#### DEPARTMENT OF HEALTH

# Prairie Island Nuclear Generating Plant October 2021

#### INDEPENDENT SPENT FUEL STORAGE INSTALLATION

# Introduction

This report provides data on radiation levels inside the Xcel Energy, Inc. Independent Spent Fuel Storage Installation (ISFSI) at the Prairie Island Nuclear Generating Plant (PINGP) for October 2021. The data contained in this report were gathered in accordance with agreements between Xcel Energy, Inc., and the Minnesota Department of Health (MDH).

At the end of October 2021, 47 casks were storing spent fuel inside the Independent Spent Fuel Storage Installation. The last cask to be moved to the Independent Spent Fuel Storage Installation was placed on May 28, 2020.

# **Radiation Monitoring**

MDH monitored radiation levels around the ISFSI from January 1995 to July 2015 using Pressurized Ionization Chambers (PICs). The PICs were located on the north and south end of the ISFSI. The PICs were replaced with new monitors that use a dual Geiger-Mueller (GM) tube system (a high range and low range GM tube). The new monitors are located in the same locations as the PICs. The new monitors were connected on September 30, 2015 and began logging data on October 20, 2015. The monitors average radiation level data over a 15-minute period and report that average value. This report contains the daily high and low of those readings as well as the average of those readings for each monitor.

# **Analysis and Comments**

Monitor 1 readings ranged from 0.150 mR/hr to 0.189 mR/hr. Monitor 2 readings ranged from 0.087 mR/hr to 0.167 mR/hr.

Additional monitoring data on radioactivity levels in other media (air, for example) are available in the annual Minnesota Department of Health "Environmental Radiation Data Report."

For more information, go to: <u>Environmental Monitoring</u> (https://www.health.state.mn.us/communities/environment/radiation/monitor/index.html)

Minnesota Department of Health Radioactive Materials Unit <u>health.ram@state.mn.us</u> www.health.state.mn.us

#### 11/3/2021

To obtain this information in a different format, call: 651-201-4000.

Date	Maximum Reading (mR/hr)	Minimum Reading (mR/hr)	Average Reading (mR/hr)
10/1/21	0.186	0.157	0.165
10/2/21	0.180	0.156	0.166
10/3/21	0.178	0.155	0.166
10/4/21	0.176	0.155	0.165
10/5/21	0.175	0.153	0.164
10/6/21	0.180	0.156	0.165
10/7/21	0.187	0.157	0.165
10/8/21	0.176	0.158	0.166
10/9/21	0.184	0.155	0.166
10/10/21	0.178	0.157	0.165
10/11/21	0.178	0.156	0.165
10/12/21	0.179	0.155	0.164
10/13/21	0.176	0.157	0.166
10/14/21	0.173	0.156	0.164
10/15/21	0.174	0.154	0.163
10/16/21	0.179	0.153	0.163
10/17/21	0.180	0.153	0.163
10/18/21	0.177	0.155	0.164
10/19/21	0.182	0.156	0.164
10/20/21	0.179	0.157	0.165
10/21/21	0.176	0.156	0.165
10/22/21	0.177	0.155	0.164
10/23/21	0.176	0.155	0.163
10/24/21	0.177	0.155	0.163
10/25/21	0.181	0.155	0.162
10/26/21	0.177	0.152	0.163
10/27/21	0.174	0.153	0.163
10/28/21	0.173	0.155	0.164
10/29/21	0.177	0.153	0.163
10/30/21	0.175	0.157	0.164
10/31/21	0.189	0.150	0.163

## Table 1: October 2021 Data Report for Monitor 1

Date	Mayimum Deading	Maximum Reading Minimum Reading (mR/hr) Average Reading (mR/hr)			
Date	Maximum Reading (mR/hr)	winimum keading (mk/hr)	Average Reading (mR/nr)		
10/1/21	0.154	0.087	0.139		
10/2/21	0.165	0.133	0.144		
10/3/21	0.156	0.135	0.144		
10/4/21	0.152	0.118	0.138		
10/5/21	0.158	0.112	0.140		
10/6/21	0.149	0.130	0.140		
10/7/21	0.160	0.133	0.143		
10/8/21	0.167	0.132	0.143		
10/9/21	0.157	0.130	0.142		
10/10/21	0.160	0.133	0.142		
10/11/21	0.154	0.132	0.140		
10/12/21	0.162	0.133	0.142		
10/13/21	0.156	0.117	0.141		
10/14/21	0.153	0.130	0.143		
10/15/21	0.152	0.133	0.142		
10/16/21	0.160	0.132	0.142		
10/17/21	0.161	0.135	0.142		
10/18/21	0.156	0.133	0.142		
10/19/21	0.157	0.129	0.142		
10/20/21	0.161	0.129	0.142		
10/21/21	0.163	0.136	0.144		
10/22/21	0.155	0.136	0.143		
10/23/21	0.150	0.133	0.142		
10/24/21	0.153	0.133	0.142		
10/25/21	0.163	0.131	0.142		
10/26/21	0.157	0.132	0.142		
10/27/21	0.154	0.134	0.142		
10/28/21	0.154	0.136	0.143		
10/29/21	0.157	0.132	0.143		
10/30/21	0.156	0.134	0.142		
10/31/21	0.151	0.135	0.142		

## Table 2: October 2021 Data Report for Monitor 2