Establishing a Radon Region on the Navajo Nation's Abandoned Uranium Mines

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The purpose of this project was trying to start to advocate that Abandoned Uranium Mines on the Navajo Nation needs to be taken seriously and mentioned to the residents living on the Navajo Nation. Many residents on the Navajo Nation are unaware that many uranium mines are left uncovered, therefore much of the toxicities are still roaming within the air climate. Which will later lead to climate issues and health issues for the residents. The major problem was trying to gather data from the uranium mines and develop a radon region on the Navajo Nation. Therefore, if I test the radon concentration of the different abandon uranium mines on the Navajo Nation then I will be able to establish a radon region based on average and maximum radon concentrations. First, I picked Abandoned Uranium mines to visit, at the time I was not eighteen, therefore, I had to have help getting clearances and tours set up to visit the mines. After deciding on the mines, Shiprock Mine, Monument Valley Mine, Kayenta Mine, Cameron Mine, and lastly Church Rock Mine. I went to the mines and gathered my results for radon readings. I had radon readings for short distance (Which was closer to the mine.) and long radon readings (which was about a mile away from the mine.) Both short and long readings had a calculation of a maximum reading and an average reading. To see if an area was lethal, I used the national goal for radon reading which was labeled as safe, it was 0.4 pCi/L (picocurie). In conclusion, with the national goal of 0.4 pCi/L of radon in an area of a mine, only Monument Valley short range was 0.3 pCi/L. Whereas, the rest of the Abandon Uranium mines exceeded the national goal. Which allowed me to establish a radon region on the Navajo Nation.

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