Minnesota Department of Health
RADIOACTIVE MATERIALS UNIT

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
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 April 2017. 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 April 2017, 40 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 August 17, 2015.

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 0.160 mR/hr to 0.195 mR/hr. Monitor 2 readings ranged from 0.160 mR/hr to 0.191 mR/hr. Monitor 1 and 2 lost contact on April 15, 2017. Contact was reestablished with both monitors and resumed logging data on April 19, 2017. No data is available during that time period.

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:
http://www.health.state.mn.us/divs/eh/radiation/monitor/index.html or contact
Brandon Juran at brandon.juran@state.mn.us or 651-201-4526.

Table 1: April 2017 Data Report for Monitor 1 – North

Date	Maximum Reading (mR/hr)	Minimum Reading (mR/hr)	Average Reading (mR/hr)
4/1/17	0.191	0.164	0.173
4/2/17	0.194	0.165	0.173
4/3/17	0.184	0.166	0.173
4/4/17	0.186	0.165	0.174
4/5/17	0.185	0.163	0.173
4/6/17	0.182	0.162	0.173
4/7/17	0.182	0.164	0.173
4/8/17	0.192	0.163	0.174
4/9/17	0.184	0.167	0.175
4/10/17	0.183	0.166	0.174
4/11/17	0.185	0.164	0.172
4/12/17	0.193	0.165	0.173
4/13/17	0.192	0.163	0.174
4/14/17	0.188	0.164	0.173
4/15/17	0.186	0.166	0.175
4/16/17	No data available	No data available	No data available
4/17/17	No data available	No data available	No data available
4/18/17	No data available	No data available	No data available
4/19/17	0.188	No data available	0.163
4/20/17	0.195	0.165	0.174
4/21/17	0.187	0.164	0.172
4/22/17	0.181	0.162	0.172
4/23/17	0.182	0.163	0.172
4/24/17	0.181	0.163	0.173
4/25/17	0.186	0.164	0.174
4/26/17	0.184	0.166	0.173
4/27/17	0.183	0.163	0.172
4/28/17	0.183	0.160	0.172
4/29/17	0.181	0.164	0.171
4/30/17	0.183	0.165	0.172

Table 2: April 2017 Data Report for Monitor 2 – South

Date	Maximum Reading (mR/hr)	Minimum Reading (mR/hr)	Average Reading (mR/hr)
4/1/17	0.188	0.162	0.171
4/2/17	0.179	0.160	0.171
4/3/17	0.180	0.164	0.172
4/4/17	0.183	0.162	0.172
4/5/17	0.182	0.162	0.171
4/6/17	0.181	0.161	0.170
4/7/17	0.180	0.161	0.171
4/8/17	0.180	0.164	0.172
4/9/17	0.181	0.164	0.172
4/10/17	0.184	0.162	0.172
4/11/17	0.183	0.164	0.171
4/12/17	0.181	0.165	0.172
4/13/17	0.184	0.162	0.171
4/14/17	0.180	0.163	0.171
4/15/17	0.187	0.166	0.173
4/16/17	No data available	No data available	No data available
4/17/17	No data available	No data available	No data available
4/18/17	No data available	No data available	No data available
4/19/17	0.183	No data available	0.162
4/20/17	0.185	0.162	0.172
4/21/17	0.178	0.161	0.170
4/22/17	0.184	0.164	0.171
4/23/17	0.191	0.164	0.172
4/24/17	0.180	0.161	0.171
4/25/17	0.181	0.165	0.173
4/26/17	0.181	0.164	0.172
4/27/17	0.179	0.160	0.170
4/28/17	0.177	0.161	0.170
4/29/17	0.180	0.160	0.170
4/30/17	0.180	0.160	0.170