( 0 / 9 ) ( -5.4E+00 ~ 2.0E+00 )
Ba-140	22/ 0	3.2E+01 ...	-4.7E-01 ( 0 / 13 ) ( -4.2E+01 ~ 2.4E+01 )	1 mile NW (#015)	3.4E+00 ( 0 / 6 ) ( -1.1E+01 ~ 2.4E+01 )	-9.6E+00 ( 0 / 9 ) ( -6.0E+01 ~ 5.6E+00 )
La-140	22/ 0	6.5E+00 ...	1.3E+00 ( 0 / 13 ) ( -1.2E+00 ~ 5.0E+00 )	1 mile N (#001)	3.3E+00 ( 0 / 3 ) ( 2.1E+00 ~ 5.0E+00 )	8.9E-01 ( 0 / 9 ) ( -2.3E+00 ~ 6.0E+00 )

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (---) USED WHEN THERE IS NO REQUIREMENT.

\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

TABLE 3  
1992 REMP ANALYSIS SUMMARY

UNITS: pCi/Kg wet wt

MEDIUM: Cana Leaves

ANALYSIS TYPE	TOTAL ANALYSES/ NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN ( f ) ** RANGE	LOCATION WITH HIGHEST LOCATION INFORMATION	ANNUAL MEAN MEAN ( f ) ** RANGE	CONTROL LOCATIONS MEAN ( f ) ** RANGE
I-131	14/ 0	1.6E+01 6.0E+01	-4.4E+00 ( 0 / 9 ) (-2.0E+01 ~ 2.7E+00)	1 mile N (#001)	-6.3E-01 ( 0 / 3 ) (-5.2E+00 ~ 2.7E+00)	-3.9E+00 ( 0 / 5 ) (-7.2E+00 ~ -5.7E-01)
Cs-134	14/ 0	2.2E+00 6.0E+01	-2.5E+00 ( 0 / 9 ) (-5.6E+00 ~ -7.0E-01)	11 miles W (#037)	-1.3E+00 ( 0 / 5 ) (-3.9E+00 ~ 9.8E-01)	-1.3E+00 ( 0 / 5 ) (-3.9E+00 ~ 9.8E-01)
Cs-137	14/ 0	2.6E+00 8.0E+01	-7.3E-01 ( 0 / 9 ) (-2.1E+00 ~ 5.1E-01)	11 miles W (#037)	-4.0E-01 ( 0 / 5 ) (-3.1E+00 ~ 1.3E+00)	-4.0E-01 ( 0 / 5 ) (-3.1E+00 ~ 1.3E+00)
Mn-54	14/ 0	2.9E+00 ...	-8.1E-01 ( 0 / 9 ) (-3.1E+00 ~ 6.7E-01)	11 miles W (#037)	6.4E-01 ( 0 / 5 ) (-4.0E+00 ~ 4.8E+00)	6.4E-01 ( 0 / 5 ) (-4.0E+00 ~ 4.8E+00)
Fe-59	14/ 0	9.7E+00 ...	-3.9E+00 ( 0 / 9 ) (-9.2E+00 ~ -3.5E-01)	1 mile N (#001)	-2.3E+00 ( 0 / 3 ) (-6.3E+00 ~ -4.9E-01)	-3.7E+00 ( 0 / 5 ) (-1.3E+01 ~ -1.4E+00)
Co-58	14/ 0	3.2E+00 ...	-8.0E-01 ( 0 / 9 ) (-2.8E+00 ~ 6.8E-01)	1 mile N (#001)	1.3E-01 ( 0 / 3 ) (-1.8E-01 ~ 6.8E-01)	-1.2E+00 ( 0 / 5 ) (-3.4E+00 ~ 9.4E-02)
Co-60	14/ 0	3.3E+00 ...	-5.4E-01 ( 0 / 9 ) (-2.5E+00 ~ 6.0E-01)	1 mile NNW (#016)	3.1E-01 ( 0 / 2 ) ( 2.4E-01 ~ 3.9E-01)	2.4E-01 ( 0 / 5 ) (-2.7E+00 ~ 2.1E+00)
Zn-65	14/ 0	8.7E+00 ...	-3.5E+00 ( 0 / 9 ) (-8.0E+00 ~ 2.2E+00)	1 mile N (#001)	-1.8E+00 ( 0 / 3 ) (-5.5E+00 ~ 2.2E+00)	-3.8E+00 ( 0 / 5 ) (-9.0E+00 ~ 1.7E+00)
Zr-95	14/ 0	5.7E+00 ...	-1.4E+00 ( 0 / 9 ) (-4.6E+00 ~ 1.8E+00)	1 mile N (#001)	-3.2E-01 ( 0 / 3 ) (-3.5E+00 ~ 1.4E+00)	-1.1E+00 ( 0 / 5 ) (-6.0E+00 ~ 6.5E+00)
Nb-95	14/ 0	3.9E+00 ...	-1.2E+00 ( 0 / 9 ) (-3.2E+00 ~ 1.4E+00)	11 miles W (#037)	-7.5E-01 ( 0 / 5 ) (-4.6E+00 ~ 3.3E+00)	-7.5E-01 ( 0 / 5 ) (-4.6E+00 ~ 3.3E+00)
Ba-140	14/ 0	2.7E+01 ...	1.7E-01 ( 0 / 9 ) (-1.4E+01 ~ 3.1E+01)	1 mile NNW (#016)	8.1E+00 ( 0 / 2 ) (-1.4E+01 ~ 3.1E+01)	-3.7E+00 ( 0 / 5 ) (-1.0E+01 ~ 6.3E+00)
La-140	14/ 0	5.3E+00 ...	4.6E-01 ( 0 / 9 ) (-3.2E+00 ~ 4.0E+00)	11 miles W (#037)	1.3E+00 ( 0 / 5 ) (-8.2E-01 ~ 3.8E+00)	1.3E+00 ( 0 / 5 ) (-8.2E-01 ~ 3.8E+00)

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)

\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

TABLE 3  
1992 REMP ANALYSIS SUMMARY

MEDIUM: Turnip Greens

UNITS: pCi/Kg wet wt

ANALYSIS TYPE	TOTAL ANALYSES/ NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN ( f ) ** RANGE	LOCATION WITH HIGHEST ANNUAL MEAN LOCATION INFORMATION	ANNUAL MEAN ( f ) ** RANGE	CONTROL LOCATIONS MEAN ( f ) ** RANGE
I-131	5/ 0	2.7E+01 6.0E+01	-5.2E+00 ( 0 / 3 ) ( -2.0E+01 ~ 9.7E+00 )	1 mile NW (#015)	9.7E+00 ( 0 / 1 ) ( 9.7E+00 ~ 9.7E+00 )	7.1E+00 ( 0 / 2 ) ( 1.7E+00 ~ 1.3E+01 )
Cs-134	5/ 0	2.0E+00 6.0E+01	-2.3E+00 ( 0 / 3 ) ( -4.9E+00 ~ 4.4E-01 )	11 miles W (#037)	-1.3E+00 ( 0 / 2 ) ( -2.3E+00 ~ 3.3E-01 )	-1.3E+00 ( 0 / 2 ) ( -2.3E+00 ~ 3.3E-01 )
Cs-137	5/ 0	2.4E+00 8.0E+01	-8.9E-01 ( 0 / 3 ) ( -1.8E+00 ~ 1.3E-01 )	11 miles W (#037)	5.1E-01 ( 0 / 2 ) ( -6.3E-01 ~ 1.6E+00 )	5.1E-01 ( 0 / 2 ) ( -6.3E-01 ~ 1.6E+00 )
Mn-54	5/ 0	2.6E+00 ...	-7.4E-01 ( 0 / 3 ) ( -1.8E+00 ~ 1.0E-01 )	11 miles W (#037)	1.7E-01 ( 0 / 2 ) ( -6.7E-01 ~ 1.0E+00 )	1.7E-01 ( 0 / 2 ) ( -6.7E-01 ~ 1.0E+00 )
Fe-59	5/ 0	1.0E+01 ...	-2.0E+00 ( 0 / 3 ) ( -6.3E+00 ~ 2.7E+00 )	11 miles W (#037)	4.3E+00 ( 0 / 2 ) ( 2.9E+00 ~ 5.7E+00 )	4.3E+00 ( 0 / 2 ) ( 2.9E+00 ~ 5.7E+00 )
Co-58	5/ 0	3.2E+00 ...	-7.8E-01 ( 0 / 3 ) ( -2.9E+00 ~ 4.4E-01 )	1 mile NW (#015)	4.4E-01 ( 0 / 1 ) ( 4.4E-01 ~ 4.4E-01 )	1.1E-01 ( 0 / 2 ) ( -7.0E-01 ~ 9.1E-01 )
Co-60	5/ 0	3.0E+00 ...	3.4E-01 ( 0 / 3 ) ( -1.0E+00 ~ 1.4E+00 )	1 mile NW (#015)	1.4E+00 ( 0 / 1 ) ( 1.4E+00 ~ 1.4E+00 )	9.6E-01 ( 0 / 2 ) ( 6.5E-01 ~ 1.3E+00 )
Zn-65	5/ 0	7.8E+00 ...	-5.9E+00 ( 0 / 3 ) ( -1.0E+01 ~ 2.5E+00 )	11 miles W (#037)	-2.1E-01 ( 0 / 2 ) ( -1.3E+00 ~ 8.4E-01 )	-2.1E-01 ( 0 / 2 ) ( -1.3E+00 ~ 8.4E-01 )
Zr-95	5/ 0	5.7E+00 ...	-8.2E-01 ( 0 / 3 ) ( -2.7E+00 ~ 3.0E-01 )	1 mile NW (#015)	3.0E-01 ( 0 / 1 ) ( 3.0E-01 ~ 3.0E-01 )	-2.4E+00 ( 0 / 2 ) ( -2.6E+00 ~ 2.1E+00 )
Nb-95	5/ 0	4.2E+00 ...	-2.8E+00 ( 0 / 3 ) ( -5.7E+00 ~ 7.4E-01 )	11 miles W (#037)	-7.3E-01 ( 0 / 2 ) ( -1.7E+00 ~ 2.4E-01 )	-7.3E-01 ( 0 / 2 ) ( -1.7E+00 ~ 2.4E-01 )
Ba-140	5/ 0	3.8E+01 ...	-1.5E+01 ( 0 / 3 ) ( -4.5E+01 ~ 2.1E+00 )	1 mile NW (#015)	2.1E+00 ( 0 / 1 ) ( 2.1E+00 ~ 2.1E+00 )	-4.3E+00 ( 0 / 2 ) ( -9.1E+00 ~ 5.5E-01 )
La-140	5/ 0	7.1E+00 ...	2.7E-02 ( 0 / 3 ) ( -3.5E+00 ~ 2.1E+00 )	11 miles W (#037)	2.4E+00 ( 0 / 2 ) ( -3.7E-01 ~ 5.1E+00 )	2.4E+00 ( 0 / 2 ) ( -3.7E-01 ~ 5.1E+00 )

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES, (---) USED WHEN THERE IS NO REQUIREMENT.  
\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

TABLE 3  
1992 REMP ANALYSIS SUMMARY

UNITS: pCi/Kg wet wt

MEDIUM: Cabbage Leaves

ANALYSIS TYPE	TOTAL ANALYSES/ NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN ( f ) ** RANGE	LOCATION WITH HIGHEST ANNUAL LOCATION INFORMATION MEAN ( f ) ** RANGE	CONTROL LOCATIONS MEAN ( f ) ** RANGE
I-131	1/0	4.4E+00 6.0E+01	0.0E+00 ( 0 / 1 ) ( 0.0E+00 ~ 0.0E+00 )	1 mile NW (#015)	no samples ( 0.0E+00 ~ 0.0E+00 )
Cs-134	1/0	2.2E+00 6.0E+01	-1.4E+00 ( 0 / 1 ) ( -1.4E+00 ~ -1.4E+00 )	1 mile NW (#015)	no samples ( -1.4E+00 ~ -1.4E+00 )
Cs-137	1/0	2.6E+00 8.0E+01	-6.0E-01 ( 0 / 1 ) ( -6.0E-01 ~ -6.0E-01 )	1 mile NW (#015)	no samples ( -6.0E-01 ~ -6.0E-01 )
Mn-54	1/0	2.6E+00 ...	9.3E-01 ( 0 / 1 ) ( 9.3E-01 ~ 9.3E-01 )	1 mile NW (#015)	no samples ( 9.3E-01 ~ 9.3E-01 )
Fe-59	1/0	6.5E+00 ...	-8.5E-01 ( 0 / 1 ) ( -8.5E-01 ~ -8.5E-01 )	1 mile NW (#015)	no samples ( -8.5E-01 ~ -8.5E-01 )
Co-58	1/0	2.6E+00 ...	-9.3E-01 ( 0 / 1 ) ( -9.3E-01 ~ -9.3E-01 )	1 mile NW (#015)	no samples ( -9.3E-01 ~ -9.3E-01 )
Co-60	1/0	3.0E+00 ...	6.2E-02 ( 0 / 1 ) ( 6.2E-02 ~ 6.2E-02 )	1 mile NW (#015)	no samples ( 6.2E-02 ~ 6.2E-02 )
Zn-65	1/0	7.2E+00 ...	-1.1E+00 ( 0 / 1 ) ( -1.1E+00 ~ -1.1E+00 )	1 mile NW (#015)	no samples ( -1.1E+00 ~ -1.1E+00 )
Zn-95	1/0	4.6E+00 ...	4.6E-01 ( 0 / 1 ) ( 4.6E-01 ~ 4.6E-01 )	1 mile NW (#015)	no samples ( 4.6E-01 ~ 4.6E-01 )
Nb-95	1/0	2.7E+00 ...	-1.6E+00 ( 0 / 1 ) ( -1.6E+00 ~ -1.6E+00 )	1 mile NW (#015)	no samples ( -1.6E+00 ~ -1.6E+00 )
Ba-140	1/0	1.3E+01 ...	1.1E+00 ( 0 / 1 ) ( 1.1E+00 ~ 1.1E+00 )	1 mile NW (#015)	no samples ( 1.1E+00 ~ 1.1E+00 )
La-140	1/0	2.6E+00 ...	2.4E-01 ( 0 / 1 ) ( 2.4E-01 ~ 2.4E-01 )	1 mile NW (#015)	no samples ( 2.4E-01 ~ 2.4E-01 )

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)  
\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

TABLE 3  
1992 REMP ANALYSIS SUMMARY

UNITS: pci/Kg wet wt

MEDIUM: Collard Greens

ANALYSIS TYPE	TOTAL ANALYSES/ NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN ( f ) ** RANGE	LOCATION WITH HIGHEST LOCATION INFORMATION	ANNUAL MEAN MEAN ( f ) ** RANGE	CONTROL LOCATIONS MEAN ( f ) ** RANGE
I-131	12/ 0	1.2E+01 6.0E+01	2.7E-01 ( 0 / 10 ) (-3.8E+00 ~ 6.2E+00)	1 mile N (#001)	1.2E+00 ( 0 / 2 ) (-3.8E+00 ~ 6.2E+00)	-6.2E+00 ( 0 / 2 ) (-6.5E+00 ~ -5.9E+00)
Cs-134	12/ 0	1.9E+00 6.0E+01	-1.3E+00 ( 0 / 10 ) (-2.4E+00 ~ 6.3E-01)	1 mile NNW (#016)	-1.2E+00 ( 0 / 8 ) (-2.4E+00 ~ 6.3E-01)	-3.6E+00 ( 0 / 2 ) (-3.7E+00 ~ -3.6E+00)
Cs-137	12/ 0	2.3E+00 8.0E+01	2.7E-01 ( 0 / 10 ) (-1.4E+00 ~ 1.8E+00)	1 mile NNW (#016)	2.9E-01 ( 0 / 8 ) (-1.4E+00 ~ 1.8E+00)	-7.7E-01 ( 0 / 2 ) (-7.7E-01 ~ -7.6E-01)
Mn-54	12/ 0	2.4E+00 ...	2.3E-01 ( 0 / 10 ) (-9.9E-01 ~ 1.1E+00)	1 mile N (#001)	5.1E-01 ( 0 / 2 ) (4.0E-01 ~ 6.2E-01)	-7.2E-01 ( 0 / 2 ) (-1.1E+00 ~ -5.8E-01)
Fe-59	12/ 0	8.1E+00 ...	-5.1E-01 ( 0 / 10 ) (-4.3E+00 ~ 4.1E+00)	1 mile NNW (#016)	-4.0E-01 ( 0 / 8 ) (-4.3E+00 ~ 4.1E+00)	-4.4E+00 ( 0 / 2 ) (-5.3E+00 ~ -3.6E+00)
Co-58	12/ 0	2.7E+00 ...	3.5E-02 ( 0 / 10 ) (-6.7E-01 ~ 6.2E-01)	1 mile N (#001)	4.9E-01 ( 0 / 2 ) (3.7E-01 ~ 6.2E-01)	-1.7E+00 ( 0 / 2 ) (-1.9E+00 ~ -1.5E+00)
Co-60	12/ 0	2.7E+00 ...	-6.9E-02 ( 0 / 10 ) (-1.7E+00 ~ 8.5E-01)	1 mile N (#001)	8.7E-02 ( 0 / 2 ) (-3.7E-01 ~ 5.5E-01)	-3.6E-01 ( 0 / 2 ) (-5.6E-01 ~ -1.5E-01)
Zn-65	12/ 0	7.1E+00 ...	-1.1E+00 ( 0 / 10 ) (-5.0E+00 ~ 2.5E+00)	1 mile NNW (#016)	-1.0E+00 ( 0 / 8 ) (-5.0E+00 ~ 2.5E+00)	-6.0E+00 ( 0 / 2 ) (-6.0E+00 ~ -6.0E+00)
Zr-95	12/ 0	4.7E+00 ...	-4.2E-01 ( 0 / 10 ) (-2.5E+00 ~ 1.3E+00)	1 mile N (#001)	1.1E+00 ( 0 / 2 ) (9.0E-01 ~ 1.3E+00)	-2.6E+00 ( 0 / 2 ) (-3.6E+00 ~ -1.5E+00)
Nb-95	12/ 0	3.3E+00 ...	-3.8E-01 ( 0 / 10 ) (-2.0E+00 ~ 1.1E+00)	1 mile NNW (#016)	-2.1E-01 ( 0 / 8 ) (-2.0E+00 ~ 1.1E+00)	-7.9E-01 ( 0 / 2 ) (-1.1E+00 ~ -4.8E-01)
Ba-140	12/ 0	2.2E+01 ...	-1.3E+00 ( 0 / 10 ) (-1.3E+01 ~ 5.5E+00)	1 mile N (#001)	5.3E-01 ( 0 / 2 ) (-4.4E+00 ~ 5.5E+00)	-8.7E+00 ( 0 / 2 ) (-1.4E+01 ~ -3.5E+00)
La-140	12/ 0	3.9E+00 ...	-1.2E-01 ( 0 / 10 ) (-1.5E+00 ~ 1.5E+00)	1 mile NNW (#016)	4.4E-02 ( 0 / 8 ) (-1.5E+00 ~ 1.5E+00)	-4.6E-01 ( 0 / 2 ) (-6.3E-01 ~ -2.9E-01)

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)  
\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

TABLE 3

## 1992 REMP ANALYSIS SUMMARY

UNITS: pCi/Kg wet wt

MEDIUM: Turnip Roots

ANALYSIS TYPE	TOTAL ANALYSES/ NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN ( f ) ** RANGE	LOCATION WITH HIGHEST ANNUAL LOCATION INFORMATION MEAN ( f ) ** RANGE	CONTROL LOCATIONS MEAN ( f ) ** RANGE
I-131	2/ 0	9.7E+00 6.0E+01	-5.2E+00 ( 0 / 2 ) (-7.7E+00 --2.6E+00)	1 mile NW (#015)	-2.6E+00 ( 0 / 1 ) (-2.6E+00 --2.6E+00)
Cs-134	2/ 0	1.6E+00 6.0E+01	-3.1E+00 ( 0 / 2 ) (-5.3E+00 --1.0E+00)	1 mile NNW (#016)	-1.0E+00 ( 0 / 1 ) (-1.0E+00 --1.0E+00)
Cs-137	2/ 0	1.9E+00 8.0E+01	-1.2E+00 ( 0 / 2 ) (-1.4E+00 --1.0E+00)	1 mile NNW (#016)	-1.0E+00 ( 0 / 1 ) (-1.0E+00 --1.0E+00)
Mn-54	2/ 0	2.0E+00 ...	-1.4E+00 ( 0 / 2 ) (-2.3E+00 --5.1E-01)	1 mile NNW (#016)	-5.1E-01 ( 0 / 1 ) (-5.1E-01 --5.1E-01)
Fe-59	2/ 0	6.3E+00 ...	-5.2E+00 ( 0 / 2 ) (-8.0E+00 --2.4E+00)	1 mile NNW (#016)	-2.4E+00 ( 0 / 1 ) (-2.4E+00 --2.4E+00)
Co-58	2/ 0	2.2E+00 ...	-7.1E-01 ( 0 / 2 ) (-9.3E-01 --4.8E-01)	1 mile NW (#015)	-4.8E-01 ( 0 / 1 ) (-4.8E-01 --4.8E-01)
Co-60	2/ 0	2.3E+00 ...	-1.1E+00 ( 0 / 2 ) (-2.0E+00 --1.8E-01)	1 mile NNW (#016)	-1.8E-01 ( 0 / 1 ) (-1.8E-01 --1.8E-01)
Zn-65	2/ 0	5.9E+00 ...	-4.4E+00 ( 0 / 2 ) (-5.6E+00 --3.1E+00)	1 mile NNW (#016)	-3.1E+00 ( 0 / 1 ) (-3.1E+00 --3.1E+00)
Zr-95	2/ 0	3.7E+00 ...	-2.9E+00 ( 0 / 2 ) (-3.2E+00 --2.7E+00)	1 mile NNW (#016)	-2.7E+00 ( 0 / 1 ) (-2.7E+00 --2.7E+00)
Nb-95	2/ 0	2.6E+00 ...	-9.8E-01 ( 0 / 2 ) (-1.2E+00 --8.0E-01)	1 mile NNW (#016)	-8.0E-01 ( 0 / 1 ) (-8.0E-01 --8.0E-01)
Ba-140	2/ 0	1.8E+01 ...	-2.7E+00 ( 0 / 2 ) (-8.1E+00 --2.7E+00)	1 mile NNW (#016)	2.7E+00 ( 0 / 1 ) ( 2.7E+00 --2.7E+00)
La-140	2/ 0	2.7E+00 ...	-1.7E+00 ( 0 / 2 ) (-2.3E+00 --1.1E+00)	1 mile NNW (#016)	-1.1E+00 ( 0 / 1 ) (-1.1E+00 --1.1E+00)

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)

\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

TABLE 3

## 1992 REMP ANALYSIS SUMMARY

UNITS: pCi/Kg wet wt

MEDIUM: Pasture Grass Vegetation

ANALYSIS TYPE	TOTAL ANALYSES/ NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN ( f ) ** RANGE	LOCATION WITH HIGHEST LOCATION INFORMATION	ANNUAL MEAN MEAN ( f ) ** RANGE	CONTROL LOCATIONS MEAN ( f ) ** RANGE
I-131	8/ 0	2.6E+01 ---	6.6E-03 ( 0 / 4 ) (-8.1E+00 ~ 3.9E+00)	1 mile NNW (#016)	2.7E+00 ( 0 / 2 ) ( 1.4E+00 ~ 3.9E+00)	-2.6E+01 ( 0 / 4 ) (-1.0E+02 ~ 6.9E+00)
Cs-134	8/ 0	1.7E+00 6.0E+01	-2.4E+00 ( 0 / 4 ) (-3.9E+00 ~ -1.5E+00)	1 mile NW (#015)	-2.0E+00 ( 0 / 2 ) (-2.4E+00 ~ -1.6E+00)	-3.1E+00 ( 0 / 4 ) (-6.1E+00 ~ -1.9E+00)
Cs-137	8/ 0	1.9E+00 8.0E+01	-6.0E-01 ( 0 / 4 ) (-2.3E+00 ~ 2.8E-01)	11 miles W (#037)	1.7E+00 ( 3 / 4 ) ( 9.8E-01 ~ 2.3E+00)	1.7E+00 ( 3 / 4 ) ( 9.8E-01 ~ 2.3E+00)
Mn-54	8/ 0	2.1E+00 ---	4.7E-01 ( 0 / 4 ) ( 3.1E-01 ~ 6.3E-01)	1 mile NNW (#016)	5.7E-01 ( 0 / 2 ) ( 5.1E-01 ~ 6.3E-01)	-3.3E-01 ( 0 / 4 ) (-1.2E+00 ~ 4.8E-01)
Fe-59	8/ 0	7.2E+00 ---	-1.6E-01 ( 0 / 4 ) (-2.0E+00 ~ 1.1E+00)	1 mile NNW (#016)	1.1E-01 ( 0 / 2 ) ( 0.0E+00 ~ 2.3E-01)	-4.6E+00 ( 0 / 4 ) (-9.3E+00 ~ 1.8E-01)
Co-58	8/ 0	2.5E+00 ---	-2.3E-01 ( 0 / 4 ) (-5.4E-01 ~ 0.0E+00)	1 mile NNW (#016)	-1.8E-01 ( 0 / 2 ) (-2.5E-01 ~ -1.2E-01)	-4.8E-01 ( 0 / 4 ) (-1.9E+00 ~ 7.2E-01)
Co-60	8/ 0	2.3E+00 ---	7.1E-01 ( 0 / 4 ) (-2.2E-01 ~ 3.0E+00)	1 mile NNW (#016)	1.6E+00 ( 0 / 2 ) ( 9.4E-02 ~ 3.0E+00)	5.9E-01 ( 0 / 4 ) (-1.3E-01 ~ 1.2E+00)
Zn-65	8/ 0	5.7E+00 ---	-1.0E+00 ( 0 / 4 ) (-3.3E+00 ~ 1.6E+00)	1 mile NNW (#016)	8.8E-01 ( 0 / 2 ) ( 1.7E-01 ~ 1.6E+00)	-6.7E+00 ( 0 / 4 ) (-9.5E+00 ~ -1.1E+00)
Zr-95	8/ 0	4.6E+00 ---	1.2E+00 ( 0 / 4 ) ( 3.6E-01 ~ 2.7E+00)	1 mile NNW (#016)	1.5E+00 ( 0 / 2 ) ( 3.6E-01 ~ 2.7E+00)	-7.0E-01 ( 0 / 4 ) (-3.8E+00 ~ 2.3E+00)
Nb-95	8/ 0	3.3E+00 ---	-4.1E-01 ( 0 / 4 ) (-1.0E+00 ~ 1.3E-01)	1 mile NW (#015)	-1.7E-01 ( 0 / 2 ) (-4.7E-01 ~ 1.3E-01)	-1.8E+00 ( 0 / 4 ) (-3.7E+00 ~ -6.3E-01)
Ba-140	8/ 0	3.2E+01 ---	2.0E+00 ( 0 / 4 ) ( 5.9E-01 ~ 4.0E+00)	1 mile NW (#015)	2.3E+00 ( 0 / 2 ) ( 5.9E-01 ~ 4.0E+00)	-1.6E+01 ( 0 / 4 ) (-7.1E+01 ~ 4.7E+00)
La-140	8/ 0	7.0E+00 ---	1.5E+00 ( 0 / 4 ) (-9.4E-01 ~ 3.8E+00)	1 mile NW (#015)	2.2E+00 ( 0 / 2 ) ( 5.7E-01 ~ 3.8E+00)	-1.6E+00 ( 0 / 4 ) (-5.4E+00 ~ 1.4E+00)

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. {---} USED WHEN THERE IS NO REQUIREMENT.

\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

TABLE 3

## 1992 REMP ANALYSIS SUMMARY

UNITS: pCi/Kg wet wt

MEDIUM: Migratory Dabblers Duck

ANALYSIS TYPE	TOTAL ANALYSES/ NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN ( f ) ** RANGE	LOCATION MILES LOCATION INFORMATION	HIGHEST ANNUAL MEAN MEAN ( f ) ** RANGE	CONTROL LOCATIONS MEAN ( f ) ** RANGE
I-131	3/0	6.4E+03 ---	-1.1E+03 ( 0 / 3 ) (-2.8E+03 -- 6.2E+02)	2-4 miles SW-WS (#242)	-1.0E+03 ( 0 / 1 ) (-1.0E+03 -- 1.0E+03)	no samples
Cs-134	3/0	1.6E+01 1.3E+02	-2.1E+01 ( 0 / 3 ) (-3.3E+01 -- 1.3E+01)	2-4 miles SW-WS (#242)	-1.6E+01 ( 0 / 1 ) (-1.6E+01 -- 1.6E+01)	no samples
Cs-137	3/0	1.8E+01 1.5E+02	9.5E-01 ( 0 / 3 ) (-2.4E+00 -- 3.8E+00)	<1 mile S (#300)	2.7E+00 ( 0 / 2 ) ( 1.5E+00 -- 3.8E+00)	no samples
Mn-54	3/0	1.9E+01 1.3E+02	-4.2E+00 ( 0 / 3 ) (-6.7E+00 -- 2.9E+00)	<1 mile S (#300)	-3.0E+00 ( 0 / 2 ) (-3.2E+00 -- 2.9E+00)	no samples
Fe-59	3/0	9.0E+01 2.6E+02	-1.2E+01 ( 0 / 3 ) (-4.8E+01 -- 6.9E+00)	2-4 miles SW-WS (#242)	6.9E+00 ( 0 / 1 ) ( 6.9E+00 -- 6.9E+00)	no samples
Co-58	3/0	3.2E+01 1.3E+02	-3.5E+00 ( 0 / 3 ) (-6.8E+00 -- 1.1E+00)	<1 mile S (#300)	-1.9E+00 ( 0 / 2 ) (-4.9E+00 -- 1.1E+00)	no samples
Co-60	3/0	1.9E+01 1.3E+02	5.4E+00 ( 0 / 3 ) ( 4.8E-01 -- 1.0E+01)	<1 mile S (#300)	7.9E+00 ( 0 / 2 ) ( 5.3E+00 -- 1.0E+01)	no samples
Zn-65	3/0	4.3E+01 2.6E+02	-7.4E+00 ( 0 / 3 ) (-1.9E+01 -- 9.2E+00)	<1 mile S (#300)	-1.4E+00 ( 0 / 2 ) (-1.2E+01 -- 9.2E+00)	no samples
Zr-95	3/0	5.7E+01 ---	-8.2E+00 ( 0 / 3 ) (-2.8E+01 -- 7.2E+00)	<1 mile S (#300)	1.6E+00 ( 0 / 2 ) (-3.9E+00 -- 7.2E+00)	no samples
Nb-95	3/0	6.2E+01 ---	-6.1E+00 ( 0 / 3 ) (-1.4E+01 -- 4.2E+00)	<1 mile S (#300)	-2.1E+00 ( 0 / 2 ) (-4.2E+00 -- 4.2E+00)	no samples
Ba-140	3/0	2.5E+03 ---	-2.8E+01 ( 0 / 3 ) (-3.6E+02 -- 4.9E+02)	<1 mile S (#300)	1.4E+02 ( 0 / 2 ) (-2.2E+02 -- 4.9E+02)	no samples
La-140	3/0	7.4E+02 ---	-2.6E+02 ( 0 / 3 ) (-3.8E+02 -- 6.8E+01)	2-4 miles SW-WS (#242)	-6.8E+01 ( 0 / 1 ) (-6.8E+01 -- 6.8E+01)	no samples

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (---) USED WHEN THERE IS NO REQUIREMENT.

\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

TABLE 3

## 1992 REMP ANALYSIS SUMMARY

MEDIUM: Goose

UNITS: pCi/Kg wet wt

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
I-131	3/0	5.5E+02 ---	6.6E+01 ( 0 / 3 ) (-5.9E+01 -- 1.8E+02)	2-4 miles SW-WS (#242) 1.8E+02 ( 0 / 1 ) ( 1.8E+02 -- 1.8E+02)	no samples
Cs-134	3/0	8.4E+00 1.3E+02	-4.1E+00 ( 0 / 3 ) (-5.7E+00 -- 1.8E+00)	2-4 miles SW-WS (#242) -1.8E+00 ( 0 / 1 ) (-1.8E+00 -- 1.8E+00)	no samples
Cs-137	3/0	9.0E+00 1.5E+02	-6.1E-01 ( 0 / 3 ) (-1.9E+00 -- 6.6E-01)	2-4 miles SW-WS (#242) 6.6E-01 ( 0 / 1 ) ( 6.6E-01 -- 6.6E-01)	no samples
Mn-54	3/0	9.4E+00 1.3E+02	-1.6E+00 ( 0 / 3 ) (-3.1E+00 -- 1.1E-01)	2-4 miles SW-WS (#242) -1.1E-01 ( 0 / 1 ) (-1.1E-01 -- 1.1E-01)	no samples
Fe-59	3/0	4.0E+01 2.6E+02	6.2E+00 ( 0 / 3 ) (-2.8E+00 -- 2.4E+01)	0-2 miles NW-NN (#221) 2.4E+01 ( 0 / 1 ) ( 2.4E+01 -- 2.4E+01)	no samples
Co-58	3/0	1.3E+01 1.3E+02	-6.7E-01 ( 0 / 3 ) (-4.8E+00 -- 6.1E+00)	0-2 miles NW-NN (#221) 6.1E+00 ( 0 / 1 ) ( 6.1E+00 -- 6.1E+00)	no samples
Co-60	3/0	9.8E+00 1.3E+02	-4.1E-02 ( 0 / 3 ) (-4.5E-01 -- 6.5E-01)	0-2 miles NW-NN (#221) 6.5E-01 ( 0 / 1 ) ( 6.5E-01 -- 6.5E-01)	no samples
Zn-65	3/0	2.2E+01 2.6E+02	-1.2E+01 ( 0 / 3 ) (-2.0E+01 -- 5.9E+00)	2-4 miles SW-WS (#242) -5.9E+00 ( 0 / 1 ) (-5.9E+00 -- 5.9E+00)	no samples
Zr-95	3/0	2.5E+01 ---	6.0E+00 ( 0 / 3 ) (-9.4E-01 -- 1.8E+01)	0-2 miles NW-NN (#221) 1.8E+01 ( 0 / 1 ) ( 1.8E+01 -- 1.8E+01)	no samples
Nb-95	3/0	2.1E+01 ---	-3.0E+00 ( 0 / 3 ) (-5.4E+00 -- 3.0E-01)	2-4 miles SW-WS (#242) -3.0E-01 ( 0 / 1 ) (-3.0E-01 -- 3.0E-01)	no samples
Ba-140	3/0	3.9E+02 ---	-6.0E+01 ( 0 / 3 ) (-2.1E+02 -- 3.6E+01)	0-2 miles NW-NN (#221) 3.6E+01 ( 0 / 1 ) ( 3.6E+01 -- 3.6E+01)	no samples
La-140	3/0	1.3E+02 ---	3.0E+01 ( 0 / 3 ) (-1.9E+01 -- 1.2E+02)	0-2 miles NW-NN (#221) 1.2E+02 ( 0 / 1 ) ( 1.2E+02 -- 1.2E+02)	no samples

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)

\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

TABLE 3  
1992 REMP ANALYSIS SUMMARY

UNITS: pCi/Kg wet wt

MEDIUM: Dove

ANALYSIS TYPE	TOTAL ANALYSES/ NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN ( f ) ** RANGE	LOCATION WITH HIGHEST LOCATION INFORMATION	ANNUAL MEAN MEAN ( f ) ** RANGE	CONTROL LOCATIONS MEAN ( f ) ** RANGE
I-131	2/ 0	4.0E+03 ---	-1.3E+03 ( 0 / 2 ) (-1.6E+03 --1.0E+03)	0-2 miles W-WNW (#231)	-1.0E+03 ( 0 / 1 ) (-1.0E+03 --1.0E+03)	no samples
Cs-134	2/ 0	2.5E+01 1.3E+02	-3.3E+01 ( 0 / 2 ) (-4.0E+01 --2.6E+01)	0-2 miles NW-WN (#221)	-2.6E+01 ( 0 / 1 ) (-2.6E+01 --2.6E+01)	no samples
Cs-137	2/ 0	2.7E+01 1.5E+02	-1.3E+01 ( 0 / 2 ) (-2.1E+01 --4.2E+00)	0-2 miles NW-WN (#221)	-4.2E+00 ( 0 / 1 ) (-4.2E+00 --4.2E+00)	no samples
Mn-54	2/ 0	2.9E+01 1.3E+02	-1.0E+01 ( 0 / 2 ) (-1.2E+01 --8.3E+00)	0-2 miles W-WNW (#231)	-8.3E+00 ( 0 / 1 ) (-8.3E+00 --8.3E+00)	no samples
Fe-59	2/ 0	1.1E+02 2.6E+02	-1.6E+00 ( 0 / 2 ) (-5.5E+00 --2.3E+00)	0-2 miles NW-WN (#221)	2.3E+00 ( 0 / 1 ) ( 2.3E+00 --2.3E+00)	no samples
Co-58	2/ 0	3.8E+01 1.3E+02	-2.6E+01 ( 0 / 2 ) (-2.8E+01 --2.4E+01)	0-2 miles NW-WN (#221)	-2.4E+01 ( 0 / 1 ) (-2.4E+01 --2.4E+01)	no samples
Co-60	2/ 0	2.4E+01 1.3E+02	-1.3E+01 ( 0 / 2 ) (-2.0E+01 --5.2E+00)	0-2 miles NW-WN (#221)	-5.2E+00 ( 0 / 1 ) (-5.2E+00 --5.2E+00)	no samples
Zn-65	2/ 0	9.2E+01 2.6E+02	-2.0E+01 ( 0 / 2 ) (-5.2E+01 --1.1E+01)	0-2 miles W-WNW (#231)	1.1E+01 ( 0 / 1 ) ( 1.1E+01 --1.1E+01)	no samples
Zr-95	2/ 0	7.3E+01 ---	-2.0E+01 ( 0 / 2 ) (-3.6E+01 --3.2E+00)	0-2 miles W-WNW (#231)	-3.2E+00 ( 0 / 1 ) (-3.2E+00 --3.2E+00)	no samples
Nb-95	2/ 0	6.6E+01 ---	-3.8E+01 ( 0 / 2 ) (-7.5E+01 --7.5E+01)	0-2 miles W-WNW (#231)	0.0E+00 ( 0 / 1 ) ( 0.0E+00 --0.0E+00)	no samples
Ba-140	2/ 0	2.0E+03 ---	-4.6E+02 ( 0 / 2 ) (-1.1E+03 --2.1E+02)	0-2 miles W-WNW (#231)	2.1E+02 ( 0 / 1 ) ( 2.1E+02 --2.1E+02)	no samples
La-140	2/ 0	5.4E+02 ---	-1.9E+02 ( 0 / 2 ) (-3.6E+02 --2.2E+01)	0-2 miles W-WNW (#231)	-2.2E+01 ( 0 / 1 ) (-2.2E+01 --2.2E+01)	no samples

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)  
\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

TABLE 3  
1992 REMP ANALYSIS SUMMARY

UNITS: pCi/Kg wet wt

MEDIUM: Pigeon

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
I-131	1/0	1.8E+02 ---	-9.8E+01 ( 0 / 1 ) (-9.8E+01 --9.8E+01)	0-2 miles E-ESE (#271) -9.8E+01 ( 0 / 1 ) (-9.8E+01 --9.8E+01)	no samples
Cs-134	1/0	4.0E+00 1.3E+02	-5.5E+00 ( 0 / 1 ) (-5.5E+00 --5.5E+00)	0-2 miles E-ESE (#271) -5.5E+00 ( 0 / 1 ) (-5.5E+00 --5.5E+00)	no samples
Cs-137	1/0	5.0E+00 1.5E+02	-7.3E-02 ( 0 / 1 ) (-7.3E-02 --7.3E-02)	0-2 miles E-ESE (#271) -7.3E-02 ( 0 / 1 ) (-7.3E-02 --7.3E-02)	no samples
Mn-54	1/0	4.6E+00 1.3E+02	-2.6E+00 ( 0 / 1 ) (-2.6E+00 --2.6E+00)	0-2 miles E-ESE (#271) -2.6E+00 ( 0 / 1 ) (-2.6E+00 --2.6E+00)	no samples
Fe-59	1/0	1.9E+01 2.6E+02	-1.3E+01 ( 0 / 1 ) (-1.3E+01 --1.3E+01)	0-2 miles E-ESE (#271) -1.3E+01 ( 0 / 1 ) (-1.3E+01 --1.3E+01)	no samples
Co-58	1/0	6.7E+00 1.3E+02	5.8E-01 ( 0 / 1 ) ( 5.8E-01 --5.8E-01)	0-2 miles E-ESE (#271) 5.8E-01 ( 0 / 1 ) ( 5.8E-01 --5.8E-01)	no samples
Co-60	1/0	5.0E+00 1.3E+02	-1.2E-01 ( 0 / 1 ) (-1.2E-01 --1.2E-01)	0-2 miles E-ESE (#271) -1.2E-01 ( 0 / 1 ) (-1.2E-01 --1.2E-01)	no samples
Zn-65	1/0	1.2E+01 2.6E+02	-7.4E+00 ( 0 / 1 ) (-7.4E+00 --7.4E+00)	0-2 miles E-ESE (#271) -7.4E+00 ( 0 / 1 ) (-7.4E+00 --7.4E+00)	no samples
Zr-95	1/0	1.2E+01 ---	-4.1E+00 ( 0 / 1 ) (-4.1E+00 --4.1E+00)	0-2 miles E-ESE (#271) -4.1E+00 ( 0 / 1 ) (-4.1E+00 --4.1E+00)	no samples
Nb-95	1/0	1.0E+01 ---	-1.2E+00 ( 0 / 1 ) (-1.2E+00 --1.2E+00)	0-2 miles E-ESE (#271) -1.2E+00 ( 0 / 1 ) (-1.2E+00 --1.2E+00)	no samples
Ba-140	1/0	1.6E+02 ---	-7.7E+01 ( 0 / 1 ) (-7.7E+01 --7.7E+01)	0-2 miles E-ESE (#271) -7.7E+01 ( 0 / 1 ) (-7.7E+01 --7.7E+01)	no samples
La-140	1/0	4.1E+01 ---	-4.7E+00 ( 0 / 1 ) (-4.7E+00 --4.7E+00)	0-2 miles E-ESE (#271) -4.7E+00 ( 0 / 1 ) (-4.7E+00 --4.7E+00)	no samples

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)  
\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

TABLE 3  
1992 REMP ANALYSIS SUMMARY

UNITS: pCi/Kg wet wt

MEDIUM: Piscivorous Fish

ANALYSIS TYPE	TOTAL ANALYSES/ NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN ( f ) ** RANGE	LOCATION WITH HIGHEST LOCATION INFORMATION	ANNUAL MEAN MEAN ( f ) ** RANGE	CONTROL LOCATIONS MEAN ( f ) ** RANGE
I-131	5/ 0	6.8E+02 ---	2.0E+02 ( 0 / 3 ) ( -2.9E+02 -- 8.6E+02 )	3 miles SSE (#216)	2.9E+02 ( 0 / 2 ) ( -2.9E+02 -- 8.6E+02 )	2.0E+01 ( 0 / 2 ) ( -4.2E-01 -- 4.1E+01 )
Cs-134	5/ 0	1.5E+01 1.3E+02	-2.6E+01 ( 0 / 3 ) ( -5.4E+01 -- 1.0E+01 )	>10 miles N-NW (#216)	-3.5E+00 ( 0 / 2 ) ( -4.2E+00 -- 2.9E+00 )	-3.5E+00 ( 0 / 2 ) ( -4.2E+00 -- 2.9E+00 )
Cs-137	5/ 0	1.7E+01 1.5E+02	9.8E+00 ( 1 / 3 ) ( 2.1E+01 -- 2.1E+01 )	2 miles E (#214)	2.1E+01 ( 1 / 1 ) ( 2.1E+01 -- 2.1E+01 )	5.9E-01 ( 0 / 2 ) ( 1.7E-01 -- 1.0E+00 )
Mn-54	5/ 0	1.7E+01 1.3E+02	-3.4E-01 ( 0 / 3 ) ( -8.8E+00 -- 4.5E+00 )	3 miles SSE (#216)	3.9E+00 ( 0 / 2 ) ( 3.3E+00 -- 4.5E+00 )	-5.7E-01 ( 0 / 2 ) ( -2.8E+00 -- 1.6E+00 )
Fe-59	5/ 0	5.4E+01 2.6E+02	-3.5E+00 ( 0 / 3 ) ( -5.9E+00 -- 1.1E+00 )	>10 miles N-NW (#216)	-2.0E-01 ( 0 / 2 ) ( -2.4E+00 -- 2.0E+00 )	-2.0E-01 ( 0 / 2 ) ( -2.4E+00 -- 2.0E+00 )
Co-58	5/ 0	2.3E+01 1.3E+02	6.9E+00 ( 0 / 3 ) ( -5.3E+00 -- 2.0E+01 )	3 miles SSE (#216)	1.3E+01 ( 0 / 2 ) ( 6.1E+00 -- 2.0E+01 )	-1.8E+00 ( 0 / 2 ) ( -1.9E+00 -- 1.6E+00 )
Co-60	5/ 0	1.8E+01 1.3E+02	5.4E+00 ( 0 / 3 ) ( -4.1E+00 -- 2.0E+01 )	3 miles SSE (#216)	1.0E+01 ( 0 / 2 ) ( 6.8E-01 -- 2.0E+01 )	1.2E+00 ( 0 / 2 ) ( 1.0E+00 -- 1.3E+00 )
Zn-65	5/ 0	3.9E+01 2.6E+02	-9.7E+00 ( 0 / 3 ) ( -1.7E+01 -- 2.2E+00 )	>10 miles N-NW (#216)	-2.0E+00 ( 0 / 2 ) ( -2.1E+00 -- 1.9E+00 )	-2.0E+00 ( 0 / 2 ) ( -2.1E+00 -- 1.9E+00 )
Zr-95	5/ 0	4.1E+01 ---	9.3E+00 ( 0 / 3 ) ( -3.2E+00 -- 3.4E+01 )	3 miles SSE (#216)	1.5E+01 ( 0 / 2 ) ( -3.2E+00 -- 3.4E+01 )	1.3E+00 ( 0 / 2 ) ( 1.7E-01 -- 2.5E+00 )
Nb-95	5/ 0	3.5E+01 ---	7.3E+00 ( 0 / 3 ) ( -1.5E+01 -- 2.6E+01 )	3 miles SSE (#216)	1.8E+01 ( 0 / 2 ) ( 1.0E+01 -- 2.6E+01 )	2.5E+00 ( 0 / 2 ) ( 0.0E+00 -- 5.1E+00 )
Ba-140	5/ 0	5.7E+02 ---	1.8E+02 ( 0 / 3 ) ( -3.6E+02 -- 5.2E+02 )	3 miles SSE (#216)	4.5E+02 ( 0 / 2 ) ( 3.8E+02 -- 5.2E+02 )	-1.3E+01 ( 0 / 2 ) ( -2.6E+01 -- 0.0E+00 )
La-140	5/ 0	1.9E+02 ---	-1.6E+01 ( 0 / 3 ) ( -1.0E+02 -- 3.0E+01 )	3 miles SSE (#216)	2.9E+01 ( 0 / 2 ) ( 2.8E+01 -- 3.0E+01 )	-3.4E+00 ( 0 / 2 ) ( -6.3E+00 -- 6.1E-01 )

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (---) USED WHEN THERE IS NO REQUIREMENT.  
\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

TABLE 3

## 1992 REMP ANALYSIS SUMMARY

UNITS: pci/Kg wet wt

MEDIUM: Crustacean Crab

ANALYSIS TYPE	TOTAL ANALYSES/ NOMROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN ( f ) ** RANGE	LOCATION WITH HIGHEST ANNUAL MEAN MEAN ( f ) ** RANGE	CONTROL LOCATIONS MEAN ( f ) ** RANGE
I-131	2/ 0	2.1E+02 ---	-1.1E+02 ( 0 / 2 ) ( -1.7E+02 --4.2E+01 )	3 miles SSE (#216)	-1.1E+02 ( 0 / 2 ) ( -1.7E+02 --4.2E+01 ) no samples
Cs-134	2/ 0	9.0E+00 1.3E+02	-1.9E+01 ( 0 / 2 ) ( -2.7E+01 --1.1E+01 )	3 miles SSE (#216)	-1.9E+01 ( 0 / 2 ) ( -2.7E+01 --1.1E+01 ) no samples
Cs-137	2/ 0	1.3E+01 1.5E+02	2.0E+01 ( 1 / 2 ) ( 1.5E+01 --2.5E+01 )	3 miles SSE (#216)	2.0E+01 ( 1 / 2 ) ( 1.5E+01 --2.5E+01 ) no samples
Mn-54	2/ 0	8.4E+00 1.3E+02	-3.6E+00 ( 0 / 2 ) ( -5.7E+00 --1.5E+00 )	3 miles SSE (#216)	-3.6E+00 ( 0 / 2 ) ( -5.7E+00 --1.5E+00 ) no samples
Fe-59	2/ 0	2.9E+01 2.6E+02	-1.5E+01 ( 0 / 2 ) ( -2.0E+01 --1.0E+01 )	3 miles SSE (#216)	-1.5E+01 ( 0 / 2 ) ( -2.0E+01 --1.0E+01 ) no samples
Co-58	2/ 0	1.2E+01 1.3E+02	-2.1E+00 ( 0 / 2 ) ( -3.3E+00 --8.1E-01 )	3 miles SSE (#216)	-2.1E+00 ( 0 / 2 ) ( -3.3E+00 --8.1E-01 ) no samples
Co-60	2/ 0	9.8E+00 1.3E+02	1.9E+00 ( 0 / 2 ) ( 7.1E-01 --3.1E+00 )	3 miles SSE (#216)	1.9E+00 ( 0 / 2 ) ( 7.1E-01 --3.1E+00 ) no samples
Zn-65	2/ 0	2.1E+01 2.6E+02	-1.9E+01 ( 0 / 2 ) ( -2.7E+01 --1.0E+01 )	3 miles SSE (#216)	-1.9E+01 ( 0 / 2 ) ( -2.7E+01 --1.0E+01 ) no samples
Zr-95	2/ 0	2.2E+01 ---	-5.8E+00 ( 0 / 2 ) ( -9.9E+00 --1.8E+00 )	3 miles SSE (#216)	-5.8E+00 ( 0 / 2 ) ( -9.9E+00 --1.8E+00 ) no samples
Nb-95	2/ 0	2.0E+01 ---	† 1.2E+01 ( 0 / 2 ) ( 8.1E+00 --1.6E+01 )	3 miles SSE (#216)	† 1.2E+01 ( 0 / 2 ) ( 8.1E+00 --1.6E+01 ) no samples
Ba-140	2/ 0	2.3E+02 ---	-9.8E+00 ( 0 / 2 ) ( -4.3E+01 --2.4E+01 )	3 miles SSE (#216)	-9.8E+00 ( 0 / 2 ) ( -4.3E+01 --2.4E+01 ) no samples
La-140	2/ 0	7.2E+01 ---	1.4E+01 ( 0 / 2 ) ( -7.9E-01 --2.8E+01 )	3 miles SSE (#216)	1.4E+01 ( 0 / 2 ) ( -7.9E-01 --2.8E+01 ) no samples
Ag-110M	2/ 0	1.3E+01 ---	4.2E+01 ( 2 / 2 ) ( 3.8E+01 --4.6E+01 )	3 miles SSE (#216)	4.2E+01 ( 2 / 2 ) ( 3.8E+01 --4.6E+01 ) no samples

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)

\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

† Manual corrections made per D.M. Harris / 4-27-93.

TABLE 3

## 1992 REMP ANALYSIS SUMMARY

UNITS: pCi/Kg wet wt

MEDIUM: Crustacean Shrimp

ANALYSIS TYPE	TOTAL ANALYSES/ NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN ( f ) ** RANGE	LOCATION WITH HIGHEST LOCATION INFORMATION	ANNUAL MEAN MEAN ( f ) ** RANGE	CONTROL LOCATIONS MEAN ( f ) ** RANGE
I-131	2/ 0	2.4E+02 ...	-1.0E+02 ( 0 / 2 ) (-2.3E+02 ~ 2.6E+01)	>10 miles (#222)	-1.0E+02 ( 0 / 2 ) (-2.3E+02 ~ 2.6E+01)	no samples
Cs-134	2/ 0	1.2E+01 1.3E+02	-1.3E+01 ( 0 / 2 ) (-1.5E+01 ~ -1.0E+01)	>10 miles (#222)	-1.3E+01 ( 0 / 2 ) (-1.5E+01 ~ -1.0E+01)	no samples
Cs-137	2/ 0	1.4E+01 1.5E+02	-1.1E-01 ( 0 / 2 ) (-2.3E+00 ~ 2.1E+00)	>10 miles (#222)	-1.1E-01 ( 0 / 2 ) (-2.3E+00 ~ 2.1E+00)	no samples
Mn-54	2/ 0	1.4E+01 1.3E+02	-6.1E+00 ( 0 / 2 ) (-9.6E+00 ~ -2.5E+00)	>10 miles (#222)	-6.1E+00 ( 0 / 2 ) (-9.6E+00 ~ -2.5E+00)	no samples
Fe-59	2/ 0	4.5E+01 2.6E+02	1.9E+00 ( 0 / 2 ) (-3.5E+00 ~ 7.4E+00)	>10 miles (#222)	1.9E+00 ( 0 / 2 ) (-3.5E+00 ~ 7.4E+00)	no samples
Co-58	2/ 0	1.7E+01 1.3E+02	-9.8E+00 ( 0 / 2 ) (-2.1E+01 ~ 1.1E+00)	>10 miles (#222)	-9.8E+00 ( 0 / 2 ) (-2.1E+01 ~ 1.1E+00)	no samples
Co-60	2/ 0	1.5E+01 1.3E+02	3.8E+00 ( 0 / 2 ) ( 7.7E-01 ~ 6.9E+00)	>10 miles (#222)	3.8E+00 ( 0 / 2 ) ( 7.7E-01 ~ 6.9E+00)	no samples
Zn-65	2/ 0	2.8E+01 2.6E+02	-2.0E+01 ( 0 / 2 ) (-2.9E+01 ~ -1.1E+01)	>10 miles (#222)	-2.0E+01 ( 0 / 2 ) (-2.9E+01 ~ -1.1E+01)	no samples
Zr-95	2/ 0	3.1E+01 ...	-1.5E+01 ( 0 / 2 ) (-2.9E+01 ~ -1.1E+00)	>10 miles (#222)	-1.5E+01 ( 0 / 2 ) (-2.9E+01 ~ -1.1E+00)	no samples
Nb-95	2/ 0	2.6E+01 ...	-5.9E+00 ( 0 / 2 ) (-1.8E+01 ~ 6.1E+00)	>10 miles (#222)	-5.9E+00 ( 0 / 2 ) (-1.8E+01 ~ 6.1E+00)	no samples
Ra-140	2/ 0	3.1E+02 ...	-5.7E+01 ( 0 / 2 ) (-8.0E+01 ~ -3.4E+01)	>10 miles (#222)	-5.7E+01 ( 0 / 2 ) (-8.0E+01 ~ -3.4E+01)	no samples
La-140	2/ 0	1.1E+02 ...	-1.6E+01 ( 0 / 2 ) (-2.6E+01 ~ -5.0E+00)	>10 miles (#222)	-1.6E+01 ( 0 / 2 ) (-2.6E+01 ~ -5.0E+00)	no samples

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (...) USED WHEN THERE IS NO REQUIREMENT.

\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

TABLE 3  
1992 REMP ANALYSIS SUMMARY

MEDIUM: Wild Swine

UNITS: pCi/Kg wet wt

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
I-131	1/0	7.9E+01 ---	-1.3E+00 ( 0 / 1 ) ( -1.3E+00 -- 1.3E+00 )	3.7 miles SE (#237) -1.3E+00 ( 0 / 1 ) ( -1.3E+00 -- 1.3E+00 )	no samples
Cs-134	1/0	5.0E+00 1.3E+02	-3.8E+00 ( 0 / 1 ) ( -3.8E+00 -- 3.8E+00 )	3.7 miles SE (#237) -3.8E+00 ( 0 / 1 ) ( -3.8E+00 -- 3.8E+00 )	no samples
Cs-137	1/0	7.0E+00 1.5E+02	1.5E-01 ( 0 / 1 ) ( 1.5E-01 -- 1.5E-01 )	3.7 miles SE (#237) 1.5E-01 ( 0 / 1 ) ( 1.5E-01 -- 1.5E-01 )	no samples
Mn-54	1/0	6.3E+00 1.3E+02	6.7E-01 ( 0 / 1 ) ( 6.7E-01 -- 6.7E-01 )	3.7 miles SE (#237) 6.7E-01 ( 0 / 1 ) ( 6.7E-01 -- 6.7E-01 )	no samples
Fe-59	1/0	2.4E+01 2.6E+02	4.7E+00 ( 0 / 1 ) ( 4.7E+00 -- 4.7E+00 )	3.7 miles SE (#237) 4.7E+00 ( 0 / 1 ) ( 4.7E+00 -- 4.7E+00 )	no samples
Co-58	1/0	8.0E+00 1.5E+02	1.7E+00 ( 0 / 1 ) ( 1.7E+00 -- 1.7E+00 )	3.7 miles SE (#237) 1.7E+00 ( 0 / 1 ) ( 1.7E+00 -- 1.7E+00 )	no samples
Co-60	1/0	6.3E+00 1.3E+02	-2.2E+00 ( 0 / 1 ) ( -2.2E+00 -- 2.2E+00 )	3.7 miles SE (#237) -2.2E+00 ( 0 / 1 ) ( -2.2E+00 -- 2.2E+00 )	no samples
Zn-65	1/0	1.5E+01 2.6E+02	-6.2E+00 ( 0 / 1 ) ( -6.2E+00 -- 6.2E+00 )	3.7 miles SE (#237) -6.2E+00 ( 0 / 1 ) ( -6.2E+00 -- 6.2E+00 )	no samples
Zr-95	1/0	1.5E+01 ---	2.2E+00 ( 0 / 1 ) ( 2.2E+00 -- 2.2E+00 )	3.7 miles SE (#237) 2.2E+00 ( 0 / 1 ) ( 2.2E+00 -- 2.2E+00 )	no samples
Nb-95	1/0	1.2E+01 ---	4.0E+00 ( 0 / 1 ) ( 4.0E+00 -- 4.0E+00 )	3.7 miles SE (#237) 4.0E+00 ( 0 / 1 ) ( 4.0E+00 -- 4.0E+00 )	no samples
Ba-140	1/0	1.1E+02 ---	1.6E+01 ( 0 / 1 ) ( 1.6E+01 -- 1.6E+01 )	3.7 miles SE (#237) 1.6E+01 ( 0 / 1 ) ( 1.6E+01 -- 1.6E+01 )	no samples
La-140	1/0	4.1E+01 ---	1.7E+01 ( 0 / 1 ) ( 1.7E+01 -- 1.7E+01 )	3.7 miles SE (#237) 1.7E+01 ( 0 / 1 ) ( 1.7E+01 -- 1.7E+01 )	no samples

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (---) USED WHEN THERE IS NO REQUIREMENT.  
\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

TABLE 3

## 1992 REMP ANALYSIS SUMMARY

UNITS: pCi/Kg wet wt

MEDIUM: Game Deer

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
I-131	1/0	2.5E+01 ---	1.3E+01 ( 0 / 1 ) ( 1.3E+01 ~ 1.3E+01 )	4-6 miles SE-SS (#263) 1.3E+01 ( 0 / 1 ) ( 1.3E+01 ~ 1.3E+01 )	no samples
Cs-134	1/0	4.0E+00 1.3E+02	1.3E-01 ( 0 / 1 ) ( 1.3E-01 ~ 1.3E-01 )	4-6 miles SE-SS (#263) 1.3E-01 ( 0 / 1 ) ( 1.3E-01 ~ 1.3E-01 )	no samples
Cs-137	1/0	4.7E+00 1.5E+02	2.3E+00 ( 0 / 1 ) ( 2.3E+00 ~ 2.3E+00 )	4-6 miles SE-SS (#263) 2.3E+00 ( 0 / 1 ) ( 2.3E+00 ~ 2.3E+00 )	no samples
Mn-54	1/0	4.1E+00 1.3E+02	-1.1E+00 ( 0 / 1 ) ( -1.1E+00 ~ -1.1E+00 )	4-6 miles SE-SS (#263) -1.1E+00 ( 0 / 1 ) ( -1.1E+00 ~ -1.1E+00 )	no samples
Fe-59	1/0	1.2E+01 2.6E+02	-1.3E+00 ( 0 / 1 ) ( -1.3E+00 ~ -1.3E+00 )	4-6 miles SE-SS (#263) -1.3E+00 ( 0 / 1 ) ( -1.3E+00 ~ -1.3E+00 )	no samples
Co-58	1/0	5.0E+00 1.3E+02	-4.9E-01 ( 0 / 1 ) ( -4.9E-01 ~ -4.9E-01 )	4-6 miles SE-SS (#263) -4.9E-01 ( 0 / 1 ) ( -4.9E-01 ~ -4.9E-01 )	no samples
Co-60	1/0	5.1E+00 1.3E+02	1.0E+00 ( 0 / 1 ) ( 1.0E+00 ~ 1.0E+00 )	4-6 miles SE-SS (#263) 1.0E+00 ( 0 / 1 ) ( 1.0E+00 ~ 1.0E+00 )	no samples
Zn-65	1/0	1.0E+01 2.6E+02	-2.9E+00 ( 0 / 1 ) ( -2.9E+00 ~ -2.9E+00 )	4-6 miles SE-SS (#263) -2.9E+00 ( 0 / 1 ) ( -2.9E+00 ~ -2.9E+00 )	no samples
Zr-95	1/0	9.6E+00 ---	4.8E+00 ( 0 / 1 ) ( 4.8E+00 ~ 4.8E+00 )	4-6 miles SE-SS (#263) 4.8E+00 ( 0 / 1 ) ( 4.8E+00 ~ 4.8E+00 )	no samples
Nb-95	1/0	5.7E+00 ---	-2.3E+00 ( 0 / 1 ) ( -2.3E+00 ~ -2.3E+00 )	4-6 miles SE-SS (#263) -2.3E+00 ( 0 / 1 ) ( -2.3E+00 ~ -2.3E+00 )	no samples
Ba-140	1/0	4.2E+01 ---	7.3E-01 ( 0 / 1 ) ( 7.3E-01 ~ 7.3E-01 )	4-6 miles SE-SS (#263) 7.3E-01 ( 0 / 1 ) ( 7.3E-01 ~ 7.3E-01 )	no samples
La-140	1/0	1.2E+01 ---	3.9E+00 ( 0 / 1 ) ( 3.9E+00 ~ 3.9E+00 )	4-6 miles SE-SS (#263) 3.9E+00 ( 0 / 1 ) ( 3.9E+00 ~ 3.9E+00 )	no samples

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)

\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

TABLE 3  
1992 REMP ANALYSIS SUMMARY

UNITS: pCi/Kg wet wt

MEDIUM: Rabbit

ANALYSIS TYPE	TOTAL ANALYSES/ NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN ( f ) ** RANGE	LOCATION WITH HIGHEST LOCATION INFORMATION	ANNUAL MEAN MEAN ( f ) ** RANGE	CONTROL LOCATIONS MEAN ( f ) ** RANGE
I-131	1/0	1.2E+03 ---	-6.5E+02 ( 0 / 1 ) ( -6.5E+02 --6.5E+02 )	3.7 miles SE (#237)	-6.5E+02 ( 0 / 1 ) ( -6.5E+02 --6.5E+02 )	no samples
Cs-134	1/0	1.5E+01 ---	-1.6E+01 ( 0 / 1 ) ( -1.6E+01 --1.6E+01 )	3.7 miles SE (#237)	-1.6E+01 ( 0 / 1 ) ( -1.6E+01 --1.6E+01 )	no samples
Cs-137	1/0	1.4E+01 ---	-1.2E+01 ( 0 / 1 ) ( -1.2E+01 --1.2E+01 )	3.7 miles SE (#237)	-1.2E+01 ( 0 / 1 ) ( -1.2E+01 --1.2E+01 )	no samples
Mn-54	1/0	1.5E+01 ---	-5.2E+00 ( 0 / 1 ) ( -5.2E+00 --5.2E+00 )	3.7 miles SE (#237)	-5.2E+00 ( 0 / 1 ) ( -5.2E+00 --5.2E+00 )	no samples
Fe-59	1/0	5.8E+01 ---	4.4E+01 ( 0 / 1 ) ( -4.4E+01 --4.4E+01 )	3.7 miles SE (#237)	-4.4E+01 ( 0 / 1 ) ( -4.4E+01 --4.4E+01 )	no samples
Co-58	1/0	2.2E+01 ---	-4.7E+00 ( 0 / 1 ) ( -4.7E+00 --4.7E+00 )	3.7 miles SE (#237)	-4.7E+00 ( 0 / 1 ) ( -4.7E+00 --4.7E+00 )	no samples
Co-60	1/0	1.6E+01 ---	2.7E+00 ( 0 / 1 ) ( 2.7E+00 --2.7E+00 )	3.7 miles SE (#237)	2.7E+00 ( 0 / 1 ) ( 2.7E+00 --2.7E+00 )	no samples
Zn-65	1/0	3.4E+01 ---	-2.6E+01 ( 0 / 1 ) ( -2.6E+01 --2.6E+01 )	3.7 miles SE (#237)	-2.6E+01 ( 0 / 1 ) ( -2.6E+01 --2.6E+01 )	no samples
Zr-95	1/0	4.7E+01 ---	9.3E+00 ( 0 / 1 ) ( 9.3E+00 --9.3E+00 )	3.7 miles SE (#237)	9.3E+00 ( 0 / 1 ) ( 9.3E+00 --9.3E+00 )	no samples
Nb-95	1/0	3.9E+01 ---	-1.4E+01 ( 0 / 1 ) ( -1.4E+01 --1.4E+01 )	3.7 miles SE (#237)	-1.4E+01 ( 0 / 1 ) ( -1.4E+01 --1.4E+01 )	no samples
Ba-140	1/0	7.9E+02 ---	-4.2E+02 ( 0 / 1 ) ( -4.2E+02 --4.2E+02 )	3.7 miles SE (#237)	-4.2E+02 ( 0 / 1 ) ( -4.2E+02 --4.2E+02 )	no samples
La-140	1/0	2.5E+02 ---	-6.4E+01 ( 0 / 1 ) ( -6.4E+01 --6.4E+01 )	3.7 miles SE (#237)	-6.4E+01 ( 0 / 1 ) ( -6.4E+01 --6.4E+01 )	no samples

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (--- USED WHEN THERE IS NO REQUIREMENT.)  
\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

TABLE 3

## 1992 REMP ANALYSIS SUMMARY

UNITS: pci/M<sup>3</sup>

MEDIUM: Airborne Particulate

ANALYSIS TYPE	TOTAL ANALYSES/ NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION *	INDICATOR LOCATIONS MEAN ( f ) ** RANGE	LOCATION WITH HIGHEST LOCATION INFORMATION	ANNUAL MEAN MEAN ( f ) ** RANGE	CONTROL LOCATIONS MEAN ( f ) ** RANGE
Beta	525/ 0	9.7E-04 1.0E-02	1.9E-02 ( 472 / 472 ) ( 9.0E-03 ~ 4.3E-02 )	14 miles NNE (#033)	2.0E-02 ( 53 / 53 ) ( 9.9E-03 ~ 4.3E-02 )	1.9E-02 ( 53 / 53 ) ( 9.2E-03 ~ 3.8E-02 )
I-131	40/ 0	2.9E-02 ...	-3.6E-03 ( 0 / 36 ) ( -4.2E-02 ~ 3.9E-02 )	1 mile NNW (#016)	5.5E-03 ( 0 / 4 ) ( -1.1E-04 ~ 1.4E-02 )	-1.6E-03 ( 0 / 4 ) ( -8.6E-03 ~ 6.1E-03 )
Cs-134	40/ 0	1.7E-04 5.0E-02	-2.0E-04 ( 0 / 36 ) ( -4.0E-04 ~ 3.3E-05 )	3.5 miles ESE (#006)	-1.4E-04 ( 0 / 8 ) ( -2.2E-04 ~ 3.3E-05 )	-1.8E-04 ( 0 / 4 ) ( -2.8E-04 ~ -1.2E-04 )
Cs-137	40/ 0	1.8E-04 6.0E-02	-3.9E-06 ( 0 / 36 ) ( -1.5E-04 ~ 9.6E-05 )	1 mile NNW (#016)	9.8E-06 ( 0 / 4 ) ( -2.6E-05 ~ 4.9E-05 )	1.6E-06 ( 0 / 4 ) ( -8.7E-06 ~ 1.0E-05 )
Mn-54	40/ 0	2.1E-04 ...	6.6E-06 ( 0 / 36 ) ( -1.4E-04 ~ 1.5E-04 )	1 mile NNW (#016)	5.6E-05 ( 0 / 4 ) ( 7.6E-06 ~ 1.5E-04 )	4.4E-05 ( 0 / 4 ) ( 5.2E-06 ~ 9.7E-05 )
Fe-59	40/ 0	9.9E-04 ...	-4.0E-05 ( 0 / 36 ) ( -9.6E-04 ~ 6.6E-04 )	14 miles NNE (#033)	2.5E-04 ( 0 / 4 ) ( -8.3E-05 ~ 6.1E-04 )	1.5E-04 ( 0 / 4 ) ( -1.3E-04 ~ 3.8E-04 )
Co-58	40/ 0	3.5E-04 ...	-1.3E-06 ( 0 / 36 ) ( -1.9E-04 ~ 1.8E-04 )	9 miles NW (#039)	9.2E-05 ( 0 / 4 ) ( -5.9E-05 ~ 1.8E-04 )	-5.8E-05 ( 0 / 4 ) ( -1.4E-04 ~ 4.9E-05 )
Co-60	40/ 0	2.0E-04 ...	2.8E-05 ( 0 / 36 ) ( -1.1E-04 ~ 1.8E-04 )	9 miles NW (#039)	7.7E-05 ( 0 / 4 ) ( 6.5E-06 ~ 1.8E-04 )	2.4E-05 ( 0 / 4 ) ( -6.5E-05 ~ 1.1E-04 )
Zn-65	40/ 0	4.5E-04 ...	-1.7E-04 ( 0 / 36 ) ( -5.2E-04 ~ 3.5E-04 )	1 mile N (#001)	-8.4E-05 ( 0 / 4 ) ( -2.8E-04 ~ 3.5E-04 )	-2.6E-04 ( 0 / 4 ) ( -4.8E-04 ~ -1.1E-04 )
Zr-95	40/ 0	6.5E-04 ...	2.8E-05 ( 0 / 36 ) ( -5.1E-04 ~ 8.5E-04 )	1 mile NNW (#016)	2.7E-04 ( 0 / 4 ) ( 3.6E-05 ~ 8.5E-04 )	1.8E-04 ( 0 / 4 ) ( -4.3E-04 ~ 6.2E-04 )
Nb-95	40/ 0	6.8E-04 ...	-3.8E-05 ( 0 / 36 ) ( -5.6E-04 ~ 3.1E-04 )	9 miles NW (#039)	1.4E-04 ( 0 / 4 ) ( -6.1E-05 ~ 3.1E-04 )	-2.1E-04 ( 0 / 4 ) ( -5.5E-04 ~ 1.6E-05 )
Ba-140	40/ 0	1.9E-02 ...	1.4E-03 ( 0 / 36 ) ( -2.0E-02 ~ 2.2E-02 )	1 mile NNW (#016)	7.8E-03 ( 0 / 4 ) ( -4.3E-04 ~ 1.7E-02 )	-7.7E-03 ( 0 / 4 ) ( -2.2E-02 ~ 2.4E-03 )
La-140	40/ 0	6.6E-03 ...	2.7E-04 ( 0 / 36 ) ( -3.9E-03 ~ 5.0E-03 )	1 mile NNW (#016)	1.7E-03 ( 0 / 4 ) ( -9.7E-04 ~ 5.0E-03 )	1.5E-03 ( 0 / 4 ) ( -2.3E-03 ~ 7.8E-03 )

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (---) USED WHEN THERE IS NO REQUIREMENT.

\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

TABLE 3  
1992 REMP ANALYSIS SUMMARY

MEDIUM: Air Iodine

UNITS: pCi/M<sup>3</sup>

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	
I-131	528/ 0	1.4E-02 7.0E-02	-6.3E-03 ( 0 / 475 ) (-2.2E+00 - 5.3E-03)	3.5 miles ESE (#006)	-1.1E-03 ( 0 / 105 ) (-6.0E-03 - 3.8E-03)	-2.1E-03 ( 0 / 53 ) (-1.1E-02 - 5.2E-03)

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (--- USED WHEN THERE IS NO REQUIREMENT )

\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )

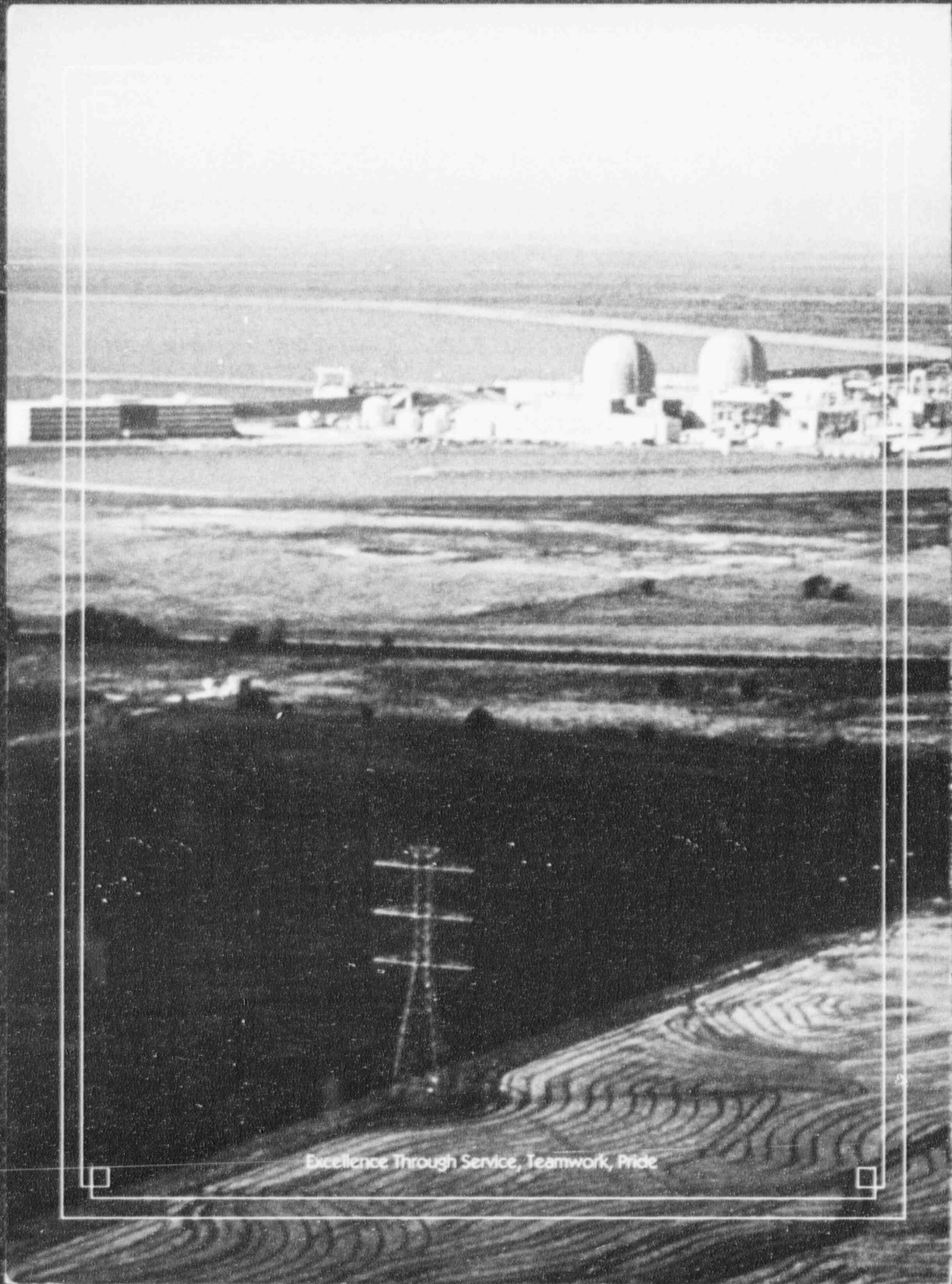
TABLE 3  
1992 REMP ANALYSIS SUMMARY

UNITS: mR/STD Quarter

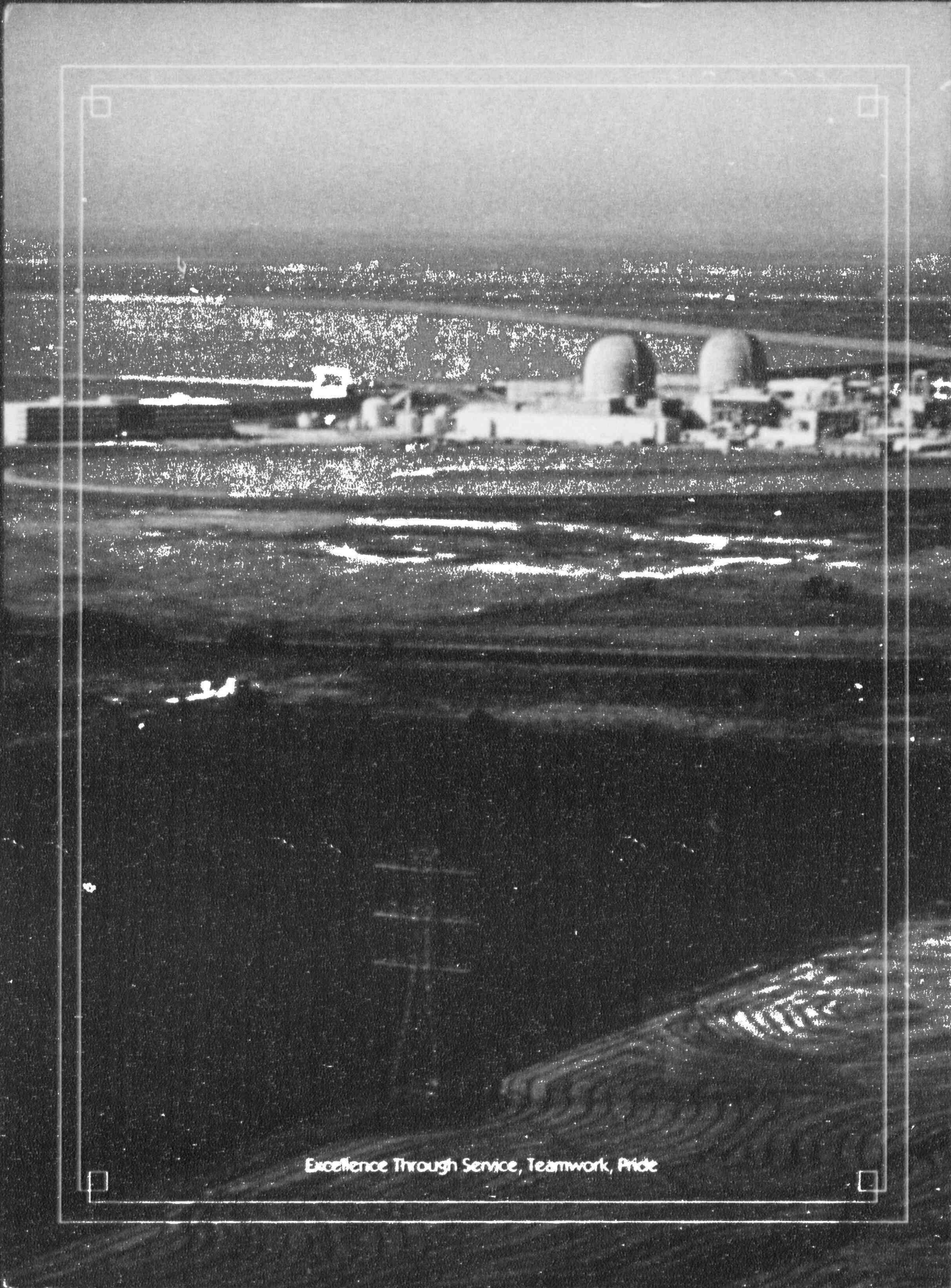
MEDIUM: Immersion Dose by TLD

ANALYSIS TYPE	TOTAL ANALYSES/ NONROUTINE MEASUREMENTS	LOWER LIMIT OF DETECTION	INDICATOR LOCATIONS MEAN ( f ) ** RANGE	LOCATION WITH HIGHEST LOCATION INFORMATION	ANNUAL MEAN MEAN ( f ) ** RANGE	CONTROL LOCATIONS MEAN ( f ) ** RANGE
Gamma	181/ 0	* ...	1.5E+01 (171 / 171 ) ( 1.3E+01 - 1.9E+01 )	1 mile W (#013)	1.9E+01 ( 4 / 4 ) ( 1.9E+01 - 1.9E+01 )	1.6E+01 ( 10 / 10 ) ( 0.0E+00 - 2.0E+01 )

\* AVERAGE MEASURED LLD AND TABLE C-2 VALUES. (---) USED WHEN THERE IS NO REQUIREMENT.  
\*\* FRACTION OF DETECTABLE MEASUREMENTS AT SPECIFIED LOCATIONS IS INDICATED IN PARENTHESES. ( f )



Excellence Through Service, Teamwork, Pride



Excellence Through Service, Teamwork, Pride