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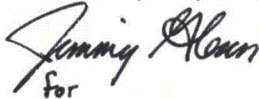
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Subject: Duke Energy Carolinas, LLC
McGuire Nuclear Station, Units 1 and 2
Docket Nos. 50-369 and 50-370
2013 Annual Radiological Environmental Operating Report

Pursuant to the requirements of Technical Specification 5.6.2 and Selected Licensee Commitment 16.11.16, please find attached the Annual Radiological Environmental Operating Report. This report covers operation of Units 1 and 2 during the 2013 calendar year.

Questions regarding this report should be directed to Kay Crane, McGuire Regulatory Affairs at (980) 875-4306.



for

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May 13, 2014
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AREOR

Annual
Radiological Environmental
Operating Report
2013



ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

**DUKE ENERGY CORPORATION
MCGUIRE NUCLEAR STATION
Units 1 and 2**

2013

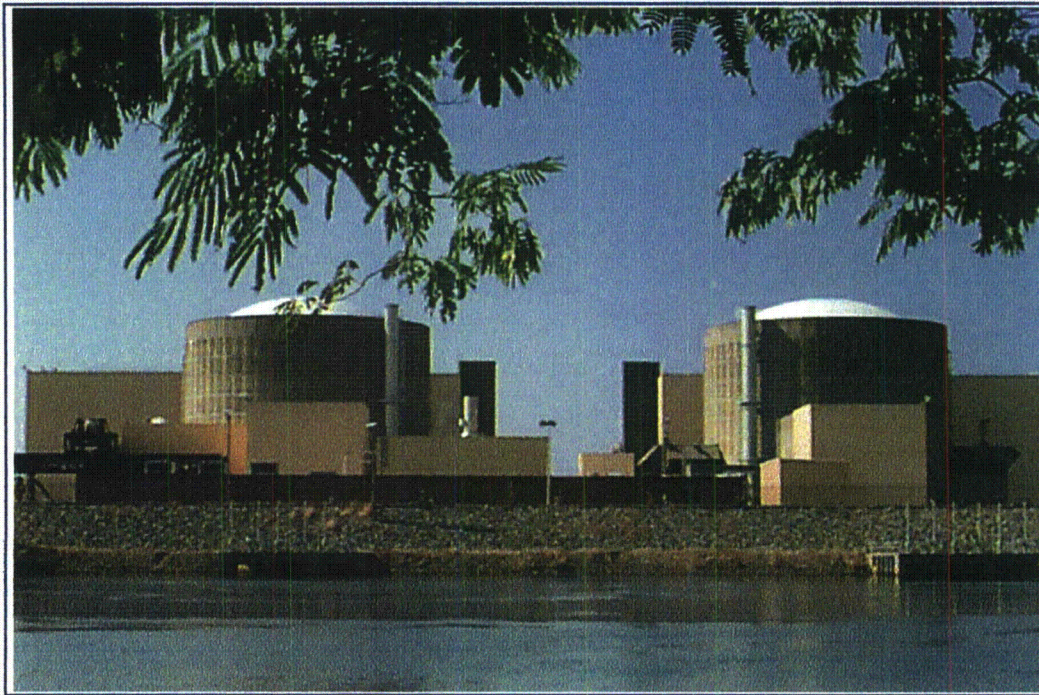


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LIST OF ACRONYMS USED IN THIS TEXT *(in alphabetical order)*

BW	BiWeekly
C	Control
DEHNR	Department of Environmental Health and Natural Resources
DHEC	Department of Health and Environmental Control
EPA	Environmental Protection Agency
ERA	Environmental Resource Associates
GI-LLI	Gastrointestinal – Lower Large Intestine
GPS	Global Positioning System
ISFSI	Independent Spent Fuel Storage Installation
LLD	Lower Limit of Detection
M	Monthly
MDA	Minimum Detectable Activity
MNS	McGuire Nuclear Station
mrem	millirem
NIST	National Institute of Standards and Technology
NRC	Nuclear Regulatory Commission
ODCM	Offsite Dose Calculation Manual
pCi/kg	picocurie per kilogram
pCi/l	picocurie per liter
pCi/m ³	picocurie per cubic meter
PIP	Problem Investigation Program
Q	Quarterly
REMP	Radiological Environmental Monitoring Program
SA	Semiannually
SLCs	Selected Licensee Commitments
SM	Semimonthly
TECH SPECS	Technical Specifications
TLD	Thermoluminescent Dosimeter
μCi/ml	microcurie per milliliter
UFSAR	Updated Final Safety Analysis Report
W	Weekly

1.0 EXECUTIVE SUMMARY

This Annual Radiological Environmental Operating Report describes the McGuire Nuclear Station Radiological Environmental Monitoring Program (REMP), and the program results for the calendar year 2013.

Included are the identification of sampling locations, descriptions of environmental sampling and analysis procedures, comparisons of present environmental radioactivity levels and pre-operational environmental data, comparisons of doses calculated from environmental measurements and effluent data, analysis of trends in environmental radiological data as potentially affected by station operations, and a summary of environmental radiological sampling results. Quality assurance practices, sampling deviations, unavailable samples, and program changes are also discussed.

Sampling activities were conducted as prescribed by Selected Licensee Commitments (SLC's). Required analyses were performed and detection capabilities were met for all collected samples as required by SLC's. Eleven hundred fifty-four samples were analyzed comprising 1,245 test results in order to compile data for the 2013 report. Based on the annual land use census, the current number of sampling sites for McGuire Nuclear Station is sufficient.

Concentrations observed in the environment in 2013 for station related radionuclides were generally within the ranges of concentrations observed in the past. Inspection of data showed that radioactivity concentrations in surface water, drinking water, shoreline sediment and fish are higher than the activities reported for samples collected prior to the operation of the station. Measured concentrations were not higher than expected, and all positively identified measurements attributable to station operation were within limits as specified in SLC's.

Additionally, environmental radiological monitoring data is consistent with effluents introduced into the environment by plant operations. The total body dose estimated to the maximum exposed member of the public as calculated by environmental sampling data, excluding TLD results, was $6.80E-2$ mrem for 2013. Background radiation dose in the United States is approximately 620 mrem per year (approximately half from naturally occurring sources such as radon and half from man-made sources such as medical processes) (reference 6.14). It is therefore concluded that station operations has had no significant radiological impact on the health and safety of the public or the environment.

2.0 INTRODUCTION

2.1 SITE DESCRIPTION AND SAMPLE LOCATIONS

McGuire Nuclear Station (MNS) is located geographically near the center of a highly industrialized region of the Carolinas. The land is predominantly rural non-farm with a small amount of land being used for farming. The McGuire site is in northwestern Mecklenburg County, North Carolina, 17 miles north-northwest of Charlotte, North Carolina. The site is bounded to the west by the Catawba River channel and to the north by 32,510 acre Lake Norman. Lake Norman is impounded by Duke Energy Corporation's Cowans Ford Dam Hydroelectric Station. The tailwater of Cowans Ford Dam is the upper limit of Mountain Island Reservoir. Mountain Island Dam is located 15 miles downstream from the site. Lookout Shoals Hydroelectric Station is at the upper reaches of Lake Norman. Marshall Steam Station is located on the western shore of Lake Norman, approximately 16 miles upstream from the site (reference 6.3).

MNS consists of two pressurized water reactors. Each reactor unit is essentially a mirror image of the other joined by an auxiliary building housing both separate and common equipment. Each unit was designed to produce approximately 1200 gross Megawatts of electricity. Unit 1 achieved criticality August 8, 1981 and Unit 2 on May 8, 1983.

Figures 2.1-1 and 2.1-2 are maps depicting the Thermoluminescent Dosimeter (TLD) monitoring locations and the sampling locations. The location numbers shown on these maps correspond to those listed in Tables 2.1-A and 2.1-B. Figure 2.1-1 comprises all sample locations within 0.5 mile radius of MNS. Figure 2.1-2 comprises all sample locations within a ten mile radius of MNS.

2.2 SCOPE AND REQUIREMENTS OF THE REMP

An environmental monitoring program has been in effect at McGuire Nuclear Station since 1977, four years prior to operation of Unit 1 in 1981. The preoperational program provides data on the existing environmental radioactivity levels for the site and vicinity which may be used to determine whether increases in environmental levels are attributable to the station. The operational program provides surveillance and backup support of detailed effluent monitoring which is necessary to evaluate the significance, if any, of the contributions to the existing environmental radioactivity levels that result from station operation.

This monitoring program is based on NRC guidance as reflected in the Selected Licensee Commitments Manual, with regard to sample media, sampling locations, sampling frequency, and analytical sensitivity requirements. Indicator and control locations were established for comparison purposes to distinguish radioactivity of station origin from natural or other "man-made" environmental radioactivity. The environmental monitoring program also verifies projected and anticipated radionuclide concentrations in the environment and related exposures from releases of radionuclides from McGuire Nuclear Station. This program satisfies the

requirements of Section IV.B.2 of Appendix I to 10CFR50 and provides surveillance of all appropriate critical exposure pathways to man and protects vital interests of the company, public, and state and federal agencies concerned with the environment. Reporting levels for radioactivity found in environmental samples are listed in Table 2.2-A. Table 2.2-B lists the REMP analysis and frequency schedule.

The Annual Land Use Census, required by Selected Licensee Commitments, is performed to ensure that changes in the use of areas at or beyond the site boundary are identified and that modifications to the Radiological Environmental Monitoring Program are made if required by changes in land use. This census satisfies the requirements of Section IV.B.3 of Appendix I to 10CFR50. Results are shown in Table 3.10.

Participation in an interlaboratory comparison program as required by Selected Licensee Commitments provides for independent checks on the precision and accuracy of measurements of radioactive material in REMP sample matrices. Such checks are performed as part of the quality assurance program for environmental monitoring in order to demonstrate that the results are valid for the purposes of Section IV.B.2 of Appendix I to 10CFR50. A summary of the results obtained as part of this comparison program are in Section 5 of this annual report.

2.3 STATISTICAL AND CALCULATIONAL METHODOLOGY

2.3.1 ESTIMATION OF THE MEAN VALUE

There was one (1) basic statistical calculation performed on the raw data resulting from the environmental sample analysis program. The calculation involved the determination of the mean value for the indicator and the control samples for each sample medium. The mean is a widely used statistic. This value was used in the reduction of the data generated by the sampling and analysis of the various media in the Radiological Environmental Monitoring Program. "Net activity (or concentration)" is the activity (or concentration) determined to be present in the sample. No "Minimum Detectable Activity", "Lower Limit of Detection", "Less Than Level", or negative activities or concentrations are included in the calculation of the mean. The following equation was used to estimate the mean (reference 6.8):

$$\bar{x} = \frac{\sum_{i=1}^N x_i}{N}$$

Where:

\bar{x} = estimate of the mean,

i = individual sample,

N = total number of samples with a net activity (or concentration),

x_i = net activity (or concentration) for sample i.

2.3.2 LOWER LEVEL OF DETECTION AND MINIMUM DETECTABLE ACTIVITY

The Lower Level of Detection (LLD) and Minimum Detectable Activity (MDA) are used throughout the Environmental Monitoring Program.

LLD - The LLD, as defined in the Selected Licensee Commitments Manual is the smallest concentration of radioactive material in a sample that will yield a net count, above the system background, that will be detected with 95% probability with only 5% probability of falsely concluding that a blank observation represents a "real" signal. The LLD is an *a priori* lower limit of detection. The actual LLD is dependent upon the standard deviation of the background counting rate, the counting efficiency, the sample size (mass or volume), the radiochemical yield, and the radioactive decay of the sample between sample collection and counting. The "required" LLD's for each sample medium and selected radionuclides are given in the Selected Licensee Commitments and are listed in Table 2.2-C.

MDA - The MDA is the net counting rate (sample after subtraction of background) that must be surpassed before a sample is considered to contain a scientifically measurable amount of a radioactive material exceeding background amounts. The MDA is calculated using a sample background and may be thought of as an "actual" LLD for a particular sample measurement.

2.3.3 TREND IDENTIFICATION

One of the purposes of an environmental monitoring program is to determine if there is a buildup of radionuclides in the environment due to the operation of the nuclear station. Visual inspection of tabular or graphical presentations of data (including preoperational) is used to determine if a trend exists. A decrease in a particular radionuclide's concentration in an environmental medium does not indicate that reactor operations are removing radioactivity from the environment but that reactor operations are not adding that radionuclide to the environment in quantities exceeding the preoperational level and that the normal removal processes (radioactive decay, deposition, resuspension, etc.) are influencing the concentration.

Substantial increases or decreases in the amount of a particular radionuclide's release from the nuclear plant will greatly affect the resulting environmental levels; therefore, a knowledge of the release of a radionuclide from the nuclear plant is necessary to completely interpret the trends, or lack of trends, determined from the environmental data. Some factors that may affect environmental levels of radionuclides include prevailing weather conditions (periods of drought, solar cycles or heavier than normal precipitation), construction in or around either the nuclear plant or the sampling location, and addition or deletion of other sources of radioactive materials (such as the Chernobyl accident). Some of these factors may be obvious while others are sometimes unknown. Therefore, how trends are identified will include some judgment by plant personnel.

Figure 2.1-1

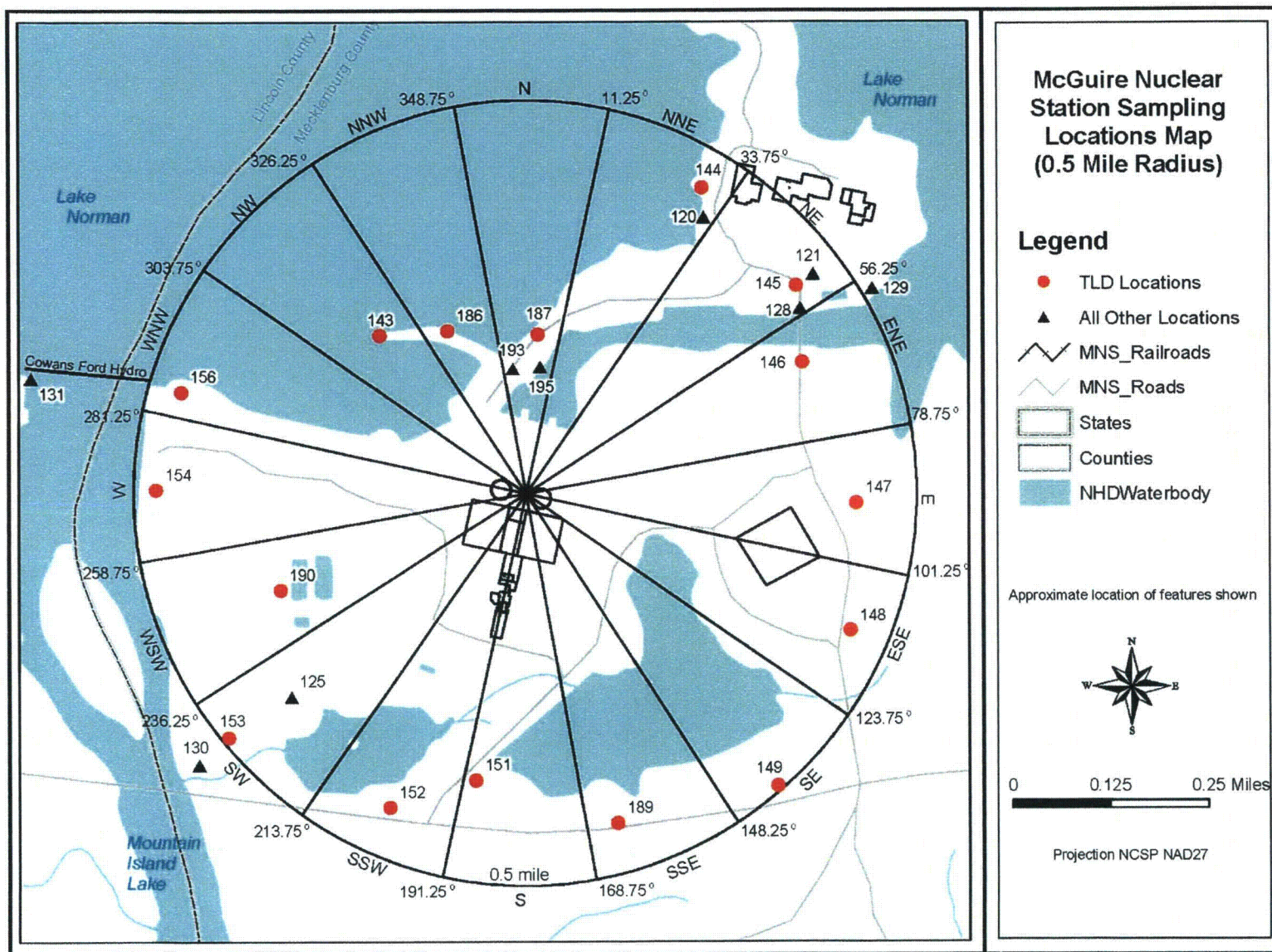


Figure 2.1-2

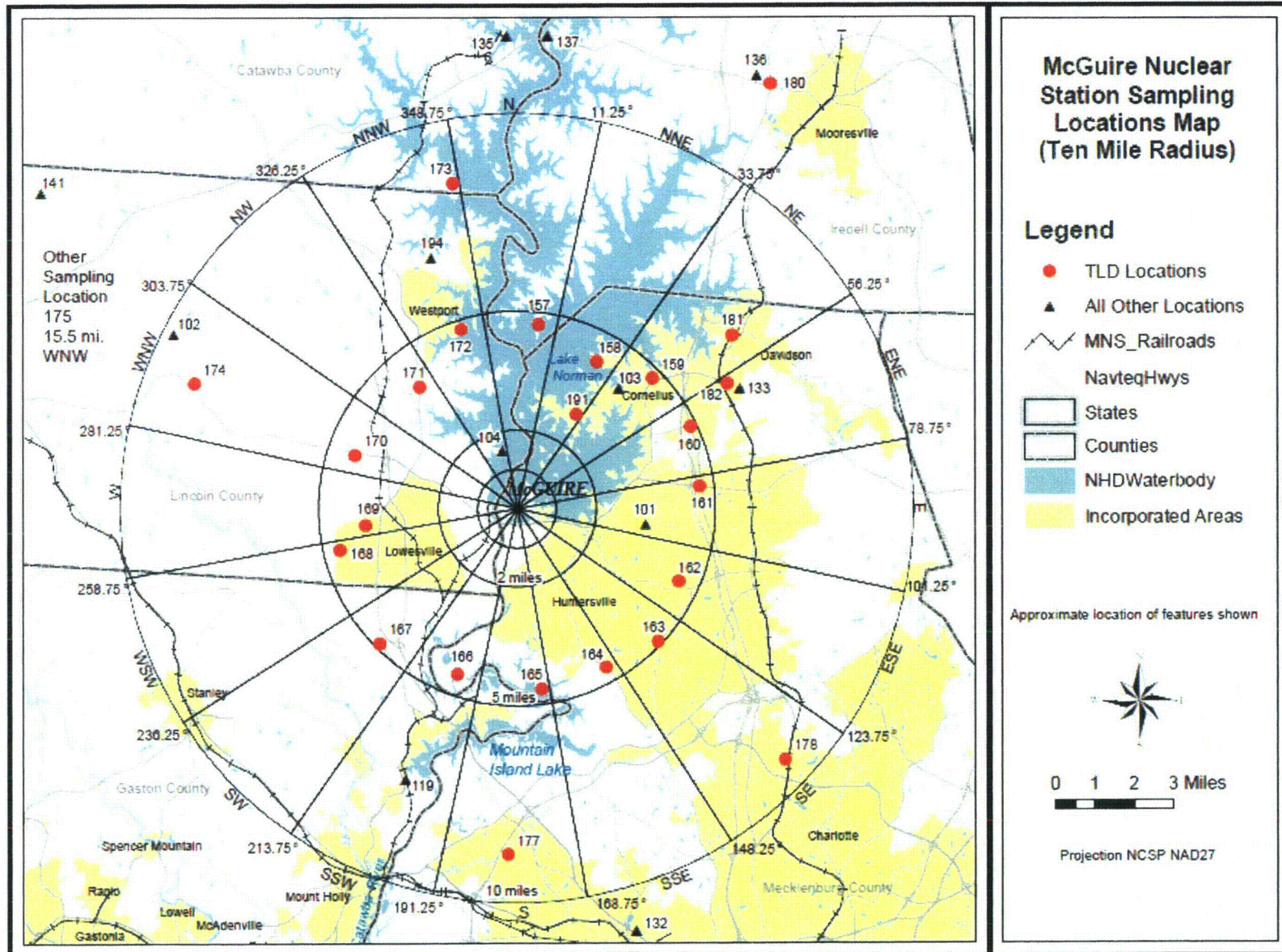


TABLE 2.1-A

**MCGUIRE RADIOLOGICAL MONITORING PROGRAM
SAMPLING LOCATIONS**

Table 2.1-A Codes			
W	Weekly	SM	Semimonthly
BW	BiWeekly	Q	Quarterly
M	Monthly	SA	Semiannually
C	Control	I	Indicator

Site #	Measure Type	Location Description*	Air Rad. & Part.	Surface Water	Drinking Water	Shoreline Sediment	Food Products	Fish	Milk	Broad Leaf Veg.
101	I	North Mecklenburg Water Treatment Facility (3.31 mi E)			M					
102	C	Amity Church Road (9.89 mi WNW)	W							M (b)
103	I	Cottonwood Substation (4.20 mi NE)	W							
104	I	5 mile radius Gardens (1.52 mi NNW)					M (a)			
119	I	Mt. Holly Municipal Water Supply (7.40 mi SSW)			M					
120	I	Site Boundary (0.46 mi NNE)	W							M (b)
121	I	Site Boundary (0.47 mi NE)	W							
125	I	Site Boundary (0.38 mi SW)	W							M (b)
128	I	Discharge Canal Bridge (0.45 mi NE)		M						
129	I	Discharge Canal Entrance to Lake Norman (0.51 mi ENE)				SA		SA		
130	I	Hwy 73 Bridge Downstream (0.52 mi SW)				SA				
131	I	Cowans Ford Dam (0.64 mi WNW)		M						
132	I	Charlotte Municipal Water Supply (11.1 mi SSE)			M					
133	I	Cornelius (6.23 mi ENE)	W							
135	C	Plant Marshall Intake Canal (11.9 mi N)		M						
136	C	Mooresville Municipal Water Supply (12.7 mi NNE)			M					
137	C	Pinnacle Access Area (12.0 mi N)				SA		SA		
141	C	Lynch Dairy-Cows (14.8 mi WNW)							SM	
188	I	5 mile radius Gardens (2.79 mi NNE)					M (a)			
193	I	Site Boundary (0.19 mi N)								M (b)
194	I	East Lincoln County Water Supply (6.73 mi NNW)			M					
195	I	Fishing Access Road (0.19 mi N)	W							

(a) During Harvest Season

(b) When Available

* GPS data reflect approximate accuracy to within 2-5 meters. GPS field measurements were taken as close as possible to the item of interest.

TABLE 2.1-B

**MCGUIRE RADIOLOGICAL MONITORING PROGRAM
SAMPLING LOCATIONS (TLD SITES)**

Table 2.1-B Codes			
IR	Inner Ring	OR	Outer Ring
C	Control	SI	Special Interest

Site #	Measure Type	Location	Distance* (miles)	Sector	Site #	Measure Type	Location	Distance* (miles)	Sector
143	IR	SITE BOUNDARY	0.27	NW	164	OR	HAMBRIGHT & BEATTIES FORD ROAD	4.64	SSE
144	IR	SITE BOUNDARY	0.46	NNE	165	OR	ARTHER AUTEN ROAD	4.57	S
145	IR	SITE BOUNDARY	0.47	NE	166	OR	NECK ROAD REFUGE BOUNDARY	4.44	SSW
146	IR	SITE BOUNDARY	0.42	ENE	167	OR	LUCIA RIVERBEND HWY/OLD FIREHOUSE	4.87	SW
147	IR	SITE BOUNDARY	0.44	E	168	OR	OLD PLANK ROAD BRIDGE	4.60	WSW
148	IR	SITE BOUNDARY	0.46	ESE	169	OR	GLOVER LANE	4.03	W
149	IR	SITE BOUNDARY	0.50	SE	170	OR	LITTLE EGYPT ROAD	4.32	WNW
151	IR	SITE BOUNDARY	0.37	S	171	OR	TRIANGLE ACE HARDWARE	3.95	NW
152	IR	SITE BOUNDARY	0.44	SSW	172	OR	LAKESHORE S RD ISLAND VIEW COURT	4.69	NNW
153	IR	SITE BOUNDARY	0.47	SW	173	SI	KEISTLER STORE / GLENWOOD ROAD	8.39	NNW
154	IR	SITE BOUNDARY	0.45	W	174	SI	EAST LINCOLN JR. HIGH SCHOOL	8.77	WNW
156	IR	SITE BOUNDARY	0.44	WNW	175	C	BOGER CITY	15.5	WNW
189	IR	SITE BOUNDARY	0.43	SSE	177	SI	BELMALLOW RD / COULWOOD	8.77	S
190	IR	SITE BOUNDARY	0.37	WSW	178	SI	FLORIDA STEEL CORPORATION	9.36	SE
157	IR	THE POINTE (MOORESVILLE)	4.69	N	180	SI	MOORESVILLE WATER TREATMENT FACILITY	12.7	NNE
158	OR	BETHEL CHURCH RD	4.33	NNE	181	SI	OLD DAVIDSON WATER FACILITY	7.02	NE
159	OR	HENDERSON ROAD	4.77	NE	182	SI	CORNELIUS AIR SITE # 133	6.23	ENE
160	OR	ANCHORAGE MARINE SHOWROOM	4.89	ENE	186	SI	MCGUIRE FISHING ACCESS ROAD	0.24	NNW
161	OR	SAM FURR ROAD & HWY 21	4.70	E	187	SI	ENERGY EXPLORIUM / AIR SITE # 195	0.19	N
162	OR	RANSON ROAD	4.53	ESE	191	SI	PENINSULA DEV. / JOHN CONNOR ROAD	2.84	NNE
163	OR	MCCOY ROAD	4.94	SE					

* GPS data reflect approximate accuracy to within 2-5 meters. GPS field measurements were taken as close as possible to the item of interest.

TABLE 2.2-A

**REPORTING LEVELS FOR RADIOACTIVITY
CONCENTRATIONS IN ENVIRONMENTAL SAMPLES**

Analysis	Water (pCi/liter)	Air Particulates or Gases (pCi/m ³)	Fish (pCi/kg-wet)	Milk (pCi/liter)	BroadLeaf Vegetation (pCi/kg-wet)
H-3	20,000 ^{(a),(b)}				
Mn-54	1,000		30,000		
Fe-59	400		10,000		
Co-58	1,000		30,000		
Co-60	300		10,000		
Zn-65	300		20,000		
Zr-Nb-95	400				
I-131	2	0.9		3	100
Cs-134	30	10	1,000	60	1,000
Cs-137	50	20	2,000	70	2,000
Ba-La-140	200			300	

(a) If no drinking water pathway exists, a value of 30,000 pCi/liter may be used.

(b) H-3 Reporting level not applicable to surface water

TABLE 2.2-B

REMP ANALYSIS FREQUENCY

Sample Medium	Analysis Schedule	Gamma Isotopic	Tritium	Low Level I-131	Gross Beta	TLD
Air Radioiodine	Weekly	X				
Air Particulate	Weekly				X	
	Quarterly Composite	X				
Direct Radiation	Quarterly					X
Surface Water	Monthly Composite	X				
	Quarterly Composite		X			
Drinking Water	Monthly Composite	X		(a)	X	
	Quarterly Composite		X			
Shoreline Sediment	Semiannually	X				
Milk	Semimonthly	X		X		
Fish	Semiannually	X				
Broadleaf Vegetation	Monthly ^(b)	X				
Food Products	Monthly ^(b)	X				

(a) Low-level I-131 analysis will be performed if the dose calculated for the consumption of drinking water is > 1 mrem per year. An LLD of 1 pCi/liter will be required for this analysis.

(b) When Available

TABLE 2.2-C

MAXIMUM VALUES FOR THE LOWER LIMITS OF DETECTION

Analysis	Water (pCi/liter)	Air Particulates or Gases (pCi/m ³)	Fish (pCi/kg-wet)	Milk (pCi/liter)	BroadLeaf Vegetation (pCi/kg-wet)	Sediment (pCi/kg-dry)
Gross Beta	4	0.01				
H-3	2000 ^(a)					
Mn-54	15		130			
Fe-59	30		260			
Co-58, 60	15		130			
Zn-65	30		260			
Zr-Nb-95	15					
I-131	1 ^(b)	0.07		1	60	
Cs-134	15	0.05	130	15	60	150
Cs-137	18	0.06	150	18	80	180
Ba-La-140	15			15		

(a) If no drinking water pathway exists, a value of 3000 pCi/liter may be used.

(b) If no drinking water pathway exists, the LLD of gamma isotopic analysis may be used.

3.0 INTERPRETATION OF RESULTS

Review of 2013 REMP analysis results was performed to detect and identify changes in environmental levels as a result of station operation. The radionuclides with Selected Licensee Commitments reporting levels that indicate consistent detectable activity have been historically trended from preoperation to present. Analyses from 1977 - 1978 have been excluded since these results were much higher than the other preoperational years due to outside influences such as weapons testing. The preoperational analyses from 1981 were combined with the operational analyses from the latter part of 1981 and averaged to give one concentration for each radionuclide for that year.

The highest annual mean concentration of applicable Selected Licensee Commitments radionuclides from the indicator locations for each media type was used for trending purposes. Trending was performed by comparing annual mean concentrations to historical results. Factors evaluated include the frequency of detection and the concentration in terms of the percent of the radionuclide's SLC reporting level (Table 2.2-A). All maximum percent of reporting level values attributable to MNS plant operation were well below the 100% action level. The highest value attributable to MNS plant operations during 2013 was 3.24% for drinking water tritium at the North Mecklenburg Water Treatment Facility (Location 101). Only Selected Licensee Commitments radionuclides were detected in 2013.

Changes in sample location, analytical technique, and presentation of results must be considered when reviewing for trends. Calculation of the annual mean concentrations has been performed differently over the history of the REMP. During 1979-1986, all net results (sample minus background) positive and negative, were included in the calculation of the mean. Only positive net activity results were used to calculate the mean for the other years. All negative values were replaced with a zero for calculational and graphical purposes to properly represent environmental conditions. A change in gamma spectroscopy analysis systems in 1987 ended a period when many measurements yielded detectable low-level activity for both indicator and control location samples. It is possible that the method the previous system used to estimate net activity may have been vulnerable to false-positive results.

This section includes tables and graphs containing the highest annual mean concentrations of any effluent related radionuclide detected since the change in analysis systems in 1987. Any zero concentrations used in tables or graphs represent activity measurements less than detectable levels. Only the specific radionuclides that represent the highest dose contributors or demonstrate consistent detectable activity are shown graphically.

Data presented in Sections 3.1 through 3.9 support the conclusion that there was no significant increase in radioactivity in the environment around McGuire Nuclear Station due to station operations in 2013. Similarly, there was no significant increase in ambient background radiation levels in the surrounding areas. The 2013 land use census data, shown in Section 3.10, indicates that no program changes are required as a result of the census.

3.1 AIRBORNE RADIOIODINE AND PARTICULATES

In 2013, 364 radioiodine and particulate samples were analyzed, 312 from six indicator locations and 52 from the control location. Particulate samples were analyzed weekly for gross beta. A quarterly gamma analysis was performed on the quarterly filter composite (by location). Radioiodine samples received a weekly gamma analysis.

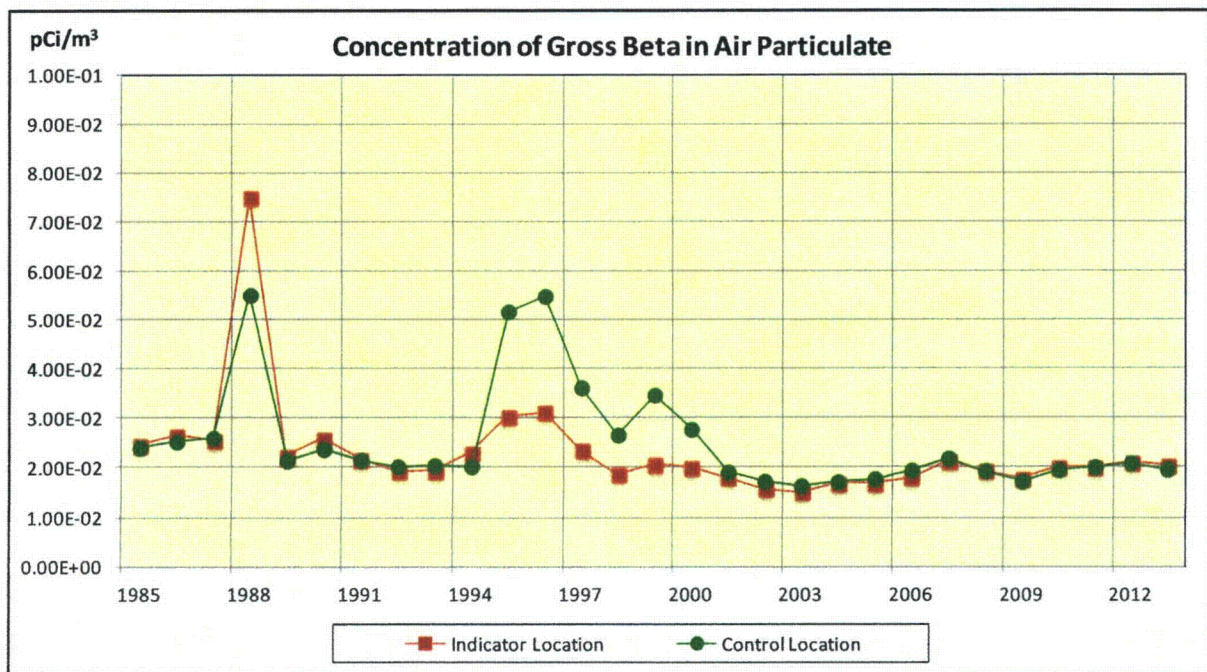
Gross beta analyses indicated $2.04\text{E-}2$ pCi/m³ at the location with the highest annual mean and $1.96\text{E-}2$ pCi/m³ at the control location. Detectable gamma emitting particulate activity (Co-58) was last observed in environmental air particulate samples in 2004 (reference 6.15).

No detectable I-131 activity in any environmental air radioiodine samples was found in 2013. K-40 and Be-7 that occur naturally were routinely detected in charcoal cartridges collected during the year.

Figure 3.1 shows gross beta highest annual mean indicator and control location concentrations since 1985. There is no reporting level for gross beta. Table 3.1-A shows indicator and control location highest annual means for Cs-137 and gross beta.

Table 3.1-B gives indicator location highest annual means and control means since 1979 for I-131. Preoperational and ten year averages are also shown. No I-131 activity due to MNS plant operation has been detected since 1989. Since no activity was detected in 2013, no reporting levels were approached.

Figure 3.1



There is no reporting level for Gross Beta in air particulate

Table 3.1-A Mean Concentrations of Radionuclides in Air Particulate

YEAR	Cs-137 Indicator (pCi/m ³)	Cs-137 Control (pCi/m ³)	Beta Indicator (pCi/m ³)	Beta Control (pCi/m ³)
1979*	4.40E-3	1.47E-3	**	**
1980*	6.70E-3	4.53E-3	**	**
1981*	6.16E-3	5.32E-3	**	**
1982*	3.82E-3	2.29E-3	**	**
1983*	2.93E-3	3.21E-3	**	**
1984	1.74E-3	8.29E-4	**	**
1985	1.86E-3	1.32E-3	2.44E-2	2.40E-2
1986	4.98E-3	3.03E-3	2.64E-2	2.52E-2
1987	1.07E-2	7.91E-3	2.54E-2	2.59E-2
1988	0.00E0	0.00E0	7.49E-2	5.51E-2
1989	0.00E0	0.00E0	2.22E-2	2.14E-2
1990	0.00E0	0.00E0	2.58E-2	2.37E-2
1991	0.00E0	0.00E0	2.16E-2	2.15E-2
1992	0.00E0	0.00E0	1.92E-2	2.02E-2
1993	0.00E0	0.00E0	1.93E-2	2.04E-2
1994	0.00E0	0.00E0	2.28E-2	2.02E-2
1995	0.00E0	0.00E0	3.02E-2	5.17E-2
1996	0.00E0	0.00E0	3.11E-2	5.49E-2
1997	0.00E0	0.00E0	2.34E-2	3.62E-2
1998	0.00E0	0.00E0	1.86E-2	2.66E-2
1999	0.00E0	0.00E0	2.06E-2	3.47E-2
2000	0.00E0	0.00E0	2.00E-2	2.77E-2
2001	0.00E0	0.00E0	1.79E-2	1.91E-2
2002	0.00E0	0.00E0	1.57E-2	1.72E-2
2003	0.00E0	0.00E0	1.50E-2	1.63E-2
2004	0.00E0	0.00E0	1.67E-2	1.71E-2
2005	0.00E0	0.00E0	1.68E-2	1.77E-2
2006	0.00E0	0.00E0	1.79E-2	1.94E-2
2007	0.00E0	0.00E0	2.12E-2	2.18E-2
2008	0.00E0	0.00E0	1.92E-2	1.93E-2
2009	0.00E0	0.00E0	1.79E-2	1.76E-2
2010	0.00E0	0.00E0	2.01E-2	1.95E-2
2011	7.06E-3	0.00E0	1.99E-2	2.00E-2
2012	0.00E0	0.00E0	2.10E-2	2.08E-2
Average (2003 – 2012)	NOT APPLICABLE	NOT APPLICABLE	1.86E-2	1.90E-2
2013	0.00E0	0.00E0	2.04E-2	1.96E-2

0.00E0 = no detectable measurements * Radioiodine and Particulates analyzed together ** Gross Beta analysis not performed
 2011 concentration affected by Fukushima Daiichi

Table 3.1-B Mean Concentrations of Air Radioiodine (I-131)

Year	Indicator Location (pCi/m ³)	Control Location (pCi/m ³)
1979*	3.28E-3	1.04E-3
1980*	2.01E-3	1.10E-3
1981*	4.17E-3	6.27E-4
1982*	1.42E-3	2.48E-3
1983*	1.99E-3	2.01E-4
1984	3.17E-3	0.00E0
1985	3.15E-3	1.04E-3
1986	1.27E-2	6.10E-3
1987	1.07E-2	6.60E-3
1988	0.00E0	0.00E0
1989	2.18E-2	0.00E0
1990	0.00E0	0.00E0
1991	0.00E0	0.00E0
1992	0.00E0	0.00E0
1993	0.00E0	0.00E0
1994	0.00E0	0.00E0
1995	0.00E0	0.00E0
1996	0.00E0	0.00E0
1997	0.00E0	0.00E0
1998	0.00E0	0.00E0
1999	0.00E0	0.00E0
2000	0.00E0	0.00E0
2001	0.00E0	0.00E0
2002	0.00E0	0.00E0
2003	0.00E0	0.00E0
2004	0.00E0	0.00E0
2005	0.00E0	0.00E0
2006	0.00E0	0.00E0
2007	0.00E0	0.00E0
2008	0.00E0	0.00E0
2009	0.00E0	0.00E0
2010	0.00E0	0.00E0
2011	6.00E-2	5.46E-2
2012	0.00E0	0.00E0
2013	0.00E0	0.00E0

0.00E0 = no detectable measurements * Radioiodine and Particulate analyzed together.
 2011 concentration affected by Fukushima Daiichi

3.2 DRINKING WATER

In 2013, 65 drinking water samples were analyzed for gross beta and gamma emitting radionuclides. Fifty-two samples were from the four indicator locations and 13 from the control location. Tritium (H-3) analyses were performed on 20 composite samples, 16 at indicator locations and four at the control location.

No detectable gamma activity was found in drinking water samples in 2013 and has not been detected since 1987. Gross beta analyses indicated 1.73 pCi/l at the location with the highest annual mean and 1.61 pCi/l at the control location. Tritium was detected in eleven of the 16 indicator composite samples taken in 2013 with the highest annual mean resulting in only 3.24% of the reporting level. Tritium was not detected in any of the four control location samples.

Figure 3.2 shows tritium highest annual mean indicator and control location concentrations with comparisons to 20% of the reporting level. Table 3.2 gives indicator location highest annual means and control means since 1979 for tritium and gross beta. There is no reporting level for gross beta.

The dose for consumption of water was less than one mrem per year, historically and for 2013; therefore low-level iodine analysis is not required.

Drinking water Location 101 was added to the sampling program in 1999. Figure 3.2 shows an increase beginning in that year. There was an increase in tritium releases in 2006 due to silica removal from the spent fuel pools. This resulted in additional water volume being released from the plant. An extreme drought during the second half of 2007 and much of 2008 affecting the Catawba River Basin resulted in less dilution volume available in Lake Norman.

Figure 3.2

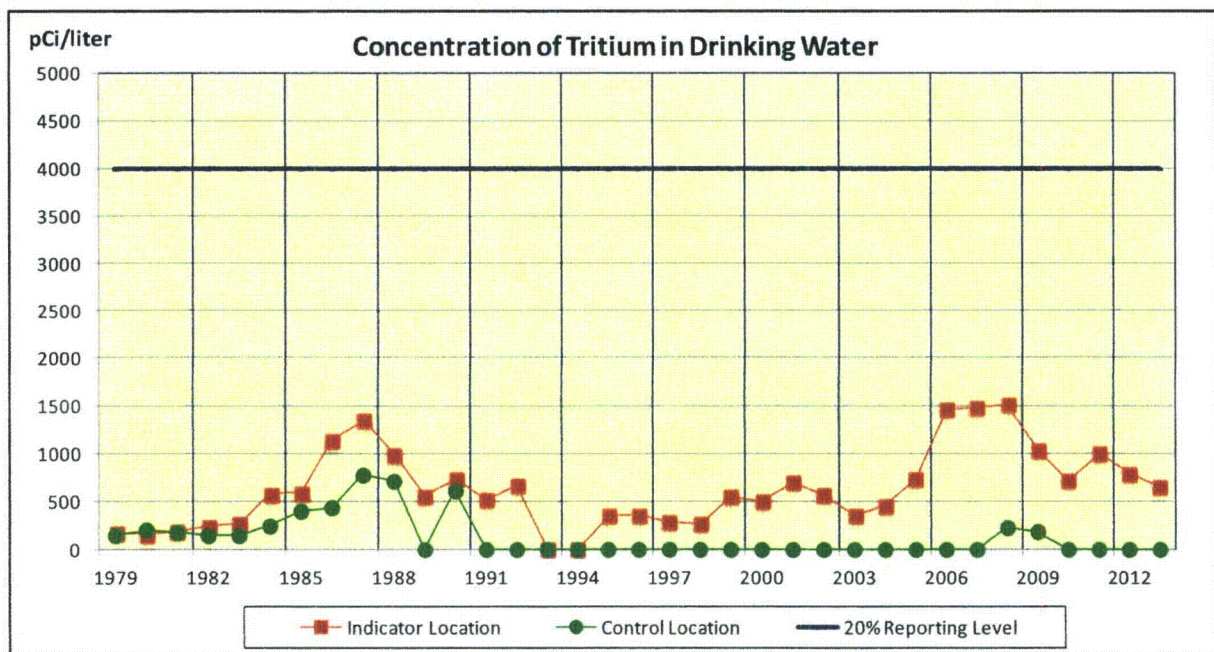


Table 3.2 Mean Concentrations of Radionuclides in Drinking Water

YEAR	Gross Beta (pCi/l)		Tritium (pCi/l)	
	Indicator Location	Control Location	Indicator Location	Control Location
1979	2.40E0	2.03E0	1.65E2	1.50E2
1980	2.34E0	1.87E0	1.63E2	2.05E2
1981	2.79E0	2.41E0	1.88E2	1.78E2
1982	2.62E0	2.43E0	2.43E2	1.45E2
1983	1.80E0	1.87E0	2.65E2	1.45E2
1984	2.78E0	1.81E0	5.77E2	2.45E2
1985	1.88E0	1.90E0	5.93E2	4.00E2
1986	2.13E0	2.15E0	1.14E3	4.37E2
1987	2.30E0	2.00E0	1.35E3	7.75E2
1988	2.00E0	2.00E0	9.92E2	7.11E2
1989	2.80E0	2.70E0	5.62E2	0.00E0
1990	3.70E0	4.30E0	7.32E2	6.11E2
1991	2.40E0	2.50E0	5.22E2	0.00E0
1992	2.00E0	1.70E0	6.73E2	0.00E0
1993	2.80E0	2.40E0	0.00E0	0.00E0
1994	2.47E0	2.90E0	0.00E0	0.00E0
1995	4.20E0	3.30E0	3.58E2	0.00E0
1996	2.75E0	2.11E0	3.60E2	0.00E0
1997	2.70E0	2.24E0	2.90E2	0.00E0
1998	2.75E0	2.33E0	2.68E2	0.00E0
1999	2.48E0	2.17E0	5.49E2	0.00E0
2000	2.66E0	1.99E0	5.04E2	0.00E0
2001	2.48E0	2.19E0	6.98E2	0.00E0
2002	2.47E0	2.08E0	5.64E2	0.00E0
2003	1.81E0	1.52E0	3.51E2	0.00E0
2004	1.68E0	1.29E0	4.61E2	0.00E0
2005	1.74E0	1.30E0	7.35E2	0.00E0
2006	1.75E0	1.80E0	1.46E3	0.00E0
2007	1.81E0	1.76E0	1.48E3	0.00E0
2008	2.40E0	1.87E0	1.52E3	2.26E2
2009	1.90E0	1.81E0	1.03E3	1.86E2
2010	1.85E0	1.74E0	7.20E2	0.00E0
2011	1.77E0	1.75E0	9.97E2	0.00E0
2012	1.74E0	1.66E0	7.95E2	0.00E0
2013	1.73E0	1.61E0	6.47E2	0.00E0

0.00E0 = no detectable measurements

3.3 SURFACE WATER

In 2013, 39 surface water samples were analyzed for gamma emitting radionuclides, 26 at the two indicator locations and 13 at the control location. Analyses for H-3 were performed on 12 samples, eight at indicator locations and four at the control location.

No detectable gamma activity was found in surface water samples in 2013 and has not been detected since 1988. Tritium was detected in all of the eight indicator composite samples taken in 2013. Tritium was not detected in control location composite samples in 2013.

Figure 3.3 shows tritium highest annual mean indicator and control location concentrations. Table 3.3 gives indicator and control location highest annual means since 1979 for tritium.

There was an increase in surface water tritium in 2006 due to silica removal from the spent fuel pools. This resulted in additional water volume being released from the plant. An extreme drought during the second half of 2007 and much of 2008 affecting the Catawba River Basin resulted in less dilution volume available in Lake Norman.

Figure 3.3

There is no reporting level for tritium in surface water

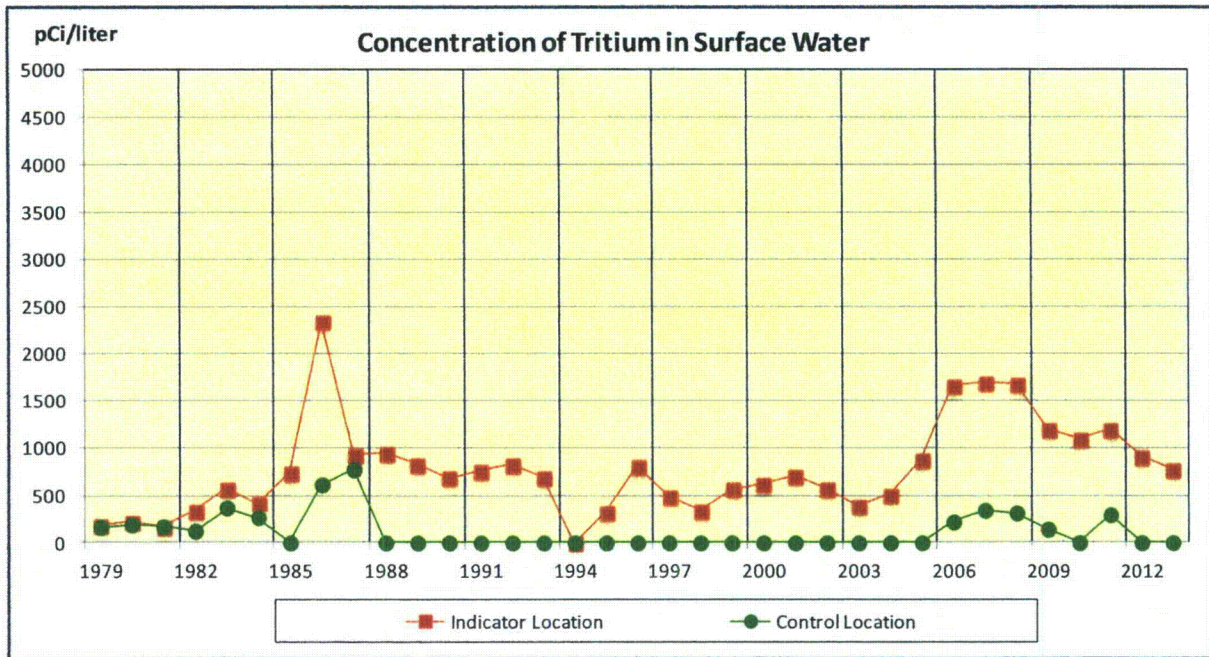


Table 3.3 Mean Concentrations of Tritium in Surface Water

YEAR	H-3 Indicator (pCi/l)	H-3 Control (pCi/l)
1979	1.85E2	1.66E2
1980	2.13E2	1.93E2
1981	1.75E2	1.70E2
1982	3.30E2	1.23E2
1983	5.75E2	3.67E2
1984	4.10E2	2.65E2
1985	7.33E2	0.00E0
1986	2.33E3	6.13E2
1987	9.20E2	7.70E2
1988	9.40E2	0.00E0
1989	8.22E2	0.00E0
1990	6.77E2	0.00E0
1991	7.53E2	0.00E0
1992	8.13E2	0.00E0
1993	6.85E2	0.00E0
1994	0.00E0	0.00E0
1995	3.15E2	0.00E0
1996	8.08E2	0.00E0
1997	4.85E2	0.00E0
1998	3.40E2	0.00E0
1999	5.60E2	0.00E0
2000	6.22E2	0.00E0
2001	6.98E2	0.00E0
2002	5.65E2	0.00E0
2003	3.91E2	0.00E0
2004	5.04E2	0.00E0
2005	8.74E2	0.00E0
2006	1.65E3	2.19E2
2007	1.68E3	3.42E2
2008	1.67E3	3.13E2
2009	1.18E3	1.41E2
2010	1.09E3	0.00E0
2011	1.19E3	2.94E2
2012	9.06E2	0.00E0
2013	7.73E2	0.00E0

0.00E0 = no detectable measurements

3.4 MILK

In 2013, 26 milk samples were analyzed for low level I-131 and other gamma emitting radionuclides. One control location was sampled. No indicator dairies were identified by the 2013 land use census.

There were no gamma emitting radionuclides due to MNS plant operations identified in milk samples in 2013. Cs-137 is the only radionuclide, other than naturally occurring, reported in milk samples since 1990 (excluding Fukushima Daiichi). Cs-137 in milk is not unusual. It is a constituent of nuclear weapons test fallout and nuclear plant accidents and has been observed periodically in samples from indicator and control locations since the preoperational period.

Table 3.4 gives indicator location highest annual means and control means since 1979 for Cs-137. Since no Cs-137 was detected in 2013, no reporting levels were approached.

K-40 is a naturally occurring radionuclide observed in milk samples in 2013.

Table 3.4 Mean Concentrations of Cs-137 in Milk

YEAR	Cs-137 Indicator (pCi/l)	Cs-137 Control (pCi/l)
1979	2.48E1	6.04E0
1980	1.72E1	4.13E0
1981	2.04E1	4.15E0
1982	1.21E1	5.20E0
1983	2.01E1	2.82E0
1984	1.48E1	2.56E0
1985	1.42E1	2.72E0
1986	3.74E0	3.45E0
1987	5.20E0	8.60E0
1988	3.40E0	2.90E0
1989	6.00E0	5.60E0
1990	5.30E0	2.60E0
1991	0.00E0	0.00E0
1992	0.00E0	0.00E0
1993	0.00E0	0.00E0
1994	0.00E0	0.00E0
1995	0.00E0	0.00E0
1996	0.00E0	0.00E0
1997	0.00E0	0.00E0
1998	0.00E0	0.00E0
1999	0.00E0	0.00E0
2000	0.00E0	0.00E0
2001	0.00E0	0.00E0
2002	0.00E0	0.00E0
2003	0.00E0	0.00E0
2004	0.00E0	0.00E0
2005	0.00E0	0.00E0

Table 3.4 continued

YEAR	Cs-137 Indicator (pCi/l)	Cs-137 Control (pCi/l)
2006	0.00E0	0.00E0
2007	0.00E0	0.00E0
2008	0.00E0	0.00E0
2009	0.00E0	0.00E0
2010	0.00E0	0.00E0
2011	0.00E0	0.00E0
2012	0.00E0	0.00E0
2013	0.00E0	0.00E0

0.00E0 = no detectable measurements

3.5 BROADLEAF VEGETATION

In 2013, 48 broadleaf vegetation samples were analyzed, 36 at the three indicator locations and twelve at the control location. There were no gamma emitting radionuclides other than naturally occurring identified in any indicator location or control location broadleaf vegetation samples during 2013.

Cs-137 is the only radionuclide, other than naturally occurring, reported in vegetation samples since the change in gamma spectroscopy analysis systems in 1987. No airborne Cs-137 has been released from the plant since 1998.

It is not unusual for Cs-137 to be present in vegetation. It is a constituent of nuclear weapons test fallout and nuclear plant accidents and has been observed in samples from indicator and control locations since the preoperational period. Table 3.5 lists the highest indicator location annual mean and control location annual mean for Cs-137 since early in the station's operational history. Visual inspection of the tabular data did not reveal any increasing trends.

K-40 and Be-7 are naturally occurring radionuclides that were observed in broadleaf vegetation samples in 2013.

Table 3.5 Mean Concentrations of Cs-137 in Broadleaf Vegetation

YEAR	Cs-137 Indicator (pCi/kg)	Cs-137 Control (pCi/kg)
1979	2.19E1	1.93E1
1980	2.30E1	1.92E1
1981	3.04E1	2.02E1
1982	2.46E1	1.22E1
1983	9.07E0	7.85E0
1984	1.02E1	1.05E1
1985	8.05E0	2.37E-2
1986	4.03E1	1.27E1
1987	2.20E1	1.70E1
1988	3.90E1	3.40E1
1989	9.60E1	0.00E0
1990	4.00E1	0.00E0
1991	3.30E1	0.00E0
1992	4.90E1	0.00E0
1993	1.60E1	0.00E0
1994	0.00E0	0.00E0
1995	0.00E0	0.00E0
1996	0.00E0	0.00E0
1997	0.00E0	0.00E0
1998	0.00E0	2.69E1
1999	0.00E0	0.00E0
2000	0.00E0	0.00E0
2001	0.00E0	0.00E0
2002	0.00E0	0.00E0
2003	0.00E0	0.00E0
2004	0.00E0	0.00E0
2005	0.00E0	0.00E0

Table 3.5 continued

YEAR	Cs-137 Indicator (pCi/kg)	Cs-137 Control (pCi/kg)
2006	2.98E1	0.00E0
2007	1.34E1	0.00E0
2008	0.00E0	0.00E0
2009	0.00E0	0.00E0
2010	0.00E0	0.00E0
2011	2.29E1	0.00E0
2012	0.00E0	0.00E0
2013	0.00E0	0.00E0

0.00E0 = no detectable measurements

2011 concentration affected by Fukushima Daiichi

3.6 FOOD PRODUCTS

In 2013, 6 food products (crops) samples were analyzed. There is no control location for this media.

No detectable activity attributable to MNS station operation has been detected in this media since 1987. Table 3.6 shows Cs-137 indicator highest annual means with preoperational data. Since no activity was detected in 2013, no reporting levels were approached.

Table 3.6 Mean Concentrations of Cs-137 in Food Products

YEAR	Cs-137 Indicator (pCi/kg)
1979	2.19E1
1980	2.30E1
1981	3.04E1
1982	2.46E1
1983	9.07E0
1984	8.45E0
1985	7.99E0
1986	2.15E1
1987	2.90E1
1988	0.00E0
1989	0.00E0
1990	0.00E0
1991	0.00E0
1992	0.00E0
1993	0.00E0
1994	0.00E0
1995	0.00E0
1996	0.00E0
1997	0.00E0
1998	0.00E0
1999	0.00E0
2000	0.00E0
2001	0.00E0
2002	0.00E0
2003	0.00E0
2004	0.00E0
2005	0.00E0
2006	0.00E0
2007	0.00E0
2008	0.00E0
2009	0.00E0
2010	0.00E0
2011	3.06E1
2012	0.00E0
2013	0.00E0

0.00E0 = no detectable measurements

2011 concentration affected by Fukushima Daiichi

3.7 FISH

In 2013, 12 fish samples were analyzed for gamma emitting radionuclides, six at the indicator location and six at the control location.

Figure 3.7-1 shows Cs-137 highest annual mean indicator and control location concentrations with comparisons to 5% of the reporting level. Figure 3.7-2 shows Co-60 highest annual mean indicator and control location concentrations also with comparisons to 5% of the reporting level. Table 3.7 gives indicator location highest annual means since 1980 for all radionuclides detected since the analysis change in 1988.

Co-60 activity was not detected in 2013 in any of the indicator or control samples. Cs-137 activity was not detected in 2013 in any of the six indicator or control samples taken.

All other radionuclides not shown in the table have demonstrated no detectable activity since 1986. Since no activity was detected in 2013, no reporting levels were approached.

Figure 3.7-1

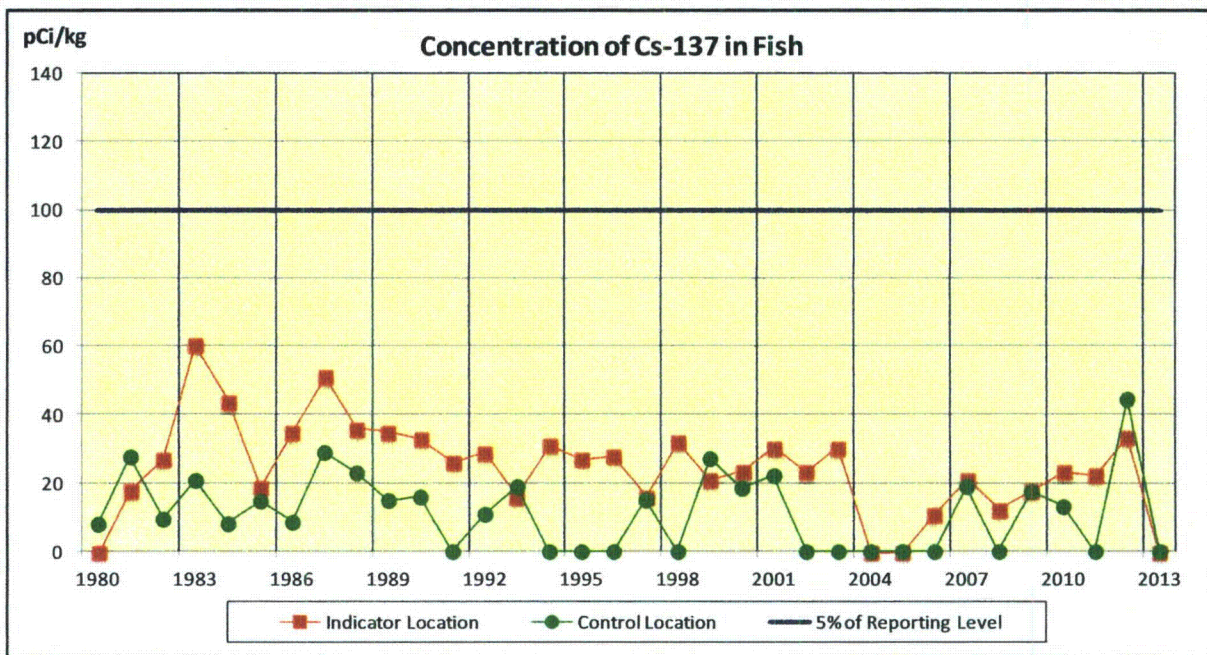


Figure 3.7-2

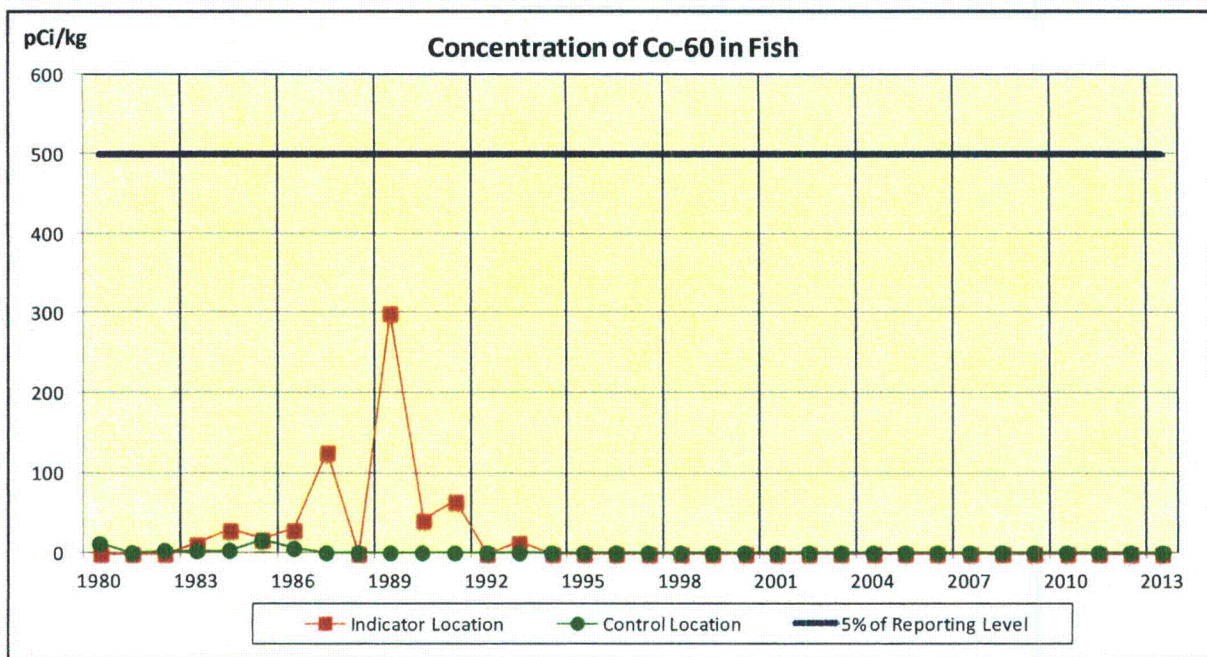


Table 3.7 Mean Concentrations of Radionuclides in Fish (pCi/kg)

YEAR	Mn-54 Indicator	Co-58 Indicator	Co-60 Indicator	Cs-134 Indicator	Cs-137 Indicator
1980	-1.97E1	8.36E0	-2.25E1	-2.70E1	-4.13E0
1981	-2.71E0	-2.98E0	-2.65E0	-1.99E0	1.80E1
1982	-3.83E0	8.16E0	-4.34E-1	-8.22E-1	2.69E1
1983	-2.60E0	2.60E1	1.11E1	-1.32E0	6.03E1
1984	3.61E0	1.45E2	2.82E1	3.11E1	4.38E1
1985	2.53E-1	7.19E0	1.72E1	-1.56E0	1.86E1
1986	1.03E0	3.17E1	2.96E1	1.67E1	3.49E1
1987	0.00E0	2.71E2	1.25E2	2.60E1	5.10E1
1988	1.20E1	7.70E1	0.00E0	2.70E1	3.60E1
1989	9.00E1	4.05E2	2.99E2	1.10E1	3.50E1
1990	0.00E0	5.60E1	4.10E1	0.00E0	3.30E1
1991	6.20E0	1.40E1	6.50E1	5.90E0	2.60E1
1992	0.00E0	0.00E0	0.00E0	0.00E0	2.90E1
1993	0.00E0	8.20E1	1.30E1	0.00E0	1.60E1
1994	0.00E0	0.00E0	0.00E0	0.00E0	3.10E1
1995	0.00E0	0.00E0	0.00E0	0.00E0	2.70E1
1996	0.00E0	0.00E0	0.00E0	0.00E0	2.78E1
1997	0.00E0	0.00E0	0.00E0	0.00E0	1.62E1
1998	0.00E0	0.00E0	0.00E0	0.00E0	3.21E1
1999	0.00E0	3.53E1	0.00E0	0.00E0	2.10E1
2000	0.00E0	4.28E1	0.00E0	0.00E0	2.34E1
2001	0.00E0	1.32E1	0.00E0	0.00E0	3.04E1
2002	0.00E0	0.00E0	0.00E0	0.00E0	2.33E1
2003	0.00E0	0.00E0	0.00E0	0.00E0	3.05E1
2004	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2005	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2006	0.00E0	0.00E0	0.00E0	0.00E0	1.08E1
2007	0.00E0	0.00E0	0.00E0	0.00E0	2.11E1
2008	0.00E0	0.00E0	0.00E0	0.00E0	1.24E1
2009	0.00E0	0.00E0	0.00E0	0.00E0	1.76E1
2010	0.00E0	0.00E0	0.00E0	0.00E0	2.33E1
2011	0.00E0	0.00E0	0.00E0	0.00E0	2.23E1
2012	0.00E0	0.00E0	0.00E0	0.00E0	3.34E1
2013	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0

0.00E0 = no detectable measurements

All negative values have been replaced with zeros for calculational purposes

3.8 SHORELINE SEDIMENT

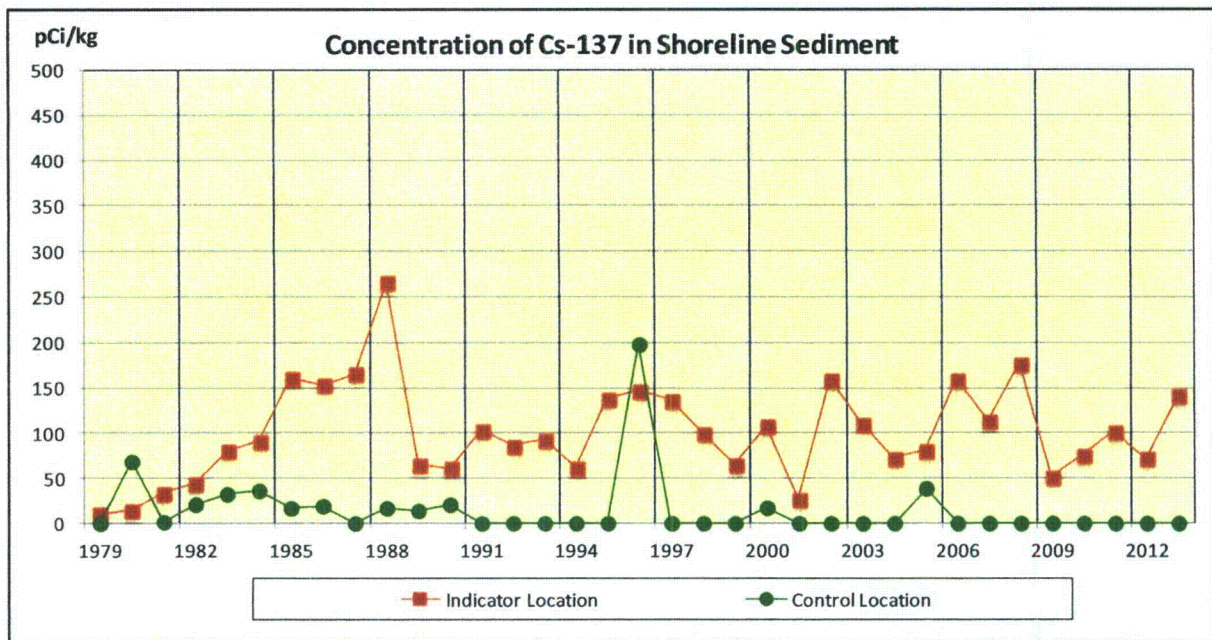
In 2013, six shoreline sediment samples were analyzed, four from two indicator locations and two at the control location.

Figure 3.8-1 shows Cs-137 highest annual mean indicator and control location concentrations since 1979. Figure 3.8-2 shows Co-60 highest annual mean indicator and control location concentrations since 1979.

Cs-137 activity was detected in two of the four indicator samples taken. The shoreline sediment location with the highest annual mean was location 130 with a mean concentration of 141 pCi/kg. Co-60 was not detected in any of the four indicator samples taken. Co-60 and Cs-137 were not detected in any control location samples.

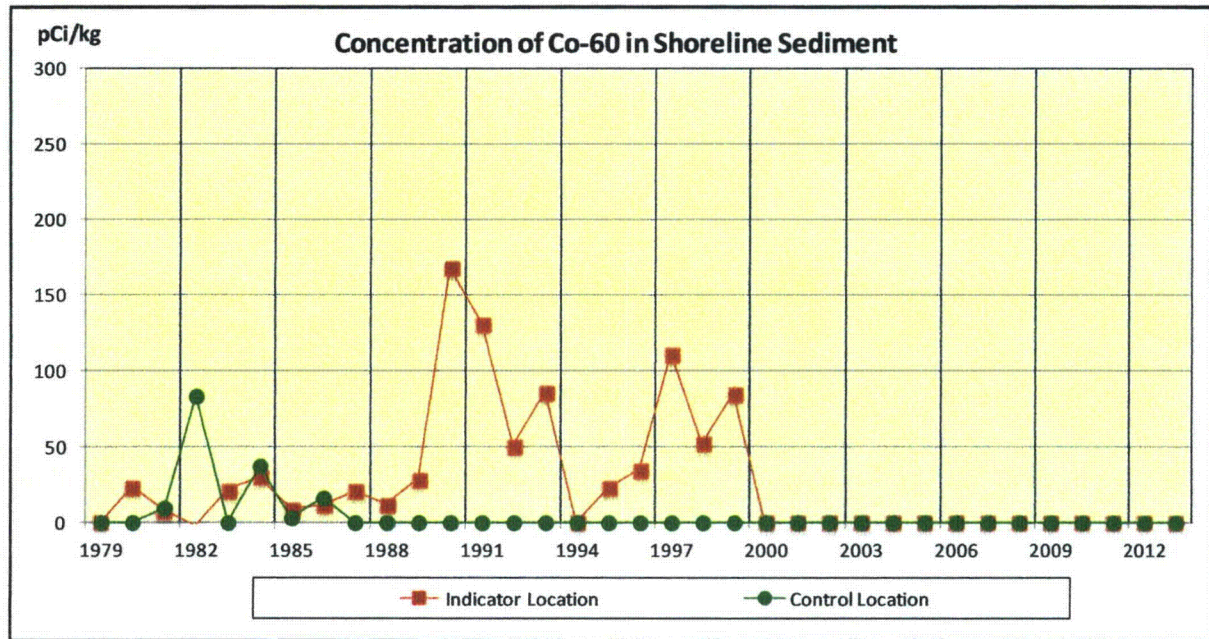
Table 3.8 gives indicator location highest annual means since 1979 for all radionuclides detected since the analysis change in 1988. There is no reporting level for shoreline sediment.

Figure 3.8-1



There is no reporting level for Cs-137 in shoreline sediment

Figure 3.8-2



There is no reporting level for Co-60 in shoreline sediment

Table 3.8 Mean Concentrations of Radionuclides in Shoreline Sediment (pCi/kg)

YEAR	Mn-54 Indicator	Co-58 Indicator	Co-60 Indicator	Cs-134 Indicator	Cs-137 Indicator
1979	-1.07E1	2.25E1	-6.50E0	0.00E0	1.20E1
1980	1.06E1	-8.74E0	2.36E1	-3.53E0	1.44E1
1981	2.13E1	1.20E1	8.21E0	3.97E1	3.36E1
1982	5.38E1	1.66E1	-1.69E0	7.67E1	4.40E1
1983	4.40E0	3.43E1	2.12E1	7.65E1	8.02E1
1984	1.19E1	7.11E1	3.04E1	3.34E1	9.13E1
1985	4.77E0	1.46E1	9.20E0	2.02E1	1.61E2
1986	1.37E1	1.02E1	1.16E1	6.35E1	1.53E2
1987	0.00E0	1.06E2	2.10E1	4.20E1	1.65E2
1988	6.50E0	9.20E1	1.20E1	9.10E0	2.66E2
1989	2.90E1	3.80E1	2.90E1	5.30E1	6.50E1
1990	3.80E1	2.70E1	1.68E2	0.00E0	6.10E1
1991	2.80E1	5.30E1	1.31E2	0.00E0	1.03E2
1992	9.40E0	0.00E0	5.10E1	9.20E0	8.60E1
1993	0.00E0	2.20E1	8.60E1	0.00E0	9.30E1
1994	4.10E1	0.00E0	0.00E0	0.00E0	8.00E1
1995	1.70E1	0.00E0	2.30E1	0.00E0	1.38E2
1996	2.90E1	1.78E1	3.50E1	0.00E0	1.47E2
1997	0.00E0	0.00E0	1.11E2	3.10E1	1.36E2
1998	0.00E0	0.00E0	5.21E1	0.00E0	9.97E1
1999	0.00E0	2.47E1	8.49E1	0.00E0	6.51E1
2000	0.00E0	3.04E1	0.00E0	0.00E0	1.08E2

Table 3.8 continued

YEAR	Mn-54 Indicator	Co-58 Indicator	Co-60 Indicator	Cs-134 Indicator	Cs-137 Indicator
2001	0.00E0	0.00E0	0.00E0	0.00E0	2.77E1
2002	2.24E1	0.00E0	0.00E0	0.00E0	1.59E2
2003	0.00E0	0.00E0	0.00E0	0.00E0	1.11E2
2004	0.00E0	0.00E0	0.00E0	0.00E0	7.17E1
2005	0.00E0	0.00E0	0.00E0	0.00E0	8.08E1
2006	0.00E0	0.00E0	0.00E0	0.00E0	1.59E2
2007	0.00E0	0.00E0	0.00E0	0.00E0	1.14E2
2008	0.00E0	0.00E0	0.00E0	0.00E0	1.77E2
2009	0.00E0	0.00E0	0.00E0	0.00E0	5.08E1
2010	0.00E0	0.00E0	0.00E0	0.00E0	7.58E1
2011	0.00E0	0.00E0	0.00E0	0.00E0	1.02E2
2012	0.00E0	0.00E0	0.00E0	0.00E0	7.13E1
2013	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0

3.9 DIRECT GAMMA RADIATION

3.9.1 ENVIRONMENTAL TLD

In 2013, 164 TLDs were analyzed, 160 at indicator locations, four at the control location. TLDs are collected and analyzed quarterly. A transit background for environmental TLDs is determined based on ANSI N545. The highest annual mean exposure for an indicator location was 106 milliroentgen. The annual mean exposure for the control location was 92.4 milliroentgen.

Figure 3.9 and Table 3.9 show TLD inner ring (site boundary), outer ring (4-5 miles), and control location annual averages in milliroentgen per year. Preoperational data and ten year rolling averages are also given. As shown in the graph, inner and outer ring averages historically compare closely, with control data somewhat higher. Inner and outer ring averages comprise a number of data points with the control average representing only one location.

The control location has historically been higher than indicator locations. This is most likely an artifact of the underlying geologic structures at the control location. TLDs located greater than 5 miles from the plant demonstrate a wide range of background radiation levels. The control location is 15.5 miles WNW, well beyond the influence of the plant.

The calculated total body dose from gaseous effluents for 2013 was 2.58E-1 millirem, which is 0.41% of the average inner ring TLD values. Therefore, it can be concluded that discharges from the plant had very little impact on the measured TLD values.

A TLD intercomparison program is conducted as part of the quality assurance program. Results of this program are included in section 5.10.

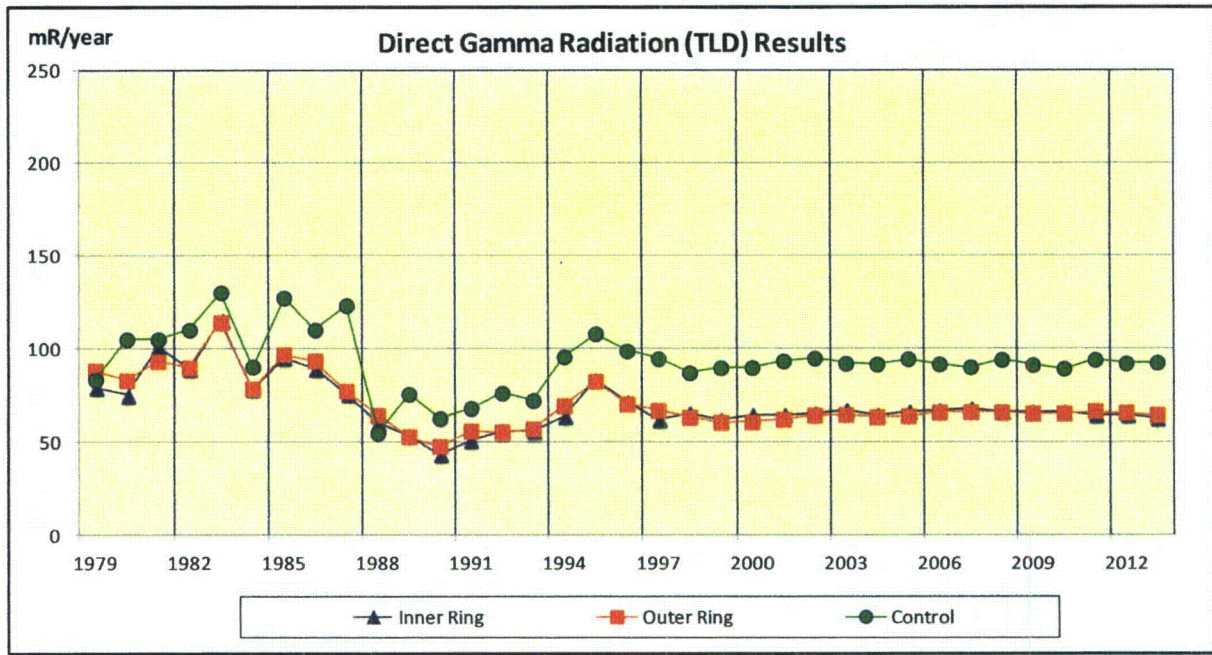
3.9.2 ISFSI

The McGuire ISFSI is located inside the protected area on the west side of the plant approximately 244 meters from plant centerline. The ISFSI protected area fence on the north side is approximately 60 meters from the owner control fence atop the berm adjacent to Lake Norman and just west of the intake structure. At a distance of 425 meters the ISFSI is closest to the Exclusion Area Boundary (EAB) on the west side along the Catawba River. The nearest resident to the ISFSI is just over a kilometer away in the east sector with the next closest resident at 1.1 kilometers in the WNW sector.

The ISFSI is situated in a slight depression in relationship to other structures inside the protected area. The ISFSI direct radiation to the north is shielded by the berm on the south boundary of Lake Norman. The EAB to the west of ISFSI is shielded from direct radiation by the drop in elevation from 754' at the ISFSI to the river bank below the Cowan's Ford Dam. These features lessen the dose impact to the public accessing the EAB west of ISFSI and the Lake Norman shoreline inside the EAB north of ISFSI.

There are no effluent releases from the fuel canisters stored inside the shielded casks to the environment. Doses measured by environmental TLDs show little or no change since the current TLD system was implemented.

Figure 3.9



There is no reporting level for Direct Radiation (TLD)

Table 3.9 Direct Gamma Radiation (TLD) Results

YEAR	Inner Ring Average (mR/yr)	Outer Ring Average (mR/yr)	Control (mR/yr)
1979	7.91E1	8.82E1	8.32E1
1980	7.54E1*	8.29E1*	1.05E2
1981	1.01E2	9.31E1	1.05E2
1982	8.95E1	8.97E1	1.10E2
1983	1.16E2	1.14E2	1.30E2
1984	7.85E1	7.83E1	9.02E1
1985	9.54E1	9.69E1	1.27E2
1986	8.91E1	9.35E1	1.10E2
1987	7.58E1	7.71E1	1.23E2
1988	6.03E1	6.42E1	5.48E1
1989	5.37E1	5.30E1	7.55E1
1990	4.34E1	4.78E1	6.25E1
1991	5.14E1	5.59E1	6.80E1
1992	5.65E1	5.55E1	7.60E1
1993	5.61E1	5.71E1	7.20E1
1994	6.40E1	6.93E1	9.55E1
1995	8.36E1	8.25E1	1.08E2
1996	7.18E1	7.02E1	9.88E1
1997	6.22E1	6.68E1	9.45E1
1998	6.59E1	6.32E1	8.69E1
1999	6.23E1	6.05E1	8.96E1
2000	6.50E1	6.08E1	8.97E1
2001	6.51E1	6.22E1	9.33E1
2002	6.57E1	6.43E1	9.48E1
2003	6.74E1	6.45E1	9.20E1
2004	6.46E1	6.33E1	9.16E1
2005	6.62E1	6.34E1	9.44E1
2006	6.75E1	6.58E1	9.17E1
2007	6.84E1	6.60E1	9.00E1
2008	6.69E1	6.58E1	9.14E1
2009	6.67E1	6.53E1	9.12E1
2010	6.63E1	6.53E1	8.92E1
2011	6.51E1	6.64E1	9.40E1
2012	6.46E1	6.57E1	9.20E1
Average (2003 – 2012)	6.64E1	6.52E1	9.18E1
2013	6.29E1	6.44E1	9.24E1

* Values are based on two quarters due to change in TLD locations.

3.10 LAND USE CENSUS

The land use census was conducted June 12, 2013 as required by SLC 16.11.14. Table 3.10 summarizes census results. A map indicating identified locations is shown in Figure 3.10.

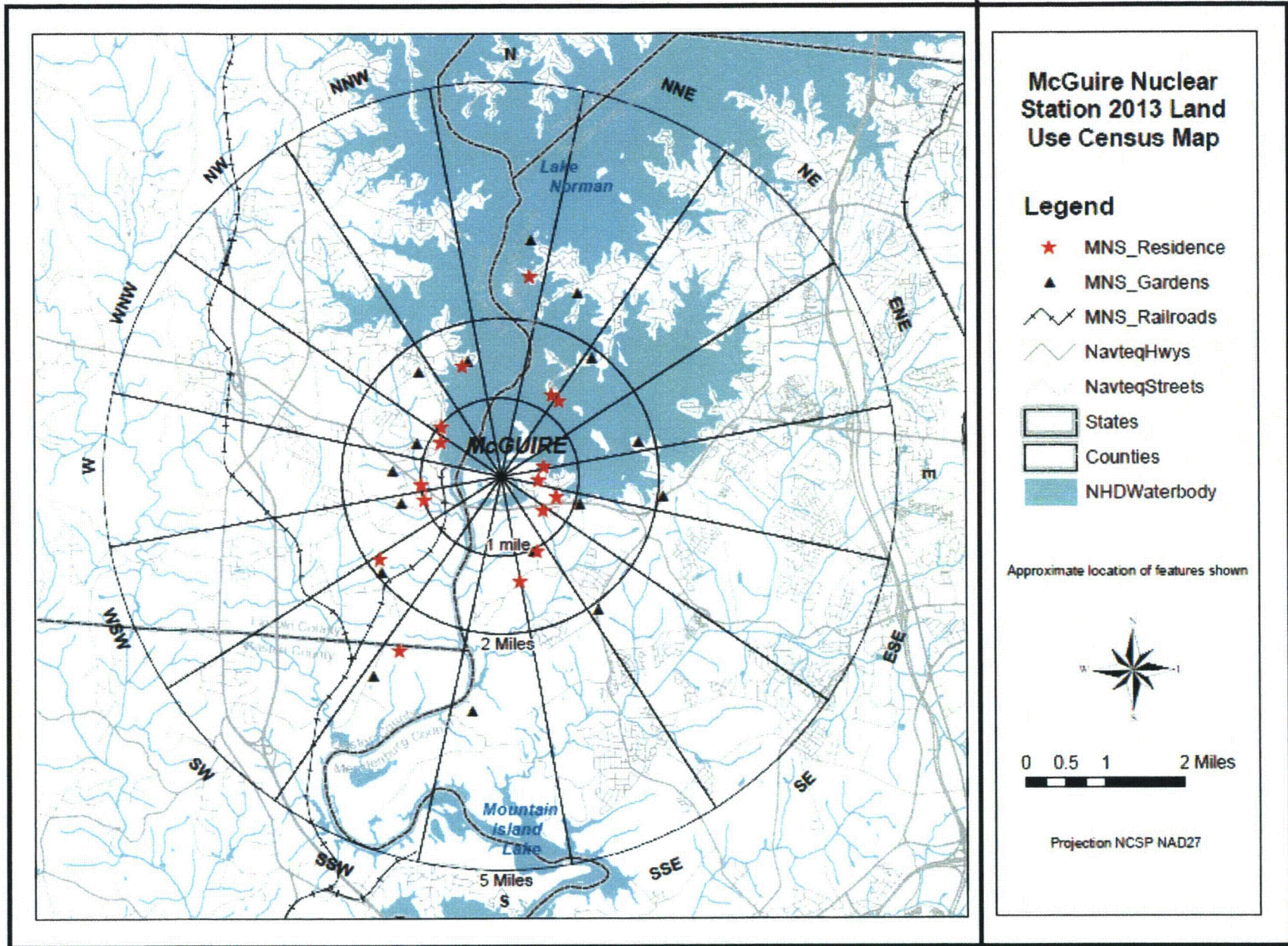
During the 2013 census, no new residences (nearer to the plant), irrigated gardens (superior to existing gardens) or milk locations were identified. The nearest residence is located in the East sector at 0.48 miles. No environmental program changes were required as a result of the 2013 land use census.

Table 3.10 McGuire 2013 Land Use Census Results

Sector		Distance (Miles)	Sector		Distance (Miles)
N	Nearest Residence	2.53	S	Nearest Residence	1.35
	Nearest Garden (irrigated)	3.03		Nearest Garden	3.14
	Nearest Milk Animal	-		Nearest Milk Animal	-
NNE	Nearest Residence	1.23	SSW	Nearest Residence	2.56
	Nearest Garden	2.53		Nearest Garden	2.94
	Nearest Milk Animal	-		Nearest Milk Animal	-
NE	Nearest Residence	1.21	SW	Nearest Residence	1.85
	Nearest Garden	1.80		Nearest Garden	1.98
	Nearest Milk Animal	-		Nearest Milk Animal	-
ENE	Nearest Residence	0.56	WSW	Nearest Residence	1.01
	Nearest Garden	1.98		Nearest Garden	1.33
	Nearest Milk Animal	-		Nearest Milk Animal	-
E	Nearest Residence	0.48	W	Nearest Residence	1.15
	Nearest Garden	2.08		Nearest Garden	1.23
	Nearest Milk Animal	-		Nearest Milk Animal	-
ESE	Nearest Residence	0.65	WNW	Nearest Residence	0.88
	Nearest Garden	1.06		Nearest Garden	1.15
	Nearest Milk Animal	-		Nearest Milk Animal	-
SE	Nearest Residence	0.67	NW	Nearest Residence	0.95
	Nearest Garden	2.10		Nearest Garden	1.68
	Nearest Milk Animal	-		Nearest Milk Animal	-
SSE	Nearest Residence	1.06	NNW	Nearest Residence	1.48
	Nearest Garden	1.06		Nearest Garden (irrigated)	1.52
	Nearest Milk Animal	-		Nearest Milk Animal	-

“-“ indicates no occurrences within the 5 mile radius

Figure 3.10



4.0 EVALUATION OF DOSE

4.1 DOSE FROM ENVIRONMENTAL MEASUREMENTS

Annual doses to maximum exposed individuals were estimated based on measured concentrations of radionuclides in 2013 MNS REMP samples. The primary purpose of estimating doses based on sample results is to allow comparison to effluent program dose estimates.

Doses based on sample results were calculated using the methodology and data presented in NRC Regulatory Guide 1.109. Measured radionuclide concentrations, averaged over the entire year for a specific radionuclide, indicator location and sample type, were used to calculate REMP-based doses. Where applicable, average background concentration at the corresponding control location was subtracted. Regulatory Guide 1.109 consumption rates for the maximum exposed individual were used in the calculations. When the guide listed "NO DATA" as the dose factor for a given radionuclide and organ, a dose factor of zero was assumed.

Maximum dose estimates (Highest Annual Mean Concentration) based on drinking water, fish, and shoreline sediment sample results are reported in Table 4.1-A. The individual critical population and pathway dose calculations are reported in Table 4.1-B.

REMP-based dose estimates are not reported for airborne radioiodine, airborne particulate, food crops, milk or vegetation sample types because no radionuclides attributable to MNS station operations were detected. Naturally occurring K-40 and Be-7 were detected in some samples but were not included in any REMP-based dose estimates. Dose estimates are not reported for surface water because sampled surface water is not considered to be a potable drinking water source although surface water tritium concentrations are used in calculating doses from fish. Exposure estimates based upon REMP TLD results are discussed in Section 3.9.

The maximum environmental organ dose estimate for any single sample type (excluding TLD results) collected during 2013 was $6.70E-2$ mrem to the child liver, total body, thyroid, kidney, lung, and GI-LLI from the consumption of drinking water.

4.2 ESTIMATED DOSE FROM RELEASES

Throughout the year, dose estimates were calculated based on actual 2013 liquid and gaseous effluent release data. Effluent-based dose estimates were calculated using the RETDAS computer program which employs methodology and data presented in NRC Regulatory Guide 1.109. These doses are shown in Table 4.1-A along with the corresponding REMP-based dose estimates. Summaries of RETDAS dose calculations are reported in the Annual Radioactive Effluent Release Report (reference 6.6).

The effluent-based liquid release doses are summations of the dose contributions from the drinking water, fish, and shoreline pathways. For iodine, particulate, and tritium exposure the effluent-based gaseous release doses are summations of the dose contributors from ground/plane, inhalation, milk and vegetation pathways.

4.3 COMPARISON OF DOSES

The environmental and effluent dose estimates given in Table 4.1-A agree reasonably well. The similarity of the doses indicate that the radioactivity levels in the environment do not differ significantly from those expected based on effluent measurements and modeling of the environmental exposure pathways. This indicates that effluent program dose estimates are both valid and reasonably conservative.

There are some differences in how effluent and environmental doses are calculated that affect the comparison. Doses calculated from environmental data are conservative because they are based on a mean that includes only samples with a net positive activity versus a mean that includes all sample results (i.e. zero results are not included in the mean). Also, airborne tritium is not measured in environmental samples but is used to calculate effluent doses.

Additionally, in 2010 McGuire began reporting estimated dose from effluent Carbon 14 (C-14). This change came about with the issuing of Regulatory Guide 1.21, Revision 2, Measuring, Evaluating and Reporting Radioactive Material in Liquid and Gaseous Effluents and Solid Waste. A description of this change is found in the 2010 Annual Radiological Effluent Release Report. C-14 is not measured in the environment and therefore, environmental and effluent doses from C-14 cannot be compared directly.

In calculations based on liquid release pathways, drinking water consumption was the predominant dose pathway based on environmental and effluent data. The maximum total organ dose based on 2013 environmental sample results was 6.80E-2 mrem to the child liver, total body, thyroid, kidney, lung, and GI-LLI. The maximum total organ dose of 1.47E-1 mrem for liquid effluent-based estimates was to the child liver, total body, kidney, lung, and GI-LLI.

In calculations based on gaseous release pathways, vegetation was the predominant dose pathway for effluent samples. The maximum organ dose for gaseous effluent estimates was 9.20E-1 mrem to the child bone. No radioactivity was detected from gaseous pathways in environmental samples; therefore, there is no calculated dose.

The doses calculated do not exceed 40CFR190 or 10CFR50 dose commitment limits for members of the public. Doses to members of the public attributable to the operation of MNS are being maintained well within regulatory limits.

TABLE 4.1-A

**MCGUIRE NUCLEAR STATION
2013 ENVIRONMENTAL AND EFFLUENT DOSE COMPARISON**

LIQUID RELEASE PATHWAY

Organ	Environmental or Effluent Data	Critical Age ⁽¹⁾	Critical Pathway ⁽²⁾	Location	Maximum Dose ⁽³⁾ (mrem)
Skin	Environmental	Teen	Shoreline Sediment	130 (0.52 mi SW)	3.70E-04
Skin	Effluent	Teen	Shoreline Sediment	Discharge Pt.	3.50E-04
Bone	Environmental	Teen	-	-	0.00E+00
Bone	Effluent	Teen	Shoreline Sediment	Discharge Pt.	5.17E-04
Liver	Environmental	Child	Drinking Water	101 (3.31 mi E)	6.80E-02
Liver	Effluent	Child	Drinking Water	3.31 mi E	1.47E-01
T. Body	Environmental	Child	Drinking Water	101 (3.31 mi E)	6.80E-02
T. Body	Effluent	Child	Drinking Water	3.31 mi E	1.47E-01
Thyroid	Environmental	Child	Drinking Water	101 (3.31 mi E)	6.80E-02
Thyroid	Effluent	Child	Drinking Water	3.31 mi E	1.46E-01
Kidney	Environmental	Child	Drinking Water	101 (3.31 mi E)	6.80E-02
Kidney	Effluent	Child	Drinking Water	3.31 mi E	1.47E-01
Lung	Environmental	Child	Drinking Water	101 (3.31 mi E)	6.80E-02
Lung	Effluent	Child	Drinking Water	3.31 mi E	1.47E-01
GI-LLI	Environmental	Child	Drinking Water	101 (3.31 mi E)	6.80E-02
GI-LLI	Effluent	Child	Drinking Water	3.31 mi E	1.47E-01

(1) Critical Age is the highest total dose (all pathways) to an age group.

(2) Critical Pathway is the highest individual dose within the identified Critical Age group.

(3) Maximum dose is a summation of the fish, drinking water and shoreline sediment pathways.

GASEOUS RELEASE PATHWAY**IODINE, PARTICULATE, and TRITIUM**

Organ	Environmental or Effluent Data	Critical Age ⁽¹⁾	Critical Pathway ⁽²⁾	Location	Maximum Dose ⁽³⁾ (mrem)
Skin	Environmental	-	-	-	0.00E+00
Skin	Effluent	All	Ground Plane	1.5 mi. NE	8.18E-06
Bone	Environmental	-	-	-	0.00E+00
Bone	Effluent	Child	Vegetation	1.5 mi. NE	9.20E-01
Liver	Environmental	-	-	-	0.00E+00
Liver	Effluent	Child	Vegetation	1.5 mi. NE	2.58E-01
T. Body	Environmental	-	-	-	0.00E+00
T. Body	Effluent	Child	Vegetation	1.5 mi. NE	2.58E-01
Thyroid	Environmental	-	-	-	0.00E+00
Thyroid	Effluent	Child	Vegetation	1.5 mi. NE	2.58E-01
Kidney	Environmental	-	-	-	0.00E+00
Kidney	Effluent	Child	Vegetation	1.5 mi. NE	2.58E-01
Lung	Environmental	-	-	-	0.00E+00
Lung	Effluent	Child	Vegetation	1.5 mi. NE	2.58E-01
GI-LLI	Environmental	-	-	-	0.00E+00
GI-LLI	Effluent	Child	Vegetation	1.5 mi. NE	2.58E-01

(1) Critical Age is the highest total dose (all pathways) to an age group.

(2) Critical Pathway is the highest individual dose within the identified Critical Age group.

(3) Maximum dose is a summation of the ground/plane, inhalation, milk and vegetation pathways.

TABLE 4.1-B

Maximum Individual Dose for 2013 based on Environmental Measurements (mrem) for McGuire Nuclear Station

Age	Sample Medium	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI	Skin
Infant	Airborne	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Drinking Water	0.00E+00	6.58E-02	6.58E-02	6.58E-02	6.58E-02	6.58E-02	6.58E-02	0.00E+00
	Milk	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	<u>TOTAL</u>	0.00E+00	6.58E-02	6.58E-02	6.58E-02	6.58E-02	6.58E-02	6.58E-02	0.00E+00
Child	Airborne	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Drinking Water	0.00E+00	6.70E-02	6.70E-02	6.70E-02	6.70E-02	6.70E-02	6.70E-02	0.00E+00
	Milk	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Broadleaf Vegetation	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Fish	0.00E+00	9.75E-04	9.75E-04	9.75E-04	9.75E-04	9.75E-04	9.75E-04	0.00E+00
	Shoreline Sediment	0.00E+00	0.00E+00	6.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.74E-05
	<u>TOTAL</u>	0.00E+00	6.80E-02	6.80E-02	6.80E-02	6.80E-02	6.80E-02	6.80E-02	7.74E-05
Teen	Airborne	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Drinking Water	0.00E+00	3.50E-02	3.50E-02	3.50E-02	3.50E-02	3.50E-02	3.50E-02	0.00E+00
	Milk	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Broadleaf Vegetation	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Fish	0.00E+00	1.18E-03	1.18E-03	1.18E-03	1.18E-03	1.18E-03	1.18E-03	0.00E+00
	Shoreline Sediment	0.00E+00	0.00E+00	3.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-04
	<u>TOTAL</u>	0.00E+00	3.62E-02	3.65E-02	3.62E-02	3.62E-02	3.62E-02	3.62E-02	3.70E-04
Adult	Airborne	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Drinking Water	0.00E+00	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	0.00E+00
	Milk	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Broadleaf Vegetation	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Fish	0.00E+00	1.53E-03	1.53E-03	1.53E-03	1.53E-03	1.53E-03	1.53E-03	0.00E+00
	Shoreline Sediment	0.00E+00	0.00E+00	5.69E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.63E-05
	<u>TOTAL</u>	0.00E+00	5.11E-02	5.12E-02	5.11E-02	5.11E-02	5.11E-02	5.11E-02	6.63E-05

Note: Dose tables are provided for sample media displaying positive nuclide occurrence.

McGuire Nuclear Station
Dose from Drinking Water Pathway for 2013 Data
Maximum Exposed Infant

Infant Dose from Drinking Water Pathway (mrem) = Usage (l) x Dose Factor (mrem/pCi ingested) x Concentration (pCi/l)

Usage (intake in one year) = 330 l

Radionuclide	<u>Ingestion Dose Factor</u>							<u>Highest Annual Net Mean Concentration</u>		<u>Dose (mrem)</u>						
	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI	Indicator	Water	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI
								Location	(pCi/l)							
Mn-54	NO DATA	1.99E-05	4.51E-06	NO DATA	4.41E-06	NO DATA	7.31E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-58	NO DATA	3.60E-06	8.98E-06	NO DATA	NO DATA	NO DATA	8.97E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Fe-59	3.08E-05	5.38E-05	2.12E-05	NO DATA	NO DATA	1.59E-05	2.57E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60	NO DATA	1.08E-05	2.55E-05	NO DATA	NO DATA	NO DATA	2.57E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zn-65	1.84E-05	6.31E-05	2.91E-05	NO DATA	3.06E-05	NO DATA	5.33E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb-95	4.20E-08	1.73E-08	1.00E-08	NO DATA	1.24E-08	NO DATA	1.46E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zr-95	2.06E-07	5.02E-08	3.56E-08	NO DATA	5.41E-08	NO DATA	2.50E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-131	3.59E-05	4.23E-05	1.86E-05	1.39E-02	4.94E-05	NO DATA	1.51E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134	3.77E-04	7.03E-04	7.10E-05	NO DATA	1.81E-04	7.42E-05	1.91E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137	5.22E-04	6.11E-04	4.33E-05	NO DATA	1.64E-04	6.64E-05	1.91E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BaLa-140	1.71E-04	1.71E-07	8.81E-06	NO DATA	4.06E-08	1.05E-07	4.20E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
H-3	NO DATA	3.08E-07	3.08E-07	3.08E-07	3.08E-07	3.08E-07	3.08E-07	101	647	0.00E+00	6.58E-02	6.58E-02	6.58E-02	6.58E-02	6.58E-02	6.58E-02
Dose Commitment (mrem) =										0.00E+00	6.58E-02	6.58E-02	6.58E-02	6.58E-02	6.58E-02	6.58E-02

McGuire Nuclear Station
Dose from Drinking Water Pathway for 2013 Data
Maximum Exposed Child

Child Dose from Drinking Water Pathway (mrem) = Usage (l) x Dose Factor (mrem/pCi ingested) x Concentration (pCi/l)

Usage (intake in one year) = 510 l

Radionuclide	<u>Ingestion Dose Factor</u>							<u>Highest Annual Net Mean Concentration</u>		<u>Dose (mrem)</u>						
	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI	Indicator Location	Water (pCi/l)	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI
Mn-54	NO DATA	1.07E-05	2.85E-06	NO DATA	3.00E-06	NO DATA	8.98E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-58	NO DATA	1.80E-06	5.51E-06	NO DATA	NO DATA	NO DATA	1.05E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Fe-59	1.65E-05	2.67E-05	1.33E-05	NO DATA	NO DATA	7.74E-06	2.78E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60	NO DATA	5.29E-06	1.56E-05	NO DATA	NO DATA	NO DATA	2.93E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zn-65	1.37E-05	3.65E-05	2.27E-05	NO DATA	2.30E-05	NO DATA	6.41E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb-95	2.25E-08	8.76E-09	6.26E-09	NO DATA	8.23E-09	NO DATA	1.62E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zr-95	1.16E-07	2.55E-08	2.27E-08	NO DATA	3.65E-08	NO DATA	2.66E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-131	1.72E-05	1.73E-05	9.83E-06	5.72E-03	2.84E-05	NO DATA	1.54E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134	2.34E-04	3.84E-04	8.10E-05	NO DATA	1.19E-04	4.27E-05	2.07E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137	3.27E-04	3.13E-04	4.62E-05	NO DATA	1.02E-04	3.67E-05	1.96E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BaLa-140	8.31E-05	7.28E-08	4.85E-06	NO DATA	2.37E-08	4.34E-08	4.21E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
H-3	NO DATA	2.03E-07	2.03E-07	2.03E-07	2.03E-07	2.03E-07	2.03E-07	101	647	0.00E+00	6.70E-02	6.70E-02	6.70E-02	6.70E-02	6.70E-02	6.70E-02
Dose Commitment (mrem) =										0.00E+00	6.70E-02	6.70E-02	6.70E-02	6.70E-02	6.70E-02	6.70E-02

McGuire Nuclear Station
Dose from Fish Pathway for 2013 Data
Maximum Exposed Child

Child Dose from Fish Pathway (mrem) = Usage (kg) x Dose Factor (mrem/pCi ingested) x Concentration (pCi/kg)

H-3 Concentration in Fish = Surface Water pCi/l x Bioaccumulation Factor 0.9 pCi/kg per pCi/l = 773 pCi/l x 0.9 = 696 pCi/kg

Usage (intake in one year) = 6.9 kg

Radionuclide	<u>Ingestion Dose Factor</u>							<u>Highest Annual Net Mean Concentration</u>		<u>Dose (mrem)</u>						
	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI	Indicator Location	Fish (pCi/kg)	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI
Mn-54	NO DATA	1.07E-05	2.85E-06	NO DATA	3.00E-06	NO DATA	8.98E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-58	NO DATA	1.80E-06	5.51E-06	NO DATA	NO DATA	NO DATA	1.05E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Fe-59	1.65E-05	2.67E-05	1.33E-05	NO DATA	NO DATA	7.74E-06	2.78E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60	NO DATA	5.29E-06	1.56E-05	NO DATA	NO DATA	NO DATA	2.93E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zn-65	1.37E-05	3.65E-05	2.27E-05	NO DATA	2.30E-05	NO DATA	6.41E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134	2.34E-04	3.84E-04	8.10E-05	NO DATA	1.19E-04	4.27E-05	2.07E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137	3.27E-04	3.13E-04	4.62E-05	NO DATA	1.02E-04	3.67E-05	1.96E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
H-3	NO DATA	2.03E-07	2.03E-07	2.03E-07	2.03E-07	2.03E-07	2.03E-07	128	696	0.00E+00	9.75E-04	9.75E-04	9.75E-04	9.75E-04	9.75E-04	9.75E-04
Dose Commitment (mrem) =										0.00E+00	9.75E-04	9.75E-04	9.75E-04	9.75E-04	9.75E-04	9.75E-04

McGuire Nuclear Station
Dose from Shoreline Sediment Pathway for 2013 Data
Maximum Exposed Child

Shoreline Recreation = 14 hr (in one year)
 Shore Width Factor = 0.3 (lake shore - location 129)
 Shore Width Factor = 0.2 (river shoreline - location 130)
 Sediment Surface Mass = 40 kg/m²

Child Dose from Shoreline Sediment Pathway (mrem) = Shoreline Recreation (hr) x External Dose Factor (mrem/hr per pCi/m²) x Shore Width Factor x Sediment Surface Mass (kg/m²) x Sediment Concentration (pCi/kg)

Radionuclide	<u>External Dose Factor Standing on Contaminated Ground</u>		Indicator Location	Highest Annual Net Mean Concentration (pCi/kg)	<u>Dose</u>	
	(mrem/hr per pCi/m ²)				(mrem)	
	T. Body	Skin			T. Body	Skin
Mn-54	5.80E-09	6.80E-09	ALL	0.00	0.00E+00	0.00E+00
Co-58	7.00E-09	8.20E-09	ALL	0.00	0.00E+00	0.00E+00
Co-60	1.70E-08	2.00E-08	ALL	0.00	0.00E+00	0.00E+00
Cs-134	1.20E-08	1.40E-08	ALL	0.00	0.00E+00	0.00E+00
Cs-137	4.20E-09	4.90E-09	130	141.0	6.63E-05	7.74E-05
Dose Commitment (mrem) =					6.63E-05	7.74E-05

*McGuire Nuclear Station
Dose from Drinking Water Pathway for 2013 Data
Maximum Exposed Teen*

Teen Dose from Drinking Water Pathway (mrem) = Usage (l) x Dose Factor (mrem/pCi ingested) x Concentration (pCi/l)

Usage (intake in one year) = 510 l

Radionuclide	<u>Ingestion Dose Factor</u>							<u>Highest Annual Net Mean Concentration</u>		<u>Dose (mrem)</u>						
	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI	Indicator Location	Water (pCi/l)	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI
Mn-54	NO DATA	5.90E-06	1.17E-06	NO DATA	1.76E-06	NO DATA	1.21E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-58	NO DATA	9.72E-07	2.24E-06	NO DATA	NO DATA	NO DATA	1.34E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Fe-59	5.87E-06	1.37E-05	5.29E-06	NO DATA	NO DATA	4.32E-06	3.24E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60	NO DATA	2.81E-06	6.33E-06	NO DATA	NO DATA	NO DATA	3.66E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zn-65	5.76E-06	2.00E-05	9.33E-06	NO DATA	1.28E-05	NO DATA	8.47E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb-95	8.22E-09	4.56E-09	2.51E-09	NO DATA	4.42E-09	NO DATA	1.95E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zr-95	4.12E-08	1.30E-08	8.94E-09	NO DATA	1.91E-08	NO DATA	3.00E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-131	5.85E-06	8.19E-06	4.40E-06	2.39E-03	1.41E-05	NO DATA	1.62E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134	8.37E-05	1.97E-04	9.14E-05	NO DATA	6.26E-05	2.39E-05	2.45E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137	1.12E-04	1.49E-04	5.19E-05	NO DATA	5.07E-05	1.97E-05	2.12E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BaLa-140	2.84E-05	3.48E-08	1.83E-06	NO DATA	1.18E-08	2.34E-08	4.38E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
H-3	NO DATA	1.06E-07	1.06E-07	1.06E-07	1.06E-07	1.06E-07	1.06E-07	101	647	0.00E+00	3.50E-02	3.50E-02	3.50E-02	3.50E-02	3.50E-02	3.50E-02
Dose Commitment (mrem)=										0.00E+00	3.50E-02	3.50E-02	3.50E-02	3.50E-02	3.50E-02	3.50E-02

*McGuire Nuclear Station
Dose from Fish Pathway for 2013 Data
Maximum Exposed Teen*

Teen Dose from Fish Pathway (mrem) = Usage (kg) x Dose Factor (mrem/pCi ingested) x Concentration (pCi/kg)

H-3 Concentration in Fish = Surface Water pCi/l x Bioaccumulation Factor 0.9 pCi/kg per pCi/l = 773 pCi/l x 0.9 = 696 pCi/kg

Usage (intake in one year) = 16 kg

Radionuclide	<u>Ingestion Dose Factor</u>							<u>Highest Annual Net Mean Concentration</u>		<u>Dose (mrem)</u>						
	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI	Location	(pCi/kg)	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI
Mn-54	NO DATA	5.90E-06	1.17E-06	NO DATA	1.76E-06	NO DATA	1.21E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-58	NO DATA	9.72E-07	2.24E-06	NO DATA	NO DATA	NO DATA	1.34E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Fe-59	5.87E-06	1.37E-05	5.29E-06	NO DATA	NO DATA	4.32E-06	3.24E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60	NO DATA	2.81E-06	6.33E-06	NO DATA	NO DATA	NO DATA	3.66E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zn-65	5.76E-06	2.00E-05	9.33E-06	NO DATA	1.28E-05	NO DATA	8.47E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134	8.37E-05	1.97E-04	9.14E-05	NO DATA	6.26E-05	2.39E-05	2.45E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137	1.12E-04	1.49E-04	5.19E-05	NO DATA	5.07E-05	1.97E-05	2.12E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
H-3	NO DATA	1.06E-07	1.06E-07	1.06E-07	1.06E-07	1.06E-07	1.06E-07	128	696	0.00E+00	1.18E-03	1.18E-03	1.18E-03	1.18E-03	1.18E-03	1.18E-03
Dose Commitment (mrem) =										0.00E+00	1.18E-03	1.18E-03	1.18E-03	1.18E-03	1.18E-03	1.18E-03

McGuire Nuclear Station
Dose from Shoreline Sediment Pathway for 2013 Data
Maximum Exposed Teen

Shoreline Recreation = 67 hr (in one year)
 Shore Width Factor = 0.3 (lake shore - location 129)
 Shore Width Factor = 0.2 (river shoreline - location 130)
 Sediment Surface Mass = 40 kg/m²

Teen Dose from Shoreline Sediment Pathway (mrem) = Shoreline Recreation (hr) x External Dose Factor (mrem/hr per pCi/m²) x Shore Width Factor x Sediment Surface Mass (kg/m²) x Sediment Concentration (pCi/kg)

Radionuclide	External Dose Factor Standing on Contaminated Ground (mrem/hr per pCi/m ²)		Indicator Location	Highest Annual Net Mean Concentration Sediment (pCi/kg)	Dose (mrem)	
	T. Body	Skin			T. Body	Skin
Mn-54	5.80E-09	6.80E-09	ALL	0.00	0.00E+00	0.00E+00
Co-58	7.00E-09	8.20E-09	ALL	0.00	0.00E+00	0.00E+00
Co-60	1.70E-08	2.00E-08	ALL	0.00	0.00E+00	0.00E+00
Cs-134	1.20E-08	1.40E-08	ALL	0.00	0.00E+00	0.00E+00
Cs-137	4.20E-09	4.90E-09	130	141	3.17E-04	3.70E-04
Dose Commitment (mrem) =					3.17E-04	3.70E-04

McGuire Nuclear Station
Dose from Drinking Water Pathway for 2013 Data
Maximum Exposed Adult

Adult Dose from Drinking Water Pathway (mrem) = Usage (l) x Dose Factor (mrem/pCi ingested) x Concentration (pCi/l)

Usage (intake in one year) = 730 l

Radionuclide	<u>Ingestion Dose Factor</u>							<u>Highest Annual Net Mean Concentration</u>		<u>Dose (mrem)</u>						
	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI	Indicator Location	Water (pCi/l)	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI
Mn-54	NO DATA	4.57E-06	8.72E-07	NO DATA	1.36E-06	NO DATA	1.40E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-58	NO DATA	7.45E-07	1.67E-06	NO DATA	NO DATA	NO DATA	1.51E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Fe-59	4.34E-06	1.02E-05	3.91E-06	NO DATA	NO DATA	2.85E-06	3.40E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60	NO DATA	2.14E-06	4.72E-06	NO DATA	NO DATA	NO DATA	4.02E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zn-65	4.84E-06	1.54E-05	6.96E-06	NO DATA	1.03E-05	NO DATA	9.70E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb-95	6.22E-09	3.46E-09	1.86E-09	NO DATA	3.42E-09	NO DATA	2.10E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zr-95	3.04E-08	9.75E-09	6.60E-09	NO DATA	1.53E-08	NO DATA	3.09E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-131	4.16E-06	5.95E-06	3.41E-06	1.95E-03	1.02E-05	NO DATA	1.57E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134	6.22E-05	1.48E-04	1.21E-04	NO DATA	4.79E-05	1.59E-05	2.59E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137	7.97E-05	1.09E-04	7.14E-05	NO DATA	3.70E-05	1.23E-05	2.11E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BaLa-140	2.03E-05	2.55E-08	1.33E-06	NO DATA	8.67E-09	1.46E-08	4.18E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
H-3	NO DATA	1.05E-07	1.05E-07	1.05E-07	1.05E-07	1.05E-07	1.05E-07	101	647	0.00E+00	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02
Dose Commitment (mrem) =										0.00E+00	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02	4.96E-02

McGuire Nuclear Station
Dose from Fish Pathway for 2013 Data
Maximum Exposed Adult

Adult Dose from Fish Pathway (mrem) = Usage (kg) x Dose Factor (mrem/pCi ingested) x Concentration (pCi/kg)

H-3 Concentration in Fish = Surface Water pCi/l x Bioaccumulation Factor 0.9 pCi/kg per pCi/l = 773 pCi/l x 0.9 = 696 pCi/kg

Usage (intake in one year) = 21 kg

Radionuclide	<u>Ingestion Dose Factor</u>							<u>Highest Annual Net Mean Concentration</u>			<u>Dose (mrem)</u>					
	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI	Location	(pCi/kg)	Bone	Liver	T. Body	Thyroid	Kidney	Lung	GI-LLI
Mn-54	NO DATA	4.57E-06	8.72E-07	NO DATA	1.36E-06	NO DATA	1.40E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-58	NO DATA	7.45E-07	1.67E-06	NO DATA	NO DATA	NO DATA	1.51E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Fe-59	4.34E-06	1.02E-05	3.91E-06	NO DATA	NO DATA	2.85E-06	3.40E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Co-60	NO DATA	2.14E-06	4.72E-06	NO DATA	NO DATA	NO DATA	4.02E-05	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zn-65	4.84E-06	1.54E-05	6.96E-06	NO DATA	1.03E-05	NO DATA	9.70E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134	6.22E-05	1.48E-04	1.21E-04	NO DATA	4.79E-05	1.59E-05	2.59E-06	ALL	0.00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137	7.97E-05	1.09E-04	7.14E-05	NO DATA	3.70E-05	1.23E-05	2.11E-06	ALL	0.0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
H-3	NO DATA	1.05E-07	1.05E-07	1.05E-07	1.05E-07	1.05E-07	1.05E-07	128	696	0.00E+00	1.53E-03	1.53E-03	1.53E-03	1.53E-03	1.53E-03	1.53E-03
Dose Commitment (mrem) =										0.00E+00	1.53E-03	1.53E-03	1.53E-03	1.53E-03	1.53E-03	1.53E-03

McGuire Nuclear Station
Dose from Shoreline Sediment Pathway for 2013 Data
Maximum Exposed Adult

Shoreline Recreation = 12 hr (in one year)
 Shore Width Factor = 0.3 (lake shore - location 129)
 Shore Width Factor = 0.2 (river shoreline - location 130)
 Sediment Surface Mass = 40 kg/m²

Adult Dose from Shoreline Sediment Pathway (mrem) = Shoreline Recreation (hr) x External Dose Factor (mrem/hr per pCi/m²) x Shore Width Factor x Sediment Surface Mass (kg/m²) x Sediment Concentration (pCi/kg)

Radionuclide	External Dose Factor Standing on Contaminated Ground (mrem/hr per pCi/m ²)		Highest Annual Net Mean Concentration		Dose (mrem)	
	T. Body	Skin	Indicator Location	Sediment (pCi/kg)	T. Body	Skin
Mn-54	5.80E-09	6.80E-09	ALL	0.00	0.00E+00	0.00E+00
Co-58	7.00E-09	8.20E-09	ALL	0.00	0.00E+00	0.00E+00
Co-60	1.70E-08	2.00E-08	ALL	0.00	0.00E+00	0.00E+00
Cs-134	1.20E-08	1.40E-08	ALL	0.00	0.00E+00	0.00E+00
Cs-137	4.20E-09	4.90E-09	130	141.0	5.69E-05	6.63E-05
Dose Commitment (mrem) =					5.69E-05	6.63E-05

5.0 QUALITY ASSURANCE

5.1 SAMPLE COLLECTION

EnRad Laboratories, Fisheries, and Aquatic Ecology performed the environmental sample collections as specified by approved sample collection procedures.

5.2 SAMPLE ANALYSIS

EnRad Laboratories performed the environmental sample analyses as specified by approved analysis procedures. EnRad Laboratories is located in Huntersville, North Carolina, at Duke Energy's Environmental Center.

5.3 DOSIMETRY ANALYSIS

The Radiation Dosimetry and Records group performed environmental dosimetry measurements as specified by approved dosimetry analysis procedures.

5.4 LABORATORY EQUIPMENT QUALITY ASSURANCE

5.4.1 DAILY QUALITY CONTROL

EnRad Laboratories has an internal quality assurance program which monitors each type of instrumentation for reliability and accuracy. Daily quality control checks ensure that instruments are in proper working order and these checks are used to monitor instrument performance.

5.4.2 CALIBRATION VERIFICATION

National Institute of Standards and Technology (NIST) standards that represent counting geometries are analyzed as unknowns at various frequencies ranging from weekly to annually to verify that efficiency calibrations are valid. The frequency is dependent upon instrument use and performance. Investigations are performed and documented should calibration verification data fall outside of the acceptable limits.

5.4.3 BATCH PROCESSING

Method quality control samples are analyzed with sample analyses that are processed in batches. These include gross beta in drinking water and tritium analyses.

5.5 DUKE ENERGY INTERCOMPARISON PROGRAM

EnRad Laboratories participated in the Duke Energy Fleet Scientific Services (FSS) Intercomparison Program during 2013. Interlaboratory cross-check standards, including gamma in water (Marinelli beakers), and tritium in water samples were analyzed during 2013. A summary of the EnRad Laboratory program results for 2013 is documented in Table 5.0-A.

5.6 ECKERT & ZIEGLER ANALYTICS CROSS CHECK PROGRAM

EnRad Laboratories participated in the Eckert & Ziegler Analytics Cross Check Program during 2013. Cross-check standards including Marinelli beakers, air filters, tritium in water, and Iodine in milk samples were analyzed at various times of the year. A summary of the EnRad Laboratory program results for 2013 is documented in Table 5.0-B.

5.7 ERA PROFICIENCY TESTING

EnRad Laboratories performed method proficiency testing through a program administered by Environmental Resource Associates (ERA) of Arvada, CO. ERA supplied requested method proficiency samples for analysis and nuclide concentration determination. ERA reported proficiency test results to the North Carolina Department of Health and Human Services, North Carolina Public Health Drinking Water Laboratory Certification Program. A summary of these proficiency test data for 2013 is documented in Table 5.0-C.

5.8 DUKE ENERGY AUDITS

The McGuire Nuclear Station Radiological Environmental Monitoring Program was not audited by the Quality Assurance Group in 2013 but was audited in 2012 (reference 6.12). No environmental monitoring issues were identified.

5.9 U.S. NUCLEAR REGULATORY COMMISSION INSPECTIONS

The MCGuire Nuclear Station Radiological Environmental Monitoring Program was audited by the NRC in 2013 (reference 6.13). No findings were noted in the 2013 audit report.

5.10 STATE OF NORTH CAROLINA INTERCOMPARISON PROGRAM

EnRad Laboratories routinely participates with the State of North Carolina Department of Environmental Health and Natural Resources (DEHNR) in an intercomparison program. EnRad Laboratories sends air, surface water, milk, crops, vegetation, sediment, and fish samples which have been collected to the State of North Carolina Radiation Protection Section.

5.11 TLD INTERCOMPARISON PROGRAM

5.11.1 NUCLEAR TECHNOLOGY SERVICES INTERCOMPARISON PROGRAM

Radiation Dosimetry and Records participates in a quarterly TLD intercomparison program administered by Nuclear Technology Services, Inc. of Roswell, GA. Nuclear Technology Services irradiates environmental dosimeters quarterly and sends them to the Radiation Dosimetry and Records group for analysis of the unknown estimated delivered exposure. A summary of the Nuclear Technology Services Intercomparison Report is documented in Table 5.0-D.

5.11.2 INTERNAL CROSSCHECK (DUKE ENERGY)

Radiation Dosimetry and Records participates in a quarterly TLD intracomparison program administered internally by the Dosimetry Lab. The Dosimetry Lab Staff irradiates environmental dosimeters quarterly and submits them for analysis of the unknown estimated delivered exposure. A summary of the Internal Cross Check (Duke Energy) Result is documented in Table 5.0-D.

TABLE 5.0-A

DUKE ENERGY

INTERLABORATORY COMPARISON PROGRAM

2013 EnRad Fleet Scientific Services Cross Check Performance Summary

Cross check samples were distributed by Fleet Scientific Services (FSS) in accordance with Duke Energy Nuclear Generation Procedure SRPMP 9-2. Six water samples were analyzed for tritium and gamma emitters. The below table lists results for specific analyses. All 27 results were evaluated as prescribed in procedure SRPMP 9-2 and passed the acceptance criteria for the program.

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	FSS Value	EnRad/FSS Ratio	Evaluation
Tritium in Water	Q131TWR1	H-3	1	pCi/L	7.48E+02	7.27E+02	1.03	Pass
					7.53E+02	7.27E+02	1.04	Pass
					7.11E+02	7.27E+02	0.98	Pass
	Q131TWR2	H-3	1	pCi/L	7.51E+05	7.85E+05	0.96	Pass
					7.52E+05	7.85E+05	0.96	Pass
					7.49E+05	7.85E+05	0.95	Pass
	Q131TWR3	H-3	1	pCi/L	6.23E+03	5.86E+03	1.06	Pass
					6.36E+03	5.86E+03	1.09	Pass
					6.32E+03	5.86E+03	1.08	Pass
Gamma in Water	Q131GWR - 0.5 L	Mn-54	1	pCi/L	4.16E+03	3.85E+03	1.08	Pass
		Co-57	1	pCi/L	7.42E+03	6.86E+03	1.08	Pass
		Co-60	1	pCi/L	5.94E+03	5.84E+03	1.02	Pass
		Sn-113	1	pCi/L	7.15E+03	7.23E+03	0.99	Pass
		Ba-133	1	pCi/L	5.86E+03	5.70E+03	1.03	Pass
		Cs-137	1	pCi/L	3.38E+03	3.46E+03	0.98	Pass
	Q131GWR - 1.0 L	Mn-54	1	pCi/L	4.21E+03	3.85E+03	1.09	Pass
		Co-57	1	pCi/L	7.68E+03	6.86E+03	1.12	Pass
		Co-60	1	pCi/L	5.90E+03	5.84E+03	1.01	Pass
		Sn-113	1	pCi/L	6.94E+03	7.23E+03	0.96	Pass
		Ba-133	1	pCi/L	5.58E+03	5.70E+03	0.98	Pass
		Cs-137	1	pCi/L	3.38E+03	3.46E+03	0.98	Pass
	Q131GWR - 3.5 L	Mn-54	1	pCi/L	4.38E+03	3.85E+03	1.14	Pass
		Co-57	1	pCi/L	7.91E+03	6.86E+03	1.15	Pass
		Co-60	1	pCi/L	6.18E+03	5.84E+03	1.06	Pass
		Sn-113	1	pCi/L	7.52E+03	7.23E+03	1.04	Pass
		Ba-133	1	pCi/L	5.93E+03	5.70E+03	1.04	Pass
		Cs-137	1	pCi/L	3.48E+03	3.46E+03	1.00	Pass

TABLE 5.0-B

ECKERT & ZIEGLER ANALYTICS

CROSS CHECK PROGRAM

2013 Cross Check Results for EnRad Laboratories

Cross check samples are received, prepared, and analyzed in all four quarters of 2013. Results are reported directly to Eckert & Ziegler Analytics. Environmental cross check samples were analyzed in replicate, and the average result reported to Eckert & Ziegler Analytics. The acceptance criteria for the program was based on the NRC Inspection Manual Procedure 84750 (IP 84750). Fifty-seven environmental results were reported, of which 57 (100%) met the acceptance criteria based on IP 84750.

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	EZA Value	EnRad/EZA Ratio	Evaluation
Beta Filter	E10509	Gross Beta	1	pCi	86.5	94.2	0.92	Agreement
	E10606	Gross Beta	3	pCi	187	215	0.87	Agreement
Gamma Filter	E10508	Ce-141	1	pCi	97.3	107	0.91	Agreement
		Cr-51	1	pCi	256	269	0.95	Agreement
		Cs-134	1	pCi	113	122	0.93	Agreement
		Cs-137	1	pCi	144	151	0.95	Agreement
		Co-58	1	pCi	109	119	0.92	Agreement
		Mn-54	1	pCi	121	119	1.02	Agreement
		Fe-59	1	pCi	149	144	1.04	Agreement
		Zn-65	1	pCi	179	171	1.04	Agreement
		Co-60	1	pCi	224	228	0.98	Agreement
I-131 in Milk	E10531	I-131	2	pCi/L	91.8	97.3	0.94	Agreement
I-131 in Water	E10709	I-131	4	pCi/L	98.6	99	1.00	Agreement
Beta in Water	E10532	Gross Beta	2	pCi/L	304	293	1.04	Agreement
	E10708	Gross Beta	4	pCi/L	291	279	1.04	Agreement
I-131 Cartridge	E10533	I-131	2	pCi	94	89.7	1.05	Agreement
	E10707	I-131	4	pCi	77.2	76.5	1.01	Agreement
Gamma Composite Filter	E10534	Ce-141	2	pCi	80.6	77.1	1.05	Agreement
		Cr-51	2	pCi	240	214	1.12	Agreement
		Cs-134	2	pCi	107	107	1.00	Agreement
		Cs-137	2	pCi	122	129	0.95	Agreement
		Co-58	2	pCi	76.6	80.2	0.96	Agreement
		Mn-54	2	pCi	149	147	1.01	Agreement
		Fe-59	2	pCi	105	102	1.03	Agreement
		Zn-65	2	pCi	196	186	1.06	Agreement
Co-60	2	pCi	152	150	1.02	Agreement		

TABLE 5.0-B (Cont.)

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	EZA Value	EnRad/EZA Ratio	Evaluation
Tritium in Water	E10535	H-3	2	pCi/L	9690	9890	0.98	Agreement
	E10705	H-3	4	pCi/L	13800	14500	0.95	Agreement
Gamma Composite Filter	E10706	Ce-141	4	pCi	107	117	0.91	Agreement
		Cr-51	4	pCi	332	317	1.05	Agreement
		Cs-134	4	pCi	145	152	0.96	Agreement
		Cs-137	4	pCi	126	135	0.93	Agreement
		Co-58	4	pCi	118	120	0.98	Agreement
		Mn-54	4	pCi	177	180	0.99	Agreement
		Fe-59	4	pCi	140	118	1.19	Agreement
		Zn-65	4	pCi	781	793	0.99	Agreement
		Co-60	4	pCi	155	157	0.99	Agreement
Gamma in Milk	E10536	I-131	2	pCi/L	96.2	95.5	1.01	Agreement
		Ce-141	2	pCi/L	92	90.4	1.02	Agreement
		Cr-51	2	pCi/L	238	250	0.95	Agreement
		Cs-134	2	pCi/L	122	125	0.98	Agreement
		Cs-137	2	pCi/L	145	151	0.96	Agreement
		Co-58	2	pCi/L	93.1	94	0.99	Agreement
		Mn-54	2	pCi/L	180	172	1.05	Agreement
		Fe-59	2	pCi/L	129	120	1.08	Agreement
		Zn-65	2	pCi/L	239	217	1.10	Agreement
Gamma in Water	E10704	I-131	4	pCi/L	95.4	92.4	1.03	Agreement
		Ce-141	4	pCi/L	89.3	88.8	1.01	Agreement
		Cr-51	4	pCi/L	243	240	1.01	Agreement
		Cs-134	4	pCi/L	109	115	0.95	Agreement
		Cs-137	4	pCi/L	104	102	1.02	Agreement
		Co-58	4	pCi/L	91.5	90.6	1.01	Agreement
		Mn-54	4	pCi/L	141	136	1.04	Agreement
		Fe-59	4	pCi/L	92.6	89.1	1.04	Agreement
		Zn-65	4	pCi/L	629	600	1.05	Agreement
Co-60	4	pCi/L	123	119	1.04	Agreement		

TABLE 5.0-C

ENVIRONMENTAL RESOURCE ASSOCIATES (ERA) PROFICIENCY TESTING

2013 Proficiency Test Results for EnRad Laboratories

North Carolina Department of Health and Human Services Laboratory Certification
EnRad Laboratories

Proficiency test samples are received, prepared, and analyzed in second and fourth quarters of 2013. Results are reported directly to Environmental Resource Associates as described in the instruction package within the study period. Proficiency test data are reported to ERA for evaluation. The acceptance criteria for the program was based on the National Environmental Laboratory Accreditation Conference (NELAC) Field of Proficiency Testing criteria. Fourteen results were reported of which 12 (85.7%) met the acceptance criteria. ERA reports proficiency test results to the North Carolina Department of Health and Human Services, North Carolina Public Drinking Water Laboratory Certification Program. This testing is to satisfy the North Carolina state drinking water radiochemistry certification requirements. The individual measurements were evaluated and results falling outside the acceptable ratio criteria had an evaluation performed to identify any recommended remedial actions and to reduce anomalous errors. Complete documentation of any evaluation will be available and provided to the NRC upon request.

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	ERA Value	Acceptance Limits	Evaluation
Gamma Emitters in Water	RAD-93	Ba-133	2	pCi/L	82.5	82.1	69.0 - 90.3	Acceptable
		Cs-134	2	pCi/L	41.9	42.8	34.2 - 47.1	Acceptable
		Cs-137	2	pCi/L	42.1	41.7	37.0 - 48.8	Acceptable
		Co-60	2	pCi/L	71	65.9	59.3 - 75.0	Acceptable
		Zn-65	2	pCi/L	207	189	170 - 222	Acceptable
Gamma Emitters in Water	RAD-95	Ba-133	4	pCi/L	48.3	54.2	44.7 - 59.9	Acceptable
		Cs-134	4	pCi/L	81.5	86.7	71.1 - 95.4	Acceptable
		Cs-137	4	pCi/L	180	206	185 - 228	Not Acceptable *
		Co-60	4	pCi/L	103	102	91.8 - 114	Acceptable
		Zn-65	4	pCi/L	337	333	300 - 389	Acceptable
Tritium in Water	RAD-93	H-3	2	pCi/L	6620	4050	3450 - 4460	Not Acceptable #
	RAD-95	H-3	4	pCi/L	17000	17700	15500 - 19500	Acceptable
Iodine-131 in Water	RAD-93	I-131	2	pCi/L	26.9	23.8	19.7 - 28.3	Acceptable
	RAD-95	I-131	4	pCi/L	21.4	23.6	19.6 - 28.0	Acceptable

* See PIP G-13-02152

See PIP G-13-00925

TABLE 5.0-D

2013 ENVIRONMENTAL DOSIMETER CROSS-CHECK RESULTS

Nuclear Technology Services

1st Quarter 2013						2nd Quarter 2013					
TLD	Reported	Delivered	Bias	Pass/Fail		TLD	Reported	Delivered	Bias	Pass/Fail	
Number	(mR)	(mR)	(% diff)	Criteria	Pass/Fail	Number	(mR)	(mR)	(% diff)	Criteria	Pass/Fail
102432	83.6	79.19	5.61	<+/-15%	Pass	102104	91.10	90.22	0.98	<+/-15%	Pass
102452	83.0	79.19	4.84	<+/-15%	Pass	102359	91.20	90.22	1.09	<+/-15%	Pass
102453	83.8	79.19	5.77	<+/-15%	Pass	102099	92.44	90.22	2.46	<+/-15%	Pass
102455	82.6	79.19	4.34	<+/-15%	Pass	102294	93.25	90.22	3.36	<+/-15%	Pass
102473	85.2	79.19	7.59	<+/-15%	Pass	102420	93.88	90.22	4.06	<+/-15%	Pass
Average Bias (B)			5.63			Average Bias (B)			2.39		
Standard Deviation (S)			1.24			Standard Deviation (S)			1.36		
Measure Performance B +S			6.87	<15%	Pass	Measure Performance B +S			3.75	<15%	Pass
3rd Quarter 2013						4th Quarter 2013					
TLD	Reported	Delivered	Bias	Pass/Fail		TLD	Reported	Delivered	Bias	Pass/Fail	
Number	(mR)	(mR)	(% diff)	Criteria	Pass/Fail	Number	(mR)	(mR)	(% diff)	Criteria	Pass/Fail
103363	82.62	79.0	4.53	<+/-15%	Pass	103138	90.70	89.2	1.68	<+/-15%	Pass
103661	86.78	79.0	9.79	<+/-15%	Pass	103139	91.28	89.2	2.33	<+/-15%	Pass
103414	83.02	79.0	5.04	<+/-15%	Pass	103140	92.38	89.2	3.57	<+/-15%	Pass
103154	87.35	79.0	10.51	<+/-15%	Pass	103747	90.97	89.2	1.98	<+/-15%	Pass
103145	85.45	79.0	8.11	<+/-15%	Pass	103676	90.97	89.2	1.98	<+/-15%	Pass
Average Bias (B)			7.60			Average Bias (B)			2.31		
Standard Deviation (S)			2.72			Standard Deviation (S)			0.74		
Measure Performance B +S			10.31	<15%	Pass	Measure Performance B +S			3.05	<15%	Pass

TABLE 5.0-D (Cont.)

Internal Crosscheck (Duke Energy)

1st Quarter 2013						2nd Quarter 2013						
TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail	TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail	
103725	36.4	35.0	3.89	<+/-15%	Pass	103279	27.6	28.0	-1.54	<+/-15%	Pass	
103726	37.6	35.0	7.43	<+/-15%	Pass	102457	27.8	28.0	-0.61	<+/-15%	Pass	
103259	35.8	35.0	2.26	<+/-15%	Pass	102497	27.4	28.0	-2.29	<+/-15%	Pass	
103761	34.5	35.0	-1.51	<+/-15%	Pass	102005	27.7	28.0	-1.04	<+/-15%	Pass	
102729	36.8	35.0	5.00	<+/-15%	Pass	102492	27.1	28.0	-3.29	<+/-15%	Pass	
102728	34.8	35.0	-0.46	<+/-15%	Pass	102102	27.4	28.0	-2.11	<+/-15%	Pass	
103258	33.4	35.0	-4.54	<+/-15%	Pass	102345	27.0	28.0	-3.43	<+/-15%	Pass	
102727	37.1	35.0	6.09	<+/-15%	Pass	101378	27.3	28.0	-2.61	<+/-15%	Pass	
103724	34.9	35.0	-0.37	<+/-15%	Pass	102400	28.5	28.0	1.79	<+/-15%	Pass	
102726	35.7	35.0	1.94	<+/-15%	Pass	103257	28.6	28.0	2.21	<+/-15%	Pass	
Average Bias (B)			1.97				Average Bias (B)			-1.29		
Standard Deviation (S)			3.74				Standard Deviation (S)			1.95		
Measure Performance B +S			5.71	<15%	Pass	Measure Performance B +S			3.24	<15%	Pass	
3rd Quarter 2013						4th Quarter 2013						
TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail	TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail	
103370	32.0	31.0	3.35	<+/-15%	Pass	103581	57.2	51.0	12.14	<+/-15%	Pass	
103610	32.0	31.0	3.10	<+/-15%	Pass	102905	56.8	51.0	11.37	<+/-15%	Pass	
103597	32.4	31.0	4.35	<+/-15%	Pass	103134	56.0	51.0	9.88	<+/-15%	Pass	
103553	31.6	31.0	1.87	<+/-15%	Pass	120802	56.9	51.0	11.59	<+/-15%	Pass	
103369	32.5	31.0	4.90	<+/-15%	Pass	103118	57.3	51.0	12.25	<+/-15%	Pass	
103750	32.2	31.0	3.87	<+/-15%	Pass	120703	55.7	51.0	9.12	<+/-15%	Pass	
103578	33.3	31.0	7.35	<+/-15%	Pass	102521	56.1	51.0	9.92	<+/-15%	Pass	
103136	32.4	31.0	4.55	<+/-15%	Pass	103582	55.5	51.0	8.90	<+/-15%	Pass	
103368	32.6	31.0	5.13	<+/-15%	Pass	102826	57.9	51.0	13.61	<+/-15%	Pass	
103552	32.5	31.0	4.74	<+/-15%	Pass	102702	56.1	51.0	10.06	<+/-15%	Pass	
Average Bias (B)			4.32				Average Bias (B)			10.88		
Standard Deviation (S)			1.46				Standard Deviation (S)			1.54		
Measure Performance B +S			5.78	<15%	Pass	Measure Performance B +S			12.42	<15%	Pass	

6.0 REFERENCES

- 6.1 McGuire Selected License Commitment Manual
- 6.2 McGuire Technical Specifications
- 6.3 McGuire Updated Final Safety Analysis Report
- 6.4 McGuire Offsite Dose Calculation Manual
- 6.5 McGuire Annual Radiological Environmental Operating Report 1979 - 2012
- 6.6 McGuire Annual Radioactive Effluent Release Report 2013
- 6.7 Probability and Statistics in Engineering and Management Science, Hines and Montgomery, 1969, pages 287-293.
- 6.8 Practical Statistics for the Physical Sciences, Havilcek and Crain, 1988, pages 83-93.
- 6.9 Nuclear Regulatory Commission Regulatory Guide 1.109, Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purposes of Evaluating Compliance with 10CFR50, Appendix I.
- 6.10 EnRad Laboratories Operating Procedures
- 6.11 RETDAS, Radiological Effluent Tracking and Dose Assessment Software, Canberra Version 3.5.1, DPC Revision #4.0
- 6.12 Radiological Effluents Control Audit 12-20 (NOS)(REC)(MNS)
- 6.13 NRC Integrated Inspection Report (50-369/2013004, 50-370/2013004)
- 6.14 NCRP (2009). National Council on Radiation Protection and Measurements. *Ionizing Radiation Exposure of the Population of the United States*, NCRP Report No. 160 (National Council on Radiation Protection and Measurements, Bethesda, Maryland).
- 6.15 Problem Investigation Program Database, V 3.4.3, Duke Energy Company, G-04-00134
- 6.16 Problem Investigation Program Database, V 3.4.3, Duke Energy Company, G-11-00761

APPENDIX A

ENVIRONMENTAL SAMPLING
&
ANALYSIS PROCEDURES

APPENDIX A

ENVIRONMENTAL SAMPLING AND ANALYSIS PROCEDURES

Adherence to established procedures for sampling and analysis of all environmental media at McGuire Nuclear Station was required to ensure compliance with Station Selected Licensee Commitments. Analytical procedures were employed to ensure that Selected Licensee Commitments detection capabilities were achieved.

Environmental sampling and analyses were performed by EnRad Laboratories, Dosimetry and Records, and Fisheries and Aquatic Ecology.

This appendix describes the environmental sampling frequencies and analysis procedures by media type.

I. CHANGE OF SAMPLING PROCEDURES

Indicator TLD Location 159 (Outer Ring) was relocated within the NE sector from 4.73 miles to 4.77 miles (reference 6.16).

II. DESCRIPTION OF ANALYSIS PROCEDURES

Gamma spectroscopy analyses are performed using high purity germanium gamma detectors and Canberra analytical software. Designated sample volumes are transferred to appropriate counting geometries and analyzed by gamma spectroscopy. Perishable samples such as fish and broadleaf vegetation are ground to achieve a homogeneous mixture. Soils and sediments are dried, sifted to remove foreign objects (rocks, clams, glass, etc.) then transferred to appropriate counting geometry.

Low-level iodine analyses are performed by passing a designated sample aliquot through a pre-weighed amount of ion exchange resin to remove and concentrate any iodine in the aqueous sample (milk). The resin is then dried, mixed thoroughly, and a net resin weight determined before being transferred to appropriate counting geometry and analyzed by gamma spectroscopy.

Tritium analyses are performed quarterly by using low-level environmental liquid scintillation analysis technique on a Packard 2550 liquid scintillation system or Perkin-Elmer 2900TR liquid scintillation system. Tritium samples are distilled and batch processed with a laboratory fortified blank, matrix spike, matrix spike duplicate, and blank to verify instrument performance and sample preparation technique are acceptable.

Gross beta analysis is performed by concentrating a designated aliquot of sample precipitate and analyzing by Tennelec XLB Series 5 gas-flow proportional counters. Samples are batch processed with a blank to ensure sample contamination has not occurred.

III. CHANGE OF ANALYSIS PROCEDURES

Quarterly gamma spectroscopy analysis of airborne particulate filter composite (by location) was implemented during 2013; elective weekly gamma spectroscopy of the airborne particulate individual filter was discontinued.

IV. SAMPLING AND ANALYSIS PROCEDURES

A.1 AIRBORNE PARTICULATE AND RADIOIODINE

Airborne particulate and radioiodine samples at each of seven locations were composited continuously by means of continuous air samplers. Air particulates were collected on a particulate filter and radioiodines were collected in a charcoal cartridge positioned behind the filter in the sampler. The samplers are designed to operate at a constant flow rate (in order to compensate for any filter loading) and are set to sample approximately 2 cubic feet per minute. Filters and cartridges were collected weekly. A separate weekly gamma analysis was performed on each charcoal cartridge and air particulate. A weekly gross beta analysis was performed on each filter. The continuous composite samples were collected from the locations listed below.

Location 102	=	Amity Church Road (9.89 mi. WNW)
Location 103	=	Cottonwood (4.20 mi. NE)
Location 120	=	Site Boundary (0.46 mi. NNE)
Location 121	=	Site Boundary (0.47 mi. NE)
Location 125	=	Site Boundary (0.38 mi. SW)
Location 133	=	Cornelius (6.23 mi. ENE)
Location 195	=	Fishing Access Road (0.19 mi. N)

A.2 DRINKING WATER

Monthly composite samples were collected. A gross beta and gamma analysis was performed on monthly composites. Tritium analysis was performed on the quarterly composites. The composites were collected monthly from the locations listed below.

Location 101	=	North Mecklenburg Water Treatment Facility (3.31 mi E)
Location 119	=	Mt. Holly Municipal Water Supply (7.40 mi. SSW)
Location 132	=	Charlotte Municipal Water Supply (11.1 mi. SSE)
Location 136	=	Mooresville Municipal Water Supply (12.7 mi. NNE)
Location 194	=	East Lincoln County Water Supply (6.73 mi. NNW)

A.3 SURFACE WATER

Monthly composite samples were collected. A gamma analysis was performed on the monthly composites. Tritium analysis was performed on the quarterly composites sample. The composites were collected monthly from the locations listed below.

Location 128 = Discharge Canal Bridge (0.45 mi. NE)
Location 131 = Cowans Ford Dam (0.64 mi. WNW)
Location 135 = Plant Marshall Intake Canal (11.9 mi. N)

A.4 MILK

Biweekly grab samples were collected at one location. A gamma and low-level Iodine-131 analysis was performed on each sample. The biweekly grab samples were collected from the location listed below.

Location 141 = Lynch Dairy - Cows (14.8 mi. WNW)

A.5 BROADLEAF VEGETATION

Monthly samples were collected as available and a gamma analysis was performed on each sample. The samples were collected from the locations listed below.

Location 102 = Amity Church Road (9.89 mi. WNW)
Location 120 = Site Boundary (0.46 mi. NNE)
Location 125 = Site Boundary (0.38 mi. SW)
Location 193 = Site Boundary (0.19 mi. N)

A.6 FOOD PRODUCTS

Samples were collected monthly when available during the harvest season and a gamma analysis was performed on each. The samples were collected at the location listed below.

Location 104 = 5 mile radius Gardens (1.52 mi NNW)

A.7 FISH

Semiannual samples were collected and a gamma analysis was performed on the edible portions of each sample. Boney fish (i.e. Sunfish) were prepared whole minus the head and tail portions. The samples were collected from the locations listed below.

Location 129 = Discharge Canal Entrance to Lake Norman (0.51 mi. ENE)
Location 137 = Pinnacle Access Area (12.0 mi. N)

A.8 SHORELINE SEDIMENT

Semiannual samples were collected and a gamma analysis was performed on each following the drying and removal of rocks and clams. The samples were collected from the locations listed below.

Location 129	=	Discharge Canal Entrance to Lake Norman (0.51 mi. ENE)
Location 130	=	Highway 73 Bridge Downstream (0.52 mi. SW)
Location 137	=	Pinnacle Access Area (12.0 mi. N)

A.9 DIRECT GAMMA RADIATION (TLD)

Thermoluminescent dosimeters (TLD) were collected quarterly at forty-one locations. A gamma exposure rate was determined for each TLD. TLD locations are listed in Table 2.1-B. The TLDs were placed as indicated below.

- * An inner ring of 14 TLDs at the site boundary, one in each available meteorological sector. The site boundary locations in the N and NNW sectors are over water; however, two special interest TLD's were placed in these sectors inside the site boundary in March, 1991.
- * An outer ring of 16 TLDs, one in each meteorological sector in the 6 to 8 kilometer range.
- * The remaining TLDs were placed in special interest areas such as population centers, residential areas, schools, and control locations.

A.10 ANNUAL LAND USE CENSUS

An annual Land Use Census was conducted to identify within a distance of 8 kilometers (5.0 miles) from the station, the nearest location from the site boundary in each of the sixteen meteorological sectors, the following:

- * The Nearest Residence
- * The Nearest Garden greater than 50 square meters or 500 square feet
- * The Nearest Milk-giving Animal (cow, goat, etc.)

The census was conducted during the growing season on 6/12/2013. Results are shown in Table 3.10. No changes were made to the sampling procedures during 2013 as a result of the 2013 census.

In the environmental program, the air deposition parameters (D/Q) are used to determine air, broadleaf vegetation and milk sampling locations. McGuire's sectors with the three highest values did not change in 2013.

V. GLOBAL POSITIONING SYSTEM (GPS) ANALYSIS

The McGuire site centerline used for GPS measurements was referenced from the McGuire Nuclear Station Updated Final Safety Analysis Report (UFSAR), section 2.1.1, Site Location. Waypoint coordinates used for MNS GPS measurements were latitude 35°-25'-59"N and longitude 80°-56'-55"W. Maps and tables were generated using North American Datum (NAD) 27. Data normally reflect accuracy to within 2 to 5 meters from point of measurement. GPS field measurements were taken as close as possible to the item of interest. Distances for the locations are displayed using three significant figures.

APPENDIX B

**RADIOLOGICAL
ENVIRONMENTAL MONITORING
PROGRAM**

SUMMARY OF RESULTS

2013

**MCGUIRE NUCLEAR STATION
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DATA SUMMARY**

McGuire Nuclear Station
Mecklenburg County, North Carolina

Docket Numbers 50-369, 370
Calendar Year 2013

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Lower Limit of Detection (LLD) ⁽¹⁾	All Indicator Locations ^{(2) (3)} Mean Range	Location w/Highest Annual Mean		Control Locations Mean Range ^{(2) (3)}	No. of Non-Routine Report Meas.
				Name, Distance, and Direction	Mean Range ^{(2) (3)}		
Air Particulate (pCi/m ³)	Gross Beta 364	See Table 2.2-C	1.93E-2 (312/312) 6.22E-3 – 3.95E-2	125 (0.38 mi SW)	2.04E-2 (52/52) 7.06E-3 – 3.88E-2	1.96E-2 (52/52) 7.57E-3 – 3.67E-2	0
	Gamma 28	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Air Radioiodine (pCi/m ³)	Gamma 364	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Drinking Water (pCi/l)	Gross Beta 65	4	1.65 (52/52) 0.78 – 2.43	119 (7.40 mi SSW)	1.73 (13/13) 0.96 – 2.43	1.61 (13/13) 1.13 – 2.37	0
	Gamma 65	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
	Tritium 20	2000	536 (11/16) 214 - 1080	101 (3.31 mi E)	647 (4/4) 317 – 1080	All less than LLD	0
Surface Water (pCi/l)	Gamma 39	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
	Tritium 12	2000	591 (8/8) 168 - 1380	128 (0.45 mi NE)	773 (4/4) 333 - 1380	All less than LLD	0
Milk (pCi/l)	Gamma 26	See Table 2.2-C	No Indicator Location	----	----	All less than LLD	0
	I-131 26	See Table 2.2-C	No Indicator Location	----	----	All less than LLD	0

**MCGUIRE NUCLEAR STATION
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DATA SUMMARY**

McGuire Nuclear Station
Mecklenburg County, North Carolina

Docket Numbers 50-369, 370
Calendar Year 2013

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Lower Limit of Detection (LLD) ⁽¹⁾	All Indicator Locations ^{(2) (3)} Mean Range	Location w/Highest Annual Mean		Control Locations Mean Range ^{(2) (3)}	No. of Non-Routine Report Meas.
				Name, Distance, and Direction	Mean Range ^{(2) (3)}		
Broadleaf Vegetation (pCi/kg, wet)	Gamma 48	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Food Products (pCi/kg, wet)	Gamma 6	See Table 2.2-C	All less than LLD	----	----	No Control Location	0
Fish (pCi/kg, wet)	Gamma 12	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Sediments--Shoreline (pCi/kg, dry)	Gamma 6 Cs-137	180	141 (2/4) 72.9 – 209	130 (0.52 mi SW)	141 (2/2) 72.9 – 209	All less than LLD	0
TLD (mR per quarter)	TLD Readout 164 ⁽⁴⁾	----	16.5 (160/160) 9.00 – 31.0	180 (12.7 mi NNE)	26.3 (4/4) 22.0 – 31.0	23.1 (4/4) 21.0 – 24.4	0

Footnotes to Appendix B

1. The Lower Limit of Detection (LLD) is the smallest concentration of radioactive material in a sample that will yield a net count above system background which will be detected with 95 percent probability and with only 5 percent probability of falsely concluding that a blank observation represents a "real" signal. Due to counting statistics and varying volumes, occasionally lower LLDs are achieved. Refer to Analytical Procedures Section/Gamma Spectrometry for an explanation of how LLD values were derived.
2. Mean and range are based on detectable measurements only.
3. The fractions of all samples with detectable activities at specific locations are indicated in parentheses.
4. Missing samples are discussed in Appendix C.

APPENDIX C

**SAMPLING DEVIATIONS
&
UNAVAILABLE ANALYSES**

APPENDIX C

MCGUIRE NUCLEAR STATION SAMPLING DEVIATIONS & UNAVAILABLE ANALYSES

DEVIATION & UNAVAILABLE REASON CODES			
BF	Blown Fuse	PO	Power Outage
FZ	Sample Frozen	PS	Pump out of service / Undergoing Repair
IW	Inclement Weather	SL	Sample Loss/Lost due to Lab Accident
LC	Line Clog to Sampler	SM	Motor / Rotor Seized
OT	Other	TF	Torn Filter
PI	Power Interrupt	VN	Vandalism
PM	Preventive Maintenance	CN	Construction

C.1 SAMPLING DEVIATIONS

Drinking Water

Location	Scheduled Collection Dates	Actual Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action Identity
101	3/4 - 4/1/2013	4/1/2013	OT	Insufficient water at time of collection due to pump tubing failure. Grab sample taken. Tubing replaced, normal sampling resumed. A work request was not necessary as a result of this event.	G-13-00534

Surface Water

Location	Scheduled Collection Dates	Actual Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action Identity
135	4/29 - 5/28/2013	4/29 - 5/28/2013	PI	Power to sampling equipment interrupted due to scheduled maintenance for about 8 hours during the composite period. A work request was not necessary as a result of this event.	G-13-01238

C.2 UNAVAILABLE ANALYSES

There were no unavailable analyses during 2013.

APPENDIX D

ANALYTICAL DEVIATIONS

No Analytical deviations were incurred for the
2013 Radiological Environmental Monitoring Program

APPENDIX E

**RADIOLOGICAL
ENVIRONMENTAL MONITORING
PROGRAM RESULTS**

2013

This appendix includes sample analysis report summaries and supportive data generated from each sample medium for 2013.

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID	Sample Dates	Nuclide	Activity	1 Sigma Error	LLD
250455	12/31/2012 - 1/7/2013	Beta	2.70E-02	1.58E-03	3.03E-03
250585	1/7/2013 - 1/14/2013	Beta	2.60E-02	1.54E-03	2.90E-03
250754	1/14/2013 - 1/21/2013	Beta	8.83E-03	1.20E-03	3.22E-03
251002	1/21/2013 - 1/28/2013	Beta	2.85E-02	1.64E-03	3.16E-03
251288	1/28/2013 - 2/4/2013	Beta	2.33E-02	1.54E-03	3.21E-03
251636	2/4/2013 - 2/11/2013	Beta	1.50E-02	1.38E-03	3.35E-03
252102	2/11/2013 - 2/18/2013	Beta	1.68E-02	1.36E-03	3.04E-03
252731	2/18/2013 - 2/25/2013	Beta	1.85E-02	1.44E-03	3.26E-03
253111	2/25/2013 - 3/4/2013	Beta	9.51E-03	1.19E-03	3.13E-03
253914	3/4/2013 - 3/11/2013	Beta	9.55E-03	1.22E-03	3.23E-03
254236	3/11/2013 - 3/18/2013	Beta	2.30E-02	1.49E-03	2.97E-03
254771	3/18/2013 - 3/25/2013	Beta	1.66E-02	1.33E-03	2.88E-03
255332	3/25/2013 - 4/1/2013	Beta	1.27E-02	1.28E-03	3.13E-03
255860	4/1/2013 - 4/8/2013	Beta	2.30E-02	1.53E-03	3.20E-03
256094	4/8/2013 - 4/15/2013	Beta	1.85E-02	1.41E-03	3.06E-03
256372	4/15/2013 - 4/22/2013	Beta	1.74E-02	1.45E-03	3.39E-03
256418	12/31/2012 - 4/1/2013	I-131	<2.66E-02	0.00E+00	2.66E-02
		Cs-134	<3.63E-04	0.00E+00	3.63E-04
		Cs-137	<4.76E-04	0.00E+00	4.76E-04
		Be-7	1.33E-01	6.34E-03	5.62E-03
		K-40	<1.08E-02	0.00E+00	1.08E-02
256639	4/22/2013 - 4/29/2013	Beta	1.79E-02	1.40E-03	3.11E-03
257162	4/29/2013 - 5/6/2013	Beta	1.09E-02	1.20E-03	3.00E-03
257318	5/6/2013 - 5/13/2013	Beta	1.46E-02	1.33E-03	3.18E-03
257765	5/13/2013 - 5/20/2013	Beta	3.12E-02	1.70E-03	3.22E-03
258009	5/20/2013 - 5/28/2013	Beta	2.02E-02	1.33E-03	2.75E-03
258244	5/28/2013 - 6/3/2013	Beta	1.53E-02	1.51E-03	3.69E-03
258591	6/3/2013 - 6/10/2013	Beta	1.36E-02	1.29E-03	3.08E-03



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m³

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
259068	6/10/2013 - 6/17/2013	Beta	1.66E-02	1.38E-03	3.14E-03
259616	6/17/2013 - 6/24/2013	Beta	1.49E-02	1.34E-03	3.17E-03
260250	6/24/2013 - 7/1/2013	Beta	1.68E-02	1.39E-03	3.17E-03
260710	7/1/2013 - 7/8/2013	Beta	7.57E-03	1.13E-03	3.09E-03
261673	7/8/2013 - 7/15/2013	Beta	9.94E-03	1.20E-03	3.11E-03
262182	7/15/2013 - 7/22/2013	Beta	1.34E-02	1.27E-03	3.02E-03
262653	4/1/2013 - 7/1/2013	I-131	<2.29E-02	0.00E+00	2.29E-02
		Cs-134	<2.75E-04	0.00E+00	2.75E-04
		Cs-137	<3.62E-04	0.00E+00	3.62E-04
		Be-7	1.45E-01	6.29E-03	5.54E-03
		K-40	<9.22E-03	0.00E+00	9.22E-03
263188	7/22/2013 - 7/29/2013	Beta	1.69E-02	1.40E-03	3.23E-03
263415	7/29/2013 - 8/5/2013	Beta	2.27E-02	1.54E-03	3.25E-03
264073	8/5/2013 - 8/12/2013	Beta	1.89E-02	1.43E-03	3.14E-03
265204	8/12/2013 - 8/19/2013	Beta	1.39E-02	1.33E-03	3.20E-03
265513	8/19/2013 - 8/26/2013	Beta	1.31E-02	1.35E-03	3.41E-03
267199	8/26/2013 - 9/3/2013	Beta	2.74E-02	1.50E-03	2.88E-03
267672	9/3/2013 - 9/9/2013	Beta	3.46E-02	1.87E-03	3.33E-03
268508	9/9/2013 - 9/16/2013	Beta	3.34E-02	1.77E-03	3.34E-03
269668	9/16/2013 - 9/23/2013	Beta	2.98E-02	1.64E-03	3.03E-03
270774	9/23/2013 - 9/30/2013	Beta	2.10E-02	1.48E-03	3.17E-03
271499	9/30/2013 - 10/7/2013	Beta	3.12E-02	1.64E-03	2.89E-03
272106	10/7/2013 - 10/14/2013	Beta	1.14E-02	1.26E-03	3.18E-03
272490	10/14/2013 - 10/21/2013	Beta	2.06E-02	1.49E-03	3.26E-03
272524	7/1/2013 - 9/30/2013	I-131	<6.92E-02	0.00E+00	6.92E-02
		Cs-134	<8.68E-04	0.00E+00	8.68E-04
		Cs-137	<8.22E-04	0.00E+00	8.22E-04
		Be-7	1.31E-01	1.01E-02	1.30E-02
		K-40	2.45E-02	4.89E-03	6.19E-03
272889	10/21/2013 - 10/28/2013	Beta	2.86E-02	1.64E-03	3.14E-03
273980	10/28/2013 - 11/4/2013	Beta	3.67E-02	1.76E-03	2.94E-03



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
274427	11/4/2013 - 11/11/2013	Beta	2.06E-02	1.46E-03	3.08E-03
274941	11/11/2013 - 11/18/2013	Beta	1.98E-02	1.42E-03	2.95E-03
276495	11/18/2013 - 11/25/2013	Beta	1.69E-02	1.38E-03	3.11E-03
278549	11/25/2013 - 12/2/2013	Beta	2.44E-02	1.51E-03	2.91E-03
278739	12/2/2013 - 12/9/2013	Beta	1.92E-02	1.45E-03	3.19E-03
279012	12/9/2013 - 12/16/2013	Beta	2.41E-02	1.55E-03	3.15E-03
279658	12/16/2013 - 12/23/2013	Beta	1.70E-02	1.40E-03	3.22E-03
280136	12/23/2013 - 12/30/2013	Beta	2.04E-02	1.49E-03	3.25E-03
280598	9/30/2013 - 12/30/2013	Cs-134	<6.77E-04	0.00E+00	6.77E-04
		Cs-137	<6.69E-04	0.00E+00	6.69E-04
		Be-7	1.25E-01	8.37E-03	1.01E-02
		K-40	1.64E-02	3.46E-03	9.02E-03

Sample Point 103 [INDICATOR - NE @ 4.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250417	12/31/2012 - 1/7/2013	Beta	2.45E-02	1.52E-03	2.99E-03
250547	1/7/2013 - 1/14/2013	Beta	2.07E-02	1.44E-03	2.93E-03
250716	1/14/2013 - 1/21/2013	Beta	8.67E-03	1.19E-03	3.22E-03
250964	1/21/2013 - 1/28/2013	Beta	2.61E-02	1.59E-03	3.17E-03
251250	1/28/2013 - 2/4/2013	Beta	2.03E-02	1.46E-03	3.18E-03
251580	2/4/2013 - 2/11/2013	Beta	1.56E-02	1.41E-03	3.40E-03
252046	2/11/2013 - 2/18/2013	Beta	1.64E-02	1.35E-03	3.04E-03
252661	2/18/2013 - 2/25/2013	Beta	1.85E-02	1.44E-03	3.26E-03
253049	2/25/2013 - 3/4/2013	Beta	1.01E-02	1.19E-03	3.09E-03
253857	3/4/2013 - 3/11/2013	Beta	1.30E-02	1.32E-03	3.27E-03
254179	3/11/2013 - 3/18/2013	Beta	1.89E-02	1.40E-03	2.96E-03
254714	3/18/2013 - 3/25/2013	Beta	1.88E-02	1.39E-03	2.88E-03
255274	3/25/2013 - 4/1/2013	Beta	1.33E-02	1.28E-03	3.08E-03
255803	4/1/2013 - 4/8/2013	Beta	2.11E-02	1.50E-03	3.25E-03
256037	4/8/2013 - 4/15/2013	Beta	1.68E-02	1.38E-03	3.08E-03



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 103 [INDICATOR - NE @ 4.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
256305	4/15/2013 - 4/22/2013	Beta	1.35E-02	1.35E-03	3.37E-03
256419	12/31/2012 - 4/1/2013	I-131	<2.20E-02	0.00E+00	2.20E-02
		Cs-134	<2.90E-04	0.00E+00	2.90E-04
		Cs-137	<2.24E-04	0.00E+00	2.24E-04
		Be-7	1.33E-01	4.66E-03	3.70E-03
		K-40	2.06E-02	2.44E-03	3.51E-03
256572	4/22/2013 - 4/29/2013	Beta	1.69E-02	1.37E-03	3.09E-03
257095	4/29/2013 - 5/6/2013	Beta	7.92E-03	1.12E-03	3.03E-03
257248	5/6/2013 - 5/13/2013	Beta	1.22E-02	1.27E-03	3.18E-03
257695	5/13/2013 - 5/20/2013	Beta	2.87E-02	1.65E-03	3.23E-03
257939	5/20/2013 - 5/28/2013	Beta	1.74E-02	1.27E-03	2.73E-03
258174	5/28/2013 - 6/3/2013	Beta	1.40E-02	1.49E-03	3.72E-03
258521	6/3/2013 - 6/10/2013	Beta	1.64E-02	1.36E-03	3.08E-03
258991	6/10/2013 - 6/17/2013	Beta	1.61E-02	1.36E-03	3.14E-03
259539	6/17/2013 - 6/24/2013	Beta	1.48E-02	1.33E-03	3.13E-03
260173	6/24/2013 - 7/1/2013	Beta	1.44E-02	1.34E-03	3.20E-03
260633	7/1/2013 - 7/8/2013	Beta	7.61E-03	1.14E-03	3.10E-03
261596	7/8/2013 - 7/15/2013	Beta	1.08E-02	1.22E-03	3.10E-03
262098	7/15/2013 - 7/22/2013	Beta	1.74E-02	1.36E-03	2.99E-03
262654	4/1/2013 - 7/1/2013	I-131	<2.44E-02	0.00E+00	2.44E-02
		Cs-134	<3.38E-04	0.00E+00	3.38E-04
		Cs-137	<3.44E-04	0.00E+00	3.44E-04
		Be-7	1.52E-01	5.43E-03	4.24E-03
		K-40	1.71E-02	2.00E-03	3.10E-03
262932	7/22/2013 - 7/29/2013	Beta	1.73E-02	1.42E-03	3.27E-03
263341	7/29/2013 - 8/5/2013	Beta	2.36E-02	1.55E-03	3.25E-03
263999	8/5/2013 - 8/12/2013	Beta	1.96E-02	1.45E-03	3.15E-03
265130	8/12/2013 - 8/19/2013	Beta	1.32E-02	1.30E-03	3.17E-03
265439	8/19/2013 - 8/26/2013	Beta	8.99E-03	1.26E-03	3.45E-03
267125	8/26/2013 - 9/3/2013	Beta	2.88E-02	1.53E-03	2.87E-03
267575	9/3/2013 - 9/9/2013	Beta	3.33E-02	1.85E-03	3.35E-03

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 103 [INDICATOR - NE @ 4.2 miles]

Sample ID	Sample Dates	Nuclide	Activity	1 Sigma Error	LLD
268429	9/9/2013 - 9/16/2013	Beta	2.89E-02	1.67E-03	3.32E-03
269551	9/16/2013 - 9/23/2013	Beta	2.53E-02	1.55E-03	3.06E-03
270696	9/23/2013 - 9/30/2013	Beta	1.97E-02	1.45E-03	3.17E-03
271421	9/30/2013 - 10/7/2013	Beta	2.87E-02	1.59E-03	2.89E-03
272028	10/7/2013 - 10/14/2013	Beta	9.77E-03	1.20E-03	3.15E-03
272411	10/14/2013 - 10/21/2013	Beta	2.30E-02	1.55E-03	3.30E-03
272525	7/1/2013 - 9/30/2013	I-131	<2.87E-02	0.00E+00	2.87E-02
		Cs-134	<2.86E-04	0.00E+00	2.86E-04
		Cs-137	<3.25E-04	0.00E+00	3.25E-04
		Be-7	1.25E-01	5.83E-03	4.82E-03
		K-40	9.70E-03	1.80E-03	2.86E-03
272812	10/21/2013 - 10/28/2013	Beta	2.88E-02	1.64E-03	3.15E-03
273904	10/28/2013 - 11/4/2013	Beta	3.34E-02	1.69E-03	2.93E-03
274351	11/4/2013 - 11/11/2013	Beta	1.68E-02	1.35E-03	3.04E-03
274865	11/11/2013 - 11/18/2013	Beta	1.97E-02	1.43E-03	2.99E-03
276419	11/18/2013 - 11/25/2013	Beta	1.91E-02	1.43E-03	3.11E-03
278550	11/25/2013 - 12/2/2013	Beta	2.16E-02	1.44E-03	2.91E-03
278678	12/2/2013 - 12/9/2013	Beta	1.69E-02	1.39E-03	3.16E-03
278951	12/9/2013 - 12/16/2013	Beta	2.63E-02	1.61E-03	3.17E-03
279597	12/16/2013 - 12/23/2013	Beta	1.81E-02	1.43E-03	3.23E-03
280075	12/23/2013 - 12/30/2013	Beta	1.85E-02	1.44E-03	3.25E-03
280599	9/30/2013 - 12/30/2013	Cs-134	<3.39E-04	0.00E+00	3.39E-04
		Cs-137	<3.05E-04	0.00E+00	3.05E-04
		Be-7	1.14E-01	6.13E-03	5.43E-03
		K-40	2.24E-02	3.29E-03	4.27E-03

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID	Sample Dates	Nuclide	Activity	1 Sigma Error	LLD
250421	12/31/2012 - 1/7/2013	Beta	2.61E-02	1.54E-03	2.94E-03
250551	1/7/2013 - 1/14/2013	Beta	2.39E-02	1.52E-03	2.98E-03
250720	1/14/2013 - 1/21/2013	Beta	9.60E-03	1.22E-03	3.21E-03
250968	1/21/2013 - 1/28/2013	Beta	2.59E-02	1.58E-03	3.17E-03
251254	1/28/2013 - 2/4/2013	Beta	2.44E-02	1.52E-03	3.10E-03



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m³

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID	Sample Dates	Nuclide	Activity	1 Sigma Error	LLD
251584	2/4/2013 - 2/11/2013	Beta	1.78E-02	1.48E-03	3.48E-03
252050	2/11/2013 - 2/18/2013	Beta	1.62E-02	1.34E-03	3.02E-03
252666	2/18/2013 - 2/25/2013	Beta	1.71E-02	1.41E-03	3.26E-03
253053	2/25/2013 - 3/4/2013	Beta	1.16E-02	1.22E-03	3.03E-03
253861	3/4/2013 - 3/11/2013	Beta	9.05E-03	1.23E-03	3.34E-03
254183	3/11/2013 - 3/18/2013	Beta	2.42E-02	1.52E-03	2.96E-03
254718	3/18/2013 - 3/25/2013	Beta	1.61E-02	1.32E-03	2.88E-03
255278	3/25/2013 - 4/1/2013	Beta	1.34E-02	1.27E-03	3.03E-03
255807	4/1/2013 - 4/8/2013	Beta	2.14E-02	1.53E-03	3.31E-03
256041	4/8/2013 - 4/15/2013	Beta	1.79E-02	1.38E-03	3.03E-03
256309	4/15/2013 - 4/22/2013	Beta	1.49E-02	1.39E-03	3.41E-03
256420	12/31/2012 - 4/1/2013	I-131	<2.33E-02	0.00E+00	2.33E-02
		Cs-134	<3.00E-04	0.00E+00	3.00E-04
		Cs-137	<3.50E-04	0.00E+00	3.50E-04
		Be-7	1.37E-01	6.11E-03	5.07E-03
		K-40	8.94E-03	2.18E-03	3.60E-03
256576	4/22/2013 - 4/29/2013	Beta	1.61E-02	1.33E-03	3.04E-03
257099	4/29/2013 - 5/6/2013	Beta	9.52E-03	1.19E-03	3.09E-03
257252	5/6/2013 - 5/13/2013	Beta	1.55E-02	1.36E-03	3.17E-03
257699	5/13/2013 - 5/20/2013	Beta	2.95E-02	1.67E-03	3.23E-03
257943	5/20/2013 - 5/28/2013	Beta	1.84E-02	1.27E-03	2.69E-03
258178	5/28/2013 - 6/3/2013	Beta	1.38E-02	1.51E-03	3.81E-03
258525	6/3/2013 - 6/10/2013	Beta	1.64E-02	1.36E-03	3.07E-03
258995	6/10/2013 - 6/17/2013	Beta	1.50E-02	1.34E-03	3.14E-03
259543	6/17/2013 - 6/24/2013	Beta	1.50E-02	1.32E-03	3.09E-03
260177	6/24/2013 - 7/1/2013	Beta	1.74E-02	1.43E-03	3.26E-03
260637	7/1/2013 - 7/8/2013	Beta	6.22E-03	1.09E-03	3.10E-03
261600	7/8/2013 - 7/15/2013	Beta	1.08E-02	1.22E-03	3.10E-03



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
262102	7/15/2013 - 7/22/2013	Beta	1.48E-02	1.29E-03	2.94E-03
262655	4/1/2013 - 7/1/2013	I-131	<2.62E-02	0.00E+00	2.62E-02
		Cs-134	<3.13E-04	0.00E+00	3.13E-04
		Cs-137	<3.55E-04	0.00E+00	3.55E-04
		Be-7	1.51E-01	5.57E-03	4.62E-03
		K-40	2.24E-02	2.57E-03	3.63E-03
262936	7/22/2013 - 7/29/2013	Beta	2.07E-02	1.51E-03	3.32E-03
263345	7/29/2013 - 8/5/2013	Beta	3.02E-02	1.69E-03	3.25E-03
264003	8/5/2013 - 8/12/2013	Beta	1.97E-02	1.45E-03	3.15E-03
265134	8/12/2013 - 8/19/2013	Beta	1.29E-02	1.28E-03	3.12E-03
265443	8/19/2013 - 8/26/2013	Beta	1.28E-02	1.36E-03	3.49E-03
267129	8/26/2013 - 9/3/2013	Beta	2.78E-02	1.51E-03	2.87E-03
267579	9/3/2013 - 9/9/2013	Beta	3.56E-02	1.88E-03	3.31E-03
268433	9/9/2013 - 9/16/2013	Beta	3.29E-02	1.74E-03	3.28E-03
269555	9/16/2013 - 9/23/2013	Beta	2.94E-02	1.66E-03	3.12E-03
270700	9/23/2013 - 9/30/2013	Beta	2.34E-02	1.54E-03	3.18E-03
271425	9/30/2013 - 10/7/2013	Beta	3.63E-02	1.74E-03	2.89E-03
272032	10/7/2013 - 10/14/2013	Beta	1.14E-02	1.23E-03	3.09E-03
272415	10/14/2013 - 10/21/2013	Beta	2.49E-02	1.59E-03	3.31E-03
272526	7/1/2013 - 9/30/2013	I-131	<2.22E-02	0.00E+00	2.22E-02
		Cs-134	<2.76E-04	0.00E+00	2.76E-04
		Cs-137	<2.94E-04	0.00E+00	2.94E-04
		Be-7	1.28E-01	4.54E-03	4.08E-03
		K-40	9.01E-03	1.62E-03	3.06E-03
272816	10/21/2013 - 10/28/2013	Beta	3.03E-02	1.69E-03	3.20E-03
273908	10/28/2013 - 11/4/2013	Beta	3.95E-02	1.81E-03	2.93E-03
274355	11/4/2013 - 11/11/2013	Beta	1.74E-02	1.34E-03	2.97E-03
274869	11/11/2013 - 11/18/2013	Beta	2.22E-02	1.51E-03	3.08E-03
276423	11/18/2013 - 11/25/2013	Beta	2.00E-02	1.45E-03	3.11E-03
278551	11/25/2013 - 12/2/2013	Beta	2.47E-02	1.51E-03	2.90E-03
278682	12/2/2013 - 12/9/2013	Beta	1.99E-02	1.46E-03	3.17E-03



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Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
278955	12/9/2013 - 12/16/2013	Beta	2.85E-02	1.65E-03	3.17E-03
279601	12/16/2013 - 12/23/2013	Beta	1.88E-02	1.44E-03	3.23E-03
280079	12/23/2013 - 12/30/2013	Beta	2.10E-02	1.50E-03	3.25E-03
280600	9/30/2013 - 12/30/2013	Cs-134	<7.10E-04	0.00E+00	7.10E-04
		Cs-137	<6.83E-04	0.00E+00	6.83E-04
		Be-7	1.53E-01	8.75E-03	9.63E-03
		K-40	1.96E-02	3.90E-03	1.07E-02

Sample Point 121 [INDICATOR - NE @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250418	12/31/2012 - 1/7/2013	Beta	2.81E-02	1.58E-03	2.95E-03
250548	1/7/2013 - 1/14/2013	Beta	2.42E-02	1.52E-03	2.97E-03
250717	1/14/2013 - 1/21/2013	Beta	1.10E-02	1.25E-03	3.21E-03
250965	1/21/2013 - 1/28/2013	Beta	2.99E-02	1.67E-03	3.17E-03
251251	1/28/2013 - 2/4/2013	Beta	2.27E-02	1.49E-03	3.12E-03
251581	2/4/2013 - 2/11/2013	Beta	1.67E-02	1.45E-03	3.46E-03
252047	2/11/2013 - 2/18/2013	Beta	1.68E-02	1.35E-03	3.02E-03
252662	2/18/2013 - 2/26/2013	Beta	1.68E-02	1.40E-03	3.26E-03
253050	2/25/2013 - 3/4/2013	Beta	1.28E-02	1.25E-03	3.04E-03
253858	3/4/2013 - 3/11/2013	Beta	1.07E-02	1.27E-03	3.33E-03
254180	3/11/2013 - 3/18/2013	Beta	2.26E-02	1.48E-03	2.96E-03
254715	3/18/2013 - 3/25/2013	Beta	1.75E-02	1.36E-03	2.88E-03
255275	3/25/2013 - 4/1/2013	Beta	1.42E-02	1.29E-03	3.04E-03
255804	4/1/2013 - 4/8/2013	Beta	2.03E-02	1.50E-03	3.30E-03
256038	4/8/2013 - 4/15/2013	Beta	1.82E-02	1.40E-03	3.05E-03
256306	4/15/2013 - 4/22/2013	Beta	1.59E-02	1.41E-03	3.38E-03
256421	12/31/2012 - 4/1/2013	I-131	<2.24E-02	0.00E+00	2.24E-02
		Cs-134	<3.62E-04	0.00E+00	3.62E-04
		Cs-137	<4.26E-04	0.00E+00	4.26E-04
		Be-7	1.44E-01	5.29E-03	4.53E-03
		K-40	1.71E-02	2.34E-03	3.25E-03
256573	4/22/2013 - 4/29/2013	Beta	1.74E-02	1.37E-03	3.04E-03
257096	4/29/2013 - 5/6/2013	Beta	8.07E-03	1.14E-03	3.07E-03



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Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 121 [INDICATOR - NE @ 0.47 miles]

Sample ID	Sample Dates	Nuclide	Activity	1 Sigma Error	LLD
257249	5/6/2013 - 5/13/2013	Beta	1.32E-02	1.30E-03	3.16E-03
257696	5/13/2013 - 5/20/2013	Beta	2.76E-02	1.63E-03	3.23E-03
257940	5/20/2013 - 5/28/2013	Beta	1.96E-02	1.30E-03	2.69E-03
258175	5/28/2013 - 6/3/2013	Beta	1.47E-02	1.53E-03	3.80E-03
258522	6/3/2013 - 6/10/2013	Beta	1.51E-02	1.33E-03	3.07E-03
258992	6/10/2013 - 6/17/2013	Beta	1.60E-02	1.36E-03	3.14E-03
259540	6/17/2013 - 6/24/2013	Beta	1.53E-02	1.33E-03	3.10E-03
260174	6/24/2013 - 7/1/2013	Beta	1.82E-02	1.45E-03	3.25E-03
260634	7/1/2013 - 7/8/2013	Beta	6.62E-03	1.11E-03	3.10E-03
261597	7/8/2013 - 7/15/2013	Beta	1.03E-02	1.20E-03	3.10E-03
262099	7/15/2013 - 7/22/2013	Beta	1.53E-02	1.30E-03	2.95E-03
262656	4/1/2013 - 7/1/2013	I-131	<6.80E-02	0.00E+00	6.80E-02
		Cs-134	<6.85E-04	0.00E+00	6.85E-04
		Cs-137	<7.80E-04	0.00E+00	7.80E-04
		Be-7	1.73E-01	1.02E-02	1.05E-02
		K-40	3.06E-02	4.16E-03	7.04E-03
262933	7/22/2013 - 7/29/2013	Beta	1.85E-02	1.46E-03	3.31E-03
263342	7/29/2013 - 8/5/2013	Beta	2.58E-02	1.60E-03	3.25E-03
264000	8/5/2013 - 8/12/2013	Beta	1.94E-02	1.44E-03	3.15E-03
265131	8/12/2013 - 8/19/2013	Beta	1.30E-02	1.28E-03	3.13E-03
265440	8/19/2013 - 8/26/2013	Beta	1.23E-02	1.35E-03	3.48E-03
267126	8/26/2013 - 9/3/2013	Beta	2.75E-02	1.50E-03	2.87E-03
267576	9/3/2013 - 9/9/2013	Beta	3.24E-02	1.81E-03	3.29E-03
268430	9/9/2013 - 9/16/2013	Beta	2.67E-02	1.62E-03	3.30E-03
269552	9/16/2013 - 9/23/2013	Beta	2.76E-02	1.62E-03	3.11E-03
270697	9/23/2013 - 9/30/2013	Beta	1.77E-02	1.41E-03	3.17E-03
271422	9/30/2013 - 10/7/2013	Beta	2.91E-02	1.60E-03	2.89E-03
272029	10/7/2013 - 10/14/2013	Beta	9.90E-03	1.19E-03	3.09E-03

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 121 [INDICATOR - NE @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
272412	10/14/2013 - 10/21/2013	Beta	1.89E-02	1.47E-03	3.31E-03
272527	7/1/2013 - 9/30/2013	I-131	<2.32E-02	0.00E+00	2.32E-02
		Cs-134	<3.00E-04	0.00E+00	3.00E-04
		Cs-137	<3.26E-04	0.00E+00	3.26E-04
		Be-7	1.32E-01	5.92E-03	4.25E-03
		K-40	5.68E-03	1.38E-03	3.99E-03
272813	10/21/2013 - 10/28/2013	Beta	3.20E-02	1.72E-03	3.19E-03
273905	10/28/2013 - 11/4/2013	Beta	3.39E-02	1.70E-03	2.93E-03
274352	11/4/2013 - 11/11/2013	Beta	1.85E-02	1.37E-03	2.96E-03
274866	11/11/2013 - 11/18/2013	Beta	1.67E-02	1.38E-03	3.07E-03
276420	11/18/2013 - 11/25/2013	Beta	1.51E-02	1.33E-03	3.12E-03
278552	11/25/2013 - 12/2/2013	Beta	2.50E-02	1.51E-03	2.90E-03
278679	12/2/2013 - 12/9/2013	Beta	1.64E-02	1.38E-03	3.17E-03
278952	12/9/2013 - 12/16/2013	Beta	2.63E-02	1.61E-03	3.17E-03
279598	12/16/2013 - 12/23/2013	Beta	1.52E-02	1.36E-03	3.23E-03
280076	12/23/2013 - 12/30/2013	Beta	1.58E-02	1.38E-03	3.25E-03
280601	9/30/2013 - 12/30/2013	Cs-134	<5.91E-04	0.00E+00	5.91E-04
		Cs-137	<7.31E-04	0.00E+00	7.31E-04
		Be-7	1.36E-01	7.88E-03	9.76E-03
		K-40	2.29E-02	4.15E-03	6.15E-03

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250419	12/31/2012 - 1/7/2013	Beta	2.86E-02	1.59E-03	2.95E-03
250549	1/7/2013 - 1/14/2013	Beta	2.37E-02	1.51E-03	2.96E-03
250718	1/14/2013 - 1/21/2013	Beta	7.37E-03	1.16E-03	3.21E-03
250966	1/21/2013 - 1/28/2013	Beta	2.69E-02	1.60E-03	3.17E-03
251252	1/28/2013 - 2/4/2013	Beta	2.25E-02	1.50E-03	3.13E-03
251582	2/4/2013 - 2/11/2013	Beta	1.85E-02	1.49E-03	3.45E-03
252048	2/11/2013 - 2/18/2013	Beta	1.80E-02	1.39E-03	3.03E-03
252663	2/18/2013 - 2/25/2013	Beta	1.58E-02	1.38E-03	3.27E-03
253051	2/25/2013 - 3/4/2013	Beta	1.22E-02	1.23E-03	3.04E-03
253859	3/4/2013 - 3/11/2013	Beta	1.56E-02	1.40E-03	3.33E-03



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
254181	3/11/2013 - 3/18/2013	Beta	2.58E-02	1.55E-03	2.96E-03
254716	3/18/2013 - 3/25/2013	Beta	2.02E-02	1.42E-03	2.88E-03
255276	3/25/2013 - 4/1/2013	Beta	1.42E-02	1.29E-03	3.04E-03
255805	4/1/2013 - 4/8/2013	Beta	2.36E-02	1.57E-03	3.30E-03
256039	4/8/2013 - 4/15/2013	Beta	1.86E-02	1.42E-03	3.08E-03
256307	4/15/2013 - 4/22/2013	Beta	1.52E-02	1.40E-03	3.39E-03
256422	12/31/2012 - 4/1/2013	I-131	<2.12E-02	0.00E+00	2.12E-02
		Cs-134	<2.49E-04	0.00E+00	2.49E-04
		Cs-137	<2.16E-04	0.00E+00	2.16E-04
		Be-7	1.52E-01	5.16E-03	3.89E-03
		K-40	1.22E-02	2.10E-03	2.96E-03
256574	4/22/2013 - 4/29/2013	Beta	1.59E-02	1.33E-03	3.05E-03
257097	4/29/2013 - 5/6/2013	Beta	1.02E-02	1.21E-03	3.08E-03
257250	5/6/2013 - 5/13/2013	Beta	1.48E-02	1.34E-03	3.17E-03
257697	5/13/2013 - 5/20/2013	Beta	3.14E-02	1.71E-03	3.23E-03
257941	5/20/2013 - 5/28/2013	Beta	2.07E-02	1.32E-03	2.69E-03
258176	5/28/2013 - 6/3/2013	Beta	1.72E-02	1.59E-03	3.81E-03
258523	6/3/2013 - 6/10/2013	Beta	1.31E-02	1.28E-03	3.07E-03
258993	6/10/2013 - 6/17/2013	Beta	1.69E-02	1.38E-03	3.13E-03
259541	6/17/2013 - 6/24/2013	Beta	1.52E-02	1.33E-03	3.10E-03
260175	6/24/2013 - 7/1/2013	Beta	1.61E-02	1.39E-03	3.25E-03
260635	7/1/2013 - 7/8/2013	Beta	7.06E-03	1.12E-03	3.10E-03
261598	7/8/2013 - 7/15/2013	Beta	1.11E-02	1.23E-03	3.10E-03
262100	7/15/2013 - 7/22/2013	Beta	1.39E-02	1.27E-03	2.95E-03
262657	4/1/2013 - 7/1/2013	I-131	<2.11E-02	0.00E+00	2.11E-02
		Cs-134	<2.22E-04	0.00E+00	2.22E-04
		Cs-137	<2.79E-04	0.00E+00	2.79E-04
		Be-7	1.69E-01	5.44E-03	4.03E-03
		K-40	1.32E-02	1.99E-03	2.69E-03
262934	7/22/2013 - 7/29/2013	Beta	1.90E-02	1.47E-03	3.32E-03
263343	7/29/2013 - 8/5/2013	Beta	2.69E-02	1.62E-03	3.25E-03



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID	Sample Dates	Nuclide	Activity	1 Sigma Error	LLD
264001	8/5/2013 - 8/12/2013	Beta	2.09E-02	1.48E-03	3.15E-03
265132	8/12/2013 - 8/19/2013	Beta	1.46E-02	1.32E-03	3.13E-03
265441	8/19/2013 - 8/26/2013	Beta	1.38E-02	1.39E-03	3.49E-03
267127	8/26/2013 - 9/3/2013	Beta	3.31E-02	1.61E-03	2.88E-03
267577	9/3/2013 - 9/9/2013	Beta	3.88E-02	1.94E-03	3.28E-03
268431	9/9/2013 - 9/16/2013	Beta	3.46E-02	1.78E-03	3.31E-03
269553	9/16/2013 - 9/23/2013	Beta	2.70E-02	1.61E-03	3.12E-03
270698	9/23/2013 - 9/30/2013	Beta	2.04E-02	1.48E-03	3.17E-03
271423	9/30/2013 - 10/7/2013	Beta	3.37E-02	1.69E-03	2.89E-03
272030	10/7/2013 - 10/14/2013	Beta	9.97E-03	1.19E-03	3.10E-03
272413	10/14/2013 - 10/21/2013	Beta	2.50E-02	1.60E-03	3.33E-03
272528	7/1/2013 - 9/30/2013	I-131	<2.52E-02	0.00E+00	2.52E-02
		Cs-134	<2.63E-04	0.00E+00	2.63E-04
		Cs-137	<2.88E-04	0.00E+00	2.88E-04
		Be-7	1.17E-01	5.30E-03	3.41E-03
		K-40	1.06E-02	1.80E-03	8.21E-04
272814	10/21/2013 - 10/28/2013	Beta	3.13E-02	1.71E-03	3.20E-03
273906	10/28/2013 - 11/4/2013	Beta	3.43E-02	1.72E-03	2.94E-03
274353	11/4/2013 - 11/11/2013	Beta	2.04E-02	1.42E-03	3.00E-03
274867	11/11/2013 - 11/18/2013	Beta	2.19E-02	1.50E-03	3.06E-03
276421	11/18/2013 - 11/25/2013	Beta	2.04E-02	1.46E-03	3.12E-03
278553	11/25/2013 - 12/2/2013	Beta	2.21E-02	1.45E-03	2.91E-03
278680	12/2/2013 - 12/9/2013	Beta	1.71E-02	1.39E-03	3.16E-03
278953	12/9/2013 - 12/16/2013	Beta	2.68E-02	1.62E-03	3.17E-03
279599	12/16/2013 - 12/23/2013	Beta	1.58E-02	1.38E-03	3.23E-03
280077	12/23/2013 - 12/30/2013	Beta	2.00E-02	1.47E-03	3.25E-03
280602	9/30/2013 - 12/30/2013	Cs-134	<3.18E-04	0.00E+00	3.18E-04
		Cs-137	<3.22E-04	0.00E+00	3.22E-04
		Be-7	1.27E-01	6.31E-03	5.17E-03
		K-40	1.18E-02	1.90E-03	3.37E-03



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 133 [INDICATOR - ENE @ 6.23 miles]

Sample ID	Sample Dates	Nuclide	Activity	1 Sigma Error	LLD
250420	12/31/2012 - 1/7/2013	Beta	2.31E-02	1.49E-03	2.99E-03
250550	1/7/2013 - 1/14/2013	Beta	2.42E-02	1.52E-03	2.93E-03
250719	1/14/2013 - 1/21/2013	Beta	9.29E-03	1.21E-03	3.23E-03
250967	1/21/2013 - 1/28/2013	Beta	2.64E-02	1.59E-03	3.16E-03
251253	1/28/2013 - 2/4/2013	Beta	2.15E-02	1.49E-03	3.18E-03
251583	2/4/2013 - 2/11/2013	Beta	1.60E-02	1.41E-03	3.38E-03
252049	2/11/2013 - 2/18/2013	Beta	1.40E-02	1.29E-03	3.04E-03
252664	2/18/2013 - 2/25/2013	Beta	1.81E-02	1.43E-03	3.26E-03
253052	2/25/2013 - 3/4/2013	Beta	1.03E-02	1.20E-03	3.09E-03
253860	3/4/2013 - 3/11/2013	Beta	1.08E-02	1.26E-03	3.27E-03
254182	3/11/2013 - 3/18/2013	Beta	2.19E-02	1.46E-03	2.96E-03
254717	3/18/2013 - 3/25/2013	Beta	1.75E-02	1.35E-03	2.88E-03
255277	3/25/2013 - 4/1/2013	Beta	1.28E-02	1.27E-03	3.08E-03
255806	4/1/2013 - 4/8/2013	Beta	1.93E-02	1.46E-03	3.25E-03
256040	4/8/2013 - 4/15/2013	Beta	1.49E-02	1.33E-03	3.08E-03
256308	4/15/2013 - 4/22/2013	Beta	1.35E-02	1.35E-03	3.37E-03
256423	12/31/2012 - 4/1/2013	I-131	<2.62E-02	0.00E+00	2.62E-02
		Cs-134	<2.64E-04	0.00E+00	2.64E-04
		Cs-137	<3.58E-04	0.00E+00	3.58E-04
		Be-7	1.32E-01	5.40E-03	4.88E-03
		K-40	2.20E-02	2.81E-03	4.47E-03
256575	4/22/2013 - 4/29/2013	Beta	1.49E-02	1.32E-03	3.10E-03
257098	4/29/2013 - 5/6/2013	Beta	8.38E-03	1.14E-03	3.02E-03
257251	5/6/2013 - 5/13/2013	Beta	1.46E-02	1.33E-03	3.18E-03
257698	5/13/2013 - 5/20/2013	Beta	2.63E-02	1.61E-03	3.23E-03
257942	5/20/2013 - 5/28/2013	Beta	1.88E-02	1.29E-03	2.73E-03
258177	5/28/2013 - 6/3/2013	Beta	1.28E-02	1.46E-03	3.73E-03
258524	6/3/2013 - 6/10/2013	Beta	1.28E-02	1.27E-03	3.08E-03



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 133 [INDICATOR - ENE @ 6.23 miles]

Sample ID	Sample Dates	Nuclide	Activity	1 Sigma Error	LLD
258994	6/10/2013 - 6/17/2013	Beta	1.77E-02	1.40E-03	3.14E-03
259542	6/17/2013 - 6/24/2013	Beta	1.09E-02	1.23E-03	3.13E-03
260176	6/24/2013 - 7/1/2013	Beta	1.61E-02	1.38E-03	3.20E-03
260636	7/1/2013 - 7/8/2013	Beta	8.73E-03	1.17E-03	3.10E-03
261599	7/8/2013 - 7/15/2013	Beta	6.86E-03	1.11E-03	3.11E-03
262101	7/15/2013 - 7/22/2013	Beta	1.44E-02	1.29E-03	2.99E-03
262658	4/1/2013 - 7/1/2013	I-131	<2.99E-02	0.00E+00	2.99E-02
		Cs-134	<3.50E-04	0.00E+00	3.50E-04
		Cs-137	<3.67E-04	0.00E+00	3.67E-04
		Be-7	1.51E-01	5.61E-03	4.35E-03
		K-40	2.25E-02	2.75E-03	3.31E-03
262935	7/22/2013 - 7/29/2013	Beta	1.59E-02	1.39E-03	3.27E-03
263344	7/29/2013 - 8/5/2013	Beta	2.43E-02	1.57E-03	3.25E-03
264002	8/5/2013 - 8/12/2013	Beta	1.97E-02	1.45E-03	3.15E-03
265133	8/12/2013 - 8/19/2013	Beta	1.27E-02	1.28E-03	3.17E-03
265442	8/19/2013 - 8/26/2013	Beta	1.22E-02	1.34E-03	3.45E-03
267128	8/26/2013 - 9/3/2013	Beta	2.56E-02	1.47E-03	2.87E-03
267578	9/3/2013 - 9/9/2013	Beta	3.22E-02	1.83E-03	3.35E-03
268432	9/9/2013 - 9/16/2013	Beta	3.30E-02	1.75E-03	3.31E-03
269554	9/16/2013 - 9/23/2013	Beta	2.50E-02	1.55E-03	3.06E-03
270699	9/23/2013 - 9/30/2013	Beta	2.01E-02	1.47E-03	3.17E-03
271424	9/30/2013 - 10/7/2013	Beta	2.76E-02	1.57E-03	2.89E-03
272031	10/7/2013 - 10/14/2013	Beta	1.02E-02	1.22E-03	3.15E-03
272414	10/14/2013 - 10/21/2013	Beta	2.30E-02	1.55E-03	3.30E-03
272529	7/1/2013 - 9/30/2013	I-131	<1.94E-02	0.00E+00	1.94E-02
		Cs-134	<2.50E-04	0.00E+00	2.50E-04
		Cs-137	<2.49E-04	0.00E+00	2.49E-04
		Be-7	1.24E-01	4.55E-03	3.52E-03
		K-40	1.19E-02	1.59E-03	3.72E-03
272815	10/21/2013 - 10/28/2013	Beta	2.72E-02	1.61E-03	3.15E-03
273907	10/28/2013 - 11/4/2013	Beta	3.25E-02	1.68E-03	2.93E-03



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 133 [INDICATOR - ENE @ 6.23 miles]

Sample ID	Sample Dates	Nuclide	Activity	1 Sigma Error	LLD
274354	11/4/2013 - 11/11/2013	Beta	1.97E-02	1.42E-03	3.03E-03
274868	11/11/2013 - 11/18/2013	Beta	1.64E-02	1.36E-03	3.01E-03
276422	11/18/2013 - 11/25/2013	Beta	1.45E-02	1.32E-03	3.11E-03
278554	11/25/2013 - 12/2/2013	Beta	2.05E-02	1.42E-03	2.91E-03
278681	12/2/2013 - 12/9/2013	Beta	1.75E-02	1.40E-03	3.16E-03
278954	12/9/2013 - 12/16/2013	Beta	2.50E-02	1.58E-03	3.17E-03
279600	12/16/2013 - 12/23/2013	Beta	1.13E-02	1.26E-03	3.22E-03
280078	12/23/2013 - 12/30/2013	Beta	1.84E-02	1.44E-03	3.25E-03
280603	9/30/2013 - 12/30/2013	Cs-134	<3.91E-04	0.00E+00	3.91E-04
		Cs-137	<3.78E-04	0.00E+00	3.78E-04
		Be-7	1.08E-01	6.31E-03	5.02E-03
		K-40	1.09E-02	2.83E-03	4.65E-03

Sample Point 195 [INDICATOR - N @ 0.19 miles]

Sample ID	Sample Dates	Nuclide	Activity	1 Sigma Error	LLD
250422	12/31/2012 - 1/7/2013	Beta	3.21E-02	1.66E-03	2.95E-03
250552	1/7/2013 - 1/14/2013	Beta	2.47E-02	1.54E-03	2.97E-03
250721	1/14/2013 - 1/21/2013	Beta	1.02E-02	1.23E-03	3.21E-03
250969	1/21/2013 - 1/28/2013	Beta	2.71E-02	1.61E-03	3.16E-03
251255	1/28/2013 - 2/4/2013	Beta	2.36E-02	1.51E-03	3.10E-03
251585	2/4/2013 - 2/11/2013	Beta	1.91E-02	1.51E-03	3.48E-03
252051	2/11/2013 - 2/18/2013	Beta	1.66E-02	1.35E-03	3.02E-03
252666	2/18/2013 - 2/25/2013	Beta	1.70E-02	1.41E-03	3.26E-03
253054	2/25/2013 - 3/4/2013	Beta	1.12E-02	1.21E-03	3.04E-03
253862	3/4/2013 - 3/11/2013	Beta	1.26E-02	1.33E-03	3.34E-03
254184	3/11/2013 - 3/18/2013	Beta	2.25E-02	1.48E-03	2.96E-03
254719	3/18/2013 - 3/25/2013	Beta	1.69E-02	1.34E-03	2.88E-03
255279	3/25/2013 - 4/1/2013	Beta	1.46E-02	1.30E-03	3.03E-03
255808	4/1/2013 - 4/8/2013	Beta	2.33E-02	1.57E-03	3.30E-03
256042	4/8/2013 - 4/15/2013	Beta	1.67E-02	1.35E-03	3.02E-03



MCQUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m³

Sample Point 195 [INDICATOR - N @ 0.19 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
256310	4/15/2013 - 4/22/2013	Beta	1.74E-02	1.45E-03	3.40E-03
256424	12/31/2012 - 4/1/2013	I-131	<5.77E-02	0.00E+00	5.77E-02
		Cs-134	<8.23E-04	0.00E+00	8.23E-04
		Cs-137	<8.81E-04	0.00E+00	8.81E-04
		Be-7	<1.24E-02	0.00E+00	1.24E-02
		K-40	8.71E-03	4.18E-03	7.82E-03
256577	4/22/2013 - 4/29/2013	Beta	1.92E-02	1.40E-03	3.03E-03
257100	4/29/2013 - 5/6/2013	Beta	8.35E-03	1.16E-03	3.09E-03
257253	5/6/2013 - 5/13/2013	Beta	1.42E-02	1.32E-03	3.17E-03
257700	5/13/2013 - 5/20/2013	Beta	3.03E-02	1.69E-03	3.23E-03
257944	5/20/2013 - 5/28/2013	Beta	1.76E-02	1.25E-03	2.69E-03
258179	5/28/2013 - 6/3/2013	Beta	1.61E-02	1.57E-03	3.81E-03
258526	6/3/2013 - 6/10/2013	Beta	1.51E-02	1.33E-03	3.07E-03
258996	6/10/2013 - 6/17/2013	Beta	1.72E-02	1.39E-03	3.14E-03
259544	6/17/2013 - 6/24/2013	Beta	1.34E-02	1.28E-03	3.09E-03
260178	6/24/2013 - 7/1/2013	Beta	1.75E-02	1.43E-03	3.26E-03
260638	7/1/2013 - 7/8/2013	Beta	6.43E-03	1.10E-03	3.10E-03
261601	7/8/2013 - 7/15/2013	Beta	8.50E-03	1.16E-03	3.10E-03
262103	7/15/2013 - 7/22/2013	Beta	1.44E-02	1.28E-03	2.94E-03
262659	4/1/2013 - 7/1/2013	I-131	<2.41E-02	0.00E+00	2.41E-02
		Cs-134	<2.55E-04	0.00E+00	2.55E-04
		Cs-137	<2.82E-04	0.00E+00	2.82E-04
		Be-7	1.66E-01	5.52E-03	3.73E-03
		K-40	9.59E-03	2.10E-03	2.93E-03
262937	7/22/2013 - 7/29/2013	Beta	1.84E-02	1.46E-03	3.32E-03
263346	7/29/2013 - 8/5/2013	Beta	2.71E-02	1.62E-03	3.25E-03
264004	8/5/2013 - 8/12/2013	Beta	1.94E-02	1.44E-03	3.15E-03
265135	8/12/2013 - 8/19/2013	Beta	1.21E-02	1.26E-03	3.12E-03
265444	8/19/2013 - 8/26/2013	Beta	1.18E-02	1.34E-03	3.49E-03
267130	8/26/2013 - 9/3/2013	Beta	2.79E-02	1.51E-03	2.88E-03
267580	9/3/2013 - 9/9/2013	Beta	3.56E-02	1.88E-03	3.30E-03



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR PARTICULATE Concentration (Activity): pCi/m3

Sample Point 196 [INDICATOR - N @ 0.19 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
268434	9/9/2013 - 9/16/2013	Beta	3.10E-02	1.70E-03	3.28E-03
269556	9/16/2013 - 9/23/2013	Beta	2.66E-02	1.60E-03	3.12E-03
270701	9/23/2013 - 9/30/2013	Beta	2.10E-02	1.49E-03	3.18E-03
271426	9/30/2013 - 10/7/2013	Beta	3.26E-02	1.67E-03	2.89E-03
272033	10/7/2013 - 10/14/2013	Beta	1.09E-02	1.22E-03	3.09E-03
272416	10/14/2013 - 10/21/2013	Beta	2.29E-02	1.55E-03	3.31E-03
272530	7/1/2013 - 9/30/2013	I-131	<2.55E-02	0.00E+00	2.55E-02
		Cs-134	<2.64E-04	0.00E+00	2.64E-04
		Cs-137	<2.99E-04	0.00E+00	2.99E-04
		Be-7	1.30E-01	4.86E-03	3.92E-03
		K-40	2.42E-02	2.77E-03	3.53E-03
272817	10/21/2013 - 10/28/2013	Beta	2.87E-02	1.66E-03	3.20E-03
273909	10/28/2013 - 11/4/2013	Beta	2.85E-02	1.60E-03	2.93E-03
274356	11/4/2013 - 11/11/2013	Beta	1.92E-02	1.39E-03	2.96E-03
274870	11/11/2013 - 11/18/2013	Beta	2.09E-02	1.49E-03	3.08E-03
276424	11/18/2013 - 11/25/2013	Beta	2.03E-02	1.46E-03	3.11E-03
278555	11/25/2013 - 12/2/2013	Beta	2.40E-02	1.49E-03	2.90E-03
278683	12/2/2013 - 12/9/2013	Beta	2.07E-02	1.48E-03	3.17E-03
278956	12/9/2013 - 12/16/2013	Beta	2.93E-02	1.67E-03	3.17E-03
279602	12/16/2013 - 12/23/2013	Beta	1.86E-02	1.44E-03	3.23E-03
280080	12/23/2013 - 12/30/2013	Beta	1.34E-02	1.32E-03	3.25E-03
280604	9/30/2013 - 12/30/2013	Cs-134	<3.24E-04	0.00E+00	3.24E-04
		Cs-137	<3.66E-04	0.00E+00	3.66E-04
		Be-7	1.22E-01	6.89E-03	6.37E-03
		K-40	1.10E-02	2.39E-03	3.47E-03

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250423	12/31/2012 - 1/7/2013	I-131	<1.30E-02	0.00E+00	1.30E-02
		Cs-134	<6.99E-03	0.00E+00	6.99E-03
		Cs-137	<1.40E-02	0.00E+00	1.40E-02
		Be-7	<8.03E-02	0.00E+00	8.03E-02
		K-40	5.68E-01	8.76E-02	1.03E-01
250553	1/7/2013 - 1/14/2013	I-131	<1.26E-02	0.00E+00	1.26E-02
		Cs-134	<1.58E-02	0.00E+00	1.58E-02
		Cs-137	<1.39E-02	0.00E+00	1.39E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m³

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250553	1/7/2013 - 1/14/2013	K-40	3.84E-01	9.60E-02	1.78E-01
250722	1/14/2013 - 1/21/2013	I-131	<1.13E-02	0.00E+00	1.13E-02
		Cs-134	<9.82E-03	0.00E+00	9.82E-03
		Cs-137	<8.09E-03	0.00E+00	8.09E-03
		Be-7	<5.82E-02	0.00E+00	5.82E-02
		K-40	4.16E-01	1.13E-01	1.58E-01
250970	1/21/2013 - 1/28/2013	I-131	<1.16E-02	0.00E+00	1.16E-02
		Cs-134	<9.91E-03	0.00E+00	9.91E-03
		Cs-137	<6.96E-03	0.00E+00	6.96E-03
		Be-7	<5.21E-02	0.00E+00	5.21E-02
		K-40	<4.10E-01	0.00E+00	4.10E-01
251256	1/28/2013 - 2/4/2013	I-131	<1.52E-02	0.00E+00	1.52E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<9.92E-02	0.00E+00	9.92E-02
		K-40	<5.08E-01	0.00E+00	5.08E-01
251586	2/4/2013 - 2/11/2013	I-131	<1.34E-02	0.00E+00	1.34E-02
		Cs-134	<1.16E-02	0.00E+00	1.16E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<9.95E-02	0.00E+00	9.95E-02
		K-40	5.00E-01	8.46E-02	1.05E-01
252052	2/11/2013 - 2/18/2013	I-131	<1.99E-02	0.00E+00	1.99E-02
		Cs-134	<1.18E-02	0.00E+00	1.18E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<9.13E-02	0.00E+00	9.13E-02
		K-40	5.08E-01	1.11E-01	2.16E-01
252667	2/18/2013 - 2/25/2013	I-131	<1.27E-02	0.00E+00	1.27E-02
		Cs-134	<9.21E-03	0.00E+00	9.21E-03
		Cs-137	<1.04E-02	0.00E+00	1.04E-02
		Be-7	<6.87E-02	0.00E+00	6.87E-02
		K-40	<2.60E-01	0.00E+00	2.60E-01
253055	2/25/2013 - 3/4/2013	I-131	<1.60E-02	0.00E+00	1.60E-02
		Cs-134	<9.99E-03	0.00E+00	9.99E-03
		Cs-137	<1.44E-02	0.00E+00	1.44E-02
		Be-7	<8.98E-02	0.00E+00	8.98E-02
		K-40	6.76E-01	9.56E-02	1.22E-01
253863	3/4/2013 - 3/11/2013	I-131	<1.03E-02	0.00E+00	1.03E-02
		Cs-134	<1.13E-02	0.00E+00	1.13E-02
		Cs-137	<1.00E-02	0.00E+00	1.00E-02
		Be-7	<5.15E-02	0.00E+00	5.15E-02
		K-40	2.49E-01	9.42E-02	1.51E-01
254185	3/11/2013 - 3/18/2013	I-131	<1.30E-02	0.00E+00	1.30E-02
		Cs-134	<1.19E-02	0.00E+00	1.19E-02
		Cs-137	<1.86E-02	0.00E+00	1.86E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	3.18E-01	1.25E-01	2.19E-01
254720	3/18/2013 - 3/25/2013	I-131	<2.83E-02	0.00E+00	2.83E-02
		Cs-134	<1.30E-02	0.00E+00	1.30E-02
		Cs-137	<1.47E-02	0.00E+00	1.47E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	4.72E-01	1.06E-01	3.05E-01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
255280	3/25/2013 - 4/1/2013	I-131	<1.38E-02	0.00E+00	1.38E-02
		Cs-134	<1.08E-02	0.00E+00	1.08E-02
		Cs-137	<1.31E-02	0.00E+00	1.31E-02
		Be-7	<7.49E-02	0.00E+00	7.49E-02
		K-40	5.02E-01	8.25E-02	3.67E-02
255809	4/1/2013 - 4/8/2013	I-131	<1.91E-02	0.00E+00	1.91E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<1.69E-02	0.00E+00	1.69E-02
		Be-7	<1.25E-01	0.00E+00	1.25E-01
		K-40	2.59E-01	7.81E-02	6.37E-02
256043	4/8/2013 - 4/15/2013	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<9.45E-03	0.00E+00	9.45E-03
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<9.44E-02	0.00E+00	9.44E-02
		K-40	3.61E-01	1.41E-01	3.06E-01
256311	4/15/2013 - 4/22/2013	I-131	<1.73E-02	0.00E+00	1.73E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<9.43E-02	0.00E+00	9.43E-02
		K-40	<4.90E-01	0.00E+00	4.90E-01
256578	4/22/2013 - 4/29/2013	I-131	<1.26E-02	0.00E+00	1.26E-02
		Cs-134	<1.10E-02	0.00E+00	1.10E-02
		Cs-137	<1.16E-02	0.00E+00	1.16E-02
		Be-7	<9.27E-02	0.00E+00	9.27E-02
		K-40	3.68E-01	8.68E-02	5.53E-02
257101	4/29/2013 - 5/6/2013	I-131	<1.05E-02	0.00E+00	1.05E-02
		Cs-134	<7.65E-03	0.00E+00	7.65E-03
		Cs-137	<8.77E-03	0.00E+00	8.77E-03
		Be-7	<9.53E-02	0.00E+00	9.53E-02
		K-40	5.80E-01	8.47E-02	8.99E-02
257254	5/6/2013 - 5/13/2013	I-131	<1.45E-02	0.00E+00	1.45E-02
		Cs-134	<9.43E-03	0.00E+00	9.43E-03
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	3.40E-01	9.08E-02	1.76E-01
257701	5/13/2013 - 5/20/2013	I-131	<1.22E-02	0.00E+00	1.22E-02
		Cs-134	<9.92E-03	0.00E+00	9.92E-03
		Cs-137	<8.92E-03	0.00E+00	8.92E-03
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	4.57E-01	1.23E-01	2.00E-01
257945	5/20/2013 - 5/28/2013	I-131	<1.39E-02	0.00E+00	1.39E-02
		Cs-134	<1.08E-02	0.00E+00	1.08E-02
		Cs-137	<1.21E-02	0.00E+00	1.21E-02
		Be-7	<5.59E-02	0.00E+00	5.59E-02
		K-40	4.01E-01	7.08E-02	3.38E-02
258180	5/28/2013 - 6/3/2013	I-131	<2.64E-02	0.00E+00	2.64E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<2.38E-02	0.00E+00	2.38E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	5.00E-01	1.29E-01	3.04E-01
258527	6/3/2013 - 6/10/2013	I-131	<1.75E-02	0.00E+00	1.75E-02

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
258527	6/3/2013 - 6/10/2013	Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	<6.58E-01	0.00E+00	6.58E-01
258997	6/10/2013 - 6/17/2013	I-131	<2.32E-02	0.00E+00	2.32E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.86E-02	0.00E+00	1.86E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	3.98E-01	1.06E-01	7.69E-02
259545	6/17/2013 - 6/24/2013	I-131	<2.04E-02	0.00E+00	2.04E-02
		Cs-134	<1.42E-02	0.00E+00	1.42E-02
		Cs-137	<1.46E-02	0.00E+00	1.46E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	<5.75E-01	0.00E+00	5.75E-01
260179	6/24/2013 - 7/1/2013	I-131	<2.41E-02	0.00E+00	2.41E-02
		Cs-134	<1.38E-02	0.00E+00	1.38E-02
		Cs-137	<1.46E-02	0.00E+00	1.46E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	<4.75E-01	0.00E+00	4.75E-01
260639	7/1/2013 - 7/8/2013	I-131	<1.90E-02	0.00E+00	1.90E-02
		Cs-134	<2.04E-02	0.00E+00	2.04E-02
		Cs-137	<2.03E-02	0.00E+00	2.03E-02
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	<4.65E-01	0.00E+00	4.65E-01
261602	7/8/2013 - 7/15/2013	I-131	<2.13E-02	0.00E+00	2.13E-02
		Cs-134	<1.55E-02	0.00E+00	1.55E-02
		Cs-137	<1.84E-02	0.00E+00	1.84E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	5.11E-01	1.20E-01	7.68E-02
262104	7/15/2013 - 7/22/2013	I-131	<1.37E-02	0.00E+00	1.37E-02
		Cs-134	<9.98E-03	0.00E+00	9.98E-03
		Cs-137	<1.28E-02	0.00E+00	1.28E-02
		Be-7	<8.16E-02	0.00E+00	8.16E-02
		K-40	6.14E-01	1.01E-01	1.70E-01
262938	7/22/2013 - 7/29/2013	I-131	<1.21E-02	0.00E+00	1.21E-02
		Cs-134	<1.06E-02	0.00E+00	1.06E-02
		Cs-137	<1.03E-02	0.00E+00	1.03E-02
		Be-7	<8.03E-02	0.00E+00	8.03E-02
		K-40	6.87E-01	1.22E-01	1.83E-01
263347	7/29/2013 - 8/5/2013	I-131	<6.69E-03	0.00E+00	6.69E-03
		Cs-134	<1.27E-02	0.00E+00	1.27E-02
		Cs-137	<1.64E-02	0.00E+00	1.64E-02
		Be-7	<6.53E-02	0.00E+00	6.53E-02
		K-40	2.52E-01	9.74E-02	1.93E-01
264005	8/5/2013 - 8/12/2013	I-131	<1.87E-02	0.00E+00	1.87E-02
		Cs-134	<2.17E-02	0.00E+00	2.17E-02
		Cs-137	<2.63E-02	0.00E+00	2.63E-02
		Be-7	<1.09E-01	0.00E+00	1.09E-01
		K-40	4.98E-01	1.88E-01	3.16E-01
265136	8/12/2013 - 8/19/2013	I-131	<2.36E-02	0.00E+00	2.36E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID	Sample Dates	Nuclide	Activity	1 Sigma Error	LLD
265136	8/12/2013 - 8/19/2013	Cs-137	<2.19E-02	0.00E+00	2.19E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	7.45E-01	1.46E-01	7.74E-02
265445	8/19/2013 - 8/26/2013	I-131	<1.05E-02	0.00E+00	1.05E-02
		Cs-134	<1.01E-02	0.00E+00	1.01E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<9.55E-02	0.00E+00	9.55E-02
		K-40	4.51E-01	9.85E-02	1.92E-01
267131	8/26/2013 - 9/3/2013	I-131	<2.11E-02	0.00E+00	2.11E-02
		Cs-134	<1.26E-02	0.00E+00	1.26E-02
		Cs-137	<1.92E-02	0.00E+00	1.92E-02
		Be-7	<9.40E-02	0.00E+00	9.40E-02
		K-40	<3.97E-01	0.00E+00	3.97E-01
267581	9/3/2013 - 9/9/2013	I-131	<1.12E-02	0.00E+00	1.12E-02
		Cs-134	<1.47E-02	0.00E+00	1.47E-02
		Cs-137	<1.61E-02	0.00E+00	1.61E-02
		Be-7	<8.17E-02	0.00E+00	8.17E-02
		K-40	2.58E-01	9.99E-02	2.77E-01
268435	9/9/2013 - 9/16/2013	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<1.24E-02	0.00E+00	1.24E-02
		Cs-137	<2.52E-02	0.00E+00	2.52E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	5.76E-01	1.29E-01	7.78E-02
269557	9/16/2013 - 9/23/2013	I-131	<2.52E-02	0.00E+00	2.52E-02
		Cs-134	<1.90E-02	0.00E+00	1.90E-02
		Cs-137	<2.66E-02	0.00E+00	2.66E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	5.10E-01	1.20E-01	2.05E-01
270702	9/23/2013 - 9/30/2013	I-131	<2.52E-02	0.00E+00	2.52E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<2.04E-02	0.00E+00	2.04E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	<6.19E-01	0.00E+00	6.19E-01
271427	9/30/2013 - 10/7/2013	I-131	<2.03E-02	0.00E+00	2.03E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	<5.88E-01	0.00E+00	5.88E-01
272034	10/7/2013 - 10/14/2013	I-131	<2.61E-02	0.00E+00	2.61E-02
		Cs-134	<2.00E-02	0.00E+00	2.00E-02
		Cs-137	<1.16E-02	0.00E+00	1.16E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	3.44E-01	9.92E-02	7.74E-02
272417	10/14/2013 - 10/21/2013	I-131	<1.28E-02	0.00E+00	1.28E-02
		Cs-134	<1.05E-02	0.00E+00	1.05E-02
		Cs-137	<8.41E-03	0.00E+00	8.41E-03
		Be-7	<7.87E-02	0.00E+00	7.87E-02
		K-40	6.44E-01	8.76E-02	3.22E-02
272818	10/21/2013 - 10/28/2013	I-131	<1.83E-02	0.00E+00	1.83E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<2.22E-02	0.00E+00	2.22E-02

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
272818	10/21/2013 - 10/28/2013	Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	<5.76E-01	0.00E+00	5.76E-01
273910	10/28/2013 - 11/4/2013	Nuclide	Activity	1 Sigma Error	LLD
		I-131	<1.75E-02	0.00E+00	1.75E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<1.16E-02	0.00E+00	1.16E-02
		Be-7	<1.25E-01	0.00E+00	1.25E-01
274357	11/4/2013 - 11/11/2013	K-40	4.85E-01	1.18E-01	7.72E-02
		Nuclide	Activity	1 Sigma Error	LLD
		I-131	<1.87E-02	0.00E+00	1.87E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
274871	11/11/2013 - 11/18/2013	Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	<5.87E-01	0.00E+00	5.87E-01
		Nuclide	Activity	1 Sigma Error	LLD
		I-131	<1.45E-02	0.00E+00	1.45E-02
		Cs-134	<1.13E-02	0.00E+00	1.13E-02
276425	11/18/2013 - 11/25/2013	Cs-137	<8.69E-03	0.00E+00	8.69E-03
		Be-7	<8.42E-02	0.00E+00	8.42E-02
		K-40	2.74E-01	8.79E-02	1.39E-01
		Nuclide	Activity	1 Sigma Error	LLD
		I-131	<1.36E-02	0.00E+00	1.36E-02
278556	11/25/2013 - 12/2/2013	Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.46E-02	0.00E+00	1.46E-02
		Be-7	<9.96E-02	0.00E+00	9.96E-02
		K-40	2.12E-01	9.10E-02	2.46E-01
		Nuclide	Activity	1 Sigma Error	LLD
278684	12/2/2013 - 12/9/2013	I-131	<1.26E-02	0.00E+00	1.26E-02
		Cs-134	<6.43E-03	0.00E+00	6.43E-03
		Cs-137	<9.64E-03	0.00E+00	9.64E-03
		Be-7	<8.96E-02	0.00E+00	8.96E-02
		K-40	3.23E-01	9.74E-02	2.08E-01
278957	12/9/2013 - 12/16/2013	Nuclide	Activity	1 Sigma Error	LLD
		I-131	<2.42E-02	0.00E+00	2.42E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<9.25E-02	0.00E+00	9.25E-02
279603	12/16/2013 - 12/23/2013	K-40	<5.19E-01	0.00E+00	5.19E-01
		Nuclide	Activity	1 Sigma Error	LLD
		I-131	<1.98E-02	0.00E+00	1.98E-02
		Cs-134	<2.20E-02	0.00E+00	2.20E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
280081	12/23/2013 - 12/30/2013	Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	<5.17E-01	0.00E+00	5.17E-01
		Nuclide	Activity	1 Sigma Error	LLD
		I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<6.97E-03	0.00E+00	6.97E-03
279603	12/16/2013 - 12/23/2013	Cs-137	<6.97E-03	0.00E+00	6.97E-03
		Be-7	<5.81E-02	0.00E+00	5.81E-02
		K-40	3.38E-01	7.26E-02	1.10E-01
		Nuclide	Activity	1 Sigma Error	LLD
		I-131	<1.99E-02	0.00E+00	1.99E-02
280081	12/23/2013 - 12/30/2013	Cs-134	<2.44E-02	0.00E+00	2.44E-02
		Cs-137	<2.66E-02	0.00E+00	2.66E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	4.00E-01	1.07E-01	2.58E-01
		Nuclide	Activity	1 Sigma Error	LLD

Sample Point 103 [INDICATOR - NE @ 4.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250424	12/31/2012 - 1/7/2013	I-131	<8.91E-03	0.00E+00	8.91E-03
		Cs-134	<7.47E-03	0.00E+00	7.47E-03
		Cs-137	<3.24E-03	0.00E+00	3.24E-03



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 103 [INDICATOR - NE @ 4.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250424	12/31/2012 - 1/7/2013	Be-7	<8.25E-02	0.00E+00	8.25E-02
		K-40	<3.23E-01	0.00E+00	3.23E-01
250554	1/7/2013 - 1/14/2013	I-131	<1.22E-02	0.00E+00	1.22E-02
		Cs-134	<1.42E-02	0.00E+00	1.42E-02
		Cs-137	<1.65E-02	0.00E+00	1.65E-02
		Be-7	<8.56E-02	0.00E+00	8.56E-02
		K-40	<4.96E-01	0.00E+00	4.96E-01
250723	1/14/2013 - 1/21/2013	I-131	<1.50E-02	0.00E+00	1.50E-02
		Cs-134	<1.39E-02	0.00E+00	1.39E-02
		Cs-137	<1.31E-02	0.00E+00	1.31E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	3.49E-01	1.12E-01	2.56E-01
250971	1/21/2013 - 1/28/2013	I-131	<1.33E-02	0.00E+00	1.33E-02
		Cs-134	<1.19E-02	0.00E+00	1.19E-02
		Cs-137	<1.30E-02	0.00E+00	1.30E-02
		Be-7	<8.22E-02	0.00E+00	8.22E-02
		K-40	3.50E-01	8.75E-02	5.91E-02
251257	1/28/2013 - 2/4/2013	I-131	<9.53E-03	0.00E+00	9.53E-03
		Cs-134	<9.88E-03	0.00E+00	9.88E-03
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<5.02E-02	0.00E+00	5.02E-02
		K-40	3.48E-01	8.70E-02	5.88E-02
251587	2/4/2013 - 2/11/2013	I-131	<1.53E-02	0.00E+00	1.53E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	<4.51E-01	0.00E+00	4.51E-01
252053	2/11/2013 - 2/18/2013	I-131	<9.03E-03	0.00E+00	9.03E-03
		Cs-134	<7.56E-03	0.00E+00	7.56E-03
		Cs-137	<7.96E-03	0.00E+00	7.96E-03
		Be-7	<7.43E-02	0.00E+00	7.43E-02
		K-40	3.88E-01	7.33E-02	1.27E-01
252668	2/18/2013 - 2/25/2013	I-131	<1.59E-02	0.00E+00	1.59E-02
		Cs-134	<9.78E-03	0.00E+00	9.78E-03
		Cs-137	<1.16E-02	0.00E+00	1.16E-02
		Be-7	<6.76E-02	0.00E+00	6.76E-02
		K-40	<4.88E-01	0.00E+00	4.88E-01
253056	2/25/2013 - 3/4/2013	I-131	<1.41E-02	0.00E+00	1.41E-02
		Cs-134	<1.09E-02	0.00E+00	1.09E-02
		Cs-137	<1.44E-02	0.00E+00	1.44E-02
		Be-7	<2.14E-02	0.00E+00	2.14E-02
		K-40	3.04E-01	8.12E-02	1.85E-01
253864	3/4/2013 - 3/11/2013	I-131	<1.25E-02	0.00E+00	1.25E-02
		Cs-134	<1.15E-02	0.00E+00	1.15E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<9.34E-02	0.00E+00	9.34E-02
		K-40	4.48E-01	8.06E-02	1.26E-01
254186	3/11/2013 - 3/18/2013	I-131	<8.11E-03	0.00E+00	8.11E-03
		Cs-134	<1.12E-02	0.00E+00	1.12E-02
		Cs-137	<1.42E-02	0.00E+00	1.42E-02
		Be-7	<8.44E-02	0.00E+00	8.44E-02



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m³

Sample Point 103 [INDICATOR - NE @ 4.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
254186	3/11/2013 - 3/18/2013	K-40	3.90E-01	8.94E-02	1.52E-01
254721	3/18/2013 - 3/25/2013	I-131	<1.29E-02	0.00E+00	1.29E-02
		Cs-134	<1.34E-02	0.00E+00	1.34E-02
		Cs-137	<9.63E-03	0.00E+00	9.63E-03
		Be-7	<9.15E-02	0.00E+00	9.15E-02
		K-40	5.32E-01	9.51E-02	1.08E-01
255281	3/25/2013 - 4/1/2013	I-131	<9.54E-03	0.00E+00	9.54E-03
		Cs-134	<9.32E-03	0.00E+00	9.32E-03
		Cs-137	<1.10E-02	0.00E+00	1.10E-02
		Be-7	<5.99E-02	0.00E+00	5.99E-02
		K-40	4.53E-01	7.88E-02	1.25E-01
255810	4/1/2013 - 4/8/2013	I-131	<1.43E-02	0.00E+00	1.43E-02
		Cs-134	<1.14E-02	0.00E+00	1.14E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<9.67E-02	0.00E+00	9.67E-02
		K-40	3.11E-01	1.18E-01	1.74E-01
256044	4/8/2013 - 4/15/2013	I-131	<1.09E-02	0.00E+00	1.09E-02
		Cs-134	<1.00E-02	0.00E+00	1.00E-02
		Cs-137	<1.12E-02	0.00E+00	1.12E-02
		Be-7	<4.27E-02	0.00E+00	4.27E-02
		K-40	3.43E-01	8.02E-02	1.01E-01
256312	4/15/2013 - 4/22/2013	I-131	<1.53E-02	0.00E+00	1.53E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.30E-02	0.00E+00	1.30E-02
		Be-7	<9.83E-02	0.00E+00	9.83E-02
		K-40	<4.44E-01	0.00E+00	4.44E-01
256679	4/22/2013 - 4/29/2013	I-131	<1.13E-02	0.00E+00	1.13E-02
		Cs-134	<1.08E-02	0.00E+00	1.08E-02
		Cs-137	<1.20E-02	0.00E+00	1.20E-02
		Be-7	<9.53E-02	0.00E+00	9.53E-02
		K-40	2.70E-01	9.84E-02	1.70E-01
257102	4/29/2013 - 5/6/2013	I-131	<1.06E-02	0.00E+00	1.06E-02
		Cs-134	<1.08E-02	0.00E+00	1.08E-02
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
		Be-7	<8.83E-02	0.00E+00	8.83E-02
		K-40	2.42E-01	9.65E-02	1.52E-01
257255	5/6/2013 - 5/13/2013	I-131	<1.10E-02	0.00E+00	1.10E-02
		Cs-134	<9.89E-03	0.00E+00	9.89E-03
		Cs-137	<9.36E-03	0.00E+00	9.36E-03
		Be-7	<9.17E-02	0.00E+00	9.17E-02
		K-40	5.47E-01	8.25E-02	9.02E-02
257702	5/13/2013 - 5/20/2013	I-131	<1.10E-02	0.00E+00	1.10E-02
		Cs-134	<8.17E-03	0.00E+00	8.17E-03
		Cs-137	<9.80E-03	0.00E+00	9.80E-03
		Be-7	<8.54E-02	0.00E+00	8.54E-02
		K-40	5.68E-01	8.38E-02	3.34E-02
257946	5/20/2013 - 5/28/2013	I-131	<1.46E-02	0.00E+00	1.46E-02
		Cs-134	<6.25E-03	0.00E+00	6.25E-03
		Cs-137	<6.97E-03	0.00E+00	6.97E-03
		Be-7	<7.28E-02	0.00E+00	7.28E-02
		K-40	3.41E-01	7.11E-02	9.79E-02



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 103 [INDICATOR - NE @ 4.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
258181	5/28/2013 - 6/3/2013	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<1.99E-02	0.00E+00	1.99E-02
		Cs-137	<2.58E-02	0.00E+00	2.58E-02
		Be-7	<2.02E-01	0.00E+00	2.02E-01
		K-40	3.15E-01	1.54E-01	3.55E-01
258528	6/3/2013 - 6/10/2013	I-131	<2.06E-02	0.00E+00	2.06E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	<5.20E-01	0.00E+00	5.20E-01
258998	6/10/2013 - 6/17/2013	I-131	<2.19E-02	0.00E+00	2.19E-02
		Cs-134	<2.04E-02	0.00E+00	2.04E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	<6.38E-01	0.00E+00	6.38E-01
259546	6/17/2013 - 6/24/2013	I-131	<1.86E-02	0.00E+00	1.86E-02
		Cs-134	<1.89E-02	0.00E+00	1.89E-02
		Cs-137	<2.27E-02	0.00E+00	2.27E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	<5.51E-01	0.00E+00	5.51E-01
260180	6/24/2013 - 7/1/2013	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<1.24E-02	0.00E+00	1.24E-02
		Cs-137	<2.01E-02	0.00E+00	2.01E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	4.61E-01	1.15E-01	3.00E-01
260640	7/1/2013 - 7/8/2013	I-131	<1.47E-02	0.00E+00	1.47E-02
		Cs-134	<1.57E-02	0.00E+00	1.57E-02
		Cs-137	<2.38E-02	0.00E+00	2.38E-02
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	5.18E-01	1.22E-01	2.59E-01
261603	7/8/2013 - 7/15/2013	I-131	<1.25E-02	0.00E+00	1.25E-02
		Cs-134	<6.95E-03	0.00E+00	6.95E-03
		Cs-137	<1.10E-02	0.00E+00	1.10E-02
		Be-7	<9.14E-02	0.00E+00	9.14E-02
		K-40	3.04E-01	7.86E-02	1.50E-01
262105	7/15/2013 - 7/22/2013	I-131	<1.12E-02	0.00E+00	1.12E-02
		Cs-134	<1.14E-02	0.00E+00	1.14E-02
		Cs-137	<1.38E-02	0.00E+00	1.38E-02
		Be-7	<8.55E-02	0.00E+00	8.55E-02
		K-40	<3.56E-01	0.00E+00	3.56E-01
262939	7/22/2013 - 7/29/2013	I-131	<9.10E-03	0.00E+00	9.10E-03
		Cs-134	<1.02E-02	0.00E+00	1.02E-02
		Cs-137	<1.09E-02	0.00E+00	1.09E-02
		Be-7	<9.72E-02	0.00E+00	9.72E-02
		K-40	<3.27E-01	0.00E+00	3.27E-01
263348	7/29/2013 - 8/5/2013	I-131	<8.80E-03	0.00E+00	8.80E-03
		Cs-134	<6.76E-03	0.00E+00	6.76E-03
		Cs-137	<1.15E-02	0.00E+00	1.15E-02
		Be-7	<5.99E-02	0.00E+00	5.99E-02
		K-40	4.91E-01	9.22E-02	1.00E-01
264006	8/5/2013 - 8/12/2013	I-131	<1.98E-02	0.00E+00	1.98E-02

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 103 [INDICATOR - NE @ 4.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
264006	8/5/2013 - 8/12/2013	Cs-134	<1.23E-02	0.00E+00	1.23E-02
		Cs-137	<2.20E-02	0.00E+00	2.20E-02
		Be-7	<1.30E-01	0.00E+00	1.30E-01
		K-40	5.42E-01	1.24E-01	2.15E-01
265137	8/12/2013 - 8/19/2013	I-131	<1.93E-02	0.00E+00	1.93E-02
		Cs-134	<1.33E-02	0.00E+00	1.33E-02
		Cs-137	<2.42E-02	0.00E+00	2.42E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	4.40E-01	1.36E-01	3.00E-01
265446	8/19/2013 - 8/26/2013	I-131	<1.59E-02	0.00E+00	1.59E-02
		Cs-134	<2.12E-02	0.00E+00	2.12E-02
		Cs-137	<2.23E-02	0.00E+00	2.23E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	4.89E-01	1.18E-01	7.77E-02
267132	8/26/2013 - 9/3/2013	I-131	<1.60E-02	0.00E+00	1.60E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	4.25E-01	1.03E-01	6.76E-02
267582	9/3/2013 - 9/9/2013	I-131	<2.51E-02	0.00E+00	2.51E-02
		Cs-134	<1.65E-02	0.00E+00	1.65E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	5.35E-01	1.59E-01	8.97E-02
268436	9/9/2013 - 9/16/2013	I-131	<2.80E-03	0.00E+00	2.80E-03
		Cs-134	<7.22E-03	0.00E+00	7.22E-03
		Cs-137	<1.40E-02	0.00E+00	1.40E-02
		Be-7	<1.00E-01	0.00E+00	1.00E-01
		K-40	2.87E-01	9.64E-02	2.74E-01
269558	9/16/2013 - 9/23/2013	I-131	<2.32E-02	0.00E+00	2.32E-02
		Cs-134	<2.05E-02	0.00E+00	2.05E-02
		Cs-137	<1.70E-02	0.00E+00	1.70E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	3.72E-01	1.03E-01	7.74E-02
270703	9/23/2013 - 9/30/2013	I-131	<1.89E-02	0.00E+00	1.89E-02
		Cs-134	<1.89E-02	0.00E+00	1.89E-02
		Cs-137	<1.47E-02	0.00E+00	1.47E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	4.89E-01	1.18E-01	2.74E-01
271428	9/30/2013 - 10/7/2013	I-131	<2.19E-02	0.00E+00	2.19E-02
		Cs-134	<1.99E-02	0.00E+00	1.99E-02
		Cs-137	<2.54E-02	0.00E+00	2.54E-02
		Be-7	<1.26E-01	0.00E+00	1.26E-01
		K-40	<5.70E-01	0.00E+00	5.70E-01
272035	10/7/2013 - 10/14/2013	I-131	<1.51E-02	0.00E+00	1.51E-02
		Cs-134	<7.52E-03	0.00E+00	7.52E-03
		Cs-137	<1.87E-02	0.00E+00	1.87E-02
		Be-7	<6.04E-02	0.00E+00	6.04E-02
		K-40	3.50E-01	9.04E-02	6.31E-02
272418	10/14/2013 - 10/21/2013	I-131	<1.34E-02	0.00E+00	1.34E-02
		Cs-134	<1.58E-02	0.00E+00	1.58E-02



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 103 [INDICATOR - NE @ 4.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
272418	10/14/2013 - 10/21/2013	Cs-137	<1.39E-02	0.00E+00	1.39E-02
		Be-7	<7.38E-02	0.00E+00	7.38E-02
		K-40	2.82E-01	1.00E-01	1.80E-01
272819	10/21/2013 - 10/28/2013	I-131	<9.27E-03	0.00E+00	9.27E-03
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<8.77E-02	0.00E+00	8.77E-02
		K-40	5.67E-01	1.05E-01	1.46E-01
273911	10/28/2013 - 11/4/2013	I-131	<1.53E-02	0.00E+00	1.53E-02
		Cs-134	<9.74E-03	0.00E+00	9.74E-03
		Cs-137	<1.43E-02	0.00E+00	1.43E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	<4.96E-01	0.00E+00	4.96E-01
274358	11/4/2013 - 11/11/2013	I-131	<2.09E-02	0.00E+00	2.09E-02
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<1.77E-01	0.00E+00	1.77E-01
		K-40	4.76E-01	1.16E-01	7.57E-02
274872	11/11/2013 - 11/18/2013	I-131	<1.67E-02	0.00E+00	1.67E-02
		Cs-134	<1.56E-02	0.00E+00	1.56E-02
		Cs-137	<1.61E-02	0.00E+00	1.61E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	5.10E-01	1.32E-01	1.82E-01
276426	11/18/2013 - 11/25/2013	I-131	<2.17E-02	0.00E+00	2.17E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	5.71E-01	1.28E-01	2.06E-01
278557	11/25/2013 - 12/2/2013	I-131	<1.57E-02	0.00E+00	1.57E-02
		Cs-134	<1.19E-02	0.00E+00	1.19E-02
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
		Be-7	<9.01E-02	0.00E+00	9.01E-02
		K-40	5.14E-01	1.10E-01	6.32E-02
278685	12/2/2013 - 12/9/2013	I-131	<1.44E-02	0.00E+00	1.44E-02
		Cs-134	<1.28E-02	0.00E+00	1.28E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	<4.78E-01	0.00E+00	4.78E-01
278958	12/9/2013 - 12/16/2013	I-131	<2.17E-02	0.00E+00	2.17E-02
		Cs-134	<1.50E-02	0.00E+00	1.50E-02
		Cs-137	<1.94E-02	0.00E+00	1.94E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	4.32E-01	1.12E-01	7.78E-02
279604	12/16/2013 - 12/23/2013	I-131	<2.27E-02	0.00E+00	2.27E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<2.06E-02	0.00E+00	2.06E-02
		Be-7	<1.10E-01	0.00E+00	1.10E-01
		K-40	<4.96E-01	0.00E+00	4.96E-01
280082	12/23/2013 - 12/30/2013	I-131	<1.49E-02	0.00E+00	1.49E-02
		Cs-134	<1.19E-02	0.00E+00	1.19E-02
		Cs-137	<1.25E-02	0.00E+00	1.25E-02



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m³

Sample Point 103 [INDICATOR - NE @ 4.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
280082	12/23/2013 - 12/30/2013	Be-7	<6.59E-02	0.00E+00	6.59E-02
		K-40	<4.22E-01	0.00E+00	4.22E-01

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250425	12/31/2012 - 1/7/2013	I-131	<1.25E-02	0.00E+00	1.25E-02
		Cs-134	<9.98E-03	0.00E+00	9.98E-03
		Cs-137	<8.98E-03	0.00E+00	8.98E-03
		Be-7	<6.09E-02	0.00E+00	6.09E-02
		K-40	2.03E-01	6.19E-02	1.88E-01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250555	1/7/2013 - 1/14/2013	I-131	<7.79E-03	0.00E+00	7.79E-03
		Cs-134	<4.87E-03	0.00E+00	4.87E-03
		Cs-137	<7.73E-03	0.00E+00	7.73E-03
		Be-7	<4.91E-02	0.00E+00	4.91E-02
		K-40	3.66E-01	8.88E-02	5.82E-02

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250724	1/14/2013 - 1/21/2013	I-131	<1.48E-02	0.00E+00	1.48E-02
		Cs-134	<1.73E-02	0.00E+00	1.73E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<8.95E-02	0.00E+00	8.95E-02
		K-40	2.46E-01	1.09E-01	2.20E-01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250972	1/21/2013 - 1/28/2013	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<1.39E-02	0.00E+00	1.39E-02
		Cs-137	<9.21E-03	0.00E+00	9.21E-03
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	2.23E-01	1.25E-01	2.68E-01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
251258	1/28/2013 - 2/4/2013	I-131	<1.19E-02	0.00E+00	1.19E-02
		Cs-134	<8.64E-03	0.00E+00	8.64E-03
		Cs-137	<1.18E-02	0.00E+00	1.18E-02
		Be-7	<5.12E-02	0.00E+00	5.12E-02
		K-40	3.21E-01	6.56E-02	1.21E-01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
251588	2/4/2013 - 2/11/2013	I-131	<1.70E-02	0.00E+00	1.70E-02
		Cs-134	<1.55E-02	0.00E+00	1.55E-02
		Cs-137	<1.14E-02	0.00E+00	1.14E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	2.44E-01	9.62E-02	2.52E-01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
252054	2/11/2013 - 2/18/2013	I-131	<1.21E-02	0.00E+00	1.21E-02
		Cs-134	<1.10E-02	0.00E+00	1.10E-02
		Cs-137	<1.29E-02	0.00E+00	1.29E-02
		Be-7	<8.49E-02	0.00E+00	8.49E-02
		K-40	1.81E-01	1.01E-01	2.40E-01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
252669	2/18/2013 - 2/25/2013	I-131	<1.08E-02	0.00E+00	1.08E-02
		Cs-134	<1.22E-02	0.00E+00	1.22E-02
		Cs-137	<1.26E-02	0.00E+00	1.26E-02
		Be-7	<7.98E-02	0.00E+00	7.98E-02
		K-40	3.55E-01	7.72E-02	3.87E-02

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
253057	2/25/2013 - 3/4/2013	I-131	<1.04E-02	0.00E+00	1.04E-02
		Cs-134	<1.23E-02	0.00E+00	1.23E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<7.63E-02	0.00E+00	7.63E-02
		K-40	4.17E-01	7.61E-02	1.03E-01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
253865	3/4/2013 - 3/11/2013	I-131	<1.10E-02	0.00E+00	1.10E-02
		Cs-134	<9.86E-03	0.00E+00	9.86E-03
		Cs-137	<1.34E-02	0.00E+00	1.34E-02

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
253865	3/4/2013 - 3/11/2013	Be-7	<1.09E-01	0.00E+00	1.09E-01
		K-40	<5.20E-01	0.00E+00	5.20E-01
254187	3/11/2013 - 3/18/2013	I-131	<1.27E-02	0.00E+00	1.27E-02
		Cs-134	<9.50E-03	0.00E+00	9.50E-03
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<7.84E-02	0.00E+00	7.84E-02
		K-40	3.58E-01	7.17E-02	3.88E-02
254722	3/18/2013 - 3/25/2013	I-131	<1.04E-02	0.00E+00	1.04E-02
		Cs-134	<1.23E-02	0.00E+00	1.23E-02
		Cs-137	<1.46E-02	0.00E+00	1.46E-02
		Be-7	<9.42E-02	0.00E+00	9.42E-02
		K-40	<4.33E-01	0.00E+00	4.33E-01
255282	3/25/2013 - 4/1/2013	I-131	<1.34E-02	0.00E+00	1.34E-02
		Cs-134	<1.10E-02	0.00E+00	1.10E-02
		Cs-137	<1.42E-02	0.00E+00	1.42E-02
		Be-7	<8.07E-02	0.00E+00	8.07E-02
		K-40	4.05E-01	7.51E-02	1.03E-01
255811	4/1/2013 - 4/8/2013	I-131	<1.45E-02	0.00E+00	1.45E-02
		Cs-134	<7.00E-03	0.00E+00	7.00E-03
		Cs-137	<1.21E-02	0.00E+00	1.21E-02
		Be-7	<8.57E-02	0.00E+00	8.57E-02
		K-40	4.82E-01	9.99E-02	1.34E-01
256045	4/8/2013 - 4/15/2013	I-131	<1.33E-02	0.00E+00	1.33E-02
		Cs-134	<1.33E-02	0.00E+00	1.33E-02
		Cs-137	<1.11E-02	0.00E+00	1.11E-02
		Be-7	<5.78E-02	0.00E+00	5.78E-02
		K-40	<4.24E-01	0.00E+00	4.24E-01
256313	4/15/2013 - 4/22/2013	I-131	<1.16E-02	0.00E+00	1.16E-02
		Cs-134	<7.35E-03	0.00E+00	7.35E-03
		Cs-137	<8.40E-03	0.00E+00	8.40E-03
		Be-7	<6.79E-02	0.00E+00	6.79E-02
		K-40	4.12E-01	9.06E-02	1.49E-01
256580	4/22/2013 - 4/29/2013	I-131	<1.19E-02	0.00E+00	1.19E-02
		Cs-134	<1.01E-02	0.00E+00	1.01E-02
		Cs-137	<1.14E-02	0.00E+00	1.14E-02
		Be-7	<4.90E-02	0.00E+00	4.90E-02
		K-40	2.43E-01	5.72E-02	1.23E-01
257103	4/29/2013 - 5/6/2013	I-131	<1.36E-02	0.00E+00	1.36E-02
		Cs-134	<9.42E-03	0.00E+00	9.42E-03
		Cs-137	<1.06E-02	0.00E+00	1.06E-02
		Be-7	<9.31E-02	0.00E+00	9.31E-02
		K-40	4.57E-01	8.20E-02	1.63E-01
257256	5/6/2013 - 5/13/2013	I-131	<6.61E-03	0.00E+00	6.61E-03
		Cs-134	<1.20E-02	0.00E+00	1.20E-02
		Cs-137	<1.60E-02	0.00E+00	1.60E-02
		Be-7	<6.51E-02	0.00E+00	6.51E-02
		K-40	3.07E-01	7.93E-02	1.50E-01
257703	5/13/2013 - 5/20/2013	I-131	<1.01E-02	0.00E+00	1.01E-02
		Cs-134	<8.45E-03	0.00E+00	8.45E-03
		Cs-137	<1.16E-02	0.00E+00	1.16E-02
		Be-7	<1.12E-01	0.00E+00	1.12E-01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m³

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
257703	6/13/2013 - 5/20/2013	K-40	3.06E-01	7.91E-02	5.52E-02
257947	5/20/2013 - 5/28/2013	I-131	<2.38E-02	0.00E+00	2.38E-02
		Cs-134	<1.40E-02	0.00E+00	1.40E-02
		Cs-137	<1.48E-02	0.00E+00	1.48E-02
		Be-7	<1.50E-01	0.00E+00	1.50E-01
		K-40	3.70E-01	1.14E-01	2.32E-01
258182	5/28/2013 - 6/3/2013	I-131	<2.57E-02	0.00E+00	2.57E-02
		Cs-134	<1.27E-02	0.00E+00	1.27E-02
		Cs-137	<2.27E-02	0.00E+00	2.27E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	5.87E-01	1.69E-01	2.49E-01
258529	6/3/2013 - 6/10/2013	I-131	<2.24E-02	0.00E+00	2.24E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	<6.15E-01	0.00E+00	6.15E-01
258999	6/10/2013 - 6/17/2013	I-131	<2.23E-02	0.00E+00	2.23E-02
		Cs-134	<2.16E-02	0.00E+00	2.16E-02
		Cs-137	<2.04E-02	0.00E+00	2.04E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	3.40E-01	1.35E-01	2.05E-01
269547	6/17/2013 - 6/24/2013	I-131	<1.58E-02	0.00E+00	1.58E-02
		Cs-134	<2.04E-02	0.00E+00	2.04E-02
		Cs-137	<1.84E-02	0.00E+00	1.84E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	5.02E-01	1.18E-01	3.24E-01
260181	6/24/2013 - 7/1/2013	I-131	<2.46E-02	0.00E+00	2.46E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<1.85E-02	0.00E+00	1.85E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	4.40E-01	1.14E-01	2.65E-01
260641	7/1/2013 - 7/8/2013	I-131	<2.04E-02	0.00E+00	2.04E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<2.23E-02	0.00E+00	2.23E-02
		Be-7	<2.10E-01	0.00E+00	2.10E-01
		K-40	3.14E-01	1.22E-01	3.00E-01
261604	7/8/2013 - 7/15/2013	I-131	<1.01E-02	0.00E+00	1.01E-02
		Cs-134	<7.95E-03	0.00E+00	7.95E-03
		Cs-137	<1.13E-02	0.00E+00	1.13E-02
		Be-7	<7.71E-02	0.00E+00	7.71E-02
		K-40	2.08E-01	6.61E-02	1.46E-01
262106	7/15/2013 - 7/22/2013	I-131	<5.40E-03	0.00E+00	5.40E-03
		Cs-134	<6.91E-03	0.00E+00	6.91E-03
		Cs-137	<1.08E-02	0.00E+00	1.08E-02
		Be-7	<7.48E-02	0.00E+00	7.48E-02
		K-40	3.74E-01	8.31E-02	1.43E-01
262940	7/22/2013 - 7/29/2013	I-131	<9.02E-03	0.00E+00	9.02E-03
		Cs-134	<9.94E-03	0.00E+00	9.94E-03
		Cs-137	<9.09E-03	0.00E+00	9.09E-03
		Be-7	<7.96E-02	0.00E+00	7.96E-02
		K-40	4.54E-01	8.02E-02	1.20E-01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID	Sample Dates	Nuclide	Activity	1 Sigma Error	LLD
263349	7/29/2013 - 8/5/2013	I-131	<9.05E-03	0.00E+00	9.05E-03
		Cs-134	<9.13E-03	0.00E+00	9.13E-03
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<9.43E-02	0.00E+00	9.43E-02
		K-40	<3.76E-01	0.00E+00	3.76E-01
264007	8/5/2013 - 8/12/2013	I-131	<2.21E-02	0.00E+00	2.21E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<2.65E-02	0.00E+00	2.65E-02
		Be-7	<1.27E-01	0.00E+00	1.27E-01
		K-40	4.68E-01	1.44E-01	2.16E-01
265138	8/12/2013 - 8/19/2013	I-131	<2.17E-02	0.00E+00	2.17E-02
		Cs-134	<1.83E-02	0.00E+00	1.83E-02
		Cs-137	<1.85E-02	0.00E+00	1.85E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	5.03E-01	1.19E-01	2.55E-01
265447	8/19/2013 - 8/26/2013	I-131	<1.90E-02	0.00E+00	1.90E-02
		Cs-134	<1.87E-02	0.00E+00	1.87E-02
		Cs-137	<1.67E-02	0.00E+00	1.67E-02
		Be-7	<1.77E-01	0.00E+00	1.77E-01
		K-40	3.20E-01	1.55E-01	2.64E-01
267133	8/26/2013 - 9/3/2013	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<2.27E-02	0.00E+00	2.27E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	3.25E-01	9.01E-02	2.25E-01
267583	9/3/2013 - 9/9/2013	I-131	<2.33E-02	0.00E+00	2.33E-02
		Cs-134	<1.12E-02	0.00E+00	1.12E-02
		Cs-137	<1.68E-02	0.00E+00	1.68E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	8.20E-01	1.64E-01	3.81E-01
268437	9/9/2013 - 9/16/2013	I-131	<2.40E-02	0.00E+00	2.40E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.83E-02	0.00E+00	1.83E-02
		Be-7	<1.30E-01	0.00E+00	1.30E-01
		K-40	3.14E-01	1.20E-01	7.61E-02
269559	9/16/2013 - 9/23/2013	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<2.36E-02	0.00E+00	2.36E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	3.21E-01	9.67E-02	2.11E-01
270704	9/23/2013 - 9/30/2013	I-131	<2.21E-02	0.00E+00	2.21E-02
		Cs-134	<1.63E-02	0.00E+00	1.63E-02
		Cs-137	<2.08E-02	0.00E+00	2.08E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	5.77E-01	1.29E-01	3.19E-01
271429	9/30/2013 - 10/7/2013	I-131	<1.73E-02	0.00E+00	1.73E-02
		Cs-134	<1.91E-02	0.00E+00	1.91E-02
		Cs-137	<2.20E-02	0.00E+00	2.20E-02
		Be-7	<1.26E-01	0.00E+00	1.26E-01
		K-40	5.10E-01	1.20E-01	7.66E-02
272036	10/7/2013 - 10/14/2013	I-131	<1.07E-02	0.00E+00	1.07E-02



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
272036	10/7/2013 - 10/14/2013	Cs-134	<9.02E-03	0.00E+00	9.02E-03
		Cs-137	<8.60E-03	0.00E+00	8.60E-03
		Be-7	<6.02E-02	0.00E+00	6.02E-02
		K-40	5.35E-01	7.88E-02	8.44E-02
272419	10/14/2013 - 10/21/2013	I-131	<1.38E-02	0.00E+00	1.38E-02
		Cs-134	<1.04E-02	0.00E+00	1.04E-02
		Cs-137	<1.08E-02	0.00E+00	1.08E-02
		Be-7	<9.34E-02	0.00E+00	9.34E-02
		K-40	4.40E-01	8.69E-02	1.24E-01
272820	10/21/2013 - 10/28/2013	I-131	<1.04E-02	0.00E+00	1.04E-02
		Cs-134	<7.03E-03	0.00E+00	7.03E-03
		Cs-137	<8.43E-03	0.00E+00	8.43E-03
		Be-7	<7.41E-02	0.00E+00	7.41E-02
		K-40	5.85E-01	8.44E-02	1.57E-01
273912	10/28/2013 - 11/4/2013	I-131	<8.43E-03	0.00E+00	8.43E-03
		Cs-134	<6.42E-03	0.00E+00	6.42E-03
		Cs-137	<1.20E-02	0.00E+00	1.20E-02
		Be-7	<8.91E-02	0.00E+00	8.91E-02
		K-40	5.03E-01	9.86E-02	5.23E-02
274359	11/4/2013 - 11/11/2013	I-131	<2.24E-02	0.00E+00	2.24E-02
		Cs-134	<1.67E-02	0.00E+00	1.67E-02
		Cs-137	<1.44E-02	0.00E+00	1.44E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	5.74E-01	1.25E-01	7.39E-02
274873	11/11/2013 - 11/18/2013	I-131	<1.48E-02	0.00E+00	1.48E-02
		Cs-134	<1.21E-02	0.00E+00	1.21E-02
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	5.19E-01	1.13E-01	6.68E-02
276427	11/18/2013 - 11/25/2013	I-131	<2.27E-02	0.00E+00	2.27E-02
		Cs-134	<1.87E-02	0.00E+00	1.87E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	3.77E-01	1.35E-01	2.60E-01
278558	11/25/2013 - 12/2/2013	I-131	<1.44E-02	0.00E+00	1.44E-02
		Cs-134	<1.00E-02	0.00E+00	1.00E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	3.44E-01	1.40E-01	3.08E-01
278686	12/2/2013 - 12/9/2013	I-131	<1.23E-02	0.00E+00	1.23E-02
		Cs-134	<8.99E-03	0.00E+00	8.99E-03
		Cs-137	<1.14E-02	0.00E+00	1.14E-02
		Be-7	<6.45E-02	0.00E+00	6.45E-02
		K-40	4.53E-01	7.35E-02	8.73E-02
278959	12/9/2013 - 12/16/2013	I-131	<2.35E-02	0.00E+00	2.35E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<1.64E-02	0.00E+00	1.64E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	<6.30E-01	0.00E+00	6.30E-01
279605	12/16/2013 - 12/23/2013	I-131	<2.52E-02	0.00E+00	2.52E-02
		Cs-134	<1.36E-02	0.00E+00	1.36E-02



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
279605	12/16/2013 - 12/23/2013	Cs-137	<1.89E-02	0.00E+00	1.89E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	<5.91E-01	0.00E+00	5.91E-01
		I-131	<1.30E-02	0.00E+00	1.30E-02
280083	12/23/2013 - 12/30/2013	Cs-134	<9.04E-03	0.00E+00	9.04E-03
		Cs-137	<1.65E-02	0.00E+00	1.65E-02
		Be-7	<9.08E-02	0.00E+00	9.08E-02
		K-40	3.50E-01	1.02E-01	5.26E-02
		I-131	<1.17E-02	0.00E+00	1.17E-02

Sample Point 121 [INDICATOR - NE @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250426	12/31/2012 - 1/7/2013	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<6.95E-03	0.00E+00	6.95E-03
		Cs-137	<7.78E-03	0.00E+00	7.78E-03
		Be-7	<9.77E-02	0.00E+00	9.77E-02
		K-40	3.00E-01	7.75E-02	5.41E-02
250556	1/7/2013 - 1/14/2013	I-131	<1.17E-02	0.00E+00	1.17E-02
		Cs-134	<1.04E-02	0.00E+00	1.04E-02
		Cs-137	<1.02E-02	0.00E+00	1.02E-02
		Be-7	<9.76E-02	0.00E+00	9.76E-02
		K-40	<3.82E-01	0.00E+00	3.82E-01
250725	1/14/2013 - 1/21/2013	I-131	<8.32E-03	0.00E+00	8.32E-03
		Cs-134	<7.14E-03	0.00E+00	7.14E-03
		Cs-137	<1.02E-02	0.00E+00	1.02E-02
		Be-7	<6.82E-02	0.00E+00	6.82E-02
		K-40	2.52E-01	8.98E-02	3.02E-01
250973	1/21/2013 - 1/28/2013	I-131	<1.10E-02	0.00E+00	1.10E-02
		Cs-134	<1.28E-02	0.00E+00	1.28E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<7.54E-02	0.00E+00	7.54E-02
		K-40	4.09E-01	9.14E-02	5.52E-02
251259	1/28/2013 - 2/4/2013	I-131	<1.07E-02	0.00E+00	1.07E-02
		Cs-134	<7.78E-03	0.00E+00	7.78E-03
		Cs-137	<9.29E-03	0.00E+00	9.29E-03
		Be-7	<7.39E-02	0.00E+00	7.39E-02
		K-40	<4.12E-01	0.00E+00	4.12E-01
251589	2/4/2013 - 2/11/2013	I-131	<1.40E-02	0.00E+00	1.40E-02
		Cs-134	<1.02E-02	0.00E+00	1.02E-02
		Cs-137	<1.47E-02	0.00E+00	1.47E-02
		Be-7	<4.65E-02	0.00E+00	4.65E-02
		K-40	3.84E-01	7.54E-02	1.09E-01
252055	2/11/2013 - 2/18/2013	I-131	<1.18E-02	0.00E+00	1.18E-02
		Cs-134	<1.08E-02	0.00E+00	1.08E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<8.38E-02	0.00E+00	8.38E-02
		K-40	5.44E-01	9.71E-02	1.55E-01
252670	2/18/2013 - 2/25/2013	I-131	<9.05E-03	0.00E+00	9.05E-03
		Cs-134	<8.56E-03	0.00E+00	8.56E-03
		Cs-137	<8.82E-03	0.00E+00	8.82E-03
		Be-7	<3.28E-02	0.00E+00	3.28E-02
		K-40	4.01E-01	7.45E-02	1.45E-01
253058	2/25/2013 - 3/4/2013	I-131	<1.33E-02	0.00E+00	1.33E-02
		Cs-134	<9.53E-03	0.00E+00	9.53E-03
		Cs-137	<9.53E-03	0.00E+00	9.53E-03



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 121 [INDICATOR - NE @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
253058	2/25/2013 - 3/4/2013	Cs-137	<1.61E-02	0.00E+00	1.61E-02
		Be-7	<5.43E-02	0.00E+00	5.43E-02
		K-40	<4.06E-01	0.00E+00	4.06E-01
253866	3/4/2013 - 3/11/2013	I-131	<1.25E-02	0.00E+00	1.25E-02
		Cs-134	<8.94E-03	0.00E+00	8.94E-03
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<7.45E-02	0.00E+00	7.45E-02
		K-40	5.83E-01	9.00E-02	3.75E-02
254188	3/11/2013 - 3/18/2013	I-131	<5.60E-03	0.00E+00	5.60E-03
		Cs-134	<8.68E-03	0.00E+00	8.68E-03
		Cs-137	<1.10E-02	0.00E+00	1.10E-02
		Be-7	<6.80E-02	0.00E+00	6.80E-02
		K-40	4.30E-01	7.72E-02	3.75E-02
254723	3/18/2013 - 3/25/2013	I-131	<1.01E-02	0.00E+00	1.01E-02
		Cs-134	<8.69E-03	0.00E+00	8.69E-03
		Cs-137	<1.63E-02	0.00E+00	1.63E-02
		Be-7	<6.53E-02	0.00E+00	6.53E-02
		K-40	4.29E-01	7.70E-02	3.74E-02
255283	3/25/2013 - 4/1/2013	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<1.38E-02	0.00E+00	1.38E-02
		Cs-137	<3.38E-03	0.00E+00	3.38E-03
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	<4.07E-01	0.00E+00	4.07E-01
255812	4/1/2013 - 4/8/2013	I-131	<1.35E-02	0.00E+00	1.35E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<8.13E-03	0.00E+00	8.13E-03
		Be-7	<6.87E-02	0.00E+00	6.87E-02
		K-40	<3.48E-01	0.00E+00	3.48E-01
256046	4/8/2013 - 4/15/2013	I-131	<1.16E-02	0.00E+00	1.16E-02
		Cs-134	<1.20E-02	0.00E+00	1.20E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<8.08E-02	0.00E+00	8.08E-02
		K-40	3.18E-01	7.83E-02	9.68E-02
256314	4/15/2013 - 4/22/2013	I-131	<1.88E-02	0.00E+00	1.88E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<6.25E-02	0.00E+00	6.25E-02
		K-40	3.07E-01	8.52E-02	6.39E-02
256581	4/22/2013 - 4/29/2013	I-131	<1.32E-02	0.00E+00	1.32E-02
		Cs-134	<7.38E-03	0.00E+00	7.38E-03
		Cs-137	<7.90E-03	0.00E+00	7.90E-03
		Be-7	<7.60E-02	0.00E+00	7.60E-02
		K-40	3.19E-01	1.04E-01	1.81E-01
257104	4/29/2013 - 5/6/2013	I-131	<3.78E-02	0.00E+00	3.78E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	<5.01E-01	0.00E+00	5.01E-01
257267	5/6/2013 - 5/13/2013	I-131	<1.10E-02	0.00E+00	1.10E-02
		Cs-134	<1.01E-02	0.00E+00	1.01E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 121 [INDICATOR - NE @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
257257	5/6/2013 - 5/13/2013	Be-7	<8.94E-02	0.00E+00	8.94E-02
		K-40	3.16E-01	6.73E-02	3.88E-02
257704	5/13/2013 - 5/20/2013	I-131	<9.23E-03	0.00E+00	9.23E-03
		Cs-134	<8.86E-03	0.00E+00	8.86E-03
		Cs-137	<1.38E-02	0.00E+00	1.38E-02
		Be-7	<6.43E-02	0.00E+00	6.43E-02
		K-40	3.79E-01	8.66E-02	1.59E-01
257948	5/20/2013 - 5/28/2013	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<2.18E-02	0.00E+00	2.18E-02
		Be-7	<8.01E-02	0.00E+00	8.01E-02
		K-40	3.66E-01	9.45E-02	2.33E-01
258183	5/28/2013 - 6/3/2013	I-131	<2.35E-02	0.00E+00	2.35E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<2.24E-02	0.00E+00	2.24E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	<7.23E-01	0.00E+00	7.23E-01
258530	6/3/2013 - 6/10/2013	I-131	<1.93E-02	0.00E+00	1.93E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<1.93E-02	0.00E+00	1.93E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	2.14E-01	1.18E-01	3.18E-01
259000	6/10/2013 - 6/17/2013	I-131	<1.79E-02	0.00E+00	1.79E-02
		Cs-134	<1.42E-02	0.00E+00	1.42E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<1.48E-01	0.00E+00	1.48E-01
		K-40	1.81E-01	9.46E-02	7.69E-02
259548	6/17/2013 - 6/24/2013	I-131	<1.97E-02	0.00E+00	1.97E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<2.50E-02	0.00E+00	2.50E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	<6.27E-01	0.00E+00	6.27E-01
260182	6/24/2013 - 7/1/2013	I-131	<2.25E-02	0.00E+00	2.25E-02
		Cs-134	<2.05E-02	0.00E+00	2.05E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<1.58E-01	0.00E+00	1.58E-01
		K-40	6.44E-01	1.37E-01	7.91E-02
260642	7/1/2013 - 7/8/2013	I-131	<2.42E-02	0.00E+00	2.42E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<2.61E-02	0.00E+00	2.61E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	2.87E-01	9.07E-02	2.06E-01
261605	7/8/2013 - 7/15/2013	I-131	<1.52E-02	0.00E+00	1.52E-02
		Cs-134	<9.04E-03	0.00E+00	9.04E-03
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<6.97E-02	0.00E+00	6.97E-02
		K-40	<3.97E-01	0.00E+00	3.97E-01
262107	7/15/2013 - 7/22/2013	I-131	<1.31E-02	0.00E+00	1.31E-02
		Cs-134	<8.38E-03	0.00E+00	8.38E-03
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
		Be-7	<6.87E-02	0.00E+00	6.87E-02

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 121 [INDICATOR - NE @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
262107	7/15/2013 - 7/22/2013	K-40	3.01E-01	7.76E-02	1.72E-01
262941	7/22/2013 - 7/29/2013	I-131	<1.43E-02	0.00E+00	1.43E-02
		Cs-134	<1.36E-02	0.00E+00	1.36E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<8.15E-02	0.00E+00	8.15E-02
		K-40	<3.93E-01	0.00E+00	3.93E-01
263350	7/29/2013 - 8/5/2013	I-131	<1.18E-02	0.00E+00	1.18E-02
		Cs-134	<6.94E-03	0.00E+00	6.94E-03
		Cs-137	<1.20E-02	0.00E+00	1.20E-02
		Be-7	<5.16E-02	0.00E+00	5.16E-02
		K-40	3.48E-01	8.44E-02	1.52E-01
264008	8/5/2013 - 8/12/2013	I-131	<2.20E-02	0.00E+00	2.20E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<2.06E-02	0.00E+00	2.06E-02
		Be-7	<5.42E-02	0.00E+00	5.42E-02
		K-40	4.86E-01	1.18E-01	2.16E-01
265139	8/12/2013 - 8/19/2013	I-131	<1.44E-02	0.00E+00	1.44E-02
		Cs-134	<2.14E-02	0.00E+00	2.14E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	3.73E-01	1.28E-01	2.55E-01
265448	8/19/2013 - 8/26/2013	I-131	<1.40E-02	0.00E+00	1.40E-02
		Cs-134	<1.16E-02	0.00E+00	1.16E-02
		Cs-137	<8.72E-03	0.00E+00	8.72E-03
		Be-7	<9.84E-02	0.00E+00	9.84E-02
		K-40	2.85E-01	7.92E-02	5.93E-02
267134	8/26/2013 - 9/3/2013	I-131	<1.45E-02	0.00E+00	1.45E-02
		Cs-134	<1.08E-02	0.00E+00	1.08E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.37E-01	0.00E+00	1.37E-01
		K-40	3.76E-01	9.70E-02	1.79E-01
267584	9/3/2013 - 9/9/2013	I-131	<1.90E-02	0.00E+00	1.90E-02
		Cs-134	<1.12E-02	0.00E+00	1.12E-02
		Cs-137	<4.86E-03	0.00E+00	4.86E-03
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	6.21E-01	1.42E-01	2.94E-01
268438	9/9/2013 - 9/16/2013	I-131	<9.48E-03	0.00E+00	9.48E-03
		Cs-134	<1.31E-02	0.00E+00	1.31E-02
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<9.51E-02	0.00E+00	9.51E-02
		K-40	3.02E-01	1.03E-01	1.82E-01
269560	9/16/2013 - 9/23/2013	I-131	<2.08E-02	0.00E+00	2.08E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<2.53E-02	0.00E+00	2.53E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	2.73E-01	1.13E-01	2.11E-01
270705	9/23/2013 - 9/30/2013	I-131	<2.52E-02	0.00E+00	2.52E-02
		Cs-134	<2.12E-02	0.00E+00	2.12E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	6.62E-01	1.38E-01	2.17E-01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 121 [INDICATOR - NE @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
271430	9/30/2013 - 10/7/2013	I-131	<2.03E-02	0.00E+00	2.03E-02
		Cs-134	<1.22E-02	0.00E+00	1.22E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	3.42E-01	1.35E-01	2.98E-01
272037	10/7/2013 - 10/14/2013	I-131	<1.44E-02	0.00E+00	1.44E-02
		Cs-134	<9.71E-03	0.00E+00	9.71E-03
		Cs-137	<1.44E-02	0.00E+00	1.44E-02
		Be-7	<6.13E-02	0.00E+00	6.13E-02
		K-40	<4.06E-01	0.00E+00	4.06E-01
272420	10/14/2013 - 10/21/2013	I-131	<1.84E-02	0.00E+00	1.84E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<2.03E-02	0.00E+00	2.03E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	5.78E-01	1.29E-01	3.06E-01
272821	10/21/2013 - 10/28/2013	I-131	<1.48E-02	0.00E+00	1.48E-02
		Cs-134	<1.26E-02	0.00E+00	1.26E-02
		Cs-137	<1.43E-02	0.00E+00	1.43E-02
		Be-7	<6.15E-02	0.00E+00	6.15E-02
		K-40	<4.13E-01	0.00E+00	4.13E-01
273913	10/28/2013 - 11/4/2013	I-131	<9.83E-03	0.00E+00	9.83E-03
		Cs-134	<9.62E-03	0.00E+00	9.62E-03
		Cs-137	<9.38E-03	0.00E+00	9.38E-03
		Be-7	<5.89E-02	0.00E+00	5.89E-02
		K-40	5.50E-01	9.75E-02	9.59E-02
274360	11/4/2013 - 11/11/2013	I-131	<2.00E-02	0.00E+00	2.00E-02
		Cs-134	<1.37E-02	0.00E+00	1.37E-02
		Cs-137	<2.28E-02	0.00E+00	2.28E-02
		Be-7	<1.59E-01	0.00E+00	1.59E-01
		K-40	3.09E-01	1.16E-01	3.00E-01
274874	11/11/2013 - 11/18/2013	I-131	<1.23E-02	0.00E+00	1.23E-02
		Cs-134	<8.84E-03	0.00E+00	8.84E-03
		Cs-137	<7.03E-03	0.00E+00	7.03E-03
		Be-7	<6.79E-02	0.00E+00	6.79E-02
		K-40	6.52E-01	9.04E-02	3.39E-02
276428	11/18/2013 - 11/25/2013	I-131	<1.58E-02	0.00E+00	1.58E-02
		Cs-134	<2.15E-02	0.00E+00	2.15E-02
		Cs-137	<1.42E-02	0.00E+00	1.42E-02
		Be-7	<1.48E-01	0.00E+00	1.48E-01
		K-40	<3.07E-01	0.00E+00	3.07E-01
278559	11/25/2013 - 12/2/2013	I-131	<9.60E-03	0.00E+00	9.60E-03
		Cs-134	<9.05E-03	0.00E+00	9.05E-03
		Cs-137	<7.60E-03	0.00E+00	7.60E-03
		Be-7	<8.39E-02	0.00E+00	8.39E-02
		K-40	2.70E-01	7.21E-02	5.21E-02
278687	12/2/2013 - 12/9/2013	I-131	<2.02E-02	0.00E+00	2.02E-02
		Cs-134	<1.98E-02	0.00E+00	1.98E-02
		Cs-137	<2.25E-02	0.00E+00	2.25E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	<6.35E-01	0.00E+00	6.35E-01
278960	12/9/2013 - 12/16/2013	I-131	<2.26E-02	0.00E+00	2.26E-02



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 121 [INDICATOR - NE @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
278960	12/9/2013 - 12/16/2013	Cs-134	<1.89E-02	0.00E+00	1.89E-02
		Cs-137	<2.09E-02	0.00E+00	2.09E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	4.60E-01	1.15E-01	2.17E-01
		I-131	<2.13E-02	0.00E+00	2.13E-02
279606	12/16/2013 - 12/23/2013	Cs-134	<2.13E-02	0.00E+00	2.13E-02
		Cs-137	<1.41E-02	0.00E+00	1.41E-02
		Be-7	<1.30E-01	0.00E+00	1.30E-01
		K-40	<5.91E-01	0.00E+00	5.91E-01
		I-131	<1.48E-02	0.00E+00	1.48E-02
280084	12/23/2013 - 12/30/2013	Cs-134	<1.18E-02	0.00E+00	1.18E-02
		Cs-137	<1.08E-02	0.00E+00	1.08E-02
		Be-7	<1.12E-01	0.00E+00	1.12E-01
		K-40	<3.76E-01	0.00E+00	3.76E-01
		I-131	<1.08E-02	0.00E+00	1.08E-02

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250427	12/31/2012 - 1/7/2013	I-131	<1.07E-02	0.00E+00	1.07E-02
		Cs-134	<1.03E-02	0.00E+00	1.03E-02
		Cs-137	<8.04E-03	0.00E+00	8.04E-03
		Be-7	<6.24E-02	0.00E+00	6.24E-02
		K-40	2.68E-01	7.45E-02	1.77E-01
250557	1/7/2013 - 1/14/2013	I-131	<1.08E-02	0.00E+00	1.08E-02
		Cs-134	<1.08E-02	0.00E+00	1.08E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	4.80E-01	8.36E-02	3.93E-02
250726	1/14/2013 - 1/21/2013	I-131	<2.42E-02	0.00E+00	2.42E-02
		Cs-134	<1.41E-02	0.00E+00	1.41E-02
		Cs-137	<1.65E-02	0.00E+00	1.65E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	5.36E-01	1.12E-01	1.74E-01
250974	1/21/2013 - 1/28/2013	I-131	<9.11E-03	0.00E+00	9.11E-03
		Cs-134	<5.18E-03	0.00E+00	5.18E-03
		Cs-137	<1.01E-02	0.00E+00	1.01E-02
		Be-7	<7.40E-02	0.00E+00	7.40E-02
		K-40	2.22E-01	8.96E-02	1.55E-01
251260	1/28/2013 - 2/4/2013	I-131	<1.34E-02	0.00E+00	1.34E-02
		Cs-134	<1.11E-02	0.00E+00	1.11E-02
		Cs-137	<1.08E-02	0.00E+00	1.08E-02
		Be-7	<5.98E-02	0.00E+00	5.98E-02
		K-40	3.29E-01	8.22E-02	1.75E-01
251590	2/4/2013 - 2/11/2013	I-131	<1.17E-02	0.00E+00	1.17E-02
		Cs-134	<1.17E-02	0.00E+00	1.17E-02
		Cs-137	<1.64E-02	0.00E+00	1.64E-02
		Be-7	<1.10E-01	0.00E+00	1.10E-01
		K-40	3.28E-01	1.12E-01	1.71E-01
252056	2/11/2013 - 2/18/2013	I-131	<1.52E-02	0.00E+00	1.52E-02
		Cs-134	<1.67E-02	0.00E+00	1.67E-02
		Cs-137	<1.40E-02	0.00E+00	1.40E-02
		Be-7	<9.24E-02	0.00E+00	9.24E-02
		K-40	2.76E-01	9.65E-02	1.72E-01
252671	2/18/2013 - 2/25/2013	I-131	<1.08E-02	0.00E+00	1.08E-02

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
252671	2/18/2013 - 2/25/2013	Cs-134	<7.54E-03	0.00E+00	7.54E-03
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<5.82E-02	0.00E+00	5.82E-02
		K-40	<4.25E-01	0.00E+00	4.25E-01
253059	2/25/2013 - 3/4/2013	I-131	<1.75E-02	0.00E+00	1.75E-02
		Cs-134	<1.38E-02	0.00E+00	1.38E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	5.30E-01	1.10E-01	6.22E-02
253867	3/4/2013 - 3/11/2013	I-131	<1.06E-02	0.00E+00	1.06E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	<4.22E-01	0.00E+00	4.22E-01
254189	3/11/2013 - 3/18/2013	I-131	<1.03E-02	0.00E+00	1.03E-02
		Cs-134	<8.56E-03	0.00E+00	8.56E-03
		Cs-137	<1.71E-02	0.00E+00	1.71E-02
		Be-7	<7.35E-02	0.00E+00	7.35E-02
		K-40	<3.79E-01	0.00E+00	3.79E-01
254724	3/18/2013 - 3/25/2013	I-131	<1.29E-02	0.00E+00	1.29E-02
		Cs-134	<1.29E-02	0.00E+00	1.29E-02
		Cs-137	<1.41E-02	0.00E+00	1.41E-02
		Be-7	<9.08E-02	0.00E+00	9.08E-02
		K-40	<4.41E-01	0.00E+00	4.41E-01
255284	3/25/2013 - 4/1/2013	I-131	<1.21E-02	0.00E+00	1.21E-02
		Cs-134	<9.61E-03	0.00E+00	9.61E-03
		Cs-137	<9.44E-03	0.00E+00	9.44E-03
		Be-7	<7.43E-02	0.00E+00	7.43E-02
		K-40	3.79E-01	7.16E-02	1.23E-01
255813	4/1/2013 - 4/8/2013	I-131	<1.05E-02	0.00E+00	1.05E-02
		Cs-134	<1.02E-02	0.00E+00	1.02E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<7.52E-02	0.00E+00	7.52E-02
		K-40	5.41E-01	8.90E-02	1.34E-01
256047	4/8/2013 - 4/15/2013	I-131	<2.09E-02	0.00E+00	2.09E-02
		Cs-134	<1.55E-02	0.00E+00	1.55E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	4.26E-01	1.00E-01	2.47E-01
256315	4/15/2013 - 4/22/2013	I-131	<1.47E-02	0.00E+00	1.47E-02
		Cs-134	<1.42E-02	0.00E+00	1.42E-02
		Cs-137	<1.38E-02	0.00E+00	1.38E-02
		Be-7	<1.25E-01	0.00E+00	1.25E-01
		K-40	<4.13E-01	0.00E+00	4.13E-01
256582	4/22/2013 - 4/29/2013	I-131	<1.19E-02	0.00E+00	1.19E-02
		Cs-134	<8.64E-03	0.00E+00	8.64E-03
		Cs-137	<1.29E-02	0.00E+00	1.29E-02
		Be-7	<8.36E-02	0.00E+00	8.36E-02
		K-40	5.02E-01	8.14E-02	1.38E-01
257105	4/29/2013 - 5/6/2013	I-131	<1.10E-02	0.00E+00	1.10E-02
		Cs-134	<1.41E-02	0.00E+00	1.41E-02



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
257105	4/29/2013 - 5/6/2013	Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<9.30E-02	0.00E+00	9.30E-02
		K-40	<4.09E-01	0.00E+00	4.09E-01
257258	5/6/2013 - 5/13/2013	I-131	<1.13E-02	0.00E+00	1.13E-02
		Cs-134	<9.49E-03	0.00E+00	9.49E-03
		Cs-137	<1.37E-02	0.00E+00	1.37E-02
		Be-7	<6.54E-02	0.00E+00	6.54E-02
		K-40	3.74E-01	7.20E-02	1.27E-01
257705	5/13/2013 - 6/20/2013	I-131	<1.06E-02	0.00E+00	1.06E-02
		Cs-134	<5.45E-03	0.00E+00	5.45E-03
		Cs-137	<8.41E-03	0.00E+00	8.41E-03
		Be-7	<5.33E-02	0.00E+00	5.33E-02
		K-40	4.85E-01	6.30E-02	8.41E-02
257949	5/20/2013 - 6/28/2013	I-131	<2.28E-02	0.00E+00	2.28E-02
		Cs-134	<1.37E-02	0.00E+00	1.37E-02
		Cs-137	<1.96E-02	0.00E+00	1.96E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	6.10E-01	1.22E-01	1.84E-01
258184	5/28/2013 - 6/3/2013	I-131	<2.38E-02	0.00E+00	2.38E-02
		Cs-134	<2.40E-02	0.00E+00	2.40E-02
		Cs-137	<3.13E-02	0.00E+00	3.13E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	3.78E-01	1.14E-01	2.49E-01
258531	6/3/2013 - 6/10/2013	I-131	<1.84E-02	0.00E+00	1.84E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.25E-02	0.00E+00	1.25E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	5.72E-01	1.28E-01	2.16E-01
259001	6/10/2013 - 6/17/2013	I-131	<2.49E-02	0.00E+00	2.49E-02
		Cs-134	<1.69E-02	0.00E+00	1.69E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	5.17E-01	1.42E-01	2.05E-01
259549	6/17/2013 - 6/24/2013	I-131	<2.02E-02	0.00E+00	2.02E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<1.43E-02	0.00E+00	1.43E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	3.91E-01	1.05E-01	2.12E-01
260183	6/24/2013 - 7/1/2013	I-131	<2.02E-02	0.00E+00	2.02E-02
		Cs-134	<2.05E-02	0.00E+00	2.05E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	<5.31E-01	0.00E+00	5.31E-01
260643	7/1/2013 - 7/8/2013	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.93E-02	0.00E+00	1.93E-02
		Cs-137	<1.70E-02	0.00E+00	1.70E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	4.59E-01	1.15E-01	2.45E-01
261606	7/8/2013 - 7/15/2013	I-131	<7.01E-03	0.00E+00	7.01E-03
		Cs-134	<4.97E-03	0.00E+00	4.97E-03
		Cs-137	<5.50E-03	0.00E+00	5.50E-03



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
261606	7/8/2013 - 7/15/2013	Be-7	<4.43E-02	0.00E+00	4.43E-02
		K-40	4.02E-01	4.40E-02	8.14E-02
262108	7/15/2013 - 7/22/2013	I-131	<1.02E-02	0.00E+00	1.02E-02
		Cs-134	<9.32E-03	0.00E+00	9.32E-03
		Cs-137	<1.09E-02	0.00E+00	1.09E-02
		Be-7	<6.13E-02	0.00E+00	6.13E-02
		K-40	6.56E-01	8.92E-02	1.10E-01
262942	7/22/2013 - 7/29/2013	I-131	<8.47E-03	0.00E+00	8.47E-03
		Cs-134	<6.56E-03	0.00E+00	6.56E-03
		Cs-137	<1.26E-02	0.00E+00	1.26E-02
		Be-7	<5.59E-02	0.00E+00	5.59E-02
		K-40	4.95E-01	7.92E-02	9.22E-02
263351	7/29/2013 - 8/5/2013	I-131	<9.77E-03	0.00E+00	9.77E-03
		Cs-134	<5.83E-03	0.00E+00	5.83E-03
		Cs-137	<9.70E-03	0.00E+00	9.70E-03
		Be-7	<6.30E-02	0.00E+00	6.30E-02
		K-40	2.43E-01	8.56E-02	1.26E-01
264009	8/5/2013 - 8/12/2013	I-131	<2.30E-02	0.00E+00	2.30E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.89E-02	0.00E+00	1.89E-02
		Be-7	<1.48E-01	0.00E+00	1.48E-01
		K-40	<4.97E-01	0.00E+00	4.97E-01
265140	8/12/2013 - 8/19/2013	I-131	<2.26E-02	0.00E+00	2.26E-02
		Cs-134	<1.40E-02	0.00E+00	1.40E-02
		Cs-137	<2.28E-02	0.00E+00	2.28E-02
		Be-7	<1.26E-01	0.00E+00	1.26E-01
		K-40	<5.60E-01	0.00E+00	5.60E-01
265449	8/19/2013 - 8/26/2013	I-131	<1.42E-02	0.00E+00	1.42E-02
		Cs-134	<1.19E-02	0.00E+00	1.19E-02
		Cs-137	<1.39E-02	0.00E+00	1.39E-02
		Be-7	<7.51E-02	0.00E+00	7.51E-02
		K-40	<4.51E-01	0.00E+00	4.51E-01
267135	8/26/2013 - 9/3/2013	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.08E-02	0.00E+00	1.08E-02
		Cs-137	<1.20E-02	0.00E+00	1.20E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	4.25E-01	1.03E-01	1.79E-01
267585	9/3/2013 - 9/9/2013	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.49E-02	0.00E+00	1.49E-02
		Cs-137	<1.93E-02	0.00E+00	1.93E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	7.81E-01	1.59E-01	2.93E-01
268439	9/9/2013 - 9/16/2013	I-131	<2.76E-02	0.00E+00	2.76E-02
		Cs-134	<1.63E-02	0.00E+00	1.63E-02
		Cs-137	<2.06E-02	0.00E+00	2.06E-02
		Be-7	<1.49E-01	0.00E+00	1.49E-01
		K-40	3.13E-01	9.44E-02	2.15E-01
269561	9/16/2013 - 9/23/2013	I-131	<2.65E-02	0.00E+00	2.65E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02
		Cs-137	<2.25E-02	0.00E+00	2.25E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m³

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
269561	9/16/2013 - 9/23/2013	K-40	5.25E-01	1.24E-01	7.88E-02
270706	9/23/2013 - 9/30/2013	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<1.36E-02	0.00E+00	1.36E-02
		Cs-137	<2.59E-02	0.00E+00	2.59E-02
		Be-7	<1.12E-01	0.00E+00	1.12E-01
		K-40	4.90E-01	1.19E-01	7.78E-02
271431	9/30/2013 - 10/7/2013	I-131	<2.11E-02	0.00E+00	2.11E-02
		Cs-134	<1.71E-02	0.00E+00	1.71E-02
		Cs-137	<2.54E-02	0.00E+00	2.54E-02
		Be-7	<1.38E-01	0.00E+00	1.38E-01
		K-40	3.68E-01	1.02E-01	2.98E-01
272038	10/7/2013 - 10/14/2013	I-131	<1.04E-02	0.00E+00	1.04E-02
		Cs-134	<8.70E-03	0.00E+00	8.70E-03
		Cs-137	<1.04E-02	0.00E+00	1.04E-02
		Be-7	<5.80E-02	0.00E+00	5.80E-02
		K-40	3.92E-01	7.99E-02	1.65E-01
272421	10/14/2013 - 10/21/2013	I-131	<1.60E-02	0.00E+00	1.60E-02
		Cs-134	<1.48E-02	0.00E+00	1.48E-02
		Cs-137	<1.35E-02	0.00E+00	1.35E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	3.64E-01	1.18E-01	2.54E-01
272822	10/21/2013 - 10/28/2013	I-131	<1.18E-02	0.00E+00	1.18E-02
		Cs-134	<1.05E-02	0.00E+00	1.05E-02
		Cs-137	<1.41E-02	0.00E+00	1.41E-02
		Be-7	<7.57E-02	0.00E+00	7.57E-02
		K-40	5.54E-01	8.55E-02	3.57E-02
273914	10/28/2013 - 11/4/2013	I-131	<2.20E-02	0.00E+00	2.20E-02
		Cs-134	<1.50E-02	0.00E+00	1.50E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	<6.22E-01	0.00E+00	6.22E-01
274361	11/4/2013 - 11/11/2013	I-131	<1.60E-02	0.00E+00	1.60E-02
		Cs-134	<1.71E-02	0.00E+00	1.71E-02
		Cs-137	<1.11E-02	0.00E+00	1.11E-02
		Be-7	<1.37E-01	0.00E+00	1.37E-01
		K-40	2.86E-01	1.17E-01	2.48E-01
274875	11/11/2013 - 11/18/2013	I-131	<1.65E-02	0.00E+00	1.65E-02
		Cs-134	<9.54E-03	0.00E+00	9.54E-03
		Cs-137	<1.31E-02	0.00E+00	1.31E-02
		Be-7	<5.87E-02	0.00E+00	5.87E-02
		K-40	<3.38E-01	0.00E+00	3.38E-01
276429	11/18/2013 - 11/25/2013	I-131	<2.57E-02	0.00E+00	2.57E-02
		Cs-134	<1.67E-02	0.00E+00	1.67E-02
		Cs-137	<1.92E-02	0.00E+00	1.92E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	<5.17E-01	0.00E+00	5.17E-01
278560	11/25/2013 - 12/2/2013	I-131	<2.20E-02	0.00E+00	2.20E-02
		Cs-134	<9.72E-03	0.00E+00	9.72E-03
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<1.92E-01	0.00E+00	1.92E-01
		K-40	<5.34E-01	0.00E+00	5.34E-01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
278688	12/2/2013 - 12/9/2013	I-131	<6.28E-03	0.00E+00	6.28E-03
		Cs-134	<1.25E-02	0.00E+00	1.25E-02
		Cs-137	<8.13E-03	0.00E+00	8.13E-03
		Be-7	<6.18E-02	0.00E+00	6.18E-02
		K-40	2.95E-01	1.09E-01	2.11E-01
278961	12/9/2013 - 12/16/2013	I-131	<2.41E-02	0.00E+00	2.41E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.90E-02	0.00E+00	1.90E-02
		Be-7	<1.41E-01	0.00E+00	1.41E-01
		K-40	4.29E-01	1.35E-01	2.17E-01
279607	12/16/2013 - 12/23/2013	I-131	<1.92E-02	0.00E+00	1.92E-02
		Cs-134	<1.99E-02	0.00E+00	1.99E-02
		Cs-137	<1.89E-02	0.00E+00	1.89E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	2.61E-01	1.11E-01	2.08E-01
280085	12/23/2013 - 12/30/2013	I-131	<9.52E-03	0.00E+00	9.52E-03
		Cs-134	<1.17E-02	0.00E+00	1.17E-02
		Cs-137	<1.28E-02	0.00E+00	1.28E-02
		Be-7	<1.00E-01	0.00E+00	1.00E-01
		K-40	3.24E-01	8.37E-02	5.84E-02

Sample Point 133 [INDICATOR - ENE @ 6.23 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250449	12/31/2012 - 1/7/2013	I-131	<1.72E-02	0.00E+00	1.72E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.37E-02	0.00E+00	1.37E-02
		Be-7	<1.25E-01	0.00E+00	1.25E-01
		K-40	2.16E-01	9.92E-02	2.95E-01
250579	1/7/2013 - 1/14/2013	I-131	<8.86E-03	0.00E+00	8.86E-03
		Cs-134	<7.37E-03	0.00E+00	7.37E-03
		Cs-137	<1.13E-02	0.00E+00	1.13E-02
		Be-7	<5.80E-02	0.00E+00	5.80E-02
		K-40	2.70E-01	7.39E-02	1.26E-01
250748	1/14/2013 - 1/21/2013	I-131	<1.34E-02	0.00E+00	1.34E-02
		Cs-134	<1.07E-02	0.00E+00	1.07E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<9.27E-02	0.00E+00	9.27E-02
		K-40	<3.62E-01	0.00E+00	3.62E-01
250996	1/21/2013 - 1/28/2013	I-131	<1.17E-02	0.00E+00	1.17E-02
		Cs-134	<2.96E-03	0.00E+00	2.96E-03
		Cs-137	<1.61E-02	0.00E+00	1.61E-02
		Be-7	<7.91E-02	0.00E+00	7.91E-02
		K-40	4.81E-01	1.08E-01	2.32E-01
251282	1/28/2013 - 2/4/2013	I-131	<2.02E-02	0.00E+00	2.02E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	4.36E-01	1.00E-01	6.21E-02
251612	2/4/2013 - 2/11/2013	I-131	<1.68E-02	0.00E+00	1.68E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<1.36E-02	0.00E+00	1.36E-02
		Be-7	<9.94E-02	0.00E+00	9.94E-02
		K-40	<5.13E-01	0.00E+00	5.13E-01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 133 [INDICATOR - ENE @ 6.23 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
252078	2/11/2013 - 2/18/2013	I-131	<2.26E-03	0.00E+00	2.26E-03
		Cs-134	<8.39E-03	0.00E+00	8.39E-03
		Cs-137	<8.65E-03	0.00E+00	8.65E-03
		Be-7	<4.82E-02	0.00E+00	4.82E-02
		K-40	2.31E-01	1.13E-01	1.90E-01
252673	2/18/2013 - 2/25/2013	I-131	<1.31E-02	0.00E+00	1.31E-02
		Cs-134	<1.00E-02	0.00E+00	1.00E-02
		Cs-137	<1.14E-02	0.00E+00	1.14E-02
		Be-7	<6.82E-02	0.00E+00	6.82E-02
		K-40	5.12E-01	8.30E-02	9.61E-02
253081	2/25/2013 - 3/4/2013	I-131	<1.23E-02	0.00E+00	1.23E-02
		Cs-134	<9.85E-03	0.00E+00	9.85E-03
		Cs-137	<1.10E-02	0.00E+00	1.10E-02
		Be-7	<5.83E-02	0.00E+00	5.83E-02
		K-40	5.17E-01	9.31E-02	1.16E-01
253889	3/4/2013 - 3/11/2013	I-131	<1.41E-02	0.00E+00	1.41E-02
		Cs-134	<1.18E-02	0.00E+00	1.18E-02
		Cs-137	<1.26E-02	0.00E+00	1.26E-02
		Be-7	<7.88E-02	0.00E+00	7.88E-02
		K-40	4.48E-01	8.06E-02	3.91E-02
254211	3/11/2013 - 3/18/2013	I-131	<1.42E-02	0.00E+00	1.42E-02
		Cs-134	<1.30E-02	0.00E+00	1.30E-02
		Cs-137	<9.14E-03	0.00E+00	9.14E-03
		Be-7	<8.99E-02	0.00E+00	8.99E-02
		K-40	5.94E-01	1.06E-01	1.42E-01
254746	3/18/2013 - 3/25/2013	I-131	<1.48E-02	0.00E+00	1.48E-02
		Cs-134	<1.33E-02	0.00E+00	1.33E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<9.82E-02	0.00E+00	9.82E-02
		K-40	3.49E-01	9.29E-02	1.45E-01
255306	3/25/2013 - 4/1/2013	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<1.09E-02	0.00E+00	1.09E-02
		Cs-137	<1.59E-02	0.00E+00	1.59E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	2.57E-01	9.98E-02	2.15E-01
255835	4/1/2013 - 4/8/2013	I-131	<9.44E-03	0.00E+00	9.44E-03
		Cs-134	<8.85E-03	0.00E+00	8.85E-03
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<5.75E-02	0.00E+00	5.75E-02
		K-40	4.04E-01	7.50E-02	3.77E-02
256069	4/8/2013 - 4/15/2013	I-131	<8.44E-03	0.00E+00	8.44E-03
		Cs-134	<7.27E-03	0.00E+00	7.27E-03
		Cs-137	<1.11E-02	0.00E+00	1.11E-02
		Be-7	<6.96E-02	0.00E+00	6.96E-02
		K-40	3.90E-01	7.36E-02	1.27E-01
256337	4/15/2013 - 4/22/2013	I-131	<1.83E-02	0.00E+00	1.83E-02
		Cs-134	<1.54E-02	0.00E+00	1.54E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<9.10E-02	0.00E+00	9.10E-02
		K-40	5.28E-01	1.13E-01	1.70E-01
256604	4/22/2013 - 4/29/2013	I-131	<1.60E-02	0.00E+00	1.60E-02



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 133 [INDICATOR - ENE @ 6.23 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
256604	4/22/2013 - 4/29/2013	Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.44E-02	0.00E+00	1.44E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	3.58E-01	1.16E-01	2.60E-01
257127	4/29/2013 - 5/6/2013	I-131	<1.62E-02	0.00E+00	1.62E-02
		Cs-134	<1.69E-02	0.00E+00	1.69E-02
		Cs-137	<1.60E-02	0.00E+00	1.60E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	<5.48E-01	0.00E+00	5.48E-01
257280	5/6/2013 - 5/13/2013	I-131	<1.44E-02	0.00E+00	1.44E-02
		Cs-134	<8.61E-03	0.00E+00	8.61E-03
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<8.79E-02	0.00E+00	8.79E-02
		K-40	3.09E-01	8.25E-02	5.96E-02
257727	5/13/2013 - 5/20/2013	I-131	<1.30E-02	0.00E+00	1.30E-02
		Cs-134	<1.05E-02	0.00E+00	1.05E-02
		Cs-137	<1.42E-02	0.00E+00	1.42E-02
		Be-7	<8.98E-02	0.00E+00	8.98E-02
		K-40	2.76E-01	9.81E-02	5.92E-02
257971	5/20/2013 - 5/28/2013	I-131	<2.29E-02	0.00E+00	2.29E-02
		Cs-134	<1.86E-02	0.00E+00	1.86E-02
		Cs-137	<1.94E-02	0.00E+00	1.94E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	3.71E-01	9.58E-02	1.86E-01
258206	5/28/2013 - 6/3/2013	I-131	<2.42E-02	0.00E+00	2.42E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.68E-02	0.00E+00	1.68E-02
		Be-7	<1.84E-01	0.00E+00	1.84E-01
		K-40	6.05E-01	1.43E-01	9.08E-02
258553	6/3/2013 - 6/10/2013	I-131	<2.24E-02	0.00E+00	2.24E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.47E-02	0.00E+00	1.47E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	2.25E-01	1.45E-01	7.76E-02
259023	6/10/2013 - 6/17/2013	I-131	<7.06E-03	0.00E+00	7.06E-03
		Cs-134	<6.56E-03	0.00E+00	6.56E-03
		Cs-137	<1.03E-02	0.00E+00	1.03E-02
		Be-7	<7.42E-02	0.00E+00	7.42E-02
		K-40	4.20E-01	7.10E-02	9.26E-02
259571	6/17/2013 - 6/24/2013	I-131	<2.05E-02	0.00E+00	2.05E-02
		Cs-134	<2.29E-02	0.00E+00	2.29E-02
		Cs-137	<2.34E-02	0.00E+00	2.34E-02
		Be-7	<1.76E-01	0.00E+00	1.76E-01
		K-40	5.94E-01	1.30E-01	2.71E-01
260206	6/24/2013 - 7/1/2013	I-131	<2.16E-02	0.00E+00	2.16E-02
		Cs-134	<2.00E-02	0.00E+00	2.00E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	4.62E-01	1.15E-01	2.07E-01
260665	7/1/2013 - 7/8/2013	I-131	<1.27E-02	0.00E+00	1.27E-02
		Cs-134	<1.95E-02	0.00E+00	1.95E-02



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m³

Sample Point 133 [INDICATOR - ENE @ 6.23 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
260665	7/1/2013 - 7/8/2013	Cs-137	<2.04E-02	0.00E+00	2.04E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	6.04E-01	1.32E-01	7.77E-02
261628	7/8/2013 - 7/15/2013	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<2.05E-02	0.00E+00	2.05E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	<6.20E-01	0.00E+00	6.20E-01
262130	7/15/2013 - 7/22/2013	I-131	<1.30E-02	0.00E+00	1.30E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.34E-02	0.00E+00	1.34E-02
		Be-7	<8.54E-02	0.00E+00	8.54E-02
		K-40	3.67E-01	1.15E-01	6.49E-02
263146	7/22/2013 - 7/29/2013	I-131	<2.20E-02	0.00E+00	2.20E-02
		Cs-134	<2.01E-02	0.00E+00	2.01E-02
		Cs-137	<2.38E-02	0.00E+00	2.38E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	4.81E-01	1.41E-01	3.02E-01
263373	7/29/2013 - 8/5/2013	I-131	<1.06E-02	0.00E+00	1.06E-02
		Cs-134	<7.24E-03	0.00E+00	7.24E-03
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	2.48E-01	1.10E-01	2.41E-01
264031	8/5/2013 - 8/12/2013	I-131	<2.10E-02	0.00E+00	2.10E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<1.00E-02	0.00E+00	1.00E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	4.00E-01	1.38E-01	7.72E-02
265162	8/12/2013 - 8/19/2013	I-131	<1.92E-02	0.00E+00	1.92E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<1.57E-01	0.00E+00	1.57E-01
		K-40	2.83E-01	1.33E-01	3.92E-01
265471	8/19/2013 - 8/26/2013	I-131	<1.06E-02	0.00E+00	1.06E-02
		Cs-134	<1.17E-02	0.00E+00	1.17E-02
		Cs-137	<1.09E-02	0.00E+00	1.09E-02
		Be-7	<7.09E-02	0.00E+00	7.09E-02
		K-40	<4.69E-01	0.00E+00	4.69E-01
267157	8/26/2013 - 9/3/2013	I-131	<2.29E-02	0.00E+00	2.29E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.65E-02	0.00E+00	1.65E-02
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	4.00E-01	1.00E-01	2.25E-01
267607	9/3/2013 - 9/9/2013	I-131	<2.65E-02	0.00E+00	2.65E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	5.50E-01	1.63E-01	2.99E-01
268440	9/9/2013 - 9/16/2013	I-131	<3.05E-02	0.00E+00	3.05E-02
		Cs-134	<2.25E-02	0.00E+00	2.25E-02
		Cs-137	<2.79E-02	0.00E+00	2.79E-02



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 133 [INDICATOR - ENE @ 6.23 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
268440	9/9/2013 - 9/16/2013	Be-7	<4.13E-02	0.00E+00	4.13E-02
		K-40	<7.08E-01	0.00E+00	7.08E-01
269563	9/16/2013 - 9/23/2013	I-131	<1.93E-02	0.00E+00	1.93E-02
		Cs-134	<9.39E-03	0.00E+00	9.39E-03
		Cs-137	<2.21E-02	0.00E+00	2.21E-02
		Be-7	<1.37E-01	0.00E+00	1.37E-01
		K-40	<6.03E-01	0.00E+00	6.03E-01
270728	9/23/2013 - 9/30/2013	I-131	<1.25E-02	0.00E+00	1.25E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.70E-02	0.00E+00	1.70E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	<5.60E-01	0.00E+00	5.60E-01
271453	9/30/2013 - 10/7/2013	I-131	<2.12E-02	0.00E+00	2.12E-02
		Cs-134	<9.71E-03	0.00E+00	9.71E-03
		Cs-137	<1.87E-02	0.00E+00	1.87E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	6.80E-01	1.39E-01	2.05E-01
272060	10/7/2013 - 10/14/2013	I-131	<1.34E-02	0.00E+00	1.34E-02
		Cs-134	<7.80E-03	0.00E+00	7.80E-03
		Cs-137	<1.48E-02	0.00E+00	1.48E-02
		Be-7	<9.93E-02	0.00E+00	9.93E-02
		K-40	3.60E-01	1.08E-01	1.87E-01
272443	10/14/2013 - 10/21/2013	I-131	<1.06E-02	0.00E+00	1.06E-02
		Cs-134	<1.08E-02	0.00E+00	1.08E-02
		Cs-137	<6.70E-03	0.00E+00	6.70E-03
		Be-7	<9.38E-02	0.00E+00	9.38E-02
		K-40	6.51E-01	9.91E-02	8.78E-02
272844	10/21/2013 - 10/28/2013	I-131	<1.45E-02	0.00E+00	1.45E-02
		Cs-134	<1.32E-02	0.00E+00	1.32E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	4.02E-01	9.74E-02	6.39E-02
273936	10/28/2013 - 11/4/2013	I-131	<1.37E-02	0.00E+00	1.37E-02
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<1.22E-02	0.00E+00	1.22E-02
		Be-7	<9.44E-02	0.00E+00	9.44E-02
		K-40	3.63E-01	1.29E-01	2.06E-01
274383	11/4/2013 - 11/11/2013	I-131	<2.18E-02	0.00E+00	2.18E-02
		Cs-134	<2.12E-02	0.00E+00	2.12E-02
		Cs-137	<1.42E-02	0.00E+00	1.42E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	6.41E-01	1.34E-01	3.25E-01
274897	11/11/2013 - 11/18/2013	I-131	<9.89E-03	0.00E+00	9.89E-03
		Cs-134	<1.16E-02	0.00E+00	1.16E-02
		Cs-137	<1.04E-02	0.00E+00	1.04E-02
		Be-7	<8.32E-02	0.00E+00	8.32E-02
		K-40	5.62E-01	8.67E-02	1.01E-01
276451	11/18/2013 - 11/25/2013	I-131	<1.43E-02	0.00E+00	1.43E-02
		Cs-134	<9.11E-03	0.00E+00	9.11E-03
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<1.12E-01	0.00E+00	1.12E-01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 133 [INDICATOR - ENE @ 6.23 miles]

Sample ID	Sample Dates	Nuclide	Activity	1 Sigma Error	LLD
276451	11/18/2013 - 11/25/2013	K-40	3.23E-01	8.34E-02	5.82E-02
278561	11/25/2013 - 12/2/2013	Nuclide	Activity	1 Sigma Error	LLD
		I-131	<1.16E-02	0.00E+00	1.16E-02
		Cs-134	<7.43E-03	0.00E+00	7.43E-03
		Cs-137	<1.35E-02	0.00E+00	1.35E-02
		Be-7	<7.31E-02	0.00E+00	7.31E-02
278700	12/2/2013 - 12/9/2013	K-40	9.20E+00	9.77E-02	9.29E-02
		Nuclide	Activity	1 Sigma Error	LLD
		I-131	<8.84E-03	0.00E+00	8.84E-03
		Cs-134	<9.89E-03	0.00E+00	9.89E-03
278973	12/9/2013 - 12/16/2013	Cs-137	<8.53E-03	0.00E+00	8.53E-03
		Be-7	<9.16E-02	0.00E+00	9.16E-02
		K-40	4.51E-01	9.85E-02	5.81E-02
		Nuclide	Activity	1 Sigma Error	LLD
278973	12/9/2013 - 12/16/2013	I-131	<2.23E-02	0.00E+00	2.23E-02
		Cs-134	<1.00E-02	0.00E+00	1.00E-02
		Cs-137	<1.71E-02	0.00E+00	1.71E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	3.77E-01	1.36E-01	2.75E-01
279619	12/16/2013 - 12/23/2013	Nuclide	Activity	1 Sigma Error	LLD
		I-131	<2.38E-02	0.00E+00	2.38E-02
		Cs-134	<1.23E-02	0.00E+00	1.23E-02
		Cs-137	<1.61E-02	0.00E+00	1.61E-02
		Be-7	<1.30E-01	0.00E+00	1.30E-01
280097	12/23/2013 - 12/30/2013	K-40	<4.85E-01	0.00E+00	4.85E-01
		Nuclide	Activity	1 Sigma Error	LLD
		I-131	<1.17E-02	0.00E+00	1.17E-02
		Cs-134	<1.03E-02	0.00E+00	1.03E-02
280097	12/23/2013 - 12/30/2013	Cs-137	<1.29E-02	0.00E+00	1.29E-02
		Be-7	<8.01E-02	0.00E+00	8.01E-02
		K-40	4.83E-01	8.99E-02	9.30E-02
		Nuclide	Activity	1 Sigma Error	LLD

Sample Point 195 [INDICATOR - N @ 0.19 miles]

Sample ID	Sample Dates	Nuclide	Activity	1 Sigma Error	LLD
250428	12/31/2012 - 1/7/2013	I-131	<1.58E-02	0.00E+00	1.58E-02
		Cs-134	<1.64E-02	0.00E+00	1.64E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	<5.07E-01	0.00E+00	5.07E-01
250558	1/7/2013 - 1/14/2013	Nuclide	Activity	1 Sigma Error	LLD
		I-131	<1.12E-02	0.00E+00	1.12E-02
		Cs-134	<7.15E-03	0.00E+00	7.15E-03
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
250727	1/14/2013 - 1/21/2013	K-40	2.91E-01	8.08E-02	1.64E-01
		Nuclide	Activity	1 Sigma Error	LLD
		I-131	<9.98E-03	0.00E+00	9.98E-03
		Cs-134	<6.38E-03	0.00E+00	6.38E-03
250975	1/21/2013 - 1/28/2013	Cs-137	<7.59E-03	0.00E+00	7.59E-03
		Be-7	<9.41E-02	0.00E+00	9.41E-02
		K-40	4.02E-01	9.22E-02	5.72E-02
		Nuclide	Activity	1 Sigma Error	LLD
250975	1/21/2013 - 1/28/2013	I-131	<1.28E-02	0.00E+00	1.28E-02
		Cs-134	<1.65E-02	0.00E+00	1.65E-02
		Cs-137	<1.35E-02	0.00E+00	1.35E-02
		Be-7	1.02E-01	3.88E-02	1.05E-01
		K-40	3.78E-01	1.19E-01	2.57E-01
251261	1/28/2013 - 2/4/2013	Nuclide	Activity	1 Sigma Error	LLD
		I-131	<1.50E-02	0.00E+00	1.50E-02
		Cs-134	<1.29E-02	0.00E+00	1.29E-02
		Cs-137	<1.40E-02	0.00E+00	1.40E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 195 [INDICATOR - N @ 0.19 miles]

Sample ID	Sample Dates	Nuclide	Activity	1 Sigma Error	LLD
251261	1/28/2013 - 2/4/2013	K-40	2.02E-01	6.73E-02	2.15E-01
251591	2/4/2013 - 2/11/2013	I-131	<1.44E-02	0.00E+00	1.44E-02
		Cs-134	<1.13E-02	0.00E+00	1.13E-02
		Cs-137	<1.85E-02	0.00E+00	1.85E-02
		Be-7	<8.06E-02	0.00E+00	8.06E-02
		K-40	3.54E-01	1.09E-01	1.96E-01
252057	2/11/2013 - 2/18/2013	I-131	<1.25E-02	0.00E+00	1.25E-02
		Cs-134	<6.46E-03	0.00E+00	6.46E-03
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<6.78E-02	0.00E+00	6.78E-02
		K-40	3.47E-01	8.41E-02	1.90E-01
252672	2/18/2013 - 2/25/2013	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	1.16E+00	1.56E-01	1.60E-01
253060	2/25/2013 - 3/4/2013	I-131	<1.13E-02	0.00E+00	1.13E-02
		Cs-134	<9.43E-03	0.00E+00	9.43E-03
		Cs-137	<8.86E-03	0.00E+00	8.86E-03
		Be-7	<7.64E-02	0.00E+00	7.64E-02
		K-40	6.16E-01	8.98E-02	9.42E-02
253868	3/4/2013 - 3/11/2013	I-131	<1.33E-02	0.00E+00	1.33E-02
		Cs-134	<1.14E-02	0.00E+00	1.14E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<8.75E-02	0.00E+00	8.75E-02
		K-40	4.98E-01	1.06E-01	6.11E-02
254190	3/11/2013 - 3/18/2013	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<1.24E-02	0.00E+00	1.24E-02
		Cs-137	<1.92E-02	0.00E+00	1.92E-02
		Be-7	<1.26E-01	0.00E+00	1.26E-01
		K-40	4.27E-01	1.01E-01	2.26E-01
254725	3/18/2013 - 3/25/2013	I-131	<1.52E-02	0.00E+00	1.52E-02
		Cs-134	<7.95E-03	0.00E+00	7.95E-03
		Cs-137	<1.64E-02	0.00E+00	1.64E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	4.26E-01	1.00E-01	6.40E-02
255285	3/25/2013 - 4/1/2013	I-131	<1.93E-02	0.00E+00	1.93E-02
		Cs-134	<1.72E-02	0.00E+00	1.72E-02
		Cs-137	<1.16E-02	0.00E+00	1.16E-02
		Be-7	<6.53E-02	0.00E+00	6.53E-02
		K-40	<4.65E-01	0.00E+00	4.65E-01
255814	4/1/2013 - 4/8/2013	I-131	<1.33E-02	0.00E+00	1.33E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.26E-02	0.00E+00	1.26E-02
		Be-7	<9.70E-02	0.00E+00	9.70E-02
		K-40	<3.92E-01	0.00E+00	3.92E-01
256048	4/8/2013 - 4/15/2013	I-131	<1.43E-02	0.00E+00	1.43E-02
		Cs-134	<1.09E-02	0.00E+00	1.09E-02
		Cs-137	<1.18E-02	0.00E+00	1.18E-02
		Be-7	<7.29E-02	0.00E+00	7.29E-02
		K-40	<3.63E-01	0.00E+00	3.63E-01

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m³

Sample Point 195 [INDICATOR - N @ 0.19 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
256316	4/15/2013 - 4/22/2013	I-131	<1.04E-02	0.00E+00	1.04E-02
		Cs-134	<8.62E-03	0.00E+00	8.62E-03
		Cs-137	<1.12E-02	0.00E+00	1.12E-02
		Be-7	<7.08E-02	0.00E+00	7.08E-02
		K-40	6.92E-01	1.09E-01	1.15E-01
256583	4/22/2013 - 4/29/2013	I-131	<1.24E-02	0.00E+00	1.24E-02
		Cs-134	<7.35E-03	0.00E+00	7.35E-03
		Cs-137	<7.26E-03	0.00E+00	7.26E-03
		Be-7	<7.44E-02	0.00E+00	7.44E-02
		K-40	4.59E-01	9.29E-02	1.10E-01
257106	4/29/2013 - 5/6/2013	I-131	<9.54E-03	0.00E+00	9.54E-03
		Cs-134	<9.43E-03	0.00E+00	9.43E-03
		Cs-137	<6.12E-03	0.00E+00	6.12E-03
		Be-7	<6.81E-02	0.00E+00	6.81E-02
		K-40	5.20E-01	9.12E-02	1.16E-01
257259	5/6/2013 - 5/13/2013	I-131	<1.41E-02	0.00E+00	1.41E-02
		Cs-134	<1.13E-02	0.00E+00	1.13E-02
		Cs-137	<1.27E-02	0.00E+00	1.27E-02
		Be-7	<6.24E-02	0.00E+00	6.24E-02
		K-40	6.08E-01	9.07E-02	1.50E-01
257706	5/13/2013 - 5/20/2013	I-131	<1.33E-02	0.00E+00	1.33E-02
		Cs-134	<9.46E-03	0.00E+00	9.46E-03
		Cs-137	<1.21E-02	0.00E+00	1.21E-02
		Be-7	<8.10E-02	0.00E+00	8.10E-02
		K-40	2.89E-01	7.63E-02	1.02E-01
257950	5/20/2013 - 5/28/2013	I-131	<2.02E-02	0.00E+00	2.02E-02
		Cs-134	<1.89E-02	0.00E+00	1.89E-02
		Cs-137	<2.05E-02	0.00E+00	2.05E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	<4.24E-01	0.00E+00	4.24E-01
258185	5/28/2013 - 6/3/2013	I-131	<2.42E-02	0.00E+00	2.42E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<2.48E-02	0.00E+00	2.48E-02
		Be-7	<1.38E-01	0.00E+00	1.38E-01
		K-40	6.53E-01	1.50E-01	3.13E-01
258532	6/3/2013 - 6/10/2013	I-131	<1.70E-02	0.00E+00	1.70E-02
		Cs-134	<1.90E-02	0.00E+00	1.90E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<7.56E-02	0.00E+00	7.56E-02
		K-40	3.74E-01	1.32E-01	3.31E-01
259002	6/10/2013 - 6/17/2013	I-131	<1.94E-02	0.00E+00	1.94E-02
		Cs-134	<1.14E-02	0.00E+00	1.14E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	6.54E-01	1.36E-01	2.44E-01
259550	6/17/2013 - 6/24/2013	I-131	<1.20E-02	0.00E+00	1.20E-02
		Cs-134	<2.11E-02	0.00E+00	2.11E-02
		Cs-137	<2.30E-02	0.00E+00	2.30E-02
		Be-7	<1.82E-01	0.00E+00	1.82E-01
		K-40	3.90E-01	1.04E-01	7.53E-02
260184	6/24/2013 - 7/11/2013	I-131	<2.58E-02	0.00E+00	2.58E-02

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 195 [INDICATOR - N @ 0.19 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
260184	6/24/2013 - 7/1/2013	Cs-134	<1.17E-02	0.00E+00	1.17E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<9.14E-02	0.00E+00	9.14E-02
		K-40	2.65E-01	8.83E-02	2.65E-01
260644	7/1/2013 - 7/8/2013	I-131	<1.94E-02	0.00E+00	1.94E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<2.28E-02	0.00E+00	2.28E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	<6.11E-01	0.00E+00	6.11E-01
261607	7/8/2013 - 7/15/2013	I-131	<1.24E-02	0.00E+00	1.24E-02
		Cs-134	<9.25E-03	0.00E+00	9.25E-03
		Cs-137	<9.35E-03	0.00E+00	9.35E-03
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	3.59E-01	1.06E-01	1.50E-01
262109	7/15/2013 - 7/22/2013	I-131	<1.06E-02	0.00E+00	1.06E-02
		Cs-134	<7.62E-03	0.00E+00	7.62E-03
		Cs-137	<1.30E-02	0.00E+00	1.30E-02
		Be-7	<8.05E-02	0.00E+00	8.05E-02
		K-40	5.15E-01	8.25E-02	1.18E-01
262943	7/22/2013 - 7/29/2013	I-131	<1.60E-02	0.00E+00	1.60E-02
		Cs-134	<1.62E-02	0.00E+00	1.62E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<1.09E-01	0.00E+00	1.09E-01
		K-40	<4.65E-01	0.00E+00	4.65E-01
263352	7/29/2013 - 8/5/2013	I-131	<8.63E-03	0.00E+00	8.63E-03
		Cs-134	<1.23E-02	0.00E+00	1.23E-02
		Cs-137	<1.48E-02	0.00E+00	1.48E-02
		Be-7	<8.14E-02	0.00E+00	8.14E-02
		K-40	3.51E-01	9.56E-02	1.68E-01
264010	8/5/2013 - 8/12/2013	I-131	<2.40E-02	0.00E+00	2.40E-02
		Cs-134	<1.95E-02	0.00E+00	1.95E-02
		Cs-137	<1.46E-02	0.00E+00	1.46E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	3.14E-01	1.21E-01	2.15E-01
265141	8/12/2013 - 8/19/2013	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<1.90E-02	0.00E+00	1.90E-02
		Cs-137	<1.65E-02	0.00E+00	1.65E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	<5.06E-01	0.00E+00	5.06E-01
265450	8/19/2013 - 8/26/2013	I-131	<2.12E-02	0.00E+00	2.12E-02
		Cs-134	<1.56E-02	0.00E+00	1.56E-02
		Cs-137	<1.64E-02	0.00E+00	1.64E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	3.78E-01	1.05E-01	3.22E-01
267136	8/26/2013 - 9/3/2013	I-131	<1.72E-02	0.00E+00	1.72E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	3.24E-01	1.12E-01	2.26E-01
267586	9/3/2013 - 9/9/2013	I-131	<2.22E-02	0.00E+00	2.22E-02
		Cs-134	<2.45E-02	0.00E+00	2.45E-02

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m³

Sample Point 195 [INDICATOR - N @ 0.19 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
267586	9/3/2013 - 9/9/2013	Cs-137	<2.54E-02	0.00E+00	2.54E-02
		Be-7	<1.84E-01	0.00E+00	1.84E-01
		K-40	5.55E-01	1.57E-01	3.41E-01
268441	9/9/2013 - 9/16/2013	I-131	<2.21E-02	0.00E+00	2.21E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<2.04E-02	0.00E+00	2.04E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	5.08E-01	1.20E-01	2.13E-01
269562	9/16/2013 - 9/23/2013	I-131	<2.32E-02	0.00E+00	2.32E-02
		Cs-134	<1.92E-02	0.00E+00	1.92E-02
		Cs-137	<2.10E-02	0.00E+00	2.10E-02
		Be-7	<1.26E-01	0.00E+00	1.26E-01
		K-40	<5.83E-01	0.00E+00	5.83E-01
270707	9/23/2013 - 9/30/2013	I-131	<2.24E-02	0.00E+00	2.24E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	<6.31E-01	0.00E+00	6.31E-01
271432	9/30/2013 - 10/7/2013	I-131	<2.21E-02	0.00E+00	2.21E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<2.48E-02	0.00E+00	2.48E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	<5.70E-01	0.00E+00	5.70E-01
272039	10/7/2013 - 10/14/2013	I-131	<1.26E-02	0.00E+00	1.26E-02
		Cs-134	<8.73E-03	0.00E+00	8.73E-03
		Cs-137	<1.18E-02	0.00E+00	1.18E-02
		Be-7	<8.12E-02	0.00E+00	8.12E-02
		K-40	5.85E-01	9.65E-02	1.32E-01
272422	10/14/2013 - 10/21/2013	I-131	<1.50E-02	0.00E+00	1.50E-02
		Cs-134	<8.42E-03	0.00E+00	8.42E-03
		Cs-137	<1.14E-02	0.00E+00	1.14E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	4.06E-01	1.09E-01	1.73E-01
272823	10/21/2013 - 10/28/2013	I-131	<1.58E-02	0.00E+00	1.58E-02
		Cs-134	<1.50E-02	0.00E+00	1.50E-02
		Cs-137	<1.61E-02	0.00E+00	1.61E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	5.28E-01	1.13E-01	1.72E-01
273915	10/28/2013 - 11/4/2013	I-131	<1.10E-02	0.00E+00	1.10E-02
		Cs-134	<8.72E-03	0.00E+00	8.72E-03
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<8.18E-02	0.00E+00	8.18E-02
		K-40	3.09E-01	7.74E-02	1.84E-01
274362	11/4/2013 - 11/11/2013	I-131	<2.17E-02	0.00E+00	2.17E-02
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	6.28E-01	1.31E-01	3.47E-01
274876	11/11/2013 - 11/18/2013	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<1.28E-02	0.00E+00	1.28E-02
		Cs-137	<1.33E-02	0.00E+00	1.33E-02



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: AIR RADIOIODINE Concentration (Activity): pCi/m3

Sample Point 195 [INDICATOR - N @ 0.19 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
274876	11/11/2013 - 11/18/2013	Be-7	<8.18E-02	0.00E+00	8.18E-02
		K-40	5.02E-01	1.34E-01	2.23E-01
276430	11/18/2013 - 11/25/2013	I-131	<2.25E-02	0.00E+00	2.25E-02
		Cs-134	<1.66E-02	0.00E+00	1.66E-02
		Cs-137	<1.33E-02	0.00E+00	1.33E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	6.28E-01	1.34E-01	2.06E-01
278562	11/25/2013 - 12/2/2013	I-131	<2.34E-02	0.00E+00	2.34E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<1.99E-02	0.00E+00	1.99E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	4.43E-01	1.36E-01	2.03E-01
278689	12/2/2013 - 12/9/2013	I-131	<1.72E-02	0.00E+00	1.72E-02
		Cs-134	<1.17E-02	0.00E+00	1.17E-02
		Cs-137	<1.82E-02	0.00E+00	1.82E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	5.25E-01	1.12E-01	6.45E-02
278962	12/9/2013 - 12/16/2013	I-131	<2.19E-02	0.00E+00	2.19E-02
		Cs-134	<1.63E-02	0.00E+00	1.63E-02
		Cs-137	<1.67E-02	0.00E+00	1.67E-02
		Be-7	<1.87E-01	0.00E+00	1.87E-01
		K-40	4.31E-01	1.11E-01	2.57E-01
279608	12/16/2013 - 12/23/2013	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<3.59E-03	0.00E+00	3.59E-03
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<1.59E-01	0.00E+00	1.59E-01
		K-40	<5.90E-01	0.00E+00	5.90E-01
280086	12/23/2013 - 12/30/2013	I-131	<1.25E-02	0.00E+00	1.25E-02
		Cs-134	<1.20E-02	0.00E+00	1.20E-02
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	5.28E-01	1.36E-01	1.75E-01

Media Type: CROPS Concentration (Activity): pCi/kg

Sample Point 104 [INDICATOR - NNW @ 1.52 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
259645	7/1/2013 - 7/1/2013	I-131	<9.30E+00	0.00E+00	9.30E+00
		Cs-134	<1.45E+01	0.00E+00	1.45E+01
		Cs-137	<1.22E+01	0.00E+00	1.22E+01
		Be-7	<1.18E+02	0.00E+00	1.18E+02
		K-40	2.40E+03	2.08E+02	1.93E+02
262859	8/5/2013 - 8/5/2013	I-131	<1.14E+01	0.00E+00	1.14E+01
		Cs-134	<1.05E+01	0.00E+00	1.05E+01
		Cs-137	<1.81E+01	0.00E+00	1.81E+01
		Be-7	<9.95E+01	0.00E+00	9.95E+01
		K-40	1.83E+03	1.79E+02	1.47E+02
265436	9/3/2013 - 9/3/2013	I-131	<6.82E+00	0.00E+00	6.82E+00
		Cs-134	<6.92E+00	0.00E+00	6.92E+00
		Cs-137	<8.06E+00	0.00E+00	8.06E+00
		Be-7	6.46E+01	2.24E+01	4.94E+01
		K-40	2.34E+03	1.14E+02	8.64E+01
269641	10/7/2013 - 10/7/2013	I-131	<1.23E+01	0.00E+00	1.23E+01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: CROPS Concentration (Activity): pCi/kg

Sample Point 104 [INDICATOR - NNW @ 1.52 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
269641	10/7/2013 - 10/7/2013	Cs-134	<1.19E+01	0.00E+00	1.19E+01
		Cs-137	<1.26E+01	0.00E+00	1.26E+01
		Be-7	<8.20E+01	0.00E+00	8.20E+01
		K-40	2.36E+03	1.45E+02	1.09E+02
272549	11/4/2013 - 11/4/2013	I-131	<8.05E+00	0.00E+00	8.05E+00
		Cs-134	<8.64E+00	0.00E+00	8.64E+00
		Cs-137	<8.87E+00	0.00E+00	8.87E+00
		Be-7	<7.30E+01	0.00E+00	7.30E+01
		K-40	2.36E+03	1.21E+02	7.68E+01
275266	12/2/2013 - 12/2/2013	I-131	<1.29E+01	0.00E+00	1.29E+01
		Cs-134	<1.54E+01	0.00E+00	1.54E+01
		Cs-137	<1.61E+01	0.00E+00	1.61E+01
		Be-7	2.54E+02	8.28E+01	1.20E+02
		K-40	3.13E+03	2.23E+02	1.72E+02

Media Type: DRINKING WATER Concentration (Activity): pCi/l

Sample Point 101 [INDICATOR - E @ 3.31 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250603	12/10/2012 - 1/7/2013	Beta	1.66E+00	4.23E-01	1.32E+00
		Mn-54	<3.67E+00	0.00E+00	3.67E+00
		Co-58	<3.83E+00	0.00E+00	3.83E+00
		Fe-59	<9.11E+00	0.00E+00	9.11E+00
		Co-60	<4.13E+00	0.00E+00	4.13E+00
		Zn-65	<1.03E+01	0.00E+00	1.03E+01
		Zr-95	<6.71E+00	0.00E+00	6.71E+00
		Nb-95	<5.19E+00	0.00E+00	5.19E+00
		I-131	<1.44E+01	0.00E+00	1.44E+01
		Cs-134	<4.29E+00	0.00E+00	4.29E+00
		Cs-137	<4.33E+00	0.00E+00	4.33E+00
		BaLa-140	<8.45E+00	0.00E+00	8.45E+00
		Be-7	<3.74E+01	0.00E+00	3.74E+01
		K-40	1.24E+02	2.01E+01	3.47E+01
		251654	1/7/2013 - 2/4/2013	Beta	2.31E+00
Mn-54	<3.93E+00			0.00E+00	3.93E+00
Co-58	<3.48E+00			0.00E+00	3.48E+00
Fe-59	<9.27E+00			0.00E+00	9.27E+00
Co-60	<5.26E+00			0.00E+00	5.26E+00
Zn-65	<6.30E+00			0.00E+00	6.30E+00
Zr-95	<7.22E+00			0.00E+00	7.22E+00
Nb-95	<5.08E+00			0.00E+00	5.08E+00
I-131	<1.06E+01			0.00E+00	1.06E+01
Cs-134	<2.97E+00			0.00E+00	2.97E+00
Cs-137	<3.88E+00			0.00E+00	3.88E+00
BaLa-140	<1.21E+01			0.00E+00	1.21E+01
Be-7	<3.16E+01			0.00E+00	3.16E+01
K-40	5.78E+01			1.79E+01	4.47E+01
253048	12/10/2012 - 3/4/2013			Nuclide	Activity
		H3DW	1.08E+03	7.27E+01	1.84E+02
253932	2/4/2013 - 3/4/2013	Beta	7.83E-01	3.67E-01	1.19E+00
		Mn-54	<3.87E+00	0.00E+00	3.87E+00
		Co-58	<4.53E+00	0.00E+00	4.53E+00
		Fe-59	<9.47E+00	0.00E+00	9.47E+00
		Co-60	<5.16E+00	0.00E+00	5.16E+00
		Zn-65	<9.60E+00	0.00E+00	9.60E+00
		Zr-95	<6.30E+00	0.00E+00	6.30E+00
		Nb-95	<5.28E+00	0.00E+00	5.28E+00
		I-131	<1.21E+01	0.00E+00	1.21E+01
		Cs-134	<3.66E+00	0.00E+00	3.66E+00
		Cs-137	<3.99E+00	0.00E+00	3.99E+00
		BaLa-140	<9.46E+00	0.00E+00	9.46E+00



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: DRINKING WATER Concentration (Activity): pCi/l

Sample Point 101 [INDICATOR - E @ 3.31 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
253932	2/4/2013 - 3/4/2013	Be-7	<3.56E+01	0.00E+00	3.56E+01
		K-40	5.04E+01	2.62E+01	3.80E+01
255901	4/1/2013 - 4/1/2013	Beta	1.35E+00	4.16E-01	1.32E+00
		Mn-54	<3.54E+00	0.00E+00	3.54E+00
		Co-58	<3.27E+00	0.00E+00	3.27E+00
		Fe-59	<9.19E+00	0.00E+00	9.19E+00
		Co-60	<4.81E+00	0.00E+00	4.81E+00
		Zn-65	<7.29E+00	0.00E+00	7.29E+00
		Zr-95	<6.57E+00	0.00E+00	6.57E+00
		Nb-95	<5.09E+00	0.00E+00	5.09E+00
		I-131	<1.23E+01	0.00E+00	1.23E+01
		Cs-134	<3.54E+00	0.00E+00	3.54E+00
		Cs-137	<4.31E+00	0.00E+00	4.31E+00
		BaLa-140	<1.07E+01	0.00E+00	1.07E+01
		Be-7	<3.40E+01	0.00E+00	3.40E+01
		K-40	1.02E+02	2.04E+01	3.73E+01
257190	4/1/2013 - 4/29/2013	Beta	1.44E+00	3.91E-01	1.22E+00
		Mn-54	<4.50E+00	0.00E+00	4.50E+00
		Co-58	<3.72E+00	0.00E+00	3.72E+00
		Fe-59	<9.73E+00	0.00E+00	9.73E+00
		Co-60	<5.39E+00	0.00E+00	5.39E+00
		Zn-65	<8.54E+00	0.00E+00	8.54E+00
		Zr-95	<5.40E+00	0.00E+00	5.40E+00
		Nb-95	<4.04E+00	0.00E+00	4.04E+00
		I-131	<1.26E+01	0.00E+00	1.26E+01
		Cs-134	<2.90E+00	0.00E+00	2.90E+00
		Cs-137	<4.01E+00	0.00E+00	4.01E+00
		BaLa-140	<1.07E+01	0.00E+00	1.07E+01
		Be-7	<3.28E+01	0.00E+00	3.28E+01
		K-40	<7.17E+01	0.00E+00	7.17E+01
258168	4/1/2013 - 5/28/2013	H3DW	8.70E+02	6.11E+01	1.54E+02
258272	4/29/2013 - 5/28/2013	Beta	1.41E+00	4.04E-01	1.27E+00
		Mn-54	<2.74E+00	0.00E+00	2.74E+00
		Co-58	<2.84E+00	0.00E+00	2.84E+00
		Fe-59	<6.89E+00	0.00E+00	6.89E+00
		Co-60	<2.99E+00	0.00E+00	2.99E+00
		Zn-65	<5.40E+00	0.00E+00	5.40E+00
		Zr-95	<5.44E+00	0.00E+00	5.44E+00
		Nb-95	<3.61E+00	0.00E+00	3.61E+00
		I-131	<1.35E+01	0.00E+00	1.35E+01
		Cs-134	<2.82E+00	0.00E+00	2.82E+00
		Cs-137	<3.05E+00	0.00E+00	3.05E+00
		BaLa-140	<7.60E+00	0.00E+00	7.60E+00
		Be-7	<2.62E+01	0.00E+00	2.62E+01
		K-40	2.04E+02	2.10E+01	2.16E+01
260278	5/28/2013 - 6/24/2013	Beta	2.25E+00	3.84E-01	1.12E+00
		Mn-54	<4.59E+00	0.00E+00	4.59E+00
		Co-58	<6.81E+00	0.00E+00	6.81E+00
		Fe-59	<9.52E+00	0.00E+00	9.52E+00
		Co-60	<7.62E+00	0.00E+00	7.62E+00
		Zn-65	<1.01E+01	0.00E+00	1.01E+01
		Zr-95	<1.10E+01	0.00E+00	1.10E+01
		Nb-95	<6.64E+00	0.00E+00	6.64E+00
		I-131	<1.38E+01	0.00E+00	1.38E+01
		Cs-134	<5.29E+00	0.00E+00	5.29E+00
		Cs-137	<5.30E+00	0.00E+00	5.30E+00
		BaLa-140	<1.33E+01	0.00E+00	1.33E+01
		Be-7	<4.98E+01	0.00E+00	4.98E+01
		K-40	<9.48E+01	0.00E+00	9.48E+01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: DRINKING WATER Concentration (Activity): pCi/l

Sample Point 101 [INDICATOR - E @ 3.31 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
263218	6/24/2013 - 7/22/2013	Beta	1.46E+00	3.65E-01	1.13E+00
		Mn-54	<4.45E+00	0.00E+00	4.45E+00
		Co-58	<4.49E+00	0.00E+00	4.49E+00
		Fe-59	<1.26E+01	0.00E+00	1.26E+01
		Co-60	<7.10E+00	0.00E+00	7.10E+00
		Zn-65	<1.12E+01	0.00E+00	1.12E+01
		Zr-95	<9.70E+00	0.00E+00	9.70E+00
		Nb-95	<6.36E+00	0.00E+00	6.36E+00
		I-131	<1.34E+01	0.00E+00	1.34E+01
		Cs-134	<4.05E+00	0.00E+00	4.05E+00
		Cs-137	<5.05E+00	0.00E+00	5.05E+00
		BaLa-140	<1.15E+01	0.00E+00	1.15E+01
		Be-7	<3.73E+01	0.00E+00	3.73E+01
		K-40	1.08E+02	3.20E+01	4.84E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
265541	7/22/2013 - 8/19/2013	Beta	2.01E+00	3.97E-01	1.19E+00
		Mn-54	<4.06E+00	0.00E+00	4.06E+00
		Co-58	<5.17E+00	0.00E+00	5.17E+00
		Fe-59	<1.14E+01	0.00E+00	1.14E+01
		Co-60	<4.64E+00	0.00E+00	4.64E+00
		Zn-65	<9.59E+00	0.00E+00	9.59E+00
		Zr-95	<9.51E+00	0.00E+00	9.51E+00
		Nb-95	<5.88E+00	0.00E+00	5.88E+00
		I-131	<1.39E+01	0.00E+00	1.39E+01
		Cs-134	<4.48E+00	0.00E+00	4.48E+00
		Cs-137	<5.28E+00	0.00E+00	5.28E+00
		BaLa-140	<1.27E+01	0.00E+00	1.27E+01
		Be-7	<5.25E+01	0.00E+00	5.25E+01
		K-40	2.00E+02	2.65E+01	3.72E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
266928	5/28/2013 - 8/19/2013	H3DW	3.21E+02	5.65E+01	1.67E+02

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
269696	8/19/2013 - 9/16/2013	Beta	1.13E+00	4.39E-01	1.42E+00
		Mn-54	<3.01E+00	0.00E+00	3.01E+00
		Co-58	<4.51E+00	0.00E+00	4.51E+00
		Fe-59	<9.60E+00	0.00E+00	9.60E+00
		Co-60	<4.27E+00	0.00E+00	4.27E+00
		Zn-65	<8.37E+00	0.00E+00	8.37E+00
		Zr-95	<7.73E+00	0.00E+00	7.73E+00
		Nb-95	<5.26E+00	0.00E+00	5.26E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.50E+00	0.00E+00	3.50E+00
		Cs-137	<3.81E+00	0.00E+00	3.81E+00
		BaLa-140	<7.46E+00	0.00E+00	7.46E+00
		Be-7	<3.12E+01	0.00E+00	3.12E+01
		K-40	8.15E+01	2.44E+01	5.17E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
272518	9/16/2013 - 10/14/2013	Beta	1.35E+00	4.12E-01	1.31E+00
		Mn-54	<3.00E+00	0.00E+00	3.00E+00
		Co-58	<3.90E+00	0.00E+00	3.90E+00
		Fe-59	<6.64E+00	0.00E+00	6.64E+00
		Co-60	<4.07E+00	0.00E+00	4.07E+00
		Zn-65	<9.07E+00	0.00E+00	9.07E+00
		Zr-95	<6.05E+00	0.00E+00	6.05E+00
		Nb-95	<5.25E+00	0.00E+00	5.25E+00
		I-131	<1.41E+01	0.00E+00	1.41E+01
		Cs-134	<3.32E+00	0.00E+00	3.32E+00
		Cs-137	<3.91E+00	0.00E+00	3.91E+00
		BaLa-140	<9.62E+00	0.00E+00	9.62E+00
		Be-7	<4.18E+01	0.00E+00	4.18E+01
		K-40	1.57E+02	2.21E+01	3.55E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
274969	10/14/2013 - 11/11/2013	Beta	1.61E+00	3.99E-01	1.24E+00
		Mn-54	<3.17E+00	0.00E+00	3.17E+00



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: DRINKING WATER Concentration (Activity): pCi/l

Sample Point 101 [INDICATOR - E @ 3.31 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
274969	10/14/2013 - 11/11/2013	Co-58	<3.72E+00	0.00E+00	3.72E+00
		Fe-59	<7.24E+00	0.00E+00	7.24E+00
		Co-60	<2.92E+00	0.00E+00	2.92E+00
		Zn-65	<6.70E+00	0.00E+00	6.70E+00
		Zr-95	<6.63E+00	0.00E+00	6.63E+00
		Nb-95	<4.33E+00	0.00E+00	4.33E+00
		I-131	<1.29E+01	0.00E+00	1.29E+01
		Cs-134	<3.08E+00	0.00E+00	3.08E+00
		Cs-137	<3.64E+00	0.00E+00	3.64E+00
		BaLa-140	<1.16E+01	0.00E+00	1.16E+01
		Be-7	<3.08E+01	0.00E+00	3.08E+01
		K-40	1.16E+02	1.82E+01	3.30E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
276945	8/19/2013 - 12/9/2013	H3DW	3.17E+02	5.34E+01	1.58E+02

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
279029	11/11/2013 - 12/9/2013	Beta	1.85E+00	3.93E-01	1.19E+00
		Mn-54	<2.74E+00	0.00E+00	2.74E+00
		Co-58	<4.32E+00	0.00E+00	4.32E+00
		Fe-59	<6.97E+00	0.00E+00	6.97E+00
		Co-60	<3.58E+00	0.00E+00	3.58E+00
		Zn-65	<6.32E+00	0.00E+00	6.32E+00
		Zr-95	<6.19E+00	0.00E+00	6.19E+00
		Nb-95	<3.58E+00	0.00E+00	3.58E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<2.62E+00	0.00E+00	2.62E+00
		Cs-137	<3.04E+00	0.00E+00	3.04E+00
		BaLa-140	<8.18E+00	0.00E+00	8.18E+00
		Be-7	<2.97E+01	0.00E+00	2.97E+01
		K-40	1.91E+02	1.98E+01	2.54E+01

Sample Point 119 [INDICATOR - SSW @ 7.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250587	12/10/2012 - 1/7/2013	Beta	2.06E+00	4.28E-01	1.31E+00
		Mn-54	<4.00E+00	0.00E+00	4.00E+00
		Co-58	<4.74E+00	0.00E+00	4.74E+00
		Fe-59	<1.06E+01	0.00E+00	1.06E+01
		Co-60	<6.47E+00	0.00E+00	6.47E+00
		Zn-65	<7.56E+00	0.00E+00	7.56E+00
		Zr-95	<8.02E+00	0.00E+00	8.02E+00
		Nb-95	<5.19E+00	0.00E+00	5.19E+00
		I-131	<1.41E+01	0.00E+00	1.41E+01
		Cs-134	<3.31E+00	0.00E+00	3.31E+00
		Cs-137	<4.46E+00	0.00E+00	4.46E+00
		BaLa-140	<9.75E+00	0.00E+00	9.75E+00
		Be-7	<3.83E+01	0.00E+00	3.83E+01
		K-40	1.38E+02	2.30E+01	3.97E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
251638	1/7/2013 - 2/4/2013	Beta	1.45E+00	3.76E-01	1.17E+00
		Mn-54	<4.32E+00	0.00E+00	4.32E+00
		Co-58	<3.69E+00	0.00E+00	3.69E+00
		Fe-59	<8.09E+00	0.00E+00	8.09E+00
		Co-60	<5.00E+00	0.00E+00	5.00E+00
		Zn-65	<7.78E+00	0.00E+00	7.78E+00
		Zr-95	<7.78E+00	0.00E+00	7.78E+00
		Nb-95	<5.72E+00	0.00E+00	5.72E+00
		I-131	<1.43E+01	0.00E+00	1.43E+01
		Cs-134	<3.40E+00	0.00E+00	3.40E+00
		Cs-137	<4.35E+00	0.00E+00	4.35E+00
		BaLa-140	<9.90E+00	0.00E+00	9.90E+00
		Be-7	<3.78E+01	0.00E+00	3.78E+01
		K-40	1.22E+02	2.86E+01	4.46E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
253047	12/10/2012 - 3/4/2013	H3DW	6.82E+02	6.64E+01	1.82E+02



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: DRINKING WATER Concentration (Activity): pCi/l

Sample Point 119 [INDICATOR - SSW @ 7.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
253916	2/4/2013 - 3/4/2013	Beta	1.77E+00	3.90E-01	1.19E+00
		Mn-54	<4.55E+00	0.00E+00	4.55E+00
		Co-58	<5.74E+00	0.00E+00	5.74E+00
		Fe-59	<7.54E+00	0.00E+00	7.54E+00
		Co-60	<5.27E+00	0.00E+00	5.27E+00
		Zn-65	<1.09E+01	0.00E+00	1.09E+01
		Zr-95	<9.12E+00	0.00E+00	9.12E+00
		Nb-95	<5.83E+00	0.00E+00	5.83E+00
		I-131	<1.44E+01	0.00E+00	1.44E+01
		Cs-134	<3.64E+00	0.00E+00	3.64E+00
		Cs-137	<4.64E+00	0.00E+00	4.64E+00
		BaLa-140	<1.10E+01	0.00E+00	1.10E+01
		Be-7	4.39E+01	1.38E+01	3.85E+01
		K-40	1.72E+02	2.19E+01	4.28E+01
		255862	3/4/2013 - 4/1/2013	Beta	1.98E+00
Mn-54	<4.39E+00			0.00E+00	4.39E+00
Co-58	<5.22E+00			0.00E+00	5.22E+00
Fe-59	<9.06E+00			0.00E+00	9.06E+00
Co-60	<5.60E+00			0.00E+00	5.60E+00
Zn-65	<1.00E+01			0.00E+00	1.00E+01
Zr-95	<9.64E+00			0.00E+00	9.64E+00
Nb-95	<6.36E+00			0.00E+00	6.36E+00
I-131	<1.39E+01			0.00E+00	1.39E+01
Cs-134	<4.25E+00			0.00E+00	4.25E+00
Cs-137	<4.79E+00			0.00E+00	4.79E+00
BaLa-140	<1.19E+01			0.00E+00	1.19E+01
Be-7	<4.30E+01			0.00E+00	4.30E+01
K-40	1.05E+02			1.92E+01	2.53E+01
257164	4/1/2013 - 4/29/2013			Beta	2.43E+00
		Mn-54	<3.88E+00	0.00E+00	3.88E+00
		Co-58	<4.93E+00	0.00E+00	4.93E+00
		Fe-59	<1.05E+01	0.00E+00	1.05E+01
		Co-60	<6.04E+00	0.00E+00	6.04E+00
		Zn-65	<8.57E+00	0.00E+00	8.57E+00
		Zr-95	<5.52E+00	0.00E+00	5.52E+00
		Nb-95	<5.54E+00	0.00E+00	5.54E+00
		I-131	<1.39E+01	0.00E+00	1.39E+01
		Cs-134	<4.32E+00	0.00E+00	4.32E+00
		Cs-137	<4.51E+00	0.00E+00	4.51E+00
		BaLa-140	<1.07E+01	0.00E+00	1.07E+01
		Be-7	<3.42E+01	0.00E+00	3.42E+01
		K-40	1.44E+02	1.97E+01	4.22E+01
		258167	3/4/2013 - 5/28/2013	H3DW	6.20E+02
258246	4/29/2013 - 5/28/2013	Beta	9.63E-01	3.91E-01	1.27E+00
		Mn-54	<3.08E+00	0.00E+00	3.08E+00
		Co-58	<3.02E+00	0.00E+00	3.02E+00
		Fe-59	<6.52E+00	0.00E+00	6.52E+00
		Co-60	<3.73E+00	0.00E+00	3.73E+00
		Zn-65	<5.78E+00	0.00E+00	5.78E+00
		Zr-95	<5.98E+00	0.00E+00	5.98E+00
		Nb-95	<3.77E+00	0.00E+00	3.77E+00
		I-131	<1.37E+01	0.00E+00	1.37E+01
		Cs-134	<2.87E+00	0.00E+00	2.87E+00
		Cs-137	<3.72E+00	0.00E+00	3.72E+00
		BaLa-140	<8.14E+00	0.00E+00	8.14E+00
		Be-7	<2.77E+01	0.00E+00	2.77E+01
		K-40	1.10E+02	1.57E+01	2.50E+01
		260252	5/28/2013 - 6/24/2013	Beta	2.07E+00
Mn-54	<3.53E+00			0.00E+00	3.53E+00



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: DRINKING WATER Concentration (Activity): pCi/l

Sample Point 119 [INDICATOR - SSW @ 7.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
260252	5/28/2013 - 6/24/2013	Co-58	<4.78E+00	0.00E+00	4.78E+00
		Fe-59	<7.93E+00	0.00E+00	7.93E+00
		Co-60	<3.72E+00	0.00E+00	3.72E+00
		Zn-65	<1.14E+01	0.00E+00	1.14E+01
		Zr-95	<8.18E+00	0.00E+00	8.18E+00
		Nb-95	<6.27E+00	0.00E+00	6.27E+00
		I-131	<1.34E+01	0.00E+00	1.34E+01
		Cs-134	<3.41E+00	0.00E+00	3.41E+00
		Cs-137	<4.61E+00	0.00E+00	4.61E+00
		BaLa-140	<1.05E+01	0.00E+00	1.05E+01
		Be-7	<3.64E+01	0.00E+00	3.64E+01
		K-40	7.75E+01	2.02E+01	2.64E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
263190	6/24/2013 - 7/22/2013	Beta	2.31E+00	3.84E-01	1.12E+00
		Mn-54	<3.53E+00	0.00E+00	3.53E+00
		Co-58	<5.51E+00	0.00E+00	5.51E+00
		Fe-59	<7.74E+00	0.00E+00	7.74E+00
		Co-60	<5.86E+00	0.00E+00	5.86E+00
		Zn-65	<7.94E+00	0.00E+00	7.94E+00
		Zr-95	<7.69E+00	0.00E+00	7.69E+00
		Nb-95	<4.64E+00	0.00E+00	4.64E+00
		I-131	<1.30E+01	0.00E+00	1.30E+01
		Cs-134	<4.02E+00	0.00E+00	4.02E+00
		Cs-137	<4.31E+00	0.00E+00	4.31E+00
		BaLa-140	<1.27E+01	0.00E+00	1.27E+01
		Be-7	<4.04E+01	0.00E+00	4.04E+01
		K-40	5.20E+01	1.70E+01	6.11E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
265515	7/22/2013 - 8/19/2013	Beta	1.56E+00	3.84E-01	1.18E+00
		Mn-54	<4.70E+00	0.00E+00	4.70E+00
		Co-58	<5.18E+00	0.00E+00	5.18E+00
		Fe-59	<1.04E+01	0.00E+00	1.04E+01
		Co-60	<6.65E+00	0.00E+00	6.65E+00
		Zn-65	<9.14E+00	0.00E+00	9.14E+00
		Zr-95	<8.31E+00	0.00E+00	8.31E+00
		Nb-95	<6.00E+00	0.00E+00	6.00E+00
		I-131	<1.32E+01	0.00E+00	1.32E+01
		Cs-134	<5.02E+00	0.00E+00	5.02E+00
		Cs-137	<5.00E+00	0.00E+00	5.00E+00
		BaLa-140	<1.31E+01	0.00E+00	1.31E+01
		Be-7	<4.15E+01	0.00E+00	4.15E+01
		K-40	1.32E+02	2.58E+01	3.94E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
266927	5/28/2013 - 8/19/2013	H3DW	2.17E+02	5.47E+01	1.67E+02

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
269670	8/19/2013 - 9/16/2013	Beta	1.33E+00	4.41E-01	1.41E+00
		Mn-54	<4.28E+00	0.00E+00	4.28E+00
		Co-58	<4.93E+00	0.00E+00	4.93E+00
		Fe-59	<9.77E+00	0.00E+00	9.77E+00
		Co-60	<6.76E+00	0.00E+00	6.76E+00
		Zn-65	<7.83E+00	0.00E+00	7.83E+00
		Zr-95	<8.01E+00	0.00E+00	8.01E+00
		Nb-95	<4.67E+00	0.00E+00	4.67E+00
		I-131	<1.41E+01	0.00E+00	1.41E+01
		Cs-134	<4.02E+00	0.00E+00	4.02E+00
		Cs-137	<4.56E+00	0.00E+00	4.56E+00
		BaLa-140	<7.14E+00	0.00E+00	7.14E+00
		Be-7	<3.91E+01	0.00E+00	3.91E+01
		K-40	1.18E+02	2.06E+01	2.75E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
272492	9/16/2013 - 10/14/2013	Beta	1.69E+00	4.16E-01	1.29E+00
		Mn-54	<4.35E+00	0.00E+00	4.35E+00
		Co-58	<4.32E+00	0.00E+00	4.32E+00
		Fe-59	<1.01E+01	0.00E+00	1.01E+01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: DRINKING WATER Concentration (Activity): pCi/l

Sample Point 119 [INDICATOR - SSW @ 7.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
272492	9/16/2013 - 10/14/2013	Co-60	<5.67E+00	0.00E+00	5.67E+00
		Zn-65	<9.43E+00	0.00E+00	9.43E+00
		Zr-95	<7.24E+00	0.00E+00	7.24E+00
		Nb-95	<6.44E+00	0.00E+00	6.44E+00
		I-131	<1.43E+01	0.00E+00	1.43E+01
		Cs-134	<3.21E+00	0.00E+00	3.21E+00
		Cs-137	<4.44E+00	0.00E+00	4.44E+00
		BaLa-140	<1.15E+01	0.00E+00	1.15E+01
		Be-7	<4.14E+01	0.00E+00	4.14E+01
		K-40	7.35E+01	1.84E+01	5.18E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
274943	10/14/2013 - 11/11/2013	Beta	1.18E+00	3.87E-01	1.22E+00
		Mn-54	<3.34E+00	0.00E+00	3.34E+00
		Co-58	<3.03E+00	0.00E+00	3.03E+00
		Fe-59	<6.50E+00	0.00E+00	6.50E+00
		Co-60	<3.20E+00	0.00E+00	3.20E+00
		Zn-65	<5.80E+00	0.00E+00	5.80E+00
		Zr-95	<6.29E+00	0.00E+00	6.29E+00
		Nb-95	<4.24E+00	0.00E+00	4.24E+00
		I-131	<1.27E+01	0.00E+00	1.27E+01
		Cs-134	<3.06E+00	0.00E+00	3.06E+00
		Cs-137	<3.02E+00	0.00E+00	3.02E+00
		BaLa-140	<6.28E+00	0.00E+00	6.28E+00
		Be-7	<3.16E+01	0.00E+00	3.16E+01
		K-40	1.71E+02	2.20E+01	3.05E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
276944	8/19/2013 - 12/9/2013	H3DW	2.14E+02	5.22E+01	1.60E+02

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
279013	11/11/2013 - 12/9/2013	Beta	1.75E+00	3.89E-01	1.19E+00
		Mn-54	<5.07E+00	0.00E+00	5.07E+00
		Co-58	<5.00E+00	0.00E+00	5.00E+00
		Fe-59	<1.00E+01	0.00E+00	1.00E+01
		Co-60	<5.18E+00	0.00E+00	5.18E+00
		Zn-65	<1.14E+01	0.00E+00	1.14E+01
		Zr-95	<8.09E+00	0.00E+00	8.09E+00
		Nb-95	<5.88E+00	0.00E+00	5.88E+00
		I-131	<1.42E+01	0.00E+00	1.42E+01
		Cs-134	<3.60E+00	0.00E+00	3.60E+00
		Cs-137	<4.53E+00	0.00E+00	4.53E+00
		BaLa-140	<9.74E+00	0.00E+00	9.74E+00
		Be-7	<4.21E+01	0.00E+00	4.21E+01
		K-40	2.13E+02	2.88E+01	4.47E+01

Sample Point 132 [INDICATOR - SSE @ 11.1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250588	12/10/2012 - 1/7/2013	Beta	1.54E+00	4.20E-01	1.32E+00
		Mn-54	<4.61E+00	0.00E+00	4.61E+00
		Co-58	<5.22E+00	0.00E+00	5.22E+00
		Fe-59	<9.27E+00	0.00E+00	9.27E+00
		Co-60	<6.35E+00	0.00E+00	6.35E+00
		Zn-65	<1.18E+01	0.00E+00	1.18E+01
		Zr-95	<7.94E+00	0.00E+00	7.94E+00
		Nb-95	<5.20E+00	0.00E+00	5.20E+00
		I-131	<1.31E+01	0.00E+00	1.31E+01
		Cs-134	<3.16E+00	0.00E+00	3.16E+00
		Cs-137	<4.15E+00	0.00E+00	4.15E+00
		BaLa-140	<1.15E+01	0.00E+00	1.15E+01
		Be-7	<4.30E+01	0.00E+00	4.30E+01
		K-40	5.20E+01	2.51E+01	4.32E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
251639	1/7/2013 - 2/4/2013	Beta	2.16E+00	4.00E-01	1.19E+00
		Mn-54	<5.04E+00	0.00E+00	5.04E+00
		Co-58	<4.03E+00	0.00E+00	4.03E+00
		Fe-59	<1.12E+01	0.00E+00	1.12E+01
		Co-60	<6.41E+00	0.00E+00	6.41E+00



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: DRINKING WATER Concentration (Activity): pCi/l

Sample Point 132 [INDICATOR - SSE @ 11.1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD		
251639	1/7/2013 - 2/4/2013	Zn-65	<1.30E+01	0.00E+00	1.30E+01		
		Zr-95	<6.56E+00	0.00E+00	6.56E+00		
		Nb-95	<4.04E+00	0.00E+00	4.04E+00		
		I-131	<1.28E+01	0.00E+00	1.28E+01		
		Cs-134	<5.00E+00	0.00E+00	5.00E+00		
		Cs-137	<5.38E+00	0.00E+00	5.38E+00		
		BaLa-140	<8.77E+00	0.00E+00	8.77E+00		
		Be-7	<3.84E+01	0.00E+00	3.84E+01		
		K-40	1.03E+02	2.14E+01	1.21E+01		
		253035	12/10/2012 - 3/4/2013	H3DW	6.63E+02	6.61E+01	1.82E+02
253917	2/4/2013 - 3/4/2013	Beta	1.93E+00	3.94E-01	1.19E+00		
		Mn-54	<4.08E+00	0.00E+00	4.08E+00		
		Co-58	<4.11E+00	0.00E+00	4.11E+00		
		Fe-59	<7.88E+00	0.00E+00	7.88E+00		
		Co-60	<5.20E+00	0.00E+00	5.20E+00		
		Zn-65	<8.73E+00	0.00E+00	8.73E+00		
		Zr-95	<7.44E+00	0.00E+00	7.44E+00		
		Nb-95	<5.84E+00	0.00E+00	5.84E+00		
		I-131	<1.42E+01	0.00E+00	1.42E+01		
		Cs-134	<3.64E+00	0.00E+00	3.64E+00		
		Cs-137	<4.27E+00	0.00E+00	4.27E+00		
		BaLa-140	<1.17E+01	0.00E+00	1.17E+01		
		Be-7	<4.13E+01	0.00E+00	4.13E+01		
		K-40	1.67E+02	2.96E+01	4.21E+01		
		255863	3/4/2013 - 4/1/2013	Beta	1.27E+00	4.13E-01	1.31E+00
Mn-54	<3.36E+00			0.00E+00	3.36E+00		
Co-58	<4.11E+00			0.00E+00	4.11E+00		
Fe-59	<1.10E+01			0.00E+00	1.10E+01		
Co-60	<5.87E+00			0.00E+00	5.87E+00		
Zn-65	<9.62E+00			0.00E+00	9.62E+00		
Zr-95	<6.68E+00			0.00E+00	6.68E+00		
Nb-95	<5.45E+00			0.00E+00	5.45E+00		
I-131	<1.44E+01			0.00E+00	1.44E+01		
Cs-134	<3.05E+00			0.00E+00	3.05E+00		
Cs-137	<4.86E+00			0.00E+00	4.86E+00		
BaLa-140	<6.84E+00			0.00E+00	6.84E+00		
Be-7	<4.36E+01			0.00E+00	4.36E+01		
K-40	9.41E+01			2.12E+01	3.65E+01		
257165	4/1/2013 - 4/29/2013			Beta	1.76E+00	3.98E-01	1.22E+00
		Mn-54	<3.94E+00	0.00E+00	3.94E+00		
		Co-58	<4.72E+00	0.00E+00	4.72E+00		
		Fe-59	<7.81E+00	0.00E+00	7.81E+00		
		Co-60	<4.58E+00	0.00E+00	4.58E+00		
		Zn-65	<7.38E+00	0.00E+00	7.38E+00		
		Zr-95	<7.89E+00	0.00E+00	7.89E+00		
		Nb-95	<5.28E+00	0.00E+00	5.28E+00		
		I-131	<1.40E+01	0.00E+00	1.40E+01		
		Cs-134	<3.58E+00	0.00E+00	3.58E+00		
		Cs-137	<3.44E+00	0.00E+00	3.44E+00		
		BaLa-140	<8.73E+00	0.00E+00	8.73E+00		
		Be-7	<3.57E+01	0.00E+00	3.57E+01		
		K-40	1.32E+02	1.88E+01	3.44E+01		
		258155	3/4/2013 - 5/28/2013	H3DW	6.01E+02	5.73E+01	1.55E+02
258247	4/29/2013 - 5/28/2013	Beta	1.94E+00	4.16E-01	1.27E+00		
		Mn-54	<3.20E+00	0.00E+00	3.20E+00		
		Co-58	<3.38E+00	0.00E+00	3.38E+00		
		Fe-59	<7.25E+00	0.00E+00	7.25E+00		
		Co-60	<5.13E+00	0.00E+00	5.13E+00		



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: DRINKING WATER Concentration (Activity): pCi/l

Sample Point 132 [INDICATOR - SSE @ 11.1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
258247	4/29/2013 - 5/28/2013	Zn-65	<6.44E+00	0.00E+00	6.44E+00
		Zr-95	<6.12E+00	0.00E+00	6.12E+00
		Nb-95	<4.39E+00	0.00E+00	4.39E+00
		I-131	<1.32E+01	0.00E+00	1.32E+01
		Cs-134	<3.88E+00	0.00E+00	3.88E+00
		Cs-137	<3.76E+00	0.00E+00	3.76E+00
		BaLa-140	<1.04E+01	0.00E+00	1.04E+01
		Be-7	<3.10E+01	0.00E+00	3.10E+01
		K-40	1.02E+02	1.58E+01	2.43E+01
		260253	5/28/2013 - 6/24/2013	Beta	1.42E+00
Mn-54	<4.57E+00			0.00E+00	4.57E+00
Co-58	<4.99E+00			0.00E+00	4.99E+00
Fe-59	<1.11E+01			0.00E+00	1.11E+01
Co-60	<6.11E+00			0.00E+00	6.11E+00
Zn-65	<1.16E+01			0.00E+00	1.16E+01
Zr-95	<8.36E+00			0.00E+00	8.36E+00
Nb-95	<5.46E+00			0.00E+00	5.46E+00
I-131	<1.33E+01			0.00E+00	1.33E+01
Cs-134	<3.87E+00			0.00E+00	3.87E+00
Cs-137	<5.16E+00			0.00E+00	5.16E+00
BaLa-140	<1.02E+01			0.00E+00	1.02E+01
Be-7	<3.79E+01			0.00E+00	3.79E+01
K-40	1.08E+02			2.36E+01	4.94E+01
263191	6/24/2013 - 7/22/2013	Beta	1.46E+00	3.64E-01	1.13E+00
		Mn-54	<5.18E+00	0.00E+00	5.18E+00
		Co-58	<4.80E+00	0.00E+00	4.80E+00
		Fe-59	<7.18E+00	0.00E+00	7.18E+00
		Co-60	<4.40E+00	0.00E+00	4.40E+00
		Zn-65	<7.43E+00	0.00E+00	7.43E+00
		Zr-95	<8.70E+00	0.00E+00	8.70E+00
		Nb-95	<4.54E+00	0.00E+00	4.54E+00
		I-131	<1.40E+01	0.00E+00	1.40E+01
		Cs-134	<4.28E+00	0.00E+00	4.28E+00
		Cs-137	<4.41E+00	0.00E+00	4.41E+00
		BaLa-140	<6.80E+00	0.00E+00	6.80E+00
		Be-7	<4.30E+01	0.00E+00	4.30E+01
		K-40	1.91E+02	2.96E+01	4.21E+01
265516	7/22/2013 - 8/19/2013	Beta	1.88E+00	3.94E-01	1.19E+00
		Mn-54	<3.86E+00	0.00E+00	3.86E+00
		Co-58	<4.33E+00	0.00E+00	4.33E+00
		Fe-59	<1.01E+01	0.00E+00	1.01E+01
		Co-60	<4.33E+00	0.00E+00	4.33E+00
		Zn-65	<1.02E+01	0.00E+00	1.02E+01
		Zr-95	<8.16E+00	0.00E+00	8.16E+00
		Nb-95	<5.38E+00	0.00E+00	5.38E+00
		I-131	<1.44E+01	0.00E+00	1.44E+01
		Cs-134	<3.58E+00	0.00E+00	3.58E+00
		Cs-137	<4.27E+00	0.00E+00	4.27E+00
		BaLa-140	<9.14E+00	0.00E+00	9.14E+00
		Be-7	<3.99E+01	0.00E+00	3.99E+01
		K-40	1.72E+02	2.73E+01	3.66E+01
266915	5/28/2013 - 8/19/2013	H3DW	3.10E+02	5.63E+01	1.67E+02
269671	8/19/2013 - 9/16/2013	Beta	8.89E-01	4.33E-01	1.41E+00
		Mn-54	<2.83E+00	0.00E+00	2.83E+00
		Co-58	<4.67E+00	0.00E+00	4.67E+00
		Fe-59	<8.96E+00	0.00E+00	8.96E+00
		Co-60	<4.70E+00	0.00E+00	4.70E+00
		Zn-65	<9.12E+00	0.00E+00	9.12E+00
		Zr-95	<6.96E+00	0.00E+00	6.96E+00



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: DRINKING WATER Concentration (Activity): pCi/l

Sample Point 132 [INDICATOR - SSE @ 11.1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
269671	8/19/2013 - 9/16/2013	Nb-95	<5.84E+00	0.00E+00	5.84E+00
		I-131	<1.41E+01	0.00E+00	1.41E+01
		Cs-134	<3.42E+00	0.00E+00	3.42E+00
		Cs-137	<4.47E+00	0.00E+00	4.47E+00
		BaLa-140	<1.09E+01	0.00E+00	1.09E+01
		Be-7	<3.80E+01	0.00E+00	3.80E+01
		K-40	<8.08E+01	0.00E+00	8.08E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
272493	9/16/2013 - 10/14/2013	Beta	1.12E+00	4.05E-01	1.30E+00
		Mn-54	<3.62E+00	0.00E+00	3.62E+00
		Co-58	<4.51E+00	0.00E+00	4.51E+00
		Fe-59	<9.95E+00	0.00E+00	9.95E+00
		Co-60	<5.63E+00	0.00E+00	5.63E+00
		Zn-65	<6.82E+00	0.00E+00	6.82E+00
		Zr-95	<8.98E+00	0.00E+00	8.98E+00
		Nb-95	<5.98E+00	0.00E+00	5.98E+00
		I-131	<1.40E+01	0.00E+00	1.40E+01
		Cs-134	<3.82E+00	0.00E+00	3.82E+00
		Cs-137	<4.27E+00	0.00E+00	4.27E+00
		BaLa-140	<1.18E+01	0.00E+00	1.18E+01
		Be-7	<3.78E+01	0.00E+00	3.78E+01
		K-40	1.31E+02	2.38E+01	4.79E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
274944	10/14/2013 - 11/11/2013	Beta	2.05E+00	4.09E-01	1.24E+00
		Mn-54	<2.52E+00	0.00E+00	2.52E+00
		Co-58	<2.73E+00	0.00E+00	2.73E+00
		Fe-59	<5.31E+00	0.00E+00	5.31E+00
		Co-60	<2.68E+00	0.00E+00	2.68E+00
		Zn-65	<6.10E+00	0.00E+00	6.10E+00
		Zr-95	<5.01E+00	0.00E+00	5.01E+00
		Nb-95	<3.20E+00	0.00E+00	3.20E+00
		I-131	<9.01E+00	0.00E+00	9.01E+00
		Cs-134	<2.48E+00	0.00E+00	2.48E+00
		Cs-137	<2.43E+00	0.00E+00	2.43E+00
		BaLa-140	<6.90E+00	0.00E+00	6.90E+00
		Be-7	<2.64E+01	0.00E+00	2.64E+01
		K-40	1.12E+02	1.98E+01	2.13E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
276932	8/19/2013 - 12/9/2013	H3DW	<1.33E+02	0.00E+00	1.59E+02

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
279014	11/11/2013 - 12/9/2013	Beta	1.67E+00	3.89E-01	1.19E+00
		Mn-54	<3.53E+00	0.00E+00	3.53E+00
		Co-58	<3.50E+00	0.00E+00	3.50E+00
		Fe-59	<7.87E+00	0.00E+00	7.87E+00
		Co-60	<4.12E+00	0.00E+00	4.12E+00
		Zn-65	<6.22E+00	0.00E+00	6.22E+00
		Zr-95	<7.40E+00	0.00E+00	7.40E+00
		Nb-95	<4.64E+00	0.00E+00	4.64E+00
		I-131	<1.30E+01	0.00E+00	1.30E+01
		Cs-134	<2.83E+00	0.00E+00	2.83E+00
		Cs-137	<3.95E+00	0.00E+00	3.95E+00
		BaLa-140	<9.61E+00	0.00E+00	9.61E+00
		Be-7	<3.29E+01	0.00E+00	3.29E+01
		K-40	1.48E+02	2.58E+01	3.25E+01

Sample Point 136 [CONTROL - NNE @ 12.7 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250589	12/10/2012 - 1/7/2013	Beta	1.83E+00	4.24E-01	1.31E+00
		Mn-54	<4.22E+00	0.00E+00	4.22E+00
		Co-58	<3.64E+00	0.00E+00	3.64E+00
		Fe-59	<1.03E+01	0.00E+00	1.03E+01
		Co-60	<5.36E+00	0.00E+00	5.36E+00
		Zn-65	<1.03E+01	0.00E+00	1.03E+01
		Zr-95	<8.47E+00	0.00E+00	8.47E+00
		Nb-95	<5.81E+00	0.00E+00	5.81E+00



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: DRINKING WATER Concentration (Activity): pCi/l

Sample Point 136 [CONTROL - NNE @ 12.7 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250589	12/10/2012 - 1/7/2013	I-131	<1.42E+01	0.00E+00	1.42E+01
		Cs-134	<3.88E+00	0.00E+00	3.88E+00
		Cs-137	<4.34E+00	0.00E+00	4.34E+00
		BaLa-140	<1.02E+01	0.00E+00	1.02E+01
		Be-7	<4.67E+01	0.00E+00	4.67E+01
		K-40	9.45E+01	2.65E+01	3.05E+01
251640	1/7/2013 - 2/4/2013	Beta	1.56E+00	3.78E-01	1.16E+00
		Mn-54	<4.04E+00	0.00E+00	4.04E+00
		Co-58	<5.83E+00	0.00E+00	5.83E+00
		Fe-59	<7.75E+00	0.00E+00	7.75E+00
		Co-60	<6.76E+00	0.00E+00	6.76E+00
		Zn-65	<9.80E+00	0.00E+00	9.80E+00
		Zr-95	<8.47E+00	0.00E+00	8.47E+00
		Nb-95	<4.74E+00	0.00E+00	4.74E+00
		I-131	<1.44E+01	0.00E+00	1.44E+01
		Cs-134	<3.44E+00	0.00E+00	3.44E+00
		Cs-137	<5.36E+00	0.00E+00	5.36E+00
		BaLa-140	<1.10E+01	0.00E+00	1.10E+01
		Be-7	<3.72E+01	0.00E+00	3.72E+01
		K-40	8.32E+01	1.77E+01	3.96E+01
		253036	12/10/2012 - 3/4/2013	H3DW	<4.75E+01
253918	2/4/2013 - 3/4/2013	Beta	2.37E+00	4.03E-01	1.18E+00
		Mn-54	<3.47E+00	0.00E+00	3.47E+00
		Co-58	<3.88E+00	0.00E+00	3.88E+00
		Fe-59	<9.85E+00	0.00E+00	9.85E+00
		Co-60	<4.21E+00	0.00E+00	4.21E+00
		Zn-65	<6.97E+00	0.00E+00	6.97E+00
		Zr-95	<7.67E+00	0.00E+00	7.67E+00
		Nb-95	<5.31E+00	0.00E+00	5.31E+00
		I-131	<1.31E+01	0.00E+00	1.31E+01
		Cs-134	<3.71E+00	0.00E+00	3.71E+00
		Cs-137	<5.05E+00	0.00E+00	5.05E+00
		BaLa-140	<1.00E+01	0.00E+00	1.00E+01
		Be-7	<3.72E+01	0.00E+00	3.72E+01
		K-40	1.07E+02	2.80E+01	3.06E+01
		255864	3/4/2013 - 4/1/2013	Beta	1.40E+00
Mn-54	<5.90E-01			0.00E+00	5.90E-01
Co-58	<7.56E-01			0.00E+00	7.56E-01
Fe-59	<1.75E+00			0.00E+00	1.75E+00
Co-60	<5.65E-01			0.00E+00	5.65E-01
Zn-65	<1.23E+00			0.00E+00	1.23E+00
Zr-95	<1.38E+00			0.00E+00	1.38E+00
Nb-95	<1.15E+00			0.00E+00	1.15E+00
I-131	<1.45E+01			0.00E+00	1.45E+01
Cs-134	<5.35E-01			0.00E+00	5.35E-01
Cs-137	<5.64E-01			0.00E+00	5.64E-01
BaLa-140	<4.12E+00			0.00E+00	4.12E+00
Be-7	<7.52E+00			0.00E+00	7.52E+00
K-40	1.73E+02			4.86E+00	4.87E+00
257166	4/1/2013 - 4/29/2013			Beta	1.74E+00
		Mn-54	<3.91E+00	0.00E+00	3.91E+00
		Co-58	<4.37E+00	0.00E+00	4.37E+00
		Fe-59	<1.11E+01	0.00E+00	1.11E+01
		Co-60	<4.23E+00	0.00E+00	4.23E+00
		Zn-65	<6.48E+00	0.00E+00	6.48E+00
		Zr-95	<7.47E+00	0.00E+00	7.47E+00
		Nb-95	<4.58E+00	0.00E+00	4.58E+00
		I-131	<1.44E+01	0.00E+00	1.44E+01
		Cs-134	<4.15E+00	0.00E+00	4.15E+00



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: DRINKING WATER Concentration (Activity): pCi/l

Sample Point 136 [CONTROL - NNE @ 12.7 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
257166	4/1/2013 - 4/29/2013	Cs-137	<5.16E+00	0.00E+00	5.16E+00
		BaLa-140	<8.59E+00	0.00E+00	8.59E+00
		Be-7	<3.42E+01	0.00E+00	3.42E+01
		K-40	1.79E+02	2.38E+01	3.34E+01
258156	3/4/2013 - 5/28/2013	H3DWH	<4.48E+01	0.00E+00	1.54E+02
258248	4/29/2013 - 5/28/2013	Beta	1.39E+00	4.01E-01	1.27E+00
		Mn-54	<2.57E+00	0.00E+00	2.57E+00
		Co-58	<2.76E+00	0.00E+00	2.76E+00
		Fe-59	<6.13E+00	0.00E+00	6.13E+00
		Co-60	<2.66E+00	0.00E+00	2.66E+00
		Zn-65	<5.90E+00	0.00E+00	5.90E+00
		Zr-95	<5.38E+00	0.00E+00	5.38E+00
		Nb-95	<4.01E+00	0.00E+00	4.01E+00
		I-131	<1.34E+01	0.00E+00	1.34E+01
		Cs-134	<2.34E+00	0.00E+00	2.34E+00
		Cs-137	<2.45E+00	0.00E+00	2.45E+00
		BaLa-140	<5.75E+00	0.00E+00	5.75E+00
		Be-7	<2.69E+01	0.00E+00	2.69E+01
		K-40	1.96E+02	1.74E+01	2.06E+01
		260254	5/28/2013 - 6/24/2013	Beta	1.31E+00
Mn-54	<3.94E+00			0.00E+00	3.94E+00
Co-58	<3.97E+00			0.00E+00	3.97E+00
Fe-59	<8.22E+00			0.00E+00	8.22E+00
Co-60	<4.52E+00			0.00E+00	4.52E+00
Zn-65	<9.54E+00			0.00E+00	9.54E+00
Zr-95	<9.19E+00			0.00E+00	9.19E+00
Nb-95	<5.26E+00			0.00E+00	5.26E+00
I-131	<1.39E+01			0.00E+00	1.39E+01
Cs-134	<3.09E+00			0.00E+00	3.09E+00
Cs-137	<4.03E+00			0.00E+00	4.03E+00
BaLa-140	<6.48E+00			0.00E+00	6.48E+00
Be-7	<4.05E+01			0.00E+00	4.05E+01
K-40	1.94E+02			2.44E+01	3.28E+01
263192	6/24/2013 - 7/22/2013			Beta	1.62E+00
		Mn-54	<4.02E+00	0.00E+00	4.02E+00
		Co-58	<4.88E+00	0.00E+00	4.88E+00
		Fe-59	<1.07E+01	0.00E+00	1.07E+01
		Co-60	<6.05E+00	0.00E+00	6.05E+00
		Zn-65	<8.37E+00	0.00E+00	8.37E+00
		Zr-95	<7.72E+00	0.00E+00	7.72E+00
		Nb-95	<5.14E+00	0.00E+00	5.14E+00
		I-131	<1.44E+01	0.00E+00	1.44E+01
		Cs-134	<3.92E+00	0.00E+00	3.92E+00
		Cs-137	<5.09E+00	0.00E+00	5.09E+00
		BaLa-140	<8.23E+00	0.00E+00	8.23E+00
		Be-7	<3.89E+01	0.00E+00	3.89E+01
		K-40	1.56E+02	2.12E+01	4.60E+01
		265517	7/22/2013 - 8/19/2013	Beta	1.64E+00
Mn-54	<4.61E+00			0.00E+00	4.61E+00
Co-58	<3.65E+00			0.00E+00	3.65E+00
Fe-59	<9.66E+00			0.00E+00	9.66E+00
Co-60	<3.76E+00			0.00E+00	3.76E+00
Zn-65	<1.01E+01			0.00E+00	1.01E+01
Zr-95	<6.92E+00			0.00E+00	6.92E+00
Nb-95	<6.14E+00			0.00E+00	6.14E+00
I-131	<1.42E+01			0.00E+00	1.42E+01
Cs-134	<3.86E+00			0.00E+00	3.86E+00
Cs-137	<4.57E+00			0.00E+00	4.57E+00
BaLa-140	<1.04E+01			0.00E+00	1.04E+01

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: DRINKING WATER Concentration (Activity): pCi/l

Sample Point 136 [CONTROL - NNE @ 12.7 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
265517	7/22/2013 - 8/19/2013	Be-7	<3.31E+01	0.00E+00	3.31E+01
		K-40	4.34E+01	2.48E+01	5.08E+01
266916	5/28/2013 - 8/19/2013	H3DW	<4.02E+01	0.00E+00	1.67E+02
269672	8/19/2013 - 9/16/2013	Beta	1.13E+00	4.41E-01	1.42E+00
		Mn-54	<4.39E+00	0.00E+00	4.39E+00
		Co-58	<4.76E+00	0.00E+00	4.76E+00
		Fe-59	<9.54E+00	0.00E+00	9.54E+00
		Co-60	<5.55E+00	0.00E+00	5.55E+00
		Zn-65	<5.32E+00	0.00E+00	5.32E+00
		Zr-95	<7.31E+00	0.00E+00	7.31E+00
		Nb-95	<5.47E+00	0.00E+00	5.47E+00
		I-131	<1.41E+01	0.00E+00	1.41E+01
		Cs-134	<4.45E+00	0.00E+00	4.45E+00
		Cs-137	<4.38E+00	0.00E+00	4.38E+00
		BaLa-140	<8.88E+00	0.00E+00	8.88E+00
		Be-7	<4.08E+01	0.00E+00	4.08E+01
		K-40	7.09E+01	1.85E+01	3.67E+01
272494	9/16/2013 - 10/14/2013	Beta	1.46E+00	4.09E-01	1.29E+00
		Mn-54	<2.83E+00	0.00E+00	2.83E+00
		Co-58	<3.36E+00	0.00E+00	3.36E+00
		Fe-59	<7.76E+00	0.00E+00	7.76E+00
		Co-60	<3.20E+00	0.00E+00	3.20E+00
		Zn-65	<7.18E+00	0.00E+00	7.18E+00
		Zr-95	<4.67E+00	0.00E+00	4.67E+00
		Nb-95	<4.03E+00	0.00E+00	4.03E+00
		I-131	<1.24E+01	0.00E+00	1.24E+01
		Cs-134	<3.14E+00	0.00E+00	3.14E+00
		Cs-137	<3.50E+00	0.00E+00	3.50E+00
		BaLa-140	<7.62E+00	0.00E+00	7.62E+00
		Be-7	<3.32E+01	0.00E+00	3.32E+01
		K-40	2.03E+02	2.76E+01	2.82E+01
274945	10/14/2013 - 11/11/2013	Beta	1.65E+00	3.98E-01	1.23E+00
		Mn-54	<2.64E+00	0.00E+00	2.64E+00
		Co-58	<2.78E+00	0.00E+00	2.78E+00
		Fe-59	<5.86E+00	0.00E+00	5.86E+00
		Co-60	<2.76E+00	0.00E+00	2.76E+00
		Zn-65	<4.99E+00	0.00E+00	4.99E+00
		Zr-95	<5.24E+00	0.00E+00	5.24E+00
		Nb-95	<3.53E+00	0.00E+00	3.53E+00
		I-131	<1.04E+01	0.00E+00	1.04E+01
		Cs-134	<2.54E+00	0.00E+00	2.54E+00
		Cs-137	<2.73E+00	0.00E+00	2.73E+00
		BaLa-140	<6.40E+00	0.00E+00	6.40E+00
		Be-7	<2.53E+01	0.00E+00	2.53E+01
		K-40	1.67E+02	1.74E+01	2.71E+01
276933	8/19/2013 - 12/9/2013	H3DW	<5.20E+01	0.00E+00	1.59E+02
279015	11/11/2013 - 12/9/2013	Beta	1.88E+00	3.94E-01	1.19E+00
		Mn-54	<4.31E+00	0.00E+00	4.31E+00
		Co-58	<5.57E+00	0.00E+00	5.57E+00
		Fe-59	<1.04E+01	0.00E+00	1.04E+01
		Co-60	<5.93E+00	0.00E+00	5.93E+00
		Zn-65	<1.15E+01	0.00E+00	1.15E+01
		Zr-95	<9.15E+00	0.00E+00	9.15E+00
		Nb-95	<5.59E+00	0.00E+00	5.59E+00
		I-131	<1.40E+01	0.00E+00	1.40E+01
		Cs-134	<3.66E+00	0.00E+00	3.66E+00
		Cs-137	<4.68E+00	0.00E+00	4.68E+00
		BaLa-140	<9.55E+00	0.00E+00	9.55E+00

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: DRINKING WATER Concentration (Activity): pCi/l

Sample Point 136 [CONTROL - NNE @ 12.7 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
279015	11/11/2013 - 12/9/2013	Be-7	<4.44E+01	0.00E+00	4.44E+01
		K-40	<7.50E+01	0.00E+00	7.50E+01

Sample Point 194 [INDICATOR - NNW @ 6.73 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250590	12/10/2012 - 1/7/2013	Beta	1.07E+00	4.07E-01	1.31E+00
		Mn-54	<3.82E+00	0.00E+00	3.82E+00
		Co-58	<4.06E+00	0.00E+00	4.06E+00
		Fe-59	<9.58E+00	0.00E+00	9.58E+00
		Co-60	<4.70E+00	0.00E+00	4.70E+00
		Zn-65	<7.60E+00	0.00E+00	7.60E+00
		Zr-95	<6.90E+00	0.00E+00	6.90E+00
		Nb-95	<5.18E+00	0.00E+00	5.18E+00
		I-131	<1.32E+01	0.00E+00	1.32E+01
		Cs-134	<2.82E+00	0.00E+00	2.82E+00
		Cs-137	<4.68E+00	0.00E+00	4.68E+00
		BaLa-140	<7.96E+00	0.00E+00	7.96E+00
		Be-7	<4.04E+01	0.00E+00	4.04E+01
		K-40	<8.10E+01	0.00E+00	8.10E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
251641	1/7/2013 - 2/4/2013	Beta	1.98E+00	3.92E-01	1.17E+00
		Mn-54	<4.65E+00	0.00E+00	4.65E+00
		Co-58	<4.56E+00	0.00E+00	4.56E+00
		Fe-59	<1.08E+01	0.00E+00	1.08E+01
		Co-60	<6.23E+00	0.00E+00	6.23E+00
		Zn-65	<8.61E+00	0.00E+00	8.61E+00
		Zr-95	<8.05E+00	0.00E+00	8.05E+00
		Nb-95	<4.85E+00	0.00E+00	4.85E+00
		I-131	<1.43E+01	0.00E+00	1.43E+01
		Cs-134	<4.27E+00	0.00E+00	4.27E+00
		Cs-137	<4.66E+00	0.00E+00	4.66E+00
		BaLa-140	<1.07E+01	0.00E+00	1.07E+01
		Be-7	<3.86E+01	0.00E+00	3.86E+01
		K-40	6.79E+01	2.24E+01	5.64E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
253037	12/10/2012 - 3/4/2013	H3DW	<9.97E+01	0.00E+00	1.81E+02

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
253919	2/4/2013 - 3/4/2013	Beta	1.47E+00	3.82E-01	1.19E+00
		Mn-54	<4.64E+00	0.00E+00	4.64E+00
		Co-58	<3.95E+00	0.00E+00	3.95E+00
		Fe-59	<1.14E+01	0.00E+00	1.14E+01
		Co-60	<6.00E+00	0.00E+00	6.00E+00
		Zn-65	<7.43E+00	0.00E+00	7.43E+00
		Zr-95	<7.56E+00	0.00E+00	7.56E+00
		Nb-95	<5.61E+00	0.00E+00	5.61E+00
		I-131	<1.40E+01	0.00E+00	1.40E+01
		Cs-134	<3.78E+00	0.00E+00	3.78E+00
		Cs-137	<4.39E+00	0.00E+00	4.39E+00
		BaLa-140	<1.07E+01	0.00E+00	1.07E+01
		Be-7	<3.60E+01	0.00E+00	3.60E+01
		K-40	3.26E+01	2.40E+01	4.50E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
255865	3/4/2013 - 4/1/2013	Beta	1.70E+00	4.20E-01	1.31E+00
		Mn-54	<4.02E+00	0.00E+00	4.02E+00
		Co-58	<4.97E+00	0.00E+00	4.97E+00
		Fe-59	<1.25E+01	0.00E+00	1.25E+01
		Co-60	<5.54E+00	0.00E+00	5.54E+00
		Zn-65	<1.04E+01	0.00E+00	1.04E+01
		Zr-95	<8.25E+00	0.00E+00	8.25E+00
		Nb-95	<6.02E+00	0.00E+00	6.02E+00
		I-131	<1.44E+01	0.00E+00	1.44E+01
		Cs-134	<4.18E+00	0.00E+00	4.18E+00
		Cs-137	<5.91E+00	0.00E+00	5.91E+00
		BaLa-140	<1.17E+01	0.00E+00	1.17E+01
		Be-7	<3.70E+01	0.00E+00	3.70E+01

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: DRINKING WATER Concentration (Activity): pCi/l

Sample Point 194 [INDICATOR - NNW @ 6.73 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
255865	3/4/2013 - 4/1/2013	K-40	<8.69E+01	0.00E+00	8.69E+01
257167	4/1/2013 - 4/29/2013	Beta	1.88E+00	3.99E-01	1.21E+00
		Mn-54	<3.99E+00	0.00E+00	3.99E+00
		Co-58	<4.62E+00	0.00E+00	4.62E+00
		Fe-59	<1.06E+01	0.00E+00	1.06E+01
		Co-60	<6.19E+00	0.00E+00	6.19E+00
		Zn-65	<7.37E+00	0.00E+00	7.37E+00
		Zr-95	<7.93E+00	0.00E+00	7.93E+00
		Nb-95	<5.38E+00	0.00E+00	5.38E+00
		I-131	<1.45E+01	0.00E+00	1.45E+01
		Cs-134	<3.62E+00	0.00E+00	3.62E+00
		Cs-137	<4.63E+00	0.00E+00	4.63E+00
		BaLa-140	<1.15E+01	0.00E+00	1.15E+01
		Be-7	<3.70E+01	0.00E+00	3.70E+01
		K-40	9.24E+01	1.90E+01	4.68E+01
258167	3/4/2013 - 5/28/2013	H3DW	<4.08E+01	0.00E+00	1.56E+02
258249	4/29/2013 - 5/28/2013	Beta	1.45E+00	4.04E-01	1.27E+00
		Mn-54	<3.07E+00	0.00E+00	3.07E+00
		Co-58	<4.21E+00	0.00E+00	4.21E+00
		Fe-59	<1.09E+01	0.00E+00	1.09E+01
		Co-60	<7.00E+00	0.00E+00	7.00E+00
		Zn-65	<1.14E+01	0.00E+00	1.14E+01
		Zr-95	<8.04E+00	0.00E+00	8.04E+00
		Nb-95	<8.18E+00	0.00E+00	8.18E+00
		I-131	<1.38E+01	0.00E+00	1.38E+01
		Cs-134	<4.29E+00	0.00E+00	4.29E+00
		Cs-137	<5.81E+00	0.00E+00	5.81E+00
		BaLa-140	<8.32E+00	0.00E+00	8.32E+00
		Be-7	<4.94E+01	0.00E+00	4.94E+01
		K-40	<7.87E+01	0.00E+00	7.87E+01
260255	5/28/2013 - 6/24/2013	Beta	1.79E+00	3.71E-01	1.11E+00
		Mn-54	<4.86E+00	0.00E+00	4.86E+00
		Co-58	<4.88E+00	0.00E+00	4.88E+00
		Fe-59	<9.92E+00	0.00E+00	9.92E+00
		Co-60	<5.30E+00	0.00E+00	5.30E+00
		Zn-65	<1.03E+01	0.00E+00	1.03E+01
		Zr-95	<8.45E+00	0.00E+00	8.45E+00
		Nb-95	<5.88E+00	0.00E+00	5.88E+00
		I-131	<1.38E+01	0.00E+00	1.38E+01
		Cs-134	<4.41E+00	0.00E+00	4.41E+00
		Cs-137	<4.86E+00	0.00E+00	4.86E+00
		BaLa-140	<1.07E+01	0.00E+00	1.07E+01
		Be-7	<4.15E+01	0.00E+00	4.15E+01
		K-40	6.80E+01	2.03E+01	3.38E+01
263193	6/24/2013 - 7/22/2013	Beta	2.18E+00	3.83E-01	1.13E+00
		Mn-54	<4.24E+00	0.00E+00	4.24E+00
		Co-58	<6.22E+00	0.00E+00	6.22E+00
		Fe-59	<1.34E+01	0.00E+00	1.34E+01
		Co-60	<7.06E+00	0.00E+00	7.06E+00
		Zn-65	<1.05E+01	0.00E+00	1.05E+01
		Zr-95	<8.33E+00	0.00E+00	8.33E+00
		Nb-95	<5.92E+00	0.00E+00	5.92E+00
		I-131	<1.33E+01	0.00E+00	1.33E+01
		Cs-134	<5.20E+00	0.00E+00	5.20E+00
		Cs-137	<5.10E+00	0.00E+00	5.10E+00
		BaLa-140	<1.43E+01	0.00E+00	1.43E+01
		Be-7	<4.26E+01	0.00E+00	4.26E+01
		K-40	1.25E+02	4.33E+01	4.71E+01

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: DRINKING WATER Concentration (Activity): pCi/l

Sample Point 194 [INDICATOR - NNW @ 6.73 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
265518	7/22/2013 - 8/19/2013	Beta	1.02E+00	3.72E-01	1.19E+00
		Mn-54	<3.98E+00	0.00E+00	3.98E+00
		Co-58	<3.85E+00	0.00E+00	3.85E+00
		Fe-59	<8.52E+00	0.00E+00	8.52E+00
		Co-60	<4.64E+00	0.00E+00	4.64E+00
		Zn-65	<7.39E+00	0.00E+00	7.39E+00
		Zr-95	<7.52E+00	0.00E+00	7.52E+00
		Nb-95	<4.41E+00	0.00E+00	4.41E+00
		I-131	<1.45E+01	0.00E+00	1.45E+01
		Cs-134	<3.74E+00	0.00E+00	3.74E+00
		Cs-137	<4.26E+00	0.00E+00	4.26E+00
		BaLa-140	<1.06E+01	0.00E+00	1.06E+01
		Be-7	<3.95E+01	0.00E+00	3.95E+01
		K-40	1.96E+02	2.57E+01	3.05E+01
266917	5/28/2013 - 8/19/2013	Nuclide	Activity	1 Sigma Error	LLD
		H3DW	<4.47E+01	0.00E+00	1.66E+02
269673	8/19/2013 - 9/16/2013	Beta	1.42E+00	4.46E-01	1.42E+00
		Mn-54	<4.43E+00	0.00E+00	4.43E+00
		Co-58	<3.37E+00	0.00E+00	3.37E+00
		Fe-59	<9.49E+00	0.00E+00	9.49E+00
		Co-60	<4.78E+00	0.00E+00	4.78E+00
		Zn-65	<6.91E+00	0.00E+00	6.91E+00
		Zr-95	<7.75E+00	0.00E+00	7.75E+00
		Nb-95	<5.35E+00	0.00E+00	5.35E+00
		I-131	<1.40E+01	0.00E+00	1.40E+01
		Cs-134	<3.63E+00	0.00E+00	3.63E+00
		Cs-137	<4.13E+00	0.00E+00	4.13E+00
		BaLa-140	<8.74E+00	0.00E+00	8.74E+00
		Be-7	<3.94E+01	0.00E+00	3.94E+01
		K-40	1.40E+02	2.42E+01	4.76E+01
272495	9/16/2013 - 10/14/2013	Beta	1.03E+00	4.05E-01	1.31E+00
		Mn-54	<4.01E+00	0.00E+00	4.01E+00
		Co-58	<3.18E+00	0.00E+00	3.18E+00
		Fe-59	<1.12E+01	0.00E+00	1.12E+01
		Co-60	<6.13E+00	0.00E+00	6.13E+00
		Zn-65	<7.15E+00	0.00E+00	7.15E+00
		Zr-95	<8.84E+00	0.00E+00	8.84E+00
		Nb-95	<4.87E+00	0.00E+00	4.87E+00
		I-131	<1.38E+01	0.00E+00	1.38E+01
		Cs-134	<4.14E+00	0.00E+00	4.14E+00
		Cs-137	<4.82E+00	0.00E+00	4.82E+00
		BaLa-140	<1.05E+01	0.00E+00	1.05E+01
		Be-7	<3.78E+01	0.00E+00	3.78E+01
		K-40	6.71E+01	2.21E+01	4.37E+01
274946	10/14/2013 - 11/12/2013	Beta	2.28E+00	4.12E-01	1.23E+00
		Mn-54	<2.78E+00	0.00E+00	2.78E+00
		Co-58	<3.83E+00	0.00E+00	3.83E+00
		Fe-59	<8.13E+00	0.00E+00	8.13E+00
		Co-60	<3.57E+00	0.00E+00	3.57E+00
		Zn-65	<5.44E+00	0.00E+00	5.44E+00
		Zr-95	<7.34E+00	0.00E+00	7.34E+00
		Nb-95	<4.40E+00	0.00E+00	4.40E+00
		I-131	<1.44E+01	0.00E+00	1.44E+01
		Cs-134	<2.84E+00	0.00E+00	2.84E+00
		Cs-137	<3.07E+00	0.00E+00	3.07E+00
		BaLa-140	<7.35E+00	0.00E+00	7.35E+00
		Be-7	<3.47E+01	0.00E+00	3.47E+01
		K-40	4.10E+01	1.50E+01	3.84E+01
276934	8/19/2013 - 12/9/2013	Nuclide	Activity	1 Sigma Error	LLD
		H3DW	<3.11E+01	0.00E+00	1.58E+02



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: DRINKING WATER Concentration (Activity): pCi/l

Sample Point 194 [INDICATOR - NNW @ 6.73 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
279016	11/12/2013 - 12/9/2013	Beta	2.04E+00	3.98E-01	1.19E+00
		Mn-54	<2.64E+00	0.00E+00	2.64E+00
		Co-58	<3.46E+00	0.00E+00	3.46E+00
		Fe-59	<7.86E+00	0.00E+00	7.86E+00
		Co-60	<4.10E+00	0.00E+00	4.10E+00
		Zn-65	<6.60E+00	0.00E+00	6.60E+00
		Zr-95	<6.28E+00	0.00E+00	6.28E+00
		Nb-95	<3.89E+00	0.00E+00	3.89E+00
		I-131	<1.10E+01	0.00E+00	1.10E+01
		Cs-134	<3.26E+00	0.00E+00	3.26E+00
		Cs-137	<3.32E+00	0.00E+00	3.32E+00
		BaLa-140	<6.89E+00	0.00E+00	6.89E+00
		Be-7	<2.51E+01	0.00E+00	2.51E+01
		K-40	8.03E+01	1.48E+01	2.57E+01

Media Type: FISH_BTMFEEDER Concentration (Activity): pCi/kg

Sample Point 129 [INDICATOR - ENE @ 0.51 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
255069	4/8/2013 - 4/8/2013	Mn-54	<2.13E+01	0.00E+00	2.13E+01
		Co-58	<1.35E+01	0.00E+00	1.35E+01
		Fe-59	<3.50E+01	0.00E+00	3.50E+01
		Co-60	<2.34E+01	0.00E+00	2.34E+01
		Zn-65	<3.05E+01	0.00E+00	3.05E+01
		Nb-95	<2.00E+01	0.00E+00	2.00E+01
		I-131	<1.47E+01	0.00E+00	1.47E+01
		Cs-134	<1.51E+01	0.00E+00	1.51E+01
		Cs-137	<2.48E+01	0.00E+00	2.48E+01
		Be-7	<1.39E+02	0.00E+00	1.39E+02
		K-40	2.62E+03	2.58E+02	2.04E+02
		Ag-110M	<1.48E+01	0.00E+00	1.48E+01
		Sb-122	<2.50E+01	0.00E+00	2.50E+01
		Sb-125	<3.73E+01	0.00E+00	3.73E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
269620	10/8/2013 - 10/8/2013	Mn-54	<2.90E+01	0.00E+00	2.90E+01
		Co-58	<2.17E+01	0.00E+00	2.17E+01
		Fe-59	<4.03E+01	0.00E+00	4.03E+01
		Co-60	<3.86E+01	0.00E+00	3.86E+01
		Zn-65	<3.84E+01	0.00E+00	3.84E+01
		Nb-95	<2.23E+01	0.00E+00	2.23E+01
		I-131	<2.77E+01	0.00E+00	2.77E+01
		Cs-134	<1.95E+01	0.00E+00	1.95E+01
		Cs-137	<2.38E+01	0.00E+00	2.38E+01
		Be-7	<1.81E+02	0.00E+00	1.81E+02
		K-40	2.92E+03	2.75E+02	3.26E+02
		Ag-110M	<2.06E+01	0.00E+00	2.06E+01
		Sb-122	<5.15E+01	0.00E+00	5.15E+01
		Sb-125	<6.21E+01	0.00E+00	6.21E+01

Sample Point 137 [CONTROL - N @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
255070	4/8/2013 - 4/8/2013	Mn-54	<2.50E+01	0.00E+00	2.50E+01
		Co-58	<2.46E+01	0.00E+00	2.46E+01
		Fe-59	<4.64E+01	0.00E+00	4.64E+01
		Co-60	<3.37E+01	0.00E+00	3.37E+01
		Zn-65	<6.53E+01	0.00E+00	6.53E+01
		Nb-95	<2.16E+01	0.00E+00	2.16E+01
		I-131	<1.64E+01	0.00E+00	1.64E+01
		Cs-134	<2.21E+01	0.00E+00	2.21E+01
		Cs-137	<1.82E+01	0.00E+00	1.82E+01
		Be-7	<1.46E+02	0.00E+00	1.46E+02
		K-40	3.30E+03	3.10E+02	2.17E+02
		Ag-110M	<2.16E+01	0.00E+00	2.16E+01
		Sb-122	<3.12E+01	0.00E+00	3.12E+01
		Sb-125	<4.18E+01	0.00E+00	4.18E+01

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: FISH_BTMEEDER Concentration (Activity): pCi/kg

Sample Point 137 [CONTROL - N @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
269621	10/8/2013 - 10/8/2013	Mn-54	<1.66E+01	0.00E+00	1.66E+01
		Co-58	<1.24E+01	0.00E+00	1.24E+01
		Fe-59	<3.17E+01	0.00E+00	3.17E+01
		Co-60	<1.43E+01	0.00E+00	1.43E+01
		Zn-65	<3.04E+01	0.00E+00	3.04E+01
		Nb-95	<1.31E+01	0.00E+00	1.31E+01
		I-131	<1.40E+01	0.00E+00	1.40E+01
		Cs-134	<1.29E+01	0.00E+00	1.29E+01
		Cs-137	<1.09E+01	0.00E+00	1.09E+01
		Be-7	<8.75E+01	0.00E+00	8.75E+01
		K-40	1.15E+03	1.58E+02	1.70E+02
		Ag-110M	<9.57E+00	0.00E+00	9.57E+00
		Sb-122	<2.60E+01	0.00E+00	2.60E+01
		Sb-125	<2.91E+01	0.00E+00	2.91E+01

Media Type: FISH_FORAGER Concentration (Activity): pCi/kg

Sample Point 129 [INDICATOR - ENE @ 0.51 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
255071	4/10/2013 - 4/10/2013	Mn-54	<1.32E+01	0.00E+00	1.32E+01
		Co-58	<1.49E+01	0.00E+00	1.49E+01
		Fe-59	<3.02E+01	0.00E+00	3.02E+01
		Co-60	<2.54E+01	0.00E+00	2.54E+01
		Zn-65	<3.76E+01	0.00E+00	3.76E+01
		Nb-95	<1.61E+01	0.00E+00	1.61E+01
		I-131	<1.40E+01	0.00E+00	1.40E+01
		Cs-134	<1.37E+01	0.00E+00	1.37E+01
		Cs-137	<1.39E+01	0.00E+00	1.39E+01
		Be-7	<9.03E+01	0.00E+00	9.03E+01
		K-40	3.45E+03	2.17E+02	1.52E+02
		Ag-110M	<1.30E+01	0.00E+00	1.30E+01
		Sb-122	<2.26E+01	0.00E+00	2.26E+01
		Sb-125	<3.01E+01	0.00E+00	3.01E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
269622	10/8/2013 - 10/8/2013	Mn-54	<1.81E+01	0.00E+00	1.81E+01
		Co-58	<2.33E+01	0.00E+00	2.33E+01
		Fe-59	<4.34E+01	0.00E+00	4.34E+01
		Co-60	<2.50E+01	0.00E+00	2.50E+01
		Zn-65	<5.30E+01	0.00E+00	5.30E+01
		Nb-95	<1.32E+01	0.00E+00	1.32E+01
		I-131	<2.04E+01	0.00E+00	2.04E+01
		Cs-134	<1.78E+01	0.00E+00	1.78E+01
		Cs-137	<2.06E+01	0.00E+00	2.06E+01
		Be-7	<1.28E+02	0.00E+00	1.28E+02
		K-40	1.74E+03	1.98E+02	1.93E+02
		Ag-110M	<1.98E+01	0.00E+00	1.98E+01
		Sb-122	<3.16E+01	0.00E+00	3.16E+01
		Sb-125	<4.21E+01	0.00E+00	4.21E+01

Sample Point 137 [CONTROL - N @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
255072	4/10/2013 - 4/10/2013	Mn-54	<1.66E+01	0.00E+00	1.66E+01
		Co-58	<1.35E+01	0.00E+00	1.35E+01
		Fe-59	<3.22E+01	0.00E+00	3.22E+01
		Co-60	<2.12E+01	0.00E+00	2.12E+01
		Zn-65	<4.32E+01	0.00E+00	4.32E+01
		Nb-95	<1.24E+01	0.00E+00	1.24E+01
		I-131	<1.36E+01	0.00E+00	1.36E+01
		Cs-134	<1.25E+01	0.00E+00	1.25E+01
		Cs-137	<1.92E+01	0.00E+00	1.92E+01
		Be-7	<1.01E+02	0.00E+00	1.01E+02
		K-40	3.08E+03	1.91E+02	1.28E+02
		Ag-110M	<1.38E+01	0.00E+00	1.38E+01
		Sb-122	<1.96E+01	0.00E+00	1.96E+01
		Sb-125	<3.50E+01	0.00E+00	3.50E+01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: FISH_FORAGER Concentration (Activity): pCi/kg

Sample Point 137 [CONTROL - N @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
269623	10/8/2013 - 10/8/2013	Mn-54	<1.54E+01	0.00E+00	1.54E+01
		Co-58	<1.25E+01	0.00E+00	1.25E+01
		Fe-59	<3.72E+01	0.00E+00	3.72E+01
		Co-60	<2.05E+01	0.00E+00	2.05E+01
		Zn-65	<5.49E+01	0.00E+00	5.49E+01
		Nb-95	<1.56E+01	0.00E+00	1.56E+01
		I-131	<1.76E+01	0.00E+00	1.76E+01
		Cs-134	<1.45E+01	0.00E+00	1.45E+01
		Cs-137	<1.88E+01	0.00E+00	1.88E+01
		Be-7	<1.27E+02	0.00E+00	1.27E+02
		K-40	<3.14E+02	0.00E+00	3.14E+02
		Ag-110M	<1.61E+01	0.00E+00	1.61E+01
		Sb-122	<2.97E+01	0.00E+00	2.97E+01
		Sb-125	<4.33E+01	0.00E+00	4.33E+01

Media Type: FISH_PREDATOR Concentration (Activity): pCi/kg

Sample Point 129 [INDICATOR - ENE @ 0.51 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
255073	4/8/2013 - 4/8/2013	Mn-54	<2.42E+01	0.00E+00	2.42E+01
		Co-58	<1.74E+01	0.00E+00	1.74E+01
		Fe-59	<4.90E+01	0.00E+00	4.90E+01
		Co-60	<3.34E+01	0.00E+00	3.34E+01
		Zn-65	<4.78E+01	0.00E+00	4.78E+01
		Nb-95	<1.75E+01	0.00E+00	1.75E+01
		I-131	<1.15E+01	0.00E+00	1.15E+01
		Cs-134	<1.48E+01	0.00E+00	1.48E+01
		Cs-137	<2.43E+01	0.00E+00	2.43E+01
		Be-7	<1.45E+02	0.00E+00	1.45E+02
		K-40	3.89E+03	2.94E+02	3.00E+02
		Ag-110M	<1.37E+01	0.00E+00	1.37E+01
		Sb-122	<2.61E+01	0.00E+00	2.61E+01
		Sb-125	<3.47E+01	0.00E+00	3.47E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
269624	10/8/2013 - 10/8/2013	Mn-54	<1.90E+01	0.00E+00	1.90E+01
		Co-58	<1.74E+01	0.00E+00	1.74E+01
		Fe-59	<4.51E+01	0.00E+00	4.51E+01
		Co-60	<3.10E+01	0.00E+00	3.10E+01
		Zn-65	<4.38E+01	0.00E+00	4.38E+01
		Nb-95	<2.09E+01	0.00E+00	2.09E+01
		I-131	<2.24E+01	0.00E+00	2.24E+01
		Cs-134	<1.86E+01	0.00E+00	1.86E+01
		Cs-137	<2.49E+01	0.00E+00	2.49E+01
		Be-7	<1.36E+02	0.00E+00	1.36E+02
		K-40	2.36E+03	2.49E+02	2.28E+02
		Ag-110M	<1.73E+01	0.00E+00	1.73E+01
		Sb-122	<3.16E+01	0.00E+00	3.16E+01
		Sb-125	<4.31E+01	0.00E+00	4.31E+01

Sample Point 137 [CONTROL - N @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
255074	4/8/2013 - 4/8/2013	Mn-54	<1.39E+01	0.00E+00	1.39E+01
		Co-58	<1.38E+01	0.00E+00	1.38E+01
		Fe-59	<2.76E+01	0.00E+00	2.76E+01
		Co-60	<2.11E+01	0.00E+00	2.11E+01
		Zn-65	<3.14E+01	0.00E+00	3.14E+01
		Nb-95	<9.60E+00	0.00E+00	9.60E+00
		I-131	<1.40E+01	0.00E+00	1.40E+01
		Cs-134	<1.00E+01	0.00E+00	1.00E+01
		Cs-137	<1.24E+01	0.00E+00	1.24E+01
		Be-7	<8.74E+01	0.00E+00	8.74E+01
		K-40	3.88E+03	2.20E+02	1.36E+02
		Ag-110M	<1.20E+01	0.00E+00	1.20E+01
		Sb-122	<2.02E+01	0.00E+00	2.02E+01
		Sb-125	<3.02E+01	0.00E+00	3.02E+01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: FISH_PREDATOR Concentration (Activity): pCi/kg

Sample Point 137 [CONTROL - N @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
269625	10/8/2013 - 10/8/2013	Mn-54	<2.13E+01	0.00E+00	2.13E+01
		Co-58	<2.47E+01	0.00E+00	2.47E+01
		Fe-59	<2.77E+01	0.00E+00	2.77E+01
		Co-60	<2.32E+01	0.00E+00	2.32E+01
		Zn-65	<5.63E+01	0.00E+00	5.63E+01
		Nb-95	<2.20E+01	0.00E+00	2.20E+01
		I-131	<2.28E+01	0.00E+00	2.28E+01
		Cs-134	<2.37E+01	0.00E+00	2.37E+01
		Cs-137	<2.43E+01	0.00E+00	2.43E+01
		Be-7	<1.90E+02	0.00E+00	1.90E+02
		K-40	2.08E+03	2.26E+02	2.20E+02
		Ag-110M	<2.31E+01	0.00E+00	2.31E+01
		Sb-122	<4.56E+01	0.00E+00	4.56E+01
		Sb-125	<5.67E+01	0.00E+00	5.67E+01

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 141 [CONTROL - WNW @ 14.8 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250760	1/14/2013 - 1/14/2013	Be-7	<5.37E+00	0.00E+00	5.37E+00
		K-40	2.05E+01	4.51E+00	1.06E+01
		LLI-131	<6.44E-01	0.00E+00	6.44E-01
		I-131	<8.30E+00	0.00E+00	8.30E+00
		Cs-134	<7.51E+00	0.00E+00	7.51E+00
		Cs-137	<9.10E+00	0.00E+00	9.10E+00
		BaLa-140	<1.00E+01	0.00E+00	1.00E+01
		Be-7	<5.86E+01	0.00E+00	5.86E+01
		K-40	1.62E+03	1.15E+02	8.23E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
251294	1/28/2013 - 1/28/2013	Be-7	<4.29E+00	0.00E+00	4.29E+00
		K-40	2.94E+01	4.09E+00	5.11E+00
		LLI-131	<6.49E-01	0.00E+00	6.49E-01
		I-131	<6.26E+00	0.00E+00	6.26E+00
		Cs-134	<6.06E+00	0.00E+00	6.06E+00
		Cs-137	<6.85E+00	0.00E+00	6.85E+00
		BaLa-140	<7.63E+00	0.00E+00	7.63E+00
		Be-7	<5.47E+01	0.00E+00	5.47E+01
		K-40	1.51E+03	8.16E+01	6.80E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
252108	2/11/2013 - 2/11/2013	Be-7	<5.21E+00	0.00E+00	5.21E+00
		K-40	1.25E+01	4.21E+00	6.98E+00
		LLI-131	<6.30E-01	0.00E+00	6.30E-01
		I-131	<8.23E+00	0.00E+00	8.23E+00
		Cs-134	<8.22E+00	0.00E+00	8.22E+00
		Cs-137	<7.50E+00	0.00E+00	7.50E+00
		BaLa-140	<1.10E+01	0.00E+00	1.10E+01
		Be-7	<6.18E+01	0.00E+00	6.18E+01
		K-40	1.45E+03	1.05E+02	6.95E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
253117	2/25/2013 - 2/25/2013	Be-7	<4.06E+00	0.00E+00	4.06E+00
		K-40	2.03E+01	3.38E+00	7.37E+00
		LLI-131	<6.32E-01	0.00E+00	6.32E-01
		I-131	<8.71E+00	0.00E+00	8.71E+00
		Cs-134	<7.36E+00	0.00E+00	7.36E+00
		Cs-137	<8.65E+00	0.00E+00	8.65E+00
		BaLa-140	<7.36E+00	0.00E+00	7.36E+00
		Be-7	<6.94E+01	0.00E+00	6.94E+01
		K-40	1.47E+03	1.14E+02	1.07E+02

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
254242	3/11/2013 - 3/11/2013	Be-7	<4.47E+00	0.00E+00	4.47E+00
		K-40	4.67E+01	6.65E+00	6.74E+00
		LLI-131	<5.86E-01	0.00E+00	5.86E-01
		I-131	<7.14E+00	0.00E+00	7.14E+00
		Cs-134	<8.61E+00	0.00E+00	8.61E+00
		Cs-137	<1.05E+01	0.00E+00	1.05E+01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 141 [CONTROL - WNW @ 14.8 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
254242	3/11/2013 - 3/11/2013	BaLa-140	<1.04E+01	0.00E+00	1.04E+01
		Be-7	<5.21E+01	0.00E+00	5.21E+01
		K-40	1.45E+03	1.04E+02	7.02E+01
255338	3/25/2013 - 3/25/2013	Be-7	<5.00E+00	0.00E+00	5.00E+00
		K-40	3.04E+01	3.75E+00	4.82E+00
		LLI-131	<6.40E-01	0.00E+00	6.40E-01
		I-131	<6.57E+00	0.00E+00	6.57E+00
		Cs-134	<4.60E+00	0.00E+00	4.60E+00
		Cs-137	<7.03E+00	0.00E+00	7.03E+00
		BaLa-140	<8.73E+00	0.00E+00	8.73E+00
		Be-7	<5.05E+01	0.00E+00	5.05E+01
		K-40	1.54E+03	8.05E+01	4.72E+01
256097	4/8/2013 - 4/8/2013	Be-7	<4.58E+00	0.00E+00	4.58E+00
		K-40	4.76E+01	4.98E+00	6.11E+00
		LLI-131	<6.45E-01	0.00E+00	6.45E-01
		I-131	<6.52E+00	0.00E+00	6.52E+00
		Cs-134	<5.29E+00	0.00E+00	5.29E+00
		Cs-137	<7.17E+00	0.00E+00	7.17E+00
		BaLa-140	<8.15E+00	0.00E+00	8.15E+00
		Be-7	<4.30E+01	0.00E+00	4.30E+01
		K-40	1.53E+03	7.70E+01	2.78E+01
256645	4/22/2013 - 4/22/2013	Be-7	<3.97E+00	0.00E+00	3.97E+00
		K-40	1.71E+01	3.86E+00	6.54E+00
		LLI-131	<6.48E-01	0.00E+00	6.48E-01
		I-131	<8.34E+00	0.00E+00	8.34E+00
		Cs-134	<8.09E+00	0.00E+00	8.09E+00
		Cs-137	<9.26E+00	0.00E+00	9.26E+00
		BaLa-140	<7.70E+00	0.00E+00	7.70E+00
		Be-7	<7.43E+01	0.00E+00	7.43E+01
		K-40	1.36E+03	1.06E+02	7.37E+01
257324	5/6/2013 - 5/6/2013	Be-7	<4.32E+00	0.00E+00	4.32E+00
		K-40	3.23E+01	5.58E+00	6.43E+00
		LLI-131	<5.72E-01	0.00E+00	5.72E-01
		I-131	<6.54E+00	0.00E+00	6.54E+00
		Cs-134	<7.82E+00	0.00E+00	7.82E+00
		Cs-137	<8.20E+00	0.00E+00	8.20E+00
		BaLa-140	<9.14E+00	0.00E+00	9.14E+00
		Be-7	<6.32E+01	0.00E+00	6.32E+01
		K-40	1.19E+03	1.05E+02	9.09E+01
258015	5/20/2013 - 5/20/2013	Be-7	<2.97E+00	0.00E+00	2.97E+00
		K-40	5.57E+01	3.21E+00	3.97E+00
		LLI-131	<6.50E-01	0.00E+00	6.50E-01
		I-131	<8.68E+00	0.00E+00	8.68E+00
		Cs-134	<9.79E+00	0.00E+00	9.79E+00
		Cs-137	<8.18E+00	0.00E+00	8.18E+00
		BaLa-140	<9.33E+00	0.00E+00	9.33E+00
		Be-7	<7.26E+01	0.00E+00	7.26E+01
		K-40	1.54E+03	1.13E+02	7.42E+01
258597	6/3/2013 - 6/3/2013	Be-7	<3.06E+00	0.00E+00	3.06E+00
		K-40	3.16E+01	3.41E+00	4.11E+00
		LLI-131	<6.26E-01	0.00E+00	6.26E-01
		I-131	<1.08E+01	0.00E+00	1.08E+01
		Cs-134	<5.74E+00	0.00E+00	5.74E+00
		Cs-137	<6.00E+00	0.00E+00	6.00E+00
		BaLa-140	<8.95E+00	0.00E+00	8.95E+00
		Be-7	<4.86E+01	0.00E+00	4.86E+01
		K-40	1.58E+03	7.94E+01	7.14E+01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 141 [CONTROL - WNW @ 14.8 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
259630	8/17/2013 - 8/17/2013	Be-7	<4.62E+00	0.00E+00	4.62E+00
		K-40	4.98E+01	5.14E+00	6.06E+00
		LLI-131	<6.00E-01	0.00E+00	6.00E-01
		I-131	<7.12E+00	0.00E+00	7.12E+00
		Cs-134	<6.25E+00	0.00E+00	6.25E+00
		Cs-137	<8.22E+00	0.00E+00	8.22E+00
		BaLa-140	<2.47E+00	0.00E+00	2.47E+00
		Be-7	<6.48E+01	0.00E+00	6.48E+01
		K-40	1.35E+03	1.05E+02	9.03E+01
		260719	7/1/2013 - 7/1/2013	Be-7	<5.15E+00
K-40	4.73E+01			5.62E+00	8.06E+00
LLI-131	<6.37E-01			0.00E+00	6.37E-01
I-131	<6.01E+00			0.00E+00	6.01E+00
Cs-134	<6.16E+00			0.00E+00	6.16E+00
Cs-137	<6.41E+00			0.00E+00	6.41E+00
BaLa-140	<6.17E+00			0.00E+00	6.17E+00
Be-7	<5.80E+01			0.00E+00	5.80E+01
K-40	1.84E+03			8.58E+01	5.52E+01
262188	7/15/2013 - 7/15/2013			Be-7	<3.67E+00
		K-40	2.09E+01	2.82E+00	6.51E+00
		LLI-131	<5.54E-01	0.00E+00	5.54E-01
		I-131	<5.81E+00	0.00E+00	5.81E+00
		Cs-134	<4.88E+00	0.00E+00	4.88E+00
		Cs-137	<5.45E+00	0.00E+00	5.45E+00
		BaLa-140	<6.91E+00	0.00E+00	6.91E+00
		Be-7	<5.20E+01	0.00E+00	5.20E+01
		K-40	1.51E+03	7.90E+01	5.55E+01
		263421	7/29/2013 - 7/29/2013	Be-7	<6.80E+00
K-40	1.42E+01			6.83E+00	1.16E+01
LLI-131	<6.40E-01			0.00E+00	6.40E-01
I-131	<6.34E+00			0.00E+00	6.34E+00
Cs-134	<4.92E+00			0.00E+00	4.92E+00
Cs-137	<5.72E+00			0.00E+00	5.72E+00
BaLa-140	<7.22E+00			0.00E+00	7.22E+00
Be-7	<4.75E+01			0.00E+00	4.75E+01
K-40	1.50E+03			8.82E+01	5.92E+01
265210	8/12/2013 - 8/12/2013			Be-7	<4.96E+00
		K-40	1.62E+01	3.62E+00	5.14E+00
		LLI-131	<6.21E-01	0.00E+00	6.21E-01
		I-131	<7.94E+00	0.00E+00	7.94E+00
		Cs-134	<6.80E+00	0.00E+00	6.80E+00
		Cs-137	<7.22E+00	0.00E+00	7.22E+00
		BaLa-140	<1.01E+01	0.00E+00	1.01E+01
		Be-7	<4.74E+01	0.00E+00	4.74E+01
		K-40	1.36E+03	1.11E+02	7.85E+01
		267205	8/26/2013 - 8/26/2013	Be-7	<4.60E+00
K-40	5.22E+01			4.55E+00	5.60E+00
LLI-131	<6.42E-01			0.00E+00	6.42E-01
I-131	<7.09E+00			0.00E+00	7.09E+00
Cs-134	<6.64E+00			0.00E+00	6.64E+00
Cs-137	<9.63E+00			0.00E+00	9.63E+00
BaLa-140	<6.58E+00			0.00E+00	6.58E+00
Be-7	<5.75E+01			0.00E+00	5.75E+01
K-40	1.60E+03			1.15E+02	1.05E+02
268515	9/9/2013 - 9/9/2013			Be-7	<4.98E+00
		K-40	5.57E+01	4.97E+00	6.58E+00
		LLI-131	<6.46E-01	0.00E+00	6.46E-01
		I-131	<8.56E+00	0.00E+00	8.56E+00



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 141 [CONTROL - WNW @ 14.8 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
268515	9/9/2013 - 9/9/2013	Cs-134	<9.11E+00	0.00E+00	9.11E+00
		Cs-137	<8.93E+00	0.00E+00	8.93E+00
		BaLa-140	<9.16E+00	0.00E+00	9.16E+00
		Be-7	<7.63E+01	0.00E+00	7.63E+01
		K-40	1.55E+03	1.20E+02	1.30E+02
270780	9/23/2013 - 9/23/2013	Be-7	<4.55E+00	0.00E+00	4.55E+00
		K-40	4.70E+01	5.23E+00	5.29E+00
		LLI-131	<6.39E-01	0.00E+00	6.39E-01
		I-131	<5.87E+00	0.00E+00	5.87E+00
		Cs-134	<6.07E+00	0.00E+00	6.07E+00
		Cs-137	<5.87E+00	0.00E+00	5.87E+00
		BaLa-140	<6.78E+00	0.00E+00	6.78E+00
		Be-7	<5.24E+01	0.00E+00	5.24E+01
		K-40	1.80E+03	8.65E+01	6.24E+01
272112	10/7/2013 - 10/7/2013	Be-7	<4.22E+00	0.00E+00	4.22E+00
		K-40	1.44E+01	3.84E+00	7.23E+00
		LLI-131	<6.19E-01	0.00E+00	6.19E-01
		I-131	<8.90E+00	0.00E+00	8.90E+00
		Cs-134	<8.40E+00	0.00E+00	8.40E+00
		Cs-137	<9.01E+00	0.00E+00	9.01E+00
		BaLa-140	<1.18E+01	0.00E+00	1.18E+01
		Be-7	<6.36E+01	0.00E+00	6.36E+01
		K-40	1.49E+03	1.09E+02	8.66E+01
272895	10/21/2013 - 10/21/2013	Be-7	<4.16E+00	0.00E+00	4.16E+00
		K-40	2.97E+01	4.01E+00	6.42E+00
		LLI-131	<5.49E-01	0.00E+00	5.49E-01
		I-131	<6.46E+00	0.00E+00	6.46E+00
		Cs-134	<5.56E+00	0.00E+00	5.56E+00
		Cs-137	<6.56E+00	0.00E+00	6.56E+00
		BaLa-140	<7.87E+00	0.00E+00	7.87E+00
		Be-7	<4.39E+01	0.00E+00	4.39E+01
		K-40	1.51E+03	8.42E+01	5.52E+01
274433	11/4/2013 - 11/4/2013	Be-7	<4.20E+00	0.00E+00	4.20E+00
		K-40	5.15E+01	4.64E+00	6.78E+00
		LLI-131	<6.12E-01	0.00E+00	6.12E-01
		I-131	<7.50E+00	0.00E+00	7.50E+00
		Cs-134	<9.13E+00	0.00E+00	9.13E+00
		Cs-137	<1.11E+01	0.00E+00	1.11E+01
		BaLa-140	<8.09E+00	0.00E+00	8.09E+00
		Be-7	<6.89E+01	0.00E+00	6.89E+01
		K-40	1.36E+03	1.05E+02	6.15E+01
276501	11/18/2013 - 11/18/2013	Be-7	<3.76E+00	0.00E+00	3.76E+00
		K-40	1.50E+01	3.24E+00	5.98E+00
		LLI-131	<5.53E-01	0.00E+00	5.53E-01
		I-131	<7.38E+00	0.00E+00	7.38E+00
		Cs-134	<6.63E+00	0.00E+00	6.63E+00
		Cs-137	<8.31E+00	0.00E+00	8.31E+00
		BaLa-140	<1.16E+01	0.00E+00	1.16E+01
		Be-7	<4.82E+01	0.00E+00	4.82E+01
		K-40	1.49E+03	1.09E+02	8.63E+01
278814	12/2/2013 - 12/2/2013	Be-7	<1.72E+00	0.00E+00	1.72E+00
		K-40	1.75E+01	1.53E+00	1.86E+00
		LLI-131	<6.50E-01	0.00E+00	6.50E-01
		I-131	<8.79E+00	0.00E+00	8.79E+00
		Cs-134	<8.33E+00	0.00E+00	8.33E+00
		Cs-137	<1.29E+01	0.00E+00	1.29E+01
		BaLa-140	<9.73E+00	0.00E+00	9.73E+00
		Be-7	<7.21E+01	0.00E+00	7.21E+01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 141 [CONTROL - WNW @ 14.8 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
278814	12/2/2013 - 12/2/2013	K-40	1.39E+03	1.36E+02	1.19E+02
279663	12/16/2013 - 12/16/2013	Be-7	<4.72E+00	0.00E+00	4.72E+00
		K-40	2.10E+01	4.39E+00	7.86E+00
		LLI-131	<6.49E-01	0.00E+00	6.49E-01
		I-131	<6.01E+00	0.00E+00	6.01E+00
		Cs-134	<5.76E+00	0.00E+00	5.76E+00
		Cs-137	<5.84E+00	0.00E+00	5.84E+00
		BaLa-140	<4.56E+00	0.00E+00	4.56E+00
		Be-7	<4.48E+01	0.00E+00	4.48E+01
		K-40	1.58E+03	8.30E+01	5.88E+01
280690	12/30/2013 - 12/30/2013	Be-7	<2.98E+00	0.00E+00	2.98E+00
		K-40	5.21E+01	3.27E+00	3.77E+00
		LLI-131	<6.48E-01	0.00E+00	6.48E-01
		I-131	<9.14E+00	0.00E+00	9.14E+00
		Cs-134	<9.04E+00	0.00E+00	9.04E+00
		Cs-137	<1.01E+01	0.00E+00	1.01E+01
		BaLa-140	<1.06E+01	0.00E+00	1.06E+01
		Be-7	<7.26E+01	0.00E+00	7.26E+01
		K-40	1.58E+03	1.22E+02	1.08E+02

Media Type: SEDIMENT_SHORE Concentration (Activity): pCi/kg

Sample Point 129 [INDICATOR - ENE @ 0.51 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
255060	4/15/2013 - 4/15/2013	Mn-54	<2.33E+01	0.00E+00	2.33E+01
		Co-58	<2.26E+01	0.00E+00	2.26E+01
		Fe-59	<5.20E+01	0.00E+00	5.20E+01
		Co-60	<3.17E+01	0.00E+00	3.17E+01
		Zn-65	<5.51E+01	0.00E+00	5.51E+01
		Zr-95	<4.97E+01	0.00E+00	4.97E+01
		Nb-95	<2.74E+01	0.00E+00	2.74E+01
		I-131	<1.95E+01	0.00E+00	1.95E+01
		Cs-134	<2.38E+01	0.00E+00	2.38E+01
		Cs-137	<3.07E+01	0.00E+00	3.07E+01
		Be-7	<1.86E+02	0.00E+00	1.86E+02
		K-40	3.73E+03	2.75E+02	2.29E+02
		Co-57	<1.48E+01	0.00E+00	1.48E+01
		Mo-99	<1.94E+02	0.00E+00	1.94E+02
		Ag-110M	<2.42E+01	0.00E+00	2.42E+01
		Sb-122	<4.15E+01	0.00E+00	4.15E+01
		Sb-125	<6.02E+01	0.00E+00	6.02E+01
269611	10/21/2013 - 10/21/2013	Mn-54	<2.02E+01	0.00E+00	2.02E+01
		Co-58	<1.42E+01	0.00E+00	1.42E+01
		Fe-59	<3.71E+01	0.00E+00	3.71E+01
		Co-60	<1.92E+01	0.00E+00	1.92E+01
		Zn-65	<3.81E+01	0.00E+00	3.81E+01
		Zr-95	<3.16E+01	0.00E+00	3.16E+01
		Nb-95	<1.99E+01	0.00E+00	1.99E+01
		I-131	<1.94E+01	0.00E+00	1.94E+01
		Cs-134	<1.58E+01	0.00E+00	1.58E+01
		Cs-137	<1.59E+01	0.00E+00	1.59E+01
		Be-7	<1.47E+02	0.00E+00	1.47E+02
		K-40	3.18E+03	1.74E+02	1.68E+02
		Co-57	<1.14E+01	0.00E+00	1.14E+01
		Mo-99	<2.45E+02	0.00E+00	2.45E+02
		Ag-110M	<1.39E+01	0.00E+00	1.39E+01
		Sb-122	<4.11E+01	0.00E+00	4.11E+01
		Sb-125	<4.23E+01	0.00E+00	4.23E+01

Sample Point 130 [INDICATOR - SW @ 0.52 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
255062	4/15/2013 - 4/15/2013	Mn-54	<3.39E+01	0.00E+00	3.39E+01
		Co-58	<2.56E+01	0.00E+00	2.56E+01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: SEDIMENT_SHORE Concentration (Activity): pCi/kg

Sample Point 130 [INDICATOR - SW @ 0.52 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
255062	4/15/2013 - 4/15/2013	Fe-59	<5.31E+01	0.00E+00	5.31E+01
		Co-60	<3.16E+01	0.00E+00	3.16E+01
		Zn-65	<6.20E+01	0.00E+00	6.20E+01
		Zr-95	<4.80E+01	0.00E+00	4.80E+01
		Nb-95	<2.99E+01	0.00E+00	2.99E+01
		I-131	<2.52E+01	0.00E+00	2.52E+01
		Cs-134	<2.40E+01	0.00E+00	2.40E+01
		Cs-137	7.29E+01	1.39E+01	2.88E+01
		Be-7	<2.07E+02	0.00E+00	2.07E+02
		K-40	1.49E+04	4.32E+02	2.48E+02
		Co-57	<1.98E+01	0.00E+00	1.98E+01
		Mo-99	<2.69E+02	0.00E+00	2.69E+02
		Ag-110M	<2.49E+01	0.00E+00	2.49E+01
		Sb-122	<4.18E+01	0.00E+00	4.18E+01
		Sb-125	<6.40E+01	0.00E+00	6.40E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
269613	10/21/2013 - 10/21/2013	Mn-54	<1.32E+01	0.00E+00	1.32E+01
		Co-58	<1.51E+01	0.00E+00	1.51E+01
		Fe-59	<3.24E+01	0.00E+00	3.24E+01
		Co-60	<1.51E+01	0.00E+00	1.51E+01
		Zn-65	<3.34E+01	0.00E+00	3.34E+01
		Zr-95	<3.04E+01	0.00E+00	3.04E+01
		Nb-95	<2.08E+01	0.00E+00	2.08E+01
		I-131	<4.63E+01	0.00E+00	4.63E+01
		Cs-134	<1.27E+01	0.00E+00	1.27E+01
		Cs-137	2.09E+02	1.06E+01	1.52E+01
		Be-7	<1.34E+02	0.00E+00	1.34E+02
		K-40	1.38E+04	2.18E+02	1.23E+02
		Co-57	<1.31E+01	0.00E+00	1.31E+01
		Mo-99	<3.83E+03	0.00E+00	3.83E+03
		Ag-110M	<1.44E+01	0.00E+00	1.44E+01
		Sb-122	<7.17E+02	0.00E+00	7.17E+02
		Sb-125	<3.97E+01	0.00E+00	3.97E+01

Sample Point 137 [CONTROL - N @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
255061	4/15/2013 - 4/15/2013	Mn-54	<1.24E+01	0.00E+00	1.24E+01
		Co-58	<1.26E+01	0.00E+00	1.26E+01
		Fe-59	<3.19E+01	0.00E+00	3.19E+01
		Co-60	<1.89E+01	0.00E+00	1.89E+01
		Zn-65	<3.86E+01	0.00E+00	3.86E+01
		Zr-95	<2.54E+01	0.00E+00	2.54E+01
		Nb-95	<1.11E+01	0.00E+00	1.11E+01
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<1.10E+01	0.00E+00	1.10E+01
		Cs-137	<1.25E+01	0.00E+00	1.25E+01
		Be-7	1.23E+02	4.16E+01	9.06E+01
		K-40	1.51E+04	3.27E+02	1.02E+02
		Co-57	<8.70E+00	0.00E+00	8.70E+00
		Mo-99	<1.09E+02	0.00E+00	1.09E+02
		Ag-110M	<1.23E+01	0.00E+00	1.23E+01
		Sb-122	<1.87E+01	0.00E+00	1.87E+01
		Sb-125	<2.80E+01	0.00E+00	2.80E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
269612	10/21/2013 - 10/21/2013	Mn-54	<1.57E+01	0.00E+00	1.57E+01
		Co-58	<1.50E+01	0.00E+00	1.50E+01
		Fe-59	<3.45E+01	0.00E+00	3.45E+01
		Co-60	<2.08E+01	0.00E+00	2.08E+01
		Zn-65	<3.74E+01	0.00E+00	3.74E+01
		Zr-95	<2.35E+01	0.00E+00	2.35E+01
		Nb-95	<1.63E+01	0.00E+00	1.63E+01
		I-131	<1.55E+01	0.00E+00	1.55E+01
		Cs-134	<1.25E+01	0.00E+00	1.25E+01
		Cs-137	<1.46E+01	0.00E+00	1.46E+01
		Be-7	<1.16E+02	0.00E+00	1.16E+02
		K-40	1.54E+04	3.27E+02	9.48E+01

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: SEDIMENT_SHORE Concentration (Activity): pCi/kg

Sample Point 137 [CONTROL - N @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
269612	10/21/2013 - 10/21/2013	Co-57	<1.04E+01	0.00E+00	1.04E+01
		Mo-99	<2.15E+02	0.00E+00	2.15E+02
		Ag-110M	<1.16E+01	0.00E+00	1.16E+01
		Sb-122	<3.53E+01	0.00E+00	3.53E+01
		Sb-125	<3.71E+01	0.00E+00	3.71E+01

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 128 [INDICATOR - NE @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250594	12/10/2012 - 1/7/2013	Mn-54	<4.57E+00	0.00E+00	4.57E+00
		Co-58	<4.92E+00	0.00E+00	4.92E+00
		Fe-59	<9.42E+00	0.00E+00	9.42E+00
		Co-60	<7.04E+00	0.00E+00	7.04E+00
		Zn-65	<1.03E+01	0.00E+00	1.03E+01
		Zr-95	<8.38E+00	0.00E+00	8.38E+00
		Nb-95	<5.20E+00	0.00E+00	5.20E+00
		I-131	<1.42E+01	0.00E+00	1.42E+01
		Cs-134	<4.61E+00	0.00E+00	4.61E+00
		Cs-137	<5.19E+00	0.00E+00	5.19E+00
		BaLa-140	<9.12E+00	0.00E+00	9.12E+00
		Be-7	<3.41E+01	0.00E+00	3.41E+01
		K-40	7.86E+01	2.44E+01	5.37E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
251645	1/7/2013 - 2/4/2013	Mn-54	<3.68E+00	0.00E+00	3.68E+00
		Co-58	<4.11E+00	0.00E+00	4.11E+00
		Fe-59	<9.24E+00	0.00E+00	9.24E+00
		Co-60	<3.63E+00	0.00E+00	3.63E+00
		Zn-65	<9.42E+00	0.00E+00	9.42E+00
		Zr-95	<7.30E+00	0.00E+00	7.30E+00
		Nb-95	<4.80E+00	0.00E+00	4.80E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<3.55E+00	0.00E+00	3.55E+00
		Cs-137	<3.54E+00	0.00E+00	3.54E+00
		BaLa-140	<9.24E+00	0.00E+00	9.24E+00
		Be-7	<3.01E+01	0.00E+00	3.01E+01
		K-40	<5.09E+01	0.00E+00	5.09E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
253038	12/10/2012 - 3/4/2013	H3SW	1.38E+03	7.59E+01	1.81E+02

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
253923	2/4/2013 - 3/4/2013	Mn-54	<3.29E+00	0.00E+00	3.29E+00
		Co-58	<3.38E+00	0.00E+00	3.38E+00
		Fe-59	<7.80E+00	0.00E+00	7.80E+00
		Co-60	<5.00E+00	0.00E+00	5.00E+00
		Zn-65	<7.66E+00	0.00E+00	7.66E+00
		Zr-95	<6.89E+00	0.00E+00	6.89E+00
		Nb-95	<3.95E+00	0.00E+00	3.95E+00
		I-131	<1.32E+01	0.00E+00	1.32E+01
		Cs-134	<3.23E+00	0.00E+00	3.23E+00
		Cs-137	<3.41E+00	0.00E+00	3.41E+00
		BaLa-140	<1.28E+01	0.00E+00	1.28E+01
		Be-7	<3.08E+01	0.00E+00	3.08E+01
		K-40	6.12E+01	2.37E+01	3.90E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
255869	3/4/2013 - 4/1/2013	Mn-54	<3.80E+00	0.00E+00	3.80E+00
		Co-58	<6.03E+00	0.00E+00	6.03E+00
		Fe-59	<1.09E+01	0.00E+00	1.09E+01
		Co-60	<6.77E+00	0.00E+00	6.77E+00
		Zn-65	<8.48E+00	0.00E+00	8.48E+00
		Zr-95	<8.80E+00	0.00E+00	8.80E+00
		Nb-95	<6.48E+00	0.00E+00	6.48E+00
		I-131	<1.37E+01	0.00E+00	1.37E+01
		Cs-134	<4.54E+00	0.00E+00	4.54E+00
		Cs-137	<5.52E+00	0.00E+00	5.52E+00
		BaLa-140	<1.32E+01	0.00E+00	1.32E+01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 128 [INDICATOR - NE @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
255869	3/4/2013 - 4/1/2013	Be-7	<4.18E+01	0.00E+00	4.18E+01
		K-40	9.39E+01	2.46E+01	5.28E+01
257171	4/1/2013 - 4/29/2013	Nuclide	Activity	1 Sigma Error	LLD
		Mn-54	<3.28E+00	0.00E+00	3.28E+00
		Co-58	<3.77E+00	0.00E+00	3.77E+00
		Fe-59	<8.39E+00	0.00E+00	8.39E+00
		Co-60	<3.10E+00	0.00E+00	3.10E+00
		Zn-65	<8.70E+00	0.00E+00	8.70E+00
		Zr-95	<5.42E+00	0.00E+00	5.42E+00
		Nb-95	<3.44E+00	0.00E+00	3.44E+00
		I-131	<1.17E+01	0.00E+00	1.17E+01
		Cs-134	<2.83E+00	0.00E+00	2.83E+00
		Cs-137	<4.24E+00	0.00E+00	4.24E+00
		BaLa-140	<8.60E+00	0.00E+00	8.60E+00
		Be-7	<3.14E+01	0.00E+00	3.14E+01
		K-40	<6.12E+01	0.00E+00	6.12E+01
258158	3/4/2013 - 5/28/2013	Nuclide	Activity	1 Sigma Error	LLD
		H3SW	9.32E+02	6.24E+01	1.56E+02
258253	4/29/2013 - 5/28/2013	Nuclide	Activity	1 Sigma Error	LLD
		Mn-54	<3.64E+00	0.00E+00	3.64E+00
		Co-58	<4.04E+00	0.00E+00	4.04E+00
		Fe-59	<7.52E+00	0.00E+00	7.52E+00
		Co-60	<3.70E+00	0.00E+00	3.70E+00
		Zn-65	<7.52E+00	0.00E+00	7.52E+00
		Zr-95	<7.00E+00	0.00E+00	7.00E+00
		Nb-95	<4.19E+00	0.00E+00	4.19E+00
		I-131	<1.40E+01	0.00E+00	1.40E+01
		Cs-134	<2.85E+00	0.00E+00	2.85E+00
		Cs-137	<3.56E+00	0.00E+00	3.56E+00
		BaLa-140	<1.11E+01	0.00E+00	1.11E+01
		Be-7	<2.78E+01	0.00E+00	2.78E+01
		K-40	6.45E+01	1.49E+01	3.75E+01
260259	5/28/2013 - 6/24/2013	Nuclide	Activity	1 Sigma Error	LLD
		Mn-54	<4.81E+00	0.00E+00	4.81E+00
		Co-58	<4.02E+00	0.00E+00	4.02E+00
		Fe-59	<9.39E+00	0.00E+00	9.39E+00
		Co-60	<7.02E+00	0.00E+00	7.02E+00
		Zn-65	<1.12E+01	0.00E+00	1.12E+01
		Zr-95	<9.16E+00	0.00E+00	9.16E+00
		Nb-95	<6.26E+00	0.00E+00	6.26E+00
		I-131	<1.35E+01	0.00E+00	1.35E+01
		Cs-134	<5.34E+00	0.00E+00	5.34E+00
		Cs-137	<6.84E+00	0.00E+00	6.84E+00
		BaLa-140	<1.16E+01	0.00E+00	1.16E+01
		Be-7	<4.38E+01	0.00E+00	4.38E+01
		K-40	8.74E+01	2.06E+01	5.36E+01
263198	6/24/2013 - 7/22/2013	Nuclide	Activity	1 Sigma Error	LLD
		Mn-54	<3.98E+00	0.00E+00	3.98E+00
		Co-58	<4.66E+00	0.00E+00	4.66E+00
		Fe-59	<1.20E+01	0.00E+00	1.20E+01
		Co-60	<5.86E+00	0.00E+00	5.86E+00
		Zn-65	<9.26E+00	0.00E+00	9.26E+00
		Zr-95	<6.90E+00	0.00E+00	6.90E+00
		Nb-95	<6.52E+00	0.00E+00	6.52E+00
		I-131	<1.42E+01	0.00E+00	1.42E+01
		Cs-134	<4.76E+00	0.00E+00	4.76E+00
		Cs-137	<4.88E+00	0.00E+00	4.88E+00
		BaLa-140	<9.28E+00	0.00E+00	9.28E+00
		Be-7	<3.27E+01	0.00E+00	3.27E+01
		K-40	6.22E+01	1.78E+01	4.86E+01
265522	7/22/2013 - 8/19/2013	Nuclide	Activity	1 Sigma Error	LLD
		Mn-54	<3.94E+00	0.00E+00	3.94E+00
		Co-58	<4.28E+00	0.00E+00	4.28E+00
		Fe-59	<9.35E+00	0.00E+00	9.35E+00

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 128 [INDICATOR - NE @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD		
265522	7/22/2013 - 8/19/2013	Co-60	<3.66E+00	0.00E+00	3.66E+00		
		Zn-65	<9.58E+00	0.00E+00	9.58E+00		
		Zr-95	<6.63E+00	0.00E+00	6.63E+00		
		Nb-95	<5.35E+00	0.00E+00	5.35E+00		
		I-131	<1.24E+01	0.00E+00	1.24E+01		
		Cs-134	<3.53E+00	0.00E+00	3.53E+00		
		Cs-137	<4.22E+00	0.00E+00	4.22E+00		
		BaLa-140	<1.12E+01	0.00E+00	1.12E+01		
		Be-7	<4.06E+01	0.00E+00	4.06E+01		
		K-40	5.75E+01	1.95E+01	3.53E+01		
		266918	5/28/2013 - 8/19/2013	H3SW	3.33E+02	5.67E+01	1.67E+02
269677	8/19/2013 - 9/16/2013	Mn-54	<4.49E+00	0.00E+00	4.49E+00		
		Co-58	<5.85E+00	0.00E+00	5.85E+00		
		Fe-59	<9.97E+00	0.00E+00	9.97E+00		
		Co-60	<8.10E+00	0.00E+00	8.10E+00		
		Zn-65	<1.16E+01	0.00E+00	1.16E+01		
		Zr-95	<9.07E+00	0.00E+00	9.07E+00		
		Nb-95	<6.47E+00	0.00E+00	6.47E+00		
		I-131	<1.45E+01	0.00E+00	1.45E+01		
		Cs-134	<5.48E+00	0.00E+00	5.48E+00		
		Cs-137	<6.10E+00	0.00E+00	6.10E+00		
		BaLa-140	<1.09E+01	0.00E+00	1.09E+01		
		Be-7	<5.62E+01	0.00E+00	5.62E+01		
		K-40	1.01E+02	1.90E+01	4.73E+01		
		272499	9/16/2013 - 10/14/2013	Mn-54	<3.60E+00	0.00E+00	3.60E+00
Co-58	<4.52E+00			0.00E+00	4.52E+00		
Fe-59	<8.91E+00			0.00E+00	8.91E+00		
Co-60	<3.73E+00			0.00E+00	3.73E+00		
Zn-65	<1.14E+01			0.00E+00	1.14E+01		
Zr-95	<7.05E+00			0.00E+00	7.05E+00		
Nb-95	<5.38E+00			0.00E+00	5.38E+00		
I-131	<1.42E+01			0.00E+00	1.42E+01		
Cs-134	<3.67E+00			0.00E+00	3.67E+00		
Cs-137	<4.00E+00			0.00E+00	4.00E+00		
BaLa-140	<9.55E+00			0.00E+00	9.55E+00		
Be-7	<4.25E+01			0.00E+00	4.25E+01		
K-40	2.12E+02			2.29E+01	4.12E+01		
274950	10/14/2013 - 11/11/2013			Mn-54	<3.02E+00	0.00E+00	3.02E+00
		Co-58	<3.29E+00	0.00E+00	3.29E+00		
		Fe-59	<7.42E+00	0.00E+00	7.42E+00		
		Co-60	<3.98E+00	0.00E+00	3.98E+00		
		Zn-65	<7.11E+00	0.00E+00	7.11E+00		
		Zr-95	<6.48E+00	0.00E+00	6.48E+00		
		Nb-95	<4.38E+00	0.00E+00	4.38E+00		
		I-131	<1.26E+01	0.00E+00	1.26E+01		
		Cs-134	<3.41E+00	0.00E+00	3.41E+00		
		Cs-137	<3.58E+00	0.00E+00	3.58E+00		
		BaLa-140	<8.52E+00	0.00E+00	8.52E+00		
		Be-7	<3.40E+01	0.00E+00	3.40E+01		
		K-40	1.93E+02	2.66E+01	2.85E+01		
		276935	8/19/2013 - 12/9/2013	H3SW	4.45E+02	5.56E+01	1.59E+02
279020	11/11/2013 - 12/9/2013	Mn-54	<3.82E+00	0.00E+00	3.82E+00		
		Co-58	<3.59E+00	0.00E+00	3.59E+00		
		Fe-59	<8.14E+00	0.00E+00	8.14E+00		
		Co-60	<3.91E+00	0.00E+00	3.91E+00		
		Zn-65	<7.01E+00	0.00E+00	7.01E+00		
		Zr-95	<7.82E+00	0.00E+00	7.82E+00		
Nb-95	<4.78E+00	0.00E+00	4.78E+00				



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 128 [INDICATOR - NE @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
279020	11/11/2013 - 12/9/2013	I-131	<1.30E+01	0.00E+00	1.30E+01
		Cs-134	<3.45E+00	0.00E+00	3.45E+00
		Cs-137	<3.64E+00	0.00E+00	3.64E+00
		BaLa-140	<8.36E+00	0.00E+00	8.36E+00
		Be-7	<3.72E+01	0.00E+00	3.72E+01
		K-40	8.55E+01	2.68E+01	4.60E+01

Sample Point 131 [INDICATOR - WNW @ 0.64 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250595	12/10/2012 - 1/7/2013	Mn-54	<3.52E+00	0.00E+00	3.52E+00
		Co-58	<5.15E+00	0.00E+00	5.15E+00
		Fe-59	<9.96E+00	0.00E+00	9.96E+00
		Co-60	<6.93E+00	0.00E+00	6.93E+00
		Zn-65	<9.84E+00	0.00E+00	9.84E+00
		Zr-95	<8.82E+00	0.00E+00	8.82E+00
		Nb-95	<4.56E+00	0.00E+00	4.56E+00
		I-131	<1.44E+01	0.00E+00	1.44E+01
		Cs-134	<4.68E+00	0.00E+00	4.68E+00
		Cs-137	<6.31E+00	0.00E+00	6.31E+00
		BaLa-140	<1.15E+01	0.00E+00	1.15E+01
		Be-7	<3.30E+01	0.00E+00	3.30E+01
		K-40	9.76E+01	2.54E+01	5.16E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
251646	1/7/2013 - 2/4/2013	Mn-54	<3.12E+00	0.00E+00	3.12E+00
		Co-58	<3.75E+00	0.00E+00	3.75E+00
		Fe-59	<7.53E+00	0.00E+00	7.53E+00
		Co-60	<3.95E+00	0.00E+00	3.95E+00
		Zn-65	<7.73E+00	0.00E+00	7.73E+00
		Zr-95	<6.87E+00	0.00E+00	6.87E+00
		Nb-95	<4.37E+00	0.00E+00	4.37E+00
		I-131	<1.14E+01	0.00E+00	1.14E+01
		Cs-134	<2.86E+00	0.00E+00	2.86E+00
		Cs-137	<3.37E+00	0.00E+00	3.37E+00
		BaLa-140	<9.78E+00	0.00E+00	9.78E+00
		Be-7	<3.38E+01	0.00E+00	3.38E+01
		K-40	1.02E+02	1.91E+01	3.43E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
253039	12/10/2012 - 3/4/2013	H3SW	6.42E+02	6.63E+01	1.84E+02

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
253924	2/4/2013 - 3/4/2013	Mn-54	<5.38E+00	0.00E+00	5.38E+00
		Co-58	<6.69E+00	0.00E+00	6.69E+00
		Fe-59	<1.28E+01	0.00E+00	1.28E+01
		Co-60	<4.72E+00	0.00E+00	4.72E+00
		Zn-65	<1.04E+01	0.00E+00	1.04E+01
		Zr-95	<9.04E+00	0.00E+00	9.04E+00
		Nb-95	<6.55E+00	0.00E+00	6.55E+00
		I-131	<1.41E+01	0.00E+00	1.41E+01
		Cs-134	<6.14E+00	0.00E+00	6.14E+00
		Cs-137	<6.14E+00	0.00E+00	6.14E+00
		BaLa-140	<1.04E+01	0.00E+00	1.04E+01
		Be-7	<4.30E+01	0.00E+00	4.30E+01
		K-40	1.66E+02	2.91E+01	5.35E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
255870	3/4/2013 - 4/1/2013	Mn-54	<1.21E+00	0.00E+00	1.21E+00
		Co-58	<1.32E+00	0.00E+00	1.32E+00
		Fe-59	<3.38E+00	0.00E+00	3.38E+00
		Co-60	<1.22E+00	0.00E+00	1.22E+00
		Zn-65	<2.56E+00	0.00E+00	2.56E+00
		Zr-95	<2.47E+00	0.00E+00	2.47E+00
		Nb-95	<1.95E+00	0.00E+00	1.95E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<1.07E+00	0.00E+00	1.07E+00
		Cs-137	<1.00E+00	0.00E+00	1.00E+00
		BaLa-140	<5.55E+00	0.00E+00	5.55E+00
		Be-7	<1.25E+01	0.00E+00	1.25E+01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 131 [INDICATOR - WNW @ 0.64 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
255870	3/4/2013 - 4/1/2013	K-40	8.55E+01	7.09E+00	1.14E+01
257172	4/1/2013 - 4/29/2013	Mn-54	<3.24E+00	0.00E+00	3.24E+00
		Co-58	<3.53E+00	0.00E+00	3.53E+00
		Fe-59	<7.70E+00	0.00E+00	7.70E+00
		Co-60	<4.00E+00	0.00E+00	4.00E+00
		Zn-65	<7.33E+00	0.00E+00	7.33E+00
		Zr-95	<6.18E+00	0.00E+00	6.18E+00
		Nb-95	<4.51E+00	0.00E+00	4.51E+00
		I-131	<1.30E+01	0.00E+00	1.30E+01
		Cs-134	<3.14E+00	0.00E+00	3.14E+00
		Cs-137	<3.25E+00	0.00E+00	3.25E+00
		BaLa-140	<6.03E+00	0.00E+00	6.03E+00
		Be-7	<3.62E+01	0.00E+00	3.62E+01
		K-40	7.21E+01	1.73E+01	3.16E+01
258159	3/4/2013 - 5/28/2013	H3SW	6.29E+02	5.76E+01	1.54E+02
258254	4/29/2013 - 5/28/2013	Mn-54	<3.10E+00	0.00E+00	3.10E+00
		Co-58	<3.58E+00	0.00E+00	3.58E+00
		Fe-59	<8.63E+00	0.00E+00	8.63E+00
		Co-60	<4.36E+00	0.00E+00	4.36E+00
		Zn-65	<7.96E+00	0.00E+00	7.96E+00
		Zr-95	<6.06E+00	0.00E+00	6.06E+00
		Nb-95	<4.78E+00	0.00E+00	4.78E+00
		I-131	<1.44E+01	0.00E+00	1.44E+01
		Cs-134	<3.32E+00	0.00E+00	3.32E+00
		Cs-137	<3.71E+00	0.00E+00	3.71E+00
		BaLa-140	<1.02E+01	0.00E+00	1.02E+01
		Be-7	<3.36E+01	0.00E+00	3.36E+01
		K-40	1.63E+02	1.99E+01	3.26E+01
260260	5/28/2013 - 6/24/2013	Mn-54	<3.71E+00	0.00E+00	3.71E+00
		Co-58	<3.80E+00	0.00E+00	3.80E+00
		Fe-59	<9.77E+00	0.00E+00	9.77E+00
		Co-60	<4.47E+00	0.00E+00	4.47E+00
		Zn-65	<8.55E+00	0.00E+00	8.55E+00
		Zr-95	<7.58E+00	0.00E+00	7.58E+00
		Nb-95	<4.13E+00	0.00E+00	4.13E+00
		I-131	<1.45E+01	0.00E+00	1.45E+01
		Cs-134	<3.05E+00	0.00E+00	3.05E+00
		Cs-137	<3.61E+00	0.00E+00	3.61E+00
		BaLa-140	<6.96E+00	0.00E+00	6.96E+00
		Be-7	<4.14E+01	0.00E+00	4.14E+01
		K-40	1.75E+02	2.52E+01	3.41E+01
263199	6/24/2013 - 7/22/2013	Mn-54	<2.96E+00	0.00E+00	2.96E+00
		Co-58	<3.91E+00	0.00E+00	3.91E+00
		Fe-59	<8.66E+00	0.00E+00	8.66E+00
		Co-60	<4.56E+00	0.00E+00	4.56E+00
		Zn-65	<7.88E+00	0.00E+00	7.88E+00
		Zr-95	<6.81E+00	0.00E+00	6.81E+00
		Nb-95	<4.85E+00	0.00E+00	4.85E+00
		I-131	<1.03E+01	0.00E+00	1.03E+01
		Cs-134	<3.68E+00	0.00E+00	3.68E+00
		Cs-137	<3.31E+00	0.00E+00	3.31E+00
		BaLa-140	<9.57E+00	0.00E+00	9.57E+00
		Be-7	<3.47E+01	0.00E+00	3.47E+01
		K-40	5.25E+01	1.12E+01	4.38E+01
265523	7/22/2013 - 8/19/2013	Mn-54	<3.56E+00	0.00E+00	3.56E+00
		Co-58	<3.68E+00	0.00E+00	3.68E+00
		Fe-59	<1.10E+01	0.00E+00	1.10E+01
		Co-60	<5.38E+00	0.00E+00	5.38E+00

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 131 [INDICATOR - WNW @ 0.64 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
265523	7/22/2013 - 8/19/2013	Zn-65	<6.09E+00	0.00E+00	6.09E+00
		Zr-95	<6.81E+00	0.00E+00	6.81E+00
		Nb-95	<4.36E+00	0.00E+00	4.36E+00
		I-131	<1.36E+01	0.00E+00	1.36E+01
		Cs-134	<3.35E+00	0.00E+00	3.35E+00
		Cs-137	<3.41E+00	0.00E+00	3.41E+00
		BaLa-140	<5.78E+00	0.00E+00	5.78E+00
		Be-7	<3.56E+01	0.00E+00	3.56E+01
		K-40	6.96E+01	1.42E+01	2.70E+01
		266919	5/28/2013 - 8/19/2013	H3SW	1.68E+02
269678	8/19/2013 - 9/16/2013	Mn-54	<4.15E+00	0.00E+00	4.15E+00
		Co-58	<4.14E+00	0.00E+00	4.14E+00
		Fe-59	<7.69E+00	0.00E+00	7.69E+00
		Co-60	<4.92E+00	0.00E+00	4.92E+00
		Zn-65	<7.61E+00	0.00E+00	7.61E+00
		Zr-95	<8.62E+00	0.00E+00	8.62E+00
		Nb-95	<4.32E+00	0.00E+00	4.32E+00
		I-131	<1.44E+01	0.00E+00	1.44E+01
		Cs-134	<3.94E+00	0.00E+00	3.94E+00
		Cs-137	<3.99E+00	0.00E+00	3.99E+00
		BaLa-140	<1.44E+01	0.00E+00	1.44E+01
		Be-7	<3.52E+01	0.00E+00	3.52E+01
		K-40	7.27E+01	1.48E+01	4.21E+01
		272500	9/16/2013 - 10/14/2013	Mn-54	<5.51E+00
Co-58	<4.40E+00			0.00E+00	4.40E+00
Fe-59	<9.26E+00			0.00E+00	9.26E+00
Co-60	<4.73E+00			0.00E+00	4.73E+00
Zn-65	<7.12E+00			0.00E+00	7.12E+00
Zr-95	<6.15E+00			0.00E+00	6.15E+00
Nb-95	<5.28E+00			0.00E+00	5.28E+00
I-131	<1.31E+01			0.00E+00	1.31E+01
Cs-134	<3.23E+00			0.00E+00	3.23E+00
Cs-137	<2.90E+00			0.00E+00	2.90E+00
BaLa-140	<6.14E+00			0.00E+00	6.14E+00
Be-7	<3.55E+01			0.00E+00	3.55E+01
K-40	8.94E+01			2.12E+01	4.09E+01
274951	10/14/2013 - 11/11/2013			Mn-54	<4.55E+00
		Co-58	<4.32E+00	0.00E+00	4.32E+00
		Fe-59	<1.06E+01	0.00E+00	1.06E+01
		Co-60	<4.40E+00	0.00E+00	4.40E+00
		Zn-65	<8.85E+00	0.00E+00	8.85E+00
		Zr-95	<6.22E+00	0.00E+00	6.22E+00
		Nb-95	<5.59E+00	0.00E+00	5.59E+00
		I-131	<1.45E+01	0.00E+00	1.45E+01
		Cs-134	<4.07E+00	0.00E+00	4.07E+00
		Cs-137	<4.99E+00	0.00E+00	4.99E+00
		BaLa-140	<1.10E+01	0.00E+00	1.10E+01
		Be-7	<4.11E+01	0.00E+00	4.11E+01
		K-40	1.02E+02	2.46E+01	3.90E+01
		276936	8/19/2013 - 12/9/2013	H3SW	2.02E+02
279021	11/11/2013 - 12/9/2013	Mn-54	<3.53E+00	0.00E+00	3.53E+00
		Co-58	<3.77E+00	0.00E+00	3.77E+00
		Fe-59	<9.10E+00	0.00E+00	9.10E+00
		Co-60	<3.65E+00	0.00E+00	3.65E+00
		Zn-65	<6.39E+00	0.00E+00	6.39E+00
		Zr-95	<7.12E+00	0.00E+00	7.12E+00
		Nb-95	<3.53E+00	0.00E+00	3.53E+00
		I-131	<1.44E+01	0.00E+00	1.44E+01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 131 [INDICATOR - WNW @ 0.64 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
279021	11/11/2013 - 12/9/2013	Cs-134	<3.61E+00	0.00E+00	3.61E+00
		Cs-137	<3.18E+00	0.00E+00	3.18E+00
		BaLa-140	<7.22E+00	0.00E+00	7.22E+00
		Be-7	<3.68E+01	0.00E+00	3.68E+01
		K-40	1.99E+02	2.35E+01	3.38E+01

Sample Point 135 [CONTROL - N @ 11.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250596	12/10/2012 - 1/7/2013	Mn-54	<4.19E+00	0.00E+00	4.19E+00
		Co-58	<4.91E+00	0.00E+00	4.91E+00
		Fe-59	<1.18E+01	0.00E+00	1.18E+01
		Co-60	<5.58E+00	0.00E+00	5.58E+00
		Zn-65	<7.99E+00	0.00E+00	7.99E+00
		Zr-95	<7.72E+00	0.00E+00	7.72E+00
		Nb-95	<5.91E+00	0.00E+00	5.91E+00
		I-131	<1.44E+01	0.00E+00	1.44E+01
		Cs-134	<4.58E+00	0.00E+00	4.58E+00
		Cs-137	<4.87E+00	0.00E+00	4.87E+00
		BaLa-140	<1.02E+01	0.00E+00	1.02E+01
		Be-7	<4.53E+01	0.00E+00	4.53E+01
		K-40	1.78E+02	2.60E+01	3.94E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
251647	1/7/2013 - 2/4/2013	Mn-54	<5.15E+00	0.00E+00	5.15E+00
		Co-58	<5.17E+00	0.00E+00	5.17E+00
		Fe-59	<1.28E+01	0.00E+00	1.28E+01
		Co-60	<5.84E+00	0.00E+00	5.84E+00
		Zn-65	<1.19E+01	0.00E+00	1.19E+01
		Zr-95	<7.36E+00	0.00E+00	7.36E+00
		Nb-95	<5.99E+00	0.00E+00	5.99E+00
		I-131	<1.36E+01	0.00E+00	1.36E+01
		Cs-134	<4.81E+00	0.00E+00	4.81E+00
		Cs-137	<4.09E+00	0.00E+00	4.09E+00
		BaLa-140	<1.21E+01	0.00E+00	1.21E+01
		Be-7	<3.62E+01	0.00E+00	3.62E+01
		K-40	1.32E+02	2.46E+01	5.65E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
253040	12/10/2012 - 3/4/2013	H3SW	<2.37E+01	0.00E+00	1.81E+02

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
253925	2/4/2013 - 3/4/2013	Mn-54	<2.59E+00	0.00E+00	2.59E+00
		Co-58	<4.27E+00	0.00E+00	4.27E+00
		Fe-59	<9.20E+00	0.00E+00	9.20E+00
		Co-60	<6.73E+00	0.00E+00	6.73E+00
		Zn-65	<8.47E+00	0.00E+00	8.47E+00
		Zr-95	<8.35E+00	0.00E+00	8.35E+00
		Nb-95	<4.66E+00	0.00E+00	4.66E+00
		I-131	<1.42E+01	0.00E+00	1.42E+01
		Cs-134	<3.35E+00	0.00E+00	3.35E+00
		Cs-137	<4.50E+00	0.00E+00	4.50E+00
		BaLa-140	<1.10E+01	0.00E+00	1.10E+01
		Be-7	<3.92E+01	0.00E+00	3.92E+01
		K-40	4.76E+01	2.58E+01	4.12E+01

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
255871	3/4/2013 - 4/1/2013	Mn-54	<4.07E+00	0.00E+00	4.07E+00
		Co-58	<3.23E+00	0.00E+00	3.23E+00
		Fe-59	<9.17E+00	0.00E+00	9.17E+00
		Co-60	<5.22E+00	0.00E+00	5.22E+00
		Zn-65	<9.19E+00	0.00E+00	9.19E+00
		Zr-95	<7.64E+00	0.00E+00	7.64E+00
		Nb-95	<6.00E+00	0.00E+00	6.00E+00
		I-131	<1.35E+01	0.00E+00	1.35E+01
		Cs-134	<3.77E+00	0.00E+00	3.77E+00
		Cs-137	<3.85E+00	0.00E+00	3.85E+00
		BaLa-140	<1.06E+01	0.00E+00	1.06E+01
		Be-7	<3.52E+01	0.00E+00	3.52E+01

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 136 [CONTROL - N @ 11.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
255871	3/4/2013 - 4/1/2013	K-40	1.46E+02	2.18E+01	3.43E+01
257173	4/1/2013 - 4/29/2013	Mn-54	<4.48E+00	0.00E+00	4.48E+00
		Co-58	<4.95E+00	0.00E+00	4.95E+00
		Fe-59	<1.15E+01	0.00E+00	1.15E+01
		Co-60	<6.41E+00	0.00E+00	6.41E+00
		Zn-65	<8.88E+00	0.00E+00	8.88E+00
		Zr-95	<7.44E+00	0.00E+00	7.44E+00
		Nb-95	<4.92E+00	0.00E+00	4.92E+00
		I-131	<1.38E+01	0.00E+00	1.38E+01
		Cs-134	<4.56E+00	0.00E+00	4.56E+00
		Cs-137	<4.79E+00	0.00E+00	4.79E+00
		BaLa-140	<1.03E+01	0.00E+00	1.03E+01
		Be-7	<3.75E+01	0.00E+00	3.75E+01
		K-40	9.80E+01	2.68E+01	3.56E+01
258160	3/4/2013 - 5/28/2013	H3SW	<-1.3E+01	0.00E+00	1.55E+02
258255	4/29/2013 - 5/28/2013	Mn-54	<2.35E+00	0.00E+00	2.35E+00
		Co-58	<3.12E+00	0.00E+00	3.12E+00
		Fe-59	<6.54E+00	0.00E+00	6.54E+00
		Co-60	<4.14E+00	0.00E+00	4.14E+00
		Zn-65	<5.93E+00	0.00E+00	5.93E+00
		Zr-95	<6.54E+00	0.00E+00	6.54E+00
		Nb-95	<3.64E+00	0.00E+00	3.64E+00
		I-131	<1.14E+01	0.00E+00	1.14E+01
		Cs-134	<2.60E+00	0.00E+00	2.60E+00
		Cs-137	<3.05E+00	0.00E+00	3.05E+00
		BaLa-140	<8.31E+00	0.00E+00	8.31E+00
		Be-7	<2.23E+01	0.00E+00	2.23E+01
		K-40	8.16E+01	1.89E+01	3.18E+01
260261	5/28/2013 - 6/24/2013	Mn-54	<5.34E+00	0.00E+00	5.34E+00
		Co-58	<4.57E+00	0.00E+00	4.57E+00
		Fe-59	<1.23E+01	0.00E+00	1.23E+01
		Co-60	<6.92E+00	0.00E+00	6.92E+00
		Zn-65	<1.11E+01	0.00E+00	1.11E+01
		Zr-95	<7.16E+00	0.00E+00	7.16E+00
		Nb-95	<7.01E+00	0.00E+00	7.01E+00
		I-131	<1.29E+01	0.00E+00	1.29E+01
		Cs-134	<4.92E+00	0.00E+00	4.92E+00
		Cs-137	<6.07E+00	0.00E+00	6.07E+00
		BaLa-140	<1.28E+01	0.00E+00	1.28E+01
		Be-7	<3.73E+01	0.00E+00	3.73E+01
		K-40	1.35E+02	2.62E+01	5.21E+01
263200	6/24/2013 - 7/22/2013	Mn-54	<1.99E+00	0.00E+00	1.99E+00
		Co-58	<5.19E+00	0.00E+00	5.19E+00
		Fe-59	<1.26E+01	0.00E+00	1.26E+01
		Co-60	<5.42E+00	0.00E+00	5.42E+00
		Zn-65	<8.94E+00	0.00E+00	8.94E+00
		Zr-95	<7.14E+00	0.00E+00	7.14E+00
		Nb-95	<5.74E+00	0.00E+00	5.74E+00
		I-131	<1.25E+01	0.00E+00	1.25E+01
		Cs-134	<3.73E+00	0.00E+00	3.73E+00
		Cs-137	<5.23E+00	0.00E+00	5.23E+00
		BaLa-140	<1.01E+01	0.00E+00	1.01E+01
		Be-7	<3.74E+01	0.00E+00	3.74E+01
		K-40	7.80E+01	2.28E+01	3.83E+01
265524	7/22/2013 - 8/19/2013	Mn-54	<3.80E+00	0.00E+00	3.80E+00
		Co-58	<3.94E+00	0.00E+00	3.94E+00
		Fe-59	<1.18E+01	0.00E+00	1.18E+01
		Co-60	<5.40E+00	0.00E+00	5.40E+00



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 136 [CONTROL - N @ 11.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
265524	7/22/2013 - 8/19/2013	Zn-65	<8.03E+00	0.00E+00	8.03E+00
		Zr-95	<8.03E+00	0.00E+00	8.03E+00
		Nb-95	<5.99E+00	0.00E+00	5.99E+00
		I-131	<1.37E+01	0.00E+00	1.37E+01
		Cs-134	<4.30E+00	0.00E+00	4.30E+00
		Cs-137	<5.49E+00	0.00E+00	5.49E+00
		BaLa-140	<1.22E+01	0.00E+00	1.22E+01
		Be-7	<4.87E+01	0.00E+00	4.87E+01
		K-40	1.06E+02	2.73E+01	5.82E+01
		266920	5/28/2013 - 8/19/2013	Nuclide	Activity
H3SW	<1.49E+02			0.00E+00	1.67E+02
269679	8/19/2013 - 9/16/2013	Nuclide	Activity	1 Sigma Error	LLD
		Mn-54	<3.84E+00	0.00E+00	3.84E+00
		Co-58	<4.56E+00	0.00E+00	4.56E+00
		Fe-59	<7.52E+00	0.00E+00	7.52E+00
		Co-60	<4.27E+00	0.00E+00	4.27E+00
		Zn-65	<7.78E+00	0.00E+00	7.78E+00
		Zr-95	<7.27E+00	0.00E+00	7.27E+00
		Nb-95	<4.20E+00	0.00E+00	4.20E+00
		I-131	<1.32E+01	0.00E+00	1.32E+01
		Cs-134	<3.22E+00	0.00E+00	3.22E+00
		Cs-137	<3.57E+00	0.00E+00	3.57E+00
		BaLa-140	<8.87E+00	0.00E+00	8.87E+00
		Be-7	<3.82E+01	0.00E+00	3.82E+01
		K-40	1.35E+02	2.56E+01	3.71E+01
272501	9/16/2013 - 10/14/2013	Nuclide	Activity	1 Sigma Error	LLD
		Mn-54	<4.61E+00	0.00E+00	4.61E+00
		Co-58	<4.19E+00	0.00E+00	4.19E+00
		Fe-59	<1.06E+01	0.00E+00	1.06E+01
		Co-60	<5.71E+00	0.00E+00	5.71E+00
		Zn-65	<1.10E+01	0.00E+00	1.10E+01
		Zr-95	<9.73E+00	0.00E+00	9.73E+00
		Nb-95	<6.58E+00	0.00E+00	6.58E+00
		I-131	<1.39E+01	0.00E+00	1.39E+01
		Cs-134	<4.71E+00	0.00E+00	4.71E+00
		Cs-137	<4.63E+00	0.00E+00	4.63E+00
		BaLa-140	<1.18E+01	0.00E+00	1.18E+01
		Be-7	<5.31E+01	0.00E+00	5.31E+01
		K-40	1.18E+02	2.68E+01	5.57E+01
274952	10/14/2013 - 11/11/2013	Nuclide	Activity	1 Sigma Error	LLD
		Mn-54	<3.09E+00	0.00E+00	3.09E+00
		Co-58	<3.57E+00	0.00E+00	3.57E+00
		Fe-59	<7.00E+00	0.00E+00	7.00E+00
		Co-60	<3.22E+00	0.00E+00	3.22E+00
		Zn-65	<6.92E+00	0.00E+00	6.92E+00
		Zr-95	<6.90E+00	0.00E+00	6.90E+00
		Nb-95	<4.38E+00	0.00E+00	4.38E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.05E+00	0.00E+00	3.05E+00
		Cs-137	<3.01E+00	0.00E+00	3.01E+00
		BaLa-140	<8.63E+00	0.00E+00	8.63E+00
		Be-7	<3.51E+01	0.00E+00	3.51E+01
		K-40	1.77E+02	2.25E+01	3.18E+01
276937	8/19/2013 - 12/9/2013	Nuclide	Activity	1 Sigma Error	LLD
		H3SW	<-5.8E+01	0.00E+00	1.59E+02
279022	11/11/2013 - 12/9/2013	Nuclide	Activity	1 Sigma Error	LLD
		Mn-54	<3.99E+00	0.00E+00	3.99E+00
		Co-58	<5.14E+00	0.00E+00	5.14E+00
		Fe-59	<7.11E+00	0.00E+00	7.11E+00
		Co-60	<5.52E+00	0.00E+00	5.52E+00
		Zn-65	<7.98E+00	0.00E+00	7.98E+00
		Zr-95	<6.15E+00	0.00E+00	6.15E+00
		I-131	<1.38E+01	0.00E+00	1.38E+01

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 136 [CONTROL - N @ 11.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
279022	11/11/2013 - 12/9/2013	Cs-134	<3.55E+00	0.00E+00	3.55E+00
		Cs-137	<3.81E+00	0.00E+00	3.81E+00
		BaLa-140	<1.18E+01	0.00E+00	1.18E+01
		Be-7	<3.87E+01	0.00E+00	3.87E+01
		K-40	<7.35E+01	0.00E+00	7.35E+01

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 143 [INDICATOR - NW @ 0.27 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
254423	12/13/2012 - 3/20/2013	mR/Std Qtr	17.8
259292	3/20/2013 - 6/19/2013	mR/Std Qtr	17.0
268966	6/19/2013 - 9/18/2013	mR/Std Qtr	14.0
279245	9/18/2013 - 12/18/2013	mR/Std Qtr	17.0

Sample Point 144 [INDICATOR - NNE @ 0.46 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
254424	12/13/2012 - 3/20/2013	mR/Std Qtr	15.9
259293	3/20/2013 - 6/19/2013	mR/Std Qtr	16.0
268967	6/19/2013 - 9/18/2013	mR/Std Qtr	13.0
279246	9/18/2013 - 12/18/2013	mR/Std Qtr	14.0

Sample Point 145 [INDICATOR - NE @ 0.47 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
254425	12/13/2012 - 3/20/2013	mR/Std Qtr	16.9
259294	3/20/2013 - 6/19/2013	mR/Std Qtr	15.0
268968	6/19/2013 - 9/18/2013	mR/Std Qtr	15.0
279247	9/18/2013 - 12/18/2013	mR/Std Qtr	15.0

Sample Point 146 [INDICATOR - ENE @ 0.42 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
254426	12/13/2012 - 3/20/2013	mR/Std Qtr	15.9
259295	3/20/2013 - 6/19/2013	mR/Std Qtr	15.0
268969	6/19/2013 - 9/18/2013	mR/Std Qtr	12.0
279248	9/18/2013 - 12/18/2013	mR/Std Qtr	13.0

Sample Point 147 [INDICATOR - E @ 0.44 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
254427	12/13/2012 - 3/20/2013	mR/Std Qtr	15.0
259296	3/20/2013 - 6/19/2013	mR/Std Qtr	15.0
268970	6/19/2013 - 9/18/2013	mR/Std Qtr	13.0
279249	9/18/2013 - 12/18/2013	mR/Std Qtr	15.0



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 148 [INDICATOR - ESE @ 0.46 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
254428	12/13/2012 - 3/20/2013	mR/Std Qtr	15.0
259297	3/20/2013 - 6/19/2013	mR/Std Qtr	13.0
268971	6/19/2013 - 9/18/2013	mR/Std Qtr	10.0
279250	9/18/2013 - 12/18/2013	mR/Std Qtr	14.0

Sample Point 149 [INDICATOR - SE @ 0.5 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
254429	12/13/2012 - 3/20/2013	mR/Std Qtr	13.1
259298	3/20/2013 - 6/19/2013	mR/Std Qtr	13.0
268972	6/19/2013 - 9/18/2013	mR/Std Qtr	10.0
279251	9/18/2013 - 12/18/2013	mR/Std Qtr	12.0

Sample Point 151 [INDICATOR - S @ 0.37 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
254430	12/13/2012 - 3/20/2013	mR/Std Qtr	15.9
259299	3/20/2013 - 6/19/2013	mR/Std Qtr	15.0
268973	6/19/2013 - 9/18/2013	mR/Std Qtr	12.0
279252	9/18/2013 - 12/18/2013	mR/Std Qtr	14.0

Sample Point 152 [INDICATOR - SSW @ 0.44 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
254431	12/13/2012 - 3/20/2013	mR/Std Qtr	15.0
259300	3/20/2013 - 6/19/2013	mR/Std Qtr	15.0
268974	6/19/2013 - 9/18/2013	mR/Std Qtr	13.0
279253	9/18/2013 - 12/18/2013	mR/Std Qtr	14.0

Sample Point 153 [INDICATOR - SW @ 0.47 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
254432	12/13/2012 - 3/20/2013	mR/Std Qtr	20.6
259301	3/20/2013 - 6/19/2013	mR/Std Qtr	19.0
268975	6/19/2013 - 9/18/2013	mR/Std Qtr	17.0
279254	9/18/2013 - 12/18/2013	mR/Std Qtr	21.0

Sample Point 154 [INDICATOR - W @ 0.45 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
254433	12/13/2012 - 3/20/2013	mR/Std Qtr	22.5
259302	3/20/2013 - 6/19/2013	mR/Std Qtr	22.0
268976	6/19/2013 - 9/18/2013	mR/Std Qtr	19.0



MCQUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 154 [INDICATOR - W @ 0.45 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
279255	9/18/2013 - 12/18/2013	mR/Std Qtr	19.0

Sample Point 156 [INDICATOR - WNW @ 0.44 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
254434	12/13/2012 - 3/20/2013	mR/Std Qtr	19.7
259303	3/20/2013 - 6/19/2013	mR/Std Qtr	17.0
268977	6/19/2013 - 9/18/2013	mR/Std Qtr	15.0
279256	9/18/2013 - 12/18/2013	mR/Std Qtr	17.0

Sample Point 157 [INDICATOR - N @ 4.69 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
254435	12/13/2012 - 3/20/2013	mR/Std Qtr	16.9
259304	3/20/2013 - 6/19/2013	mR/Std Qtr	20.0
268978	6/19/2013 - 9/18/2013	mR/Std Qtr	14.0
279257	9/18/2013 - 12/18/2013	mR/Std Qtr	15.0

Sample Point 158 [INDICATOR - NNE @ 4.33 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
254436	12/13/2012 - 3/20/2013	mR/Std Qtr	15.9
259305	3/20/2013 - 6/19/2013	mR/Std Qtr	15.0
268979	6/19/2013 - 9/18/2013	mR/Std Qtr	13.0
279258	9/18/2013 - 12/18/2013	mR/Std Qtr	16.0

Sample Point 159 [INDICATOR - NE @ 4.73 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
254437	12/13/2012 - 3/20/2013	mR/Std Qtr	24.4
259306	3/20/2013 - 6/19/2013	mR/Std Qtr	23.0
268980	6/19/2013 - 9/18/2013	mR/Std Qtr	19.0
279259	9/18/2013 - 12/18/2013	mR/Std Qtr	22.0

Sample Point 160 [INDICATOR - ENE @ 4.89 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
254438	12/13/2012 - 3/20/2013	mR/Std Qtr	17.8
259307	3/20/2013 - 6/19/2013	mR/Std Qtr	17.0
268981	6/19/2013 - 9/18/2013	mR/Std Qtr	15.0
279260	9/18/2013 - 12/18/2013	mR/Std Qtr	16.0

Sample Point 161 [INDICATOR - E @ 4.7 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
254439	12/13/2012 - 3/20/2013	mR/Std Qtr	16.9



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 161 [INDICATOR - E @ 4.7 miles]

TLD RING TLD_OUTER

Sample ID: 259308	Sample Dates: 3/20/2013 - 6/19/2013	Nuclide mR/Std Qtr	Activity 15.0
Sample ID: 268982	Sample Dates: 6/19/2013 - 9/18/2013	Nuclide mR/Std Qtr	Activity 13.0
Sample ID: 279261	Sample Dates: 9/18/2013 - 12/18/2013	Nuclide mR/Std Qtr	Activity 14.0

Sample Point 162 [INDICATOR - ESE @ 4.53 miles]

TLD RING TLD_OUTER

Sample ID: 254440	Sample Dates: 12/13/2012 - 3/20/2013	Nuclide mR/Std Qtr	Activity 13.1
Sample ID: 259309	Sample Dates: 3/20/2013 - 6/19/2013	Nuclide mR/Std Qtr	Activity 16.0
Sample ID: 268983	Sample Dates: 6/19/2013 - 9/18/2013	Nuclide mR/Std Qtr	Activity 10.0
Sample ID: 279262	Sample Dates: 9/18/2013 - 12/18/2013	Nuclide mR/Std Qtr	Activity 11.0

Sample Point 163 [INDICATOR - SE @ 4.94 miles]

TLD RING TLD_OUTER

Sample ID: 254441	Sample Dates: 12/13/2012 - 3/20/2013	Nuclide mR/Std Qtr	Activity 13.1
Sample ID: 259310	Sample Dates: 3/20/2013 - 6/19/2013	Nuclide mR/Std Qtr	Activity 12.0
Sample ID: 268984	Sample Dates: 6/19/2013 - 9/18/2013	Nuclide mR/Std Qtr	Activity 9.0
Sample ID: 279263	Sample Dates: 9/18/2013 - 12/18/2013	Nuclide mR/Std Qtr	Activity 10.0

Sample Point 164 [INDICATOR - SSE @ 4.64 miles]

TLD RING TLD_OUTER

Sample ID: 254442	Sample Dates: 12/13/2012 - 3/20/2013	Nuclide mR/Std Qtr	Activity 13.1
Sample ID: 259311	Sample Dates: 3/20/2013 - 6/19/2013	Nuclide mR/Std Qtr	Activity 12.0
Sample ID: 268985	Sample Dates: 6/19/2013 - 9/18/2013	Nuclide mR/Std Qtr	Activity 9.0
Sample ID: 279264	Sample Dates: 9/18/2013 - 12/18/2013	Nuclide mR/Std Qtr	Activity 11.0

Sample Point 165 [INDICATOR - S @ 4.57 miles]

TLD RING TLD_OUTER

Sample ID: 254443	Sample Dates: 12/13/2012 - 3/20/2013	Nuclide mR/Std Qtr	Activity 22.5
Sample ID: 259312	Sample Dates: 3/20/2013 - 6/19/2013	Nuclide mR/Std Qtr	Activity 20.0
Sample ID: 268986	Sample Dates: 6/19/2013 - 9/18/2013	Nuclide mR/Std Qtr	Activity 18.0
Sample ID: 279265	Sample Dates: 9/18/2013 - 12/18/2013	Nuclide mR/Std Qtr	Activity 20.0

Sample Point 166 [INDICATOR - SSW @ 4.44 miles]

TLD RING TLD_OUTER

Sample ID: 254444	Sample Dates: 12/13/2012 - 3/20/2013	Nuclide mR/Std Qtr	Activity 17.8
Sample ID: 259313	Sample Dates: 3/20/2013 - 6/19/2013	Nuclide mR/Std Qtr	Activity 18.0
Sample ID: 268987	Sample Dates: 6/19/2013 - 9/18/2013	Nuclide mR/Std Qtr	Activity 15.0
Sample ID: 279266	Sample Dates: 9/18/2013 - 12/18/2013	Nuclide mR/Std Qtr	Activity 18.0



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 167 [INDICATOR - SW @ 4.87 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
254445	12/13/2012 - 3/20/2013	mR/Std Qtr	20.6
259314	3/20/2013 - 6/19/2013	mR/Std Qtr	20.0
268988	6/19/2013 - 9/18/2013	mR/Std Qtr	18.0
279267	9/18/2013 - 12/18/2013	mR/Std Qtr	21.0

Sample Point 168 [INDICATOR - WSW @ 4.6 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
254446	12/13/2012 - 3/20/2013	mR/Std Qtr	17.8
259315	3/20/2013 - 6/19/2013	mR/Std Qtr	18.0
268989	6/19/2013 - 9/18/2013	mR/Std Qtr	14.0
279268	9/18/2013 - 12/18/2013	mR/Std Qtr	17.0

Sample Point 169 [INDICATOR - W @ 4.03 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
254447	12/13/2012 - 3/20/2013	mR/Std Qtr	15.9
259316	3/20/2013 - 6/19/2013	mR/Std Qtr	14.0
268990	6/19/2013 - 9/18/2013	mR/Std Qtr	13.0
279269	9/18/2013 - 12/18/2013	mR/Std Qtr	14.0

Sample Point 170 [INDICATOR - WNW @ 4.32 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
254457	12/13/2012 - 3/20/2013	mR/Std Qtr	21.6
259326	3/20/2013 - 6/19/2013	mR/Std Qtr	20.0
269000	6/19/2013 - 9/18/2013	mR/Std Qtr	17.0
279279	9/18/2013 - 12/18/2013	mR/Std Qtr	20.0

Sample Point 171 [INDICATOR - NW @ 3.95 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
254448	12/13/2012 - 3/20/2013	mR/Std Qtr	15.9
259317	3/20/2013 - 6/19/2013	mR/Std Qtr	17.0
268991	6/19/2013 - 9/18/2013	mR/Std Qtr	13.0
279270	9/18/2013 - 12/18/2013	mR/Std Qtr	16.0

Sample Point 172 [INDICATOR - NNW @ 4.69 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
254449	12/13/2012 - 3/20/2013	mR/Std Qtr	15.9
259318	3/20/2013 - 6/19/2013	mR/Std Qtr	15.0
268992	6/19/2013 - 9/18/2013	mR/Std Qtr	13.0



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 172 [INDICATOR - NNW @ 4.69 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
279271	9/18/2013 - 12/18/2013	mR/Std Qtr	15.0

Sample Point 173 [INDICATOR - NNW @ 8.39 miles]

TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
254450	12/13/2012 - 3/20/2013	mR/Std Qtr	25.3
259319	3/20/2013 - 6/19/2013	mR/Std Qtr	25.0
268993	6/19/2013 - 9/18/2013	mR/Std Qtr	22.0
279272	9/18/2013 - 12/18/2013	mR/Std Qtr	23.0

Sample Point 174 [INDICATOR - WNW @ 8.77 miles]

TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
254451	12/13/2012 - 3/20/2013	mR/Std Qtr	24.4
259320	3/20/2013 - 6/19/2013	mR/Std Qtr	24.0
268994	6/19/2013 - 9/18/2013	mR/Std Qtr	21.0
279273	9/18/2013 - 12/18/2013	mR/Std Qtr	21.0

Sample Point 175 [CONTROL - WNW @ 15.5 miles]

TLD RING TLD_CTRL

Sample ID:	Sample Dates:	Nuclide	Activity
254452	12/13/2012 - 3/20/2013	mR/Std Qtr	24.4
259321	3/20/2013 - 6/19/2013	mR/Std Qtr	24.0
268995	6/19/2013 - 9/18/2013	mR/Std Qtr	21.0
279274	9/18/2013 - 12/18/2013	mR/Std Qtr	23.0

Sample Point 177 [INDICATOR - S @ 8.77 miles]

TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
254453	12/13/2012 - 3/20/2013	mR/Std Qtr	15.0
259322	3/20/2013 - 6/19/2013	mR/Std Qtr	14.0
268996	6/19/2013 - 9/18/2013	mR/Std Qtr	14.0
279275	9/18/2013 - 12/18/2013	mR/Std Qtr	13.0

Sample Point 178 [INDICATOR - SE @ 9.36 miles]

TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
254454	12/13/2012 - 3/20/2013	mR/Std Qtr	16.9
259323	3/20/2013 - 6/19/2013	mR/Std Qtr	15.0
268997	6/19/2013 - 9/18/2013	mR/Std Qtr	12.0
279276	9/18/2013 - 12/18/2013	mR/Std Qtr	16.0

Sample Point 180 [INDICATOR - NNE @ 12.7 miles]

TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
254491	12/13/2012 - 3/20/2013	mR/Std Qtr	31.0



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 180 [INDICATOR - NNE @ 12.7 miles]

TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
259360	3/20/2013 - 6/19/2013	mR/Std Qtr	27.0
269034	6/19/2013 - 9/18/2013	mR/Std Qtr	22.0
279313	9/18/2013 - 12/18/2013	mR/Std Qtr	25.0

Sample Point 181 [INDICATOR - NE @ 7.02 miles]

TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
254492	12/13/2012 - 3/20/2013	mR/Std Qtr	16.9
259361	3/20/2013 - 6/19/2013	mR/Std Qtr	17.0
269035	6/19/2013 - 9/18/2013	mR/Std Qtr	13.0
279314	9/18/2013 - 12/18/2013	mR/Std Qtr	16.0

Sample Point 182 [INDICATOR - ENE @ 6.23 miles]

TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
254493	12/13/2012 - 3/20/2013	mR/Std Qtr	15.9
259362	3/20/2013 - 6/19/2013	mR/Std Qtr	15.0
269036	6/19/2013 - 9/18/2013	mR/Std Qtr	13.0
279315	9/18/2013 - 12/18/2013	mR/Std Qtr	14.0

Sample Point 186 [INDICATOR - NNW @ 0.24 miles]

TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
254494	12/13/2012 - 3/20/2013	mR/Std Qtr	16.9
259363	3/20/2013 - 6/19/2013	mR/Std Qtr	18.0
269037	6/19/2013 - 9/18/2013	mR/Std Qtr	14.0
279316	9/18/2013 - 12/18/2013	mR/Std Qtr	15.0

Sample Point 187 [INDICATOR - N @ 0.19 miles]

TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
254495	12/13/2012 - 3/20/2013	mR/Std Qtr	18.8
259364	3/20/2013 - 6/19/2013	mR/Std Qtr	17.0
269038	6/19/2013 - 9/18/2013	mR/Std Qtr	14.0
279317	9/18/2013 - 12/18/2013	mR/Std Qtr	17.0

Sample Point 189 [INDICATOR - SSE @ 0.43 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
254496	12/13/2012 - 3/20/2013	mR/Std Qtr	15.0
259365	3/20/2013 - 6/19/2013	mR/Std Qtr	16.0
269039	6/19/2013 - 9/18/2013	mR/Std Qtr	13.0
279318	9/18/2013 - 12/18/2013	mR/Std Qtr	15.0



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 190 [INDICATOR - WSW @ 0.37 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
254497	12/13/2012 - 3/20/2013	mR/Std Qtr	19.7
259366	3/20/2013 - 6/19/2013	mR/Std Qtr	20.0
269040	6/19/2013 - 9/18/2013	mR/Std Qtr	17.0
279319	9/18/2013 - 12/18/2013	mR/Std Qtr	21.0

Sample Point 191 [INDICATOR - NNE @ 2.84 miles]

TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
254498	12/13/2012 - 3/20/2013	mR/Std Qtr	16.9
259367	3/20/2013 - 6/19/2013	mR/Std Qtr	18.0
269041	6/19/2013 - 9/18/2013	mR/Std Qtr	15.0
279320	9/18/2013 - 12/18/2013	mR/Std Qtr	16.0

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
249992	1/7/2013 - 1/7/2013	I-131	<3.27E+01	0.00E+00	3.27E+01
		Cs-134	<3.85E+01	0.00E+00	3.85E+01
		Cs-137	<3.82E+01	0.00E+00	3.82E+01
		Be-7	1.65E+03	1.90E+02	2.56E+02
		K-40	2.45E+03	3.37E+02	3.43E+02
250950	2/4/2013 - 2/4/2013	I-131	<2.68E+01	0.00E+00	2.68E+01
		Cs-134	<2.39E+01	0.00E+00	2.39E+01
		Cs-137	<3.30E+01	0.00E+00	3.30E+01
		Be-7	1.85E+03	1.60E+02	2.03E+02
		K-40	3.56E+03	3.09E+02	3.32E+02
252695	3/4/2013 - 3/4/2013	I-131	<3.14E+01	0.00E+00	3.14E+01
		Cs-134	<2.78E+01	0.00E+00	2.78E+01
		Cs-137	<4.07E+01	0.00E+00	4.07E+01
		Be-7	1.41E+03	2.11E+02	2.69E+02
		K-40	3.47E+03	3.82E+02	5.16E+02
255037	4/1/2013 - 4/1/2013	I-131	<2.89E+01	0.00E+00	2.89E+01
		Cs-134	<2.98E+01	0.00E+00	2.98E+01
		Cs-137	<2.78E+01	0.00E+00	2.78E+01
		Be-7	1.47E+03	1.48E+02	1.98E+02
		K-40	3.78E+03	3.26E+02	2.81E+02
256526	5/6/2013 - 5/6/2013	I-131	<1.40E+01	0.00E+00	1.40E+01
		Cs-134	<1.22E+01	0.00E+00	1.22E+01
		Cs-137	<1.63E+01	0.00E+00	1.63E+01
		Be-7	8.09E+02	9.71E+01	1.12E+02
		K-40	2.76E+03	1.89E+02	1.52E+02
257925	6/3/2013 - 6/3/2013	I-131	<1.99E+01	0.00E+00	1.99E+01
		Cs-134	<2.14E+01	0.00E+00	2.14E+01
		Cs-137	<2.15E+01	0.00E+00	2.15E+01
		Be-7	5.01E+02	9.43E+01	1.52E+02
		K-40	3.20E+03	2.97E+02	3.03E+02
259618	7/1/2013 - 7/1/2013	I-131	<1.42E+01	0.00E+00	1.42E+01
		Cs-134	<1.69E+01	0.00E+00	1.69E+01

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
259618	7/1/2013 - 7/1/2013	Cs-137	<1.87E+01	0.00E+00	1.87E+01
		Be-7	1.21E+03	1.01E+02	1.34E+02
		K-40	4.19E+03	2.37E+02	1.46E+02
262848	8/6/2013 - 8/6/2013	I-131	<1.81E+01	0.00E+00	1.81E+01
		Cs-134	<1.47E+01	0.00E+00	1.47E+01
		Cs-137	<2.01E+01	0.00E+00	2.01E+01
		Be-7	1.54E+03	1.20E+02	1.19E+02
		K-40	4.80E+03	2.62E+02	2.05E+02
265426	9/3/2013 - 9/3/2013	I-131	<2.30E+01	0.00E+00	2.30E+01
		Cs-134	<2.64E+01	0.00E+00	2.64E+01
		Cs-137	<2.44E+01	0.00E+00	2.44E+01
		Be-7	1.64E+03	1.59E+02	2.21E+02
		K-40	3.82E+03	3.65E+02	3.91E+02
269585	10/7/2013 - 10/7/2013	I-131	<1.61E+01	0.00E+00	1.61E+01
		Cs-134	<1.47E+01	0.00E+00	1.47E+01
		Cs-137	<1.51E+01	0.00E+00	1.51E+01
		Be-7	1.18E+03	1.13E+02	1.17E+02
		K-40	3.77E+03	2.10E+02	1.46E+02
272533	11/4/2013 - 11/4/2013	I-131	<2.44E+01	0.00E+00	2.44E+01
		Cs-134	<2.93E+01	0.00E+00	2.93E+01
		Cs-137	<3.45E+01	0.00E+00	3.45E+01
		Be-7	1.03E+03	1.79E+02	2.16E+02
		K-40	4.00E+03	3.38E+02	4.54E+02
275255	12/2/2013 - 12/2/2013	I-131	<2.73E+01	0.00E+00	2.73E+01
		Cs-134	<2.92E+01	0.00E+00	2.92E+01
		Cs-137	<3.40E+01	0.00E+00	3.40E+01
		Be-7	9.57E+02	1.61E+02	2.62E+02
		K-40	2.52E+03	2.79E+02	3.35E+02

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
250005	1/7/2013 - 1/7/2013	I-131	<2.50E+01	0.00E+00	2.50E+01
		Cs-134	<2.37E+01	0.00E+00	2.37E+01
		Cs-137	<3.17E+01	0.00E+00	3.17E+01
		Be-7	9.05E+02	1.06E+02	2.13E+02
		K-40	5.32E+03	3.37E+02	2.30E+02
250963	2/4/2013 - 2/4/2013	I-131	<3.50E+01	0.00E+00	3.50E+01
		Cs-134	<4.19E+01	0.00E+00	4.19E+01
		Cs-137	<5.71E+01	0.00E+00	5.71E+01
		Be-7	9.44E+02	1.86E+02	3.79E+02
		K-40	4.46E+03	4.93E+02	5.03E+02
252674	3/4/2013 - 3/4/2013	I-131	<3.56E+01	0.00E+00	3.56E+01
		Cs-134	<2.70E+01	0.00E+00	2.70E+01
		Cs-137	<4.35E+01	0.00E+00	4.35E+01
		Be-7	7.61E+02	1.69E+02	2.73E+02
		K-40	3.69E+03	4.31E+02	3.23E+02
255079	4/1/2013 - 4/1/2013	I-131	<2.36E+01	0.00E+00	2.36E+01
		Cs-134	<2.42E+01	0.00E+00	2.42E+01
		Cs-137	<2.72E+01	0.00E+00	2.72E+01
		Be-7	7.98E+02	1.31E+02	1.85E+02
		K-40	5.56E+03	3.50E+02	5.94E+01
256539	5/6/2013 - 5/6/2013	I-131	<1.68E+01	0.00E+00	1.68E+01
		Cs-134	<1.52E+01	0.00E+00	1.52E+01

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
256539	5/6/2013 - 5/6/2013	Cs-137	<1.69E+01	0.00E+00	1.69E+01
		Be-7	6.38E+02	1.10E+02	1.43E+02
		K-40	3.56E+03	2.38E+02	2.07E+02
257938	6/3/2013 - 6/3/2013	I-131	<1.89E+01	0.00E+00	1.89E+01
		Cs-134	<1.44E+01	0.00E+00	1.44E+01
		Cs-137	<1.97E+01	0.00E+00	1.97E+01
		Be-7	3.70E+02	7.59E+01	1.34E+02
		K-40	3.98E+03	2.46E+02	1.93E+02
259647	7/1/2013 - 7/1/2013	I-131	<1.78E+01	0.00E+00	1.78E+01
		Cs-134	<2.05E+01	0.00E+00	2.05E+01
		Cs-137	<2.39E+01	0.00E+00	2.39E+01
		Be-7	8.04E+02	1.10E+02	1.53E+02
		K-40	4.03E+03	2.52E+02	1.98E+02
262861	8/5/2013 - 8/5/2013	I-131	<2.14E+01	0.00E+00	2.14E+01
		Cs-134	<2.88E+01	0.00E+00	2.88E+01
		Cs-137	<3.58E+01	0.00E+00	3.58E+01
		Be-7	1.26E+03	1.59E+02	2.12E+02
		K-40	3.12E+03	3.74E+02	3.94E+02
265438	9/3/2013 - 9/3/2013	I-131	<1.75E+01	0.00E+00	1.75E+01
		Cs-134	<2.25E+01	0.00E+00	2.25E+01
		Cs-137	<2.50E+01	0.00E+00	2.50E+01
		Be-7	1.50E+03	1.35E+02	1.15E+02
		K-40	3.71E+03	2.92E+02	2.29E+02
269564	10/7/2013 - 10/7/2013	I-131	<2.10E+01	0.00E+00	2.10E+01
		Cs-134	<1.71E+01	0.00E+00	1.71E+01
		Cs-137	<2.19E+01	0.00E+00	2.19E+01
		Be-7	9.29E+02	1.01E+02	1.49E+02
		K-40	3.98E+03	2.66E+02	1.58E+02
272552	11/4/2013 - 11/4/2013	I-131	<2.88E+01	0.00E+00	2.88E+01
		Cs-134	<2.74E+01	0.00E+00	2.74E+01
		Cs-137	<2.81E+01	0.00E+00	2.81E+01
		Be-7	1.14E+03	1.74E+02	2.40E+02
		K-40	3.41E+03	3.86E+02	3.65E+02
275268	12/2/2013 - 12/2/2013	I-131	<2.52E+01	0.00E+00	2.52E+01
		Cs-134	<2.72E+01	0.00E+00	2.72E+01
		Cs-137	<2.38E+01	0.00E+00	2.38E+01
		Be-7	5.61E+02	1.00E+02	1.90E+02
		K-40	4.05E+03	2.90E+02	2.06E+02

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
249995	1/7/2013 - 1/7/2013	I-131	<3.08E+01	0.00E+00	3.08E+01
		Cs-134	<3.82E+01	0.00E+00	3.82E+01
		Cs-137	<4.72E+01	0.00E+00	4.72E+01
		Be-7	5.09E+02	1.12E+02	2.12E+02
		K-40	3.26E+03	3.97E+02	4.97E+02
250963	2/4/2013 - 2/4/2013	I-131	<3.04E+01	0.00E+00	3.04E+01
		Cs-134	<3.00E+01	0.00E+00	3.00E+01
		Cs-137	<3.81E+01	0.00E+00	3.81E+01
		Be-7	1.29E+03	1.95E+02	2.07E+02
		K-40	3.68E+03	3.14E+02	3.96E+02
252698	3/4/2013 - 3/4/2013	I-131	<3.54E+01	0.00E+00	3.54E+01
		Cs-134	<4.98E+01	0.00E+00	4.98E+01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
252698	3/4/2013 - 3/4/2013	Cs-137	<5.19E+01	0.00E+00	5.19E+01
		Be-7	1.43E+03	2.46E+02	3.02E+02
		K-40	3.90E+03	4.95E+02	5.61E+02
255040	4/1/2013 - 4/1/2013	I-131	<2.78E+01	0.00E+00	2.78E+01
		Cs-134	<1.73E+01	0.00E+00	1.73E+01
		Cs-137	<2.20E+01	0.00E+00	2.20E+01
		Be-7	8.12E+02	1.13E+02	1.87E+02
		K-40	4.31E+03	3.37E+02	1.91E+02
256529	5/6/2013 - 5/6/2013	I-131	<2.80E+01	0.00E+00	2.80E+01
		Cs-134	<3.05E+01	0.00E+00	3.05E+01
		Cs-137	<2.86E+01	0.00E+00	2.86E+01
		Be-7	9.08E+02	1.30E+02	1.80E+02
		K-40	3.38E+03	3.12E+02	2.67E+02
257928	6/3/2013 - 6/3/2013	I-131	<2.05E+01	0.00E+00	2.05E+01
		Cs-134	<1.99E+01	0.00E+00	1.99E+01
		Cs-137	<2.51E+01	0.00E+00	2.51E+01
		Be-7	6.47E+02	1.05E+02	1.82E+02
		K-40	3.44E+03	3.31E+02	3.19E+02
259621	7/1/2013 - 7/1/2013	I-131	<1.07E+01	0.00E+00	1.07E+01
		Cs-134	<1.10E+01	0.00E+00	1.10E+01
		Cs-137	<1.42E+01	0.00E+00	1.42E+01
		Be-7	9.55E+02	7.87E+01	8.09E+01
		K-40	3.31E+03	1.84E+02	1.42E+02
262851	8/5/2013 - 8/5/2013	I-131	<2.07E+01	0.00E+00	2.07E+01
		Cs-134	<1.90E+01	0.00E+00	1.90E+01
		Cs-137	<2.66E+01	0.00E+00	2.66E+01
		Be-7	1.47E+03	1.43E+02	1.78E+02
		K-40	4.76E+03	3.15E+02	2.48E+02
265428	9/3/2013 - 9/3/2013	I-131	<3.02E+01	0.00E+00	3.02E+01
		Cs-134	<2.46E+01	0.00E+00	2.46E+01
		Cs-137	<3.02E+01	0.00E+00	3.02E+01
		Be-7	1.24E+03	1.62E+02	2.15E+02
		K-40	5.93E+03	3.66E+02	2.77E+02
269588	10/7/2013 - 10/7/2013	I-131	<2.48E+01	0.00E+00	2.48E+01
		Cs-134	<3.07E+01	0.00E+00	3.07E+01
		Cs-137	<3.26E+01	0.00E+00	3.26E+01
		Be-7	7.90E+02	1.61E+02	2.44E+02
		K-40	3.81E+03	3.62E+02	2.38E+02
272536	11/4/2013 - 11/4/2013	I-131	<3.90E+01	0.00E+00	3.90E+01
		Cs-134	<3.13E+01	0.00E+00	3.13E+01
		Cs-137	<4.39E+01	0.00E+00	4.39E+01
		Be-7	6.90E+02	1.96E+02	3.35E+02
		K-40	3.34E+03	4.26E+02	5.53E+02
275258	12/2/2013 - 12/2/2013	I-131	<3.17E+01	0.00E+00	3.17E+01
		Cs-134	<3.27E+01	0.00E+00	3.27E+01
		Cs-137	<4.08E+01	0.00E+00	4.08E+01
		Be-7	1.10E+03	1.32E+02	1.63E+02
		K-40	3.04E+03	3.59E+02	3.10E+02

Sample Point 193 [INDICATOR - N @ 0.19 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
249993	1/7/2013 - 1/7/2013	I-131	<2.97E+01	0.00E+00	2.97E+01
		Cs-134	<2.34E+01	0.00E+00	2.34E+01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 193 [INDICATOR - N @ 0.19 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
249993	1/7/2013 - 1/7/2013	Cs-137	<3.71E+01	0.00E+00	3.71E+01
		Be-7	1.64E+03	2.06E+02	2.96E+02
		K-40	4.00E+03	3.73E+02	3.31E+02
250951	2/4/2013 - 2/4/2013	Nuclide	Activity	1 Sigma Error	LLD
		I-131	<2.13E+01	0.00E+00	2.13E+01
		Cs-134	<1.70E+01	0.00E+00	1.70E+01
		Cs-137	<2.48E+01	0.00E+00	2.48E+01
		Be-7	2.54E+03	1.69E+02	1.83E+02
252696	3/4/2013 - 3/4/2013	Nuclide	Activity	1 Sigma Error	LLD
		I-131	<3.17E+01	0.00E+00	3.17E+01
		Cs-134	<3.88E+01	0.00E+00	3.88E+01
		Cs-137	<2.97E+01	0.00E+00	2.97E+01
		Be-7	2.49E+03	2.24E+02	2.57E+02
255038	4/1/2013 - 4/1/2013	Nuclide	Activity	1 Sigma Error	LLD
		I-131	<2.38E+01	0.00E+00	2.38E+01
		Cs-134	<2.73E+01	0.00E+00	2.73E+01
		Cs-137	<3.03E+01	0.00E+00	3.03E+01
		Be-7	1.55E+03	1.36E+02	1.71E+02
256527	5/6/2013 - 5/6/2013	Nuclide	Activity	1 Sigma Error	LLD
		I-131	<2.07E+01	0.00E+00	2.07E+01
		Cs-134	<1.56E+01	0.00E+00	1.56E+01
		Cs-137	<2.47E+01	0.00E+00	2.47E+01
		Be-7	2.66E+03	1.89E+02	1.58E+02
257926	6/3/2013 - 6/3/2013	Nuclide	Activity	1 Sigma Error	LLD
		I-131	<1.58E+01	0.00E+00	1.58E+01
		Cs-134	<1.83E+01	0.00E+00	1.83E+01
		Cs-137	<1.82E+01	0.00E+00	1.82E+01
		Be-7	1.21E+03	1.26E+02	1.35E+02
259619	7/1/2013 - 7/1/2013	Nuclide	Activity	1 Sigma Error	LLD
		I-131	<1.60E+01	0.00E+00	1.60E+01
		Cs-134	<1.39E+01	0.00E+00	1.39E+01
		Cs-137	<2.01E+01	0.00E+00	2.01E+01
		Be-7	1.08E+03	1.04E+02	1.27E+02
262849	8/5/2013 - 8/5/2013	Nuclide	Activity	1 Sigma Error	LLD
		I-131	<1.48E+01	0.00E+00	1.48E+01
		Cs-134	<1.65E+01	0.00E+00	1.65E+01
		Cs-137	<1.92E+01	0.00E+00	1.92E+01
		Be-7	7.91E+02	9.78E+01	1.44E+02
265426	9/3/2013 - 9/3/2013	Nuclide	Activity	1 Sigma Error	LLD
		I-131	<2.17E+01	0.00E+00	2.17E+01
		Cs-134	<2.50E+01	0.00E+00	2.50E+01
		Cs-137	<2.21E+01	0.00E+00	2.21E+01
		Be-7	9.18E+02	1.27E+02	1.90E+02
269586	10/7/2013 - 10/7/2013	Nuclide	Activity	1 Sigma Error	LLD
		I-131	<2.03E+01	0.00E+00	2.03E+01
		Cs-134	<2.18E+01	0.00E+00	2.18E+01
		Cs-137	<2.71E+01	0.00E+00	2.71E+01
		Be-7	6.91E+02	1.26E+02	1.84E+02
272534	11/4/2013 - 11/4/2013	Nuclide	Activity	1 Sigma Error	LLD
		I-131	<1.99E+01	0.00E+00	1.99E+01
		Cs-134	<1.69E+01	0.00E+00	1.69E+01
		Cs-137	<2.22E+01	0.00E+00	2.22E+01



MCGUIRE Radiological Environmental Monitoring Analysis Report - 2013 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg

Sample Point 193 [INDICATOR - N @ 0.19 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	1 Sigma Error	LLD
272534	11/4/2013 - 11/4/2013	Be-7	6.11E+02	1.00E+02	1.93E+02
		K-40	3.58E+03	3.11E+02	2.08E+02
275256	12/2/2013 - 12/2/2013	I-131	<3.05E+01	0.00E+00	3.05E+01
		Cs-134	<3.33E+01	0.00E+00	3.33E+01
		Cs-137	<2.33E+01	0.00E+00	2.33E+01
		Be-7	6.40E+02	1.35E+02	2.52E+02
		K-40	3.88E+03	3.86E+02	4.64E+02



APPENDIX F

**ERRATA TO
PREVIOUS REPORTS**

APPENDIX F

ERRATA TO THE 2013 AREOR

There are no errata to be appended to the 2013 AREOR.