UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

STATEMENT OF BASIS

FOR DENIAL OF UIC CLASS V PERMIT SD50000-11098 THE LODGE AT MOUNT RUSHMORE D/B/A WINONA INN LIMITED PARTNERSHIP

24075 Highway 16A Keystone, Pennington County, South Dakota (Latitude 43.941616, Longitude -103.399454)

Background and Description of Proposed Activity

The Winona Inn Limited Partnership (Applicant) purchased the Lodge at Mount Rushmore (Lodge) in 2008. The contact is Mark Arend, General Partner. The Lodge is a 50-room resort destination in the Black Hills, 4.5 miles from Mount Rushmore National Monument. It has an indoor pool, hot tub and other guest services. There are four Class V Shallow Disposal Wells onsite for treatment of the sanitary waste generated by the resort. Two public water supply wells (PWS) well on the property are the water source for the Lodge. Another PWS well on a neighbor's property is in close proximity to the Lodge's wells, and there are private drinking water wells in the vicinity.

In response to an EPA letter dated March 31, 2016, the Applicant submitted a permit application in May 2016 in order to continue to operate the Lodge's Class V Shallow Disposal Wells.

Beginning in the summer of 2015, the EPA began receiving information from the Pennington County Planning Department and South Dakota Department of Environment & Natural Resources (SDDENR), indicating the Lodge had a failing onsite wastewater treatment system (OWTS).

Initially, neighbors filed two complaints with Pennington County about the Lodge's wastewater treatment system. The complaints cited that one side of a lower drainfield (Drainfield #2) was greener than the other, several areas of that drainfield were brown and covered with flies, black septic effluent was surfacing at the same drainfield next to a neighboring RV parking lot, there was a strong effluent odor around the tanks above the drainfield, and erosion was occurring on the hillside above the drainfield. After two site visits in March and May of 2015, Pennington County confirmed the pumps in the septic tank were not working, the dosing tanks were full of sludge, there was standing effluent in Drainfield #2, and there was sludge accumulation in the distribution pipes of Drainfield #2. Pennington County also determined that Mr. Arend had not serviced or repaired the OWTS since the Winona Inn Limited Partnership purchased the property in 2008. On June 30, 2016, Pennington County emailed a corrective action plan to Mr. Arend that he never completed.

A representative from SDDENR was present for the Pennington County May 17, 2015 inspection and sent a follow up letter to Mr. Arend on May 20, 2016, indicating the floats for the dosing pumps needed to be adjusted for Drainfield #2 so that the drainfield received less effluent, and that lack of maintenance was the likely cause for the wastewater system failure. In March of 2016, the Ground Water Quality Division of SDDENR reviewed the Lodge's OWTS for potential impacts on groundwater and determined there was a risk of contamination to the underlying aquifer and adjacent drinking water wells.

In December of 2015, the EPA requested and received OWTS inventory information from Mr. Arend about the Lodge's septic systems. Although the information was inadequate, the EPA was able to determine that Mr. Arend was operating four UIC Class V Shallow Disposal Wells on site. With this information and with the information from Pennington County and SDDENR, the EPA also determined the Lodge was not in compliance with 40 Code of Federal Regulations (CFR) §144.12–Prohibition of movement of fluid into underground sources of drinking water. This states that Owners/Operators cannot conduct any injection activities that may allow contaminated fluids to move into underground sources of drinking water. In a letter sent to Mr. Arend dated March 31, 2016, the EPA informed him that his Class V wells were no longer rule authorized and that he was prohibited from injecting effluent into the drainfields. The EPA ordered Mr. Arend to abandon and plug the Lodge's septic systems or apply for a permit in order to continue to operate the Class V Shallow Disposal Wells. Mr. Arend submitted a permit application in May of 2016. As part of the application process, the EPA later asked Mr. Arend to provide water quality data for the OWTS effluent and the well that supplies drinking water for the Lodge. The EPA inspected the facility in July 2016 and verified that the Lodge's septic systems were in use and Drainfield #2 was in failure. In his last communication with the EPA in September of 2016, Mr. Arend said he was keeping the EPA posted and that he would forward the sampling results as soon as he gets them. The EPA has not received the results.

Reasons for Denial

- 1. Mr. Arend, General Partner of the Winona Inn Limited Partnership, has not complied with federal, state and county laws even after repeated requests to do so. Because of his demonstrated inability to comply with applicable laws, it is reasonable to conclude that noncompliance with the federal UIC program will continue.
- 2. Mr. Arend did not comply with 40 CFR §144.83(a)(1). Under this regulation, for existing systems in South Dakota, the operator of a Class V well must submit complete inventory information, cease injection and may resume injection 90 days after submitting the information unless notified by the UIC Program Director that injection may not resume or may resume sooner. The EPA sent Mr. Arend a letter in December of 2015 requesting inventory information along with a shallow waste disposal system/well inventory request form. The EPA received the form from Mr. Arend on January 5, 2016. The form was incomplete and did not contain information on the Lodge's septic systems. To the EPA's knowledge, injection did not cease.

- 3. By letter dated March 31, 2016, the EPA informed Mr. Arend that his Class V wells were no longer rule authorized and that he was prohibited from injecting effluent into the drainfields. Mr. Arend did not cease injection, continued to inject and continued to be in violation of the Safe Drinking Water Act and its implementing regulations under the UIC program. See 40 CFR §§ 144.12, 144.82, and 144.84.
- 4. SDDENR concluded in its hydrogeologic area of review that lack of system maintenance coupled with vulnerable surface geology may increase the risk of contaminated water reaching the underlying aquifer, and thus other close public and private drinking water wells. If the Lodge continues to operate in noncompliance with county, state, and federal UIC regulations, it poses a serious threat to the quality of the groundwater that supplies all these wells.
- 5. Information from Pennington County and SDDENR revealed that Mr. Arend did not complete the all necessary steps to obtain an operating permit from the county. Contrary to what SDDENR recommended, Mr. Arend did not adjust the floats for the dosing pumps for Drainfield #2 to decrease the amount of wastewater going to the drainfield. Mr. Arend did not take action necessary to allow the drainfield to rest and recover from the hydraulic overload it had received. In violation of 40 CFR § 144.12 and 144.82, Mr. Arend's inattention to resolving problems associated with the failed system most likely has contributed to the movement of contaminated fluid into underground sources of drinking water, which could cause a violation of a National Primary Drinking Water Standard and may adversely affect public health.
- 6. Mr. Arend failed to submit additional information requested by the EPA, in violation of 40 CFR § 144.27. Following the March 31, 2016 letter from the EPA, Mr. Arend submitted a permit application but did not submit the necessary sampling data to obtain the permit. Pursuant to 40 CFR § 144.27(d), an owner or operator of an injection well authorized by rule is prohibited from injecting into the well upon failure to comply with a request for information within the time period specified. To date, Mr. Arend has not provided the wastewater and public water supply sampling reports requested by the EPA.
- 7. According to a consumer confidence report posted by SDDENR on their website (http://denr.sd.gov/des/dw/PDF/SysInfo/sysinfo2217.pdf) the Lodge has had numerous PWS violations in the past five years for failing to take routine samples to monitor total coliform bacteria, for exceeding allowable contaminant levels for total and fecal coliform bacteria, and for failing to take source samples for E. Coli. Because of the close proximity of the Lodge's septic systems to the public water supply wells and the vulnerable surface geology with easy transmissivity through a fractured schist substratum, it is likely that these violations are tied to the failed OWTS.