SUMMARY DOCUMENT
FOR LARGE SCALE PERMIT APPLICATION
SIMON CONTRACTORS OF SD, INC.

Applicant: Simon Contractors of SD, Inc.
3975 Sturgis Road
Rapid City, South Dakota 57702

Type of Mining: Large scale mining operation for limestone

Legal Description: Portions of Sections 33 and 34; T5S-R4E, Custer County

General Location: Approximately 4 miles southwest of Pringle, South Dakota

Local Contact: Mike Lee
Environmental Specialist
Phone (605) 394-3300

Description:

On January 13, 2022, the Minerals and Mining Program of the Department of Agriculture and Natural Resources received a large scale mine permit application from Simon Contractors of SD, Inc. (Simon Contractors) for its Loring Quarry Project. The proposed operation will involve surface mining for limestone on land approximately 4 miles southwest of Pringle, South Dakota.

The Loring Quarry was originally operated by John Erpelding in the 1920’s and was purchased by Northwest Engineering (Hills Materials) in 1963. Hills Materials, which is now Simon Contractors, previously operated the quarry under Small Scale Mine Permit 428 and Mine License 83-42. The proposed mine permit involves the expansion of the Loring Limestone Quarry which is currently mined under Simon Contractor’s Mine License 14-977. Mining will continue under the mine license; however, the mine permit will allow the company to mine limestone for uses other than construction aggregate and cement, such as for an agricultural consumer base.

A total of approximately 105.30 acres of permitted affected land will be disturbed during the life of the project. Approximately 78.4 acres will be affected west of the George S. Mickelson Trail (which includes the 42.51 acre current quarry disturbance), while approximately 26.9 acres will be affected east of the trail. A minimum 50-foot vegetative buffer zone will be maintained along the trail during the mining operation. Topsoil and overburden will be stripped from portions of the expansion area to allow for one to three years of sales volume and stockpiled. The stripped area and existing quarry will be drilled and blasted, and
limestone will be removed and hauled to an on-site crusher where it will be sized into different products. After the limestone is processed, it will be stockpiled until it is loaded onto trucks and shipped to customers. Reclamation will occur concurrently with the mining operation.

Mining at the quarry will be conducted for approximately 60 to 120 days annually. It is expected to be completed around 2077 in the western mine area and 2150 in the eastern mine area. Simon Contractors plans to remove about 150,000 tons of limestone annually during the mining operation. The company also plans to remove up to 20,000 tons of overburden annually, but depending on mining activity in the quarry, there will be times when no overburden will need to be removed.

Reclamation:

The proposed future use of the affected area is forest which is the current use of the land around the existing quarry. Reclamation occurs as soon as practicable after the mining process is complete, with concurrent reclamation being conducted in approximately 2035 and 2070 in the western mine area. Highwalls will be blasted and regraded to a 3:1 (H:V) slope, unless it is determined portions will remain for bat habitat after consultation with the South Dakota Department of Game, Fish, and Parks. A portion of the stockpiled overburden will be used to reshape the highwall on the west property line. Any remaining overburden will be placed on the quarry floor. Topsoil will then be placed over the graded material prior to seeding. The area will be hydroseeded and/or drill seeded with the seed mixture recommended by the Custer County Natural Resources Conservation Service. Once grasses are established, ponderosa pine seedlings will be placed to support the forest postmine land use.

Environmental Concerns:

Potential environmental impacts from the operation appear to be minimal. The area in and around the proposed operation has already been affected by past mining activities. The proposed area includes a limestone quarry which was originally operated by John Erpelding in the 1920’s and was purchased by Hills Materials in 1963. Hills Materials, which is now Simon Contractors, has operated the quarry under Small Scale Mine Permit 428 and Mine Licenses 83-42 and 14-977. Although no reclamation has been reported under the mine permit and license, Simon Contractors has successfully reclaimed portions of other limestone quarries around the Black Hills area. The area is currently used for forest land and cattle grazing.

A wildlife survey of the proposed mine area identified no threatened or endangered species. However, seven SD Natural Heritage Program (SDNHP) sensitive species were noted. This includes three diurnal raptors (one Golden Eagle, one Bald Eagle, and one Merlin). The two eagles were noted flying over the quarry on a single occasion and never landed in the proposed expansion area. The Merlin was noted perched on a wooden post on a single occasion as well. The other four sensitive species were bats (Townsend’s big-eared bat, silver-haired bat, long-eared myotic, and fringe-tailed bat). A total of eight bat species were identified during baseline wildfire surveys. The existing pit highwalls and a man-made grotto used to access
underground caves in the area were evaluated for potential bat hibernaculum habitat. However, no bats were observed emerging from the highwalls or grotto.

No significant impacts to wildlife are anticipated during mining and reclamation. The current quarry has been in existence since the 1920’s, and wildlife have indicated a tolerance for mining activities at the quarry. The area is also used by cattle ranchers and hikers along the Mickelson Trail. Simon Contractors will institute impact mitigation measure for bats during roosting and hibernation, including seasonal restrictions on tree cutting and blasting near the vuggy highwall and pit area with grotto entrances. It will install covers over highwall crevices and openings at critical times to keep bats out of active mining areas. The company has also agreed to leave some highwalls for bat habitat with some flexibility.

Overall, the proposed area is forest land with some good quality rangeland which is grazed a couple of weeks annually. The area is classified as an upland grassland vegetative community with a lowland grassland community along an unnamed intermittent tributary to Cold Brook and scattered woodlands. The vegetation is this area consists of species such as crested wheatgrass, smooth brome grass, western wheatgrass, kentucky bluegrass, little bluestem, alfalfa, white sagebrush, prairie sagewort, black medic, western tansy, mustard, rocky mountain iris, and ponderosa pine. Noxious and other weeds noted include canada thistle, dandelion and field bindweed. Crested wheatgrass and smooth brome grass are the dominant species. No threatened or endangered vegetative species were noted during the inspection or in the baseline vegetative survey.

Mining operations are not anticipated to impact surface water. A vegetative buffer will be maintained around an unnamed intermittent tributary to Cold Brook which flows from north to south just to the east of the proposed mine area and Cold Brook which flows west to east across the southern most corner of the area. There are no plans to divert either drainage. A drainage crossing consisting of culverts or a concrete slab bridge will be installed in Cold Brook during construction of the haul road to the eastern quarry area. The drainage will be protected from erosion during construction, operation, and reclamation of the crossing. During precipitation events greater than 0.25 inches recorded since April 2020, no flow was noted in the intermittent drainage to the east of the mine. However, some pooling of water did occur in a low-lying area near the Mickelson Trail. Simon Contractors will follow the Storm Water Pollution Prevention Plan in the company’s General Storm Water Permit in the event any erosion and sediment controls are needed during the mining operation.

There should be no impacts to ground water. Mining occurs in the Madison Formation which is a known aquifer in the Black Hills. The area also contains karst features. However, since ground water has not been encountered during current mining operations or exploratory drilling, there are not anticipated to be any groundwater concerns in the Madison Formation associated with this operation. One stock well and one domestic well are located within 1/2 mile of the quarry and are drilled into the Minnelusa Formation. The recharge area for these wells is to the west-northwest of the proposed mine area in higher terrain. As a result, these wells will not be impacted by the mining operation.
Impacts from noise and dust appear to be minimal. Nearby residences, State Highway 89, and the Mickelson Trail could be impacted by noise and dust. The nearest residence is located approximately 1/4 mile south of the proposed mining area. However, a small ridge blocks the view of the mine from the ranch. Simon Contractors will take steps to mitigate noise and dust impacts. Blasting will not occur on overcast days to limit reflection of noise and air blast back to the ground. Blasts will also be monitored with a seismograph. Water will be applied to highwall faces and pit floors prior to and after blasting, and the portable crusher has an onboard water dust suppression system.

Current Status – June 14, 2022:

The department notified Simon Contractors that the application was considered procedurally complete as of June 14, 2022. For more information, contact the Minerals and Mining Program, Joe Foss Building, 523 East Capitol, Pierre, South Dakota, or call (605) 773-4201.