

SUMMARY RESPONSE TO COMMENTS
South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management
Division of Mining and Solid Waste Management

Approval of the Application and Issuance of Mine Operating Permit I-002171
RDA LLC, RDA Mine

This Summary Response to Comments (Summary) outlines specific issues, within the jurisdiction of the South Carolina Department of Health and Environmental Control (DHEC), considered in review of the RDA, LLC (RDA) application to receive a Mine Operating Permit for the RDA Mine. In addition to the mine operating permit, the operator must obtain other DHEC approved environmental permits before beginning mine operations. To construct and operate the RDA Mine and its associated process equipment, DHEC requires an Air Quality Construction Permit, a National Pollutant Discharge Elimination System (NPDES) Permit, and a Mine Operating Permit. The Air Quality Construction Permit and the Mine Operating Permit were issued on March 25, 2019.

This Summary is specific to the technical review for the Mine Operating Permit (Permit) under the authority of the SC Mining Act (Act). DHEC's permit, this summary response document, and notice of decision memorandum are available for viewing on our public notice webpage at <https://www.scdhec.gov/rda-mine-quarry>

General overview: DHEC's Mining and Reclamation Section reviewed all information submitted in the application, reclamation plan, supplemental information received, and comments received from governmental and nongovernmental agencies, and the public to determine if the application met all appropriate requirements. With the thorough review of all information submitted, DHEC has approved the mine permit application and issued the mine operating permit.

The South Carolina Mining Act: The legislative purposes of the Act (Section 48-20-20) are to provide that: "(1) the usefulness, productivity, and scenic values of all lands and waters involved in mining within the State receive the greatest practical degree of protection and restoration;" and that "(2) no mining may be carried on in the State unless plans for the mining include reasonable provisions for protection of the surrounding environment and for reclamation of the area of land affected by mining."

The Act provides specific criteria for review by DHEC of applications for mining permits. The Act does not supersede local zoning ordinances. Issues related to zoning (i.e., property value and industrial development) are under the jurisdiction of county and municipal planning departments and governed by zoning and land use regulations. DHEC is **not** authorized to consider the effect of a mining operation on property values. DHEC is required to evaluate the application in a timely manner and to consider relevant environmental issues.

Application and Notice Process for the Mine Operating Permit: DHEC received the Application for a Mine Operating Permit from RDA, for the proposed RDA Mine, on June 21, 2017. *An Intent to Mine notice for the RDA Mine was advertised in The Kingstree News, Georgetown Times, and the Post & Courier newspapers on August 9, and August 16, 2017.* The *Intent to Mine* notice was mailed to adjacent landowners, government and regulatory agencies, and other interested parties.

DHEC drafted a permit and held a public hearing on July 26, 2018. As required, the public hearing was placed on notice. The *Notice of Public Hearing* was mailed to interested parties

and advertised in *The Kingstree News*, *Georgetown Times*, and *the Post & Courier* newspapers on June 20 and 27, 2018. This summary report responds to comments, questions, and requests received prior to and during the hearing, and during the comment period that ended on August 10, 2018. DHEC has responded to comments by general category.

Groundwater and Dewatering: Many of the concerns received by DHEC focused on the proposed dry mining of the RDA Mine. The term dry mining indicates that groundwater, precipitation, and surface water will be pumped from the active mine pit so that equipment can remove the limestone from a mostly dry pit. Water discharged from the mine will flow through a permitted NPDES outfall.

To provide reasonable provisions for protection of the surrounding environment DHEC has conditioned the permit to limit dry mining to Segment 6 and require DHEC approval for any future expansion beyond Segment 6. Segment 6 is 53.2 acres (ac) and is in the center of the permitted area. Monitoring wells will monitor water levels within the permitted area and at the permit boundary. At the boundary, the water level shall be maintained at two feet above the top of limestone. Other monitoring well stations and staff gauges will monitor water levels per a *Sinkhole Monitoring and Contingency Plan (SCMP)*. The SCMP is an addendum to the permit.

Water pumped from the pit will be monitored continually for flow rate. These and other permit conditions will allow DHEC to observe any impacts onsite from the dry mining of Segment 6. By monitoring onsite during the first years of mining at Segment 6, DHEC will have empirical data to determine what affects the dry mining will have outside of Segment 6. DHEC will review the data from the monitoring wells and will approve or disapprove any dry mining beyond Segment 6.

RDA commissioned Groundwater Management Associates (GMA) to project groundwater levels and mine water discharge rates from pit dewatering in Segment 6. GMA used the MODFLOW groundwater flow model to simulate the dry mining of Segment 6. The groundwater model demonstrates that dry mining in Segment 6 will not draw down groundwater levels at the property boundary below 2 feet above the top of the limestone.

A response to other groundwater and dewatering related concerns and comments is provided in the following sections of this summary.

Historical Dry Mining and Offsite Impacts: DHEC is aware that dry mining at the Jamestown Quarry historically caused sinkhole formation and water well impacts offsite. This information has been reviewed as part of the technical review for the RDA mine application. The RDA Mine permit includes conditions and monitoring requirements to provide provisions for protection of offsite impacts that the Jamestown Quarry permit did not include when those offsite impacts occurred. These conditions and requirements will allow DHEC to monitor, prevent, and minimize any offsite impacts that may occur.

Perimeter Compliance Monitoring Wells: Nine perimeter compliance monitoring wells will be installed prior to pit dewatering and after further investigative work is completed to determine the highest known elevation at the top of the limestone. These wells will be placed at the highest known limestone elevations and the water levels will be monitored. The water level must remain two feet above the top of the limestone to maintain compliance. These wells will ensure that the water is not drawn down below this compliance point beyond the permit boundary.

Sinkhole Concerns: In response to concerns over the development of sinkholes due to dry mining, the applicant has developed a *Sinkhole Monitoring and Contingency Plan* (SMCP), which is added to the permit as Appendix B. The SMCP utilizes the perimeter monitoring well stations, staff gauges, proximal monitoring well stations, surveys, field reconnaissance, aerial evaluations, and drone flyovers to evaluate for sinkhole development. These measures will be installed prior to the pumping of pit water and monitored regularly during mining. If sinkholes, or the threat of sinkholes, are detected, there are several resolutions available, including, but not limited to: 1) the reduction of pumping rates; 2) the utilization of re-infiltration trenches; 3) the cessation of pumping; and/or 4) the implementation of wet mining. The mining permit requires the operator to implement and update the SMCP during mining, however, DHEC has the authority to require more measures, as needed, at any time during mining operations, and DHEC will exercise its authority if there is an imminent threat of sinkholes or if sinkholes occur.

Domestic and Agricultural Water Well Impacts: Many of the residents living near the RDA Mine site expressed concerns that their water wells may be impacted due to lower groundwater levels caused by dewatering of the open pit. DHEC is requiring that the water level be maintained two feet above the top of the limestone at the nine perimeter compliance monitoring wells. DHEC acknowledges that there may be water wells at shallow depths near the permit boundary. However, the permit is conditioned so that dewatering of the mine shall not adversely impact a neighboring domestic or agricultural water supply well. If DHEC determines that dewatering at the mine does adversely impact a well, the operator shall be responsible for deepening or re-drilling the well, installing a new well, or connecting the resident or commercial business to a public water supply, if available. DHEC has the discretion to require the operator to provide a temporary potable water supply while it determines the cause of the well malfunction. The temporary water supply would be continued until a permanent drinking water supply becomes available.

Offsite Domestic and Agricultural Water Well Inventory: To further address the water well concerns of residents who live near the RDA Mine, DHEC is requiring a water well inventory to be conducted within a ½ mile radius of the pit. The information collected at each well shall be used to establish the existence, condition, and productive uses of each well.

Well Inventory at Further Distance from the Pit Boundary: Comments were received requesting that DHEC require a well inventory at a further distance from the pit boundary than ½ mile. DHEC has consistently used a 1/2 mile from the pit boundary as the distance required for a well survey. There is a low potential for water supply wells to be impacted at a distance greater than 1/2 mile from the pit boundary; however, if deemed necessary, DHEC can require additional well inventories at a greater distance based on groundwater monitoring data from observation wells.

Impact to Ponds: Residents living near the RDA Mine expressed concerns that their ponds may be impacted due to lower groundwater levels caused by dewatering of the open pit. DHEC will observe and investigate any pond level concerns that arise during the operation of the RDA Mine. As the permit states, if investigations of pond problems conclusively show adverse impacts caused by dewatering at the mine, the operator will be responsible for mitigating those impacts.

Request Additional Aquifer Characterization Studies: Several requests were received for DHEC to require additional aquifer characterization studies. Mining is initially limited to the 53.2-acre Segment 6 and the operator is required to monitor the perimeter monitoring wells and the

sinkhole monitoring stations associated with the Sinkhole Monitoring and Contingency Plan. RDA has modeled the mining of Segment 6 and submitted the model to DHEC for information. The model indicates that the dry mining of Segment 6 can occur while maintaining compliance with the perimeter monitoring wells.

DHEC will review the data produced from these monitoring requirements during the first years of mining. This empirical data will be used to observe any impacts onsite and determine if there is significant potential for offsite impacts prior to approving any additional dry mining beyond Segment 6.

Stormwater Discharge Monitoring and Sediment Control: RDA mine will be permitted to discharge stormwater, groundwater, mine equipment wash water, and process wastewater in accordance with the existing National Pollution Discharge Elimination System (NPDES) *General Permit for Discharges Associated with Nonmetal Mineral Mining Facilities*. This NPDES permit authorizes the operator to discharge water at the set outfall while meeting permit conditions and requirements. The outfall is located on the south side of Murray Swamp, just west of Jumpin Run Road. The water will flow through the Sediment Retention and Water Storage Basin prior to being discharged at the outfall into Murray Swamp. Water discharged to Murray Swamp will be subject to numeric effluent limits for total suspended solids, pH, oil and grease, Cadmium, Lead, and Thallium.

Wetlands Delineation / Impacts / Protection: A wetland delineation was performed by Environs, LLC. On December 12, 2017, the U.S. Army Corps of Engineers (USACE) issued a letter that concurred with these delineations. In total, there are 92.15ac of federally recognized jurisdictional wetlands, 798 linear feet of other waters of the United States, and 26.12ac of non-jurisdictional wetlands.

In September 2017, the operator applied to the USACE for activities affecting waters of the United States, also known as a Nationwide Permit 44. On February 02, 2018, the USACE issued an approval letter allowing the operator to affect 0.394ac of designated wetlands.

For the remaining 91.756 ac of jurisdictional wetlands, the operator shall maintain a minimum 50-foot undisturbed buffer from any land disturbance activities and all designated wetlands; wetlands associated with Murray Swamp shall require a 75-foot undisturbed buffer or to the +35MSL contour, whichever is greater. These buffer areas shall be permanently flagged prior to any ground disturbance and maintained throughout the life of the mine.

Concerns were expressed that dewatering activities will have indirect impacts on local wetlands. The operator shall monitor the wetlands using methods described in the *Technical Standard for Water-Table Monitoring of Potential Wetland Sites* by the USACE. Monitoring wells shall be installed to a depth of 15 inches in wetlands #4, #6 and #14 designated on the mine map, and wetland #4 shall be used as a control group.

Flooding of Murray Swamp Concerns: Concerns were expressed that the pumping of additional water into Murray Swamp, especially during times of natural flooding events, would significantly increase the flooding of the swamp. Flow analyses were performed by a Professional Engineer working at Georgia Civil, Inc. The flow model accurately ($\pm <1.0$ inch) calculated the water elevation given by FEMA for a 100-year storm event. Using this same model and adding the maximum predicted discharge from the mine site to the 100-year storm event increased the calculated water surface elevation by 0.02 inches. Therefore, it has been

determined that the increase of discharge into Murray Swamp will have negligible impacts to the water level during 100-year storm events.

Conveyor and Pit Water Crossing over Murray Swamp Concerns: Concerns were expressed over the conveyance of limestone by conveyor belt and water, by pipe, over Murray Swamp. The conveyor system crossing Murray Swamp shall be designed and constructed to withstand flooding conditions (e.g., increased surface water levels, increased flow velocity, impacts from floating debris). The conveyor supports shall be designed and constructed to withstand a 100-year flooding event on Murray Swamp. The Conveyor undercarriage, (e.g., drive head, return belt, motors) shall be constructed at an elevation above the 100-year flood event on Murray Swamp, as based on the 2012 FEMA Flood Insurance Study.

To prevent spillage from the conveyor, the conveyor will take a straight route across the wetlands to minimize the number of transfer points within the wetland boundaries. The proposed operation is for one continuous conveyor through the wetlands; however, should transfer points between conveyors operating in series (i.e., one conveyor feeds another conveyor) become necessary, the discharge and receiving ends of the conveyors within the wetlands will be fitted with sidings or skirts to eliminate spillage.

Additionally, to eliminate material falling from the underside return belt, a scraper bar will be located at the drive head pulley to remove all material from the belt at the point of discharge.

Endangered or Threatened Species: A protected species study was prepared by Environs', LLC, entitled *Protected Species Report – Proposed RDA Limestone Mine*, and was submitted with the mine operating permit application. The findings of the study stated that there are six (6) federally threatened or endangered species and one state-only threatened or endangered species located in Williamsburg County. After an eleven-month investigation, Environs', LLC concluded that "...no affects to the listed species are expected as a result of developing a limestone mine on the project site."

Comments were received regarding the presence of endangered or threatened species within or around the permit boundary of the RDA Mine to include the Atlantic Sturgeon, the Spotted Turtle, the Gopher Frog, the Eastern Tiger Salamander, and the Red-Cockaded Woodpecker. These comments are addressed below.

Endangered Atlantic Sturgeon:

The Atlantic Sturgeon is a federally-protected species of freshwater and saltwater fish. The Black River, which is considered a critical habitat for this species, is over six miles down-stream from the RDA site. DHEC's Bureau of Water generated flow models to predict any impact that discharge from the RDA site may have on the Sturgeon's habitat. In consultation with the National Oceanic and Atmospheric Administration (NOAA), it was determined that any probable discharge from the RDA site would negligibly affect the Atlantic sturgeon or its habitat in the Black River.

Red-Cockaded Woodpecker:

The Red-Cockaded Woodpecker (RCW) is an endangered bird that typically nests in mature (greater than 80 years old) longleaf pines. Milliken Forestry Company, a recognized endangered species consultant, surveyed the area and determined that there are no RCW cavity trees located on the project site.

Spotted Turtles:

Spotted Turtles are a state-threatened species of turtle, considered *at risk* by The U.S. Fish and Wildlife Service (USFWS). There are currently no records that this species was observed in the general area, but there are documented cases approximately five (5) miles away. The permit is conditioned that prior to any land disturbance, a qualified consultant shall survey the area. The operator shall also train staff to identify and report any Spotted Turtle sightings. If the Spotted Turtle is observed on site, the operator shall work with The S.C. Department of Natural Resources (SCDNR) to develop a specific management plan.

Gopher Frog:

Carolina Gopher Frogs are a state-endangered and an *at-risk* species. There are currently no records that this species was observed in the general area; however, they are known to live in isolated, freshwater wetlands that dot the area. The permit is conditioned that prior to any disturbance to selected wetlands, a qualified consultant shall survey the area for at least two (2) years. If the gopher frog is observed on site, the operator shall work with SCDNR to develop a specific management plan.

Eastern Tiger Salamander:

Eastern Tiger Salamanders are a conservation *species of concern*. There are currently no records that this species was observed in the general area. The permit is conditioned that prior to any disturbance to selected wetlands, a qualified consultant shall survey the area for at least two years. If the Eastern Tiger Salamander is observed on site, the operator shall work with SCDNR to develop a specific management plan.

Historic and Cultural Resources: A cultural and historic resource survey was prepared by Brockington and Associates, entitled *Cultural Resources Survey of the RDA Mine Tract*, and was submitted with the mine operating permit application. The findings of the study identified one archaeological site (38WG0185) determined to be a significant cultural site. The State Historic Preservation Office (SHPO) concurred with this finding. The permit requires the operator to buffer the identified area with a 50-foot undisturbed buffer at all times and install a perimeter fence around the entire archeological site during mining in nearby segments.

Ground Vibrations from Blasts: Concerns were expressed that ground vibration from blasting would damage homes. Explosives technology in mining has greatly improved, providing greater reliability and more precise control over the detonation of explosives. As a result, the public's safety and protection to property has significantly increased over the years. To protect people and property outside the mining areas, the Act restricts the magnitude and intensity of rock blasting. The Fire Marshall's Office (SC Department of Labor Licensing and Regulation) requires blasters be tested, certified, and licensed by the State. All blasting operations in South Carolina must be overseen by a licensed blaster. Circa 1930, the former U.S. Bureau of Mines (USBM), Department of the Interior, devoted many years of research and testing on structural affects from blasting. As a result, it is now recognized that the potential for damage to buildings caused from ground vibration from blasting is most closely correlated to the measure of Peak Particle Velocity (PPV). PPV is usually measured in inches per second (*ips*) in three mutually perpendicular directions within the ground at the nearest structure (not of the structure itself).

Seismic waves travel in all directions from the source of the blast. The PPV of these waves is mostly dependent on the quantity or weight of explosives detonated at the same time. With today's blasting technology, each blast-hole charge can be fired individually, which significantly aids in controlling the blast and PPV. Even though the resultant blast sounds like one explosion, it is really a series of smaller explosions - the time separation between two blast-holes need be

only about 8 milliseconds. Based on the USBM's research and recommendations, the Act set the allowable PPV limit at 1.0 ips at the nearest residence or other structure not within the permitted area. Blasters at commercial mines and quarries are required to design and load blasts not to exceed the statutory PPV limit of 1.0 ips. All blasts less than 1.0 ips PPV comply with the Regulations. The operator must ensure all blasting operations will be designed, with an appropriate added factor of safety, to meet the 1.0 ips regulatory limit. Each blast shall be monitored for compliance, using at least one seismograph. Blasting records, including the company's seismograph records, will be maintained per Regulation R.150B and be available for DHEC review.

Comments were also received concerning how blasting would affect both domestic animals and wildlife on adjacent properties. Historically, there have been no noted adverse effects on animals. Blasting operations are conducted to minimize noise. The noise heard from blasting is created by the explosive release of gases during detonation. Blasts are designed to hold these gases in the drilled blast hole and this energy is used to fragment the rock. Depending on the design of the blast, the upper 5' - 10' of the blast holes are loaded with crushed stone (stemming) to prevent gases from escaping. Consequently, when there is a blast, there is only a low frequency rumbling. A blast may startle an animal, but they quickly adapt as indicated by prevalent signs of wildlife (e.g., deer and turkey tracks and droppings) at mines sites.

Pre-Blast Survey: S.C. Code Ann. Regs., R.89-150, requires a pre-blast survey of all structures within one-half mile (2,640 ft) of any proposed blasting area. An independent contractor performs this survey with the permission of the landowner and at the expense of the mine operator. The survey will document the pre-blast conditions of all structures within the half-mile area. The owner shall have the right to be present during the survey of the structure. The survey is a condition of the permit and shall be conducted prior to initial blasting. The structure's owner, the mining company, and DHEC receive a copy of the survey.

Minimum Distance from Structures and Contiguous Property Boundaries: Regulation R.89-150.I requires the operator to maintain a minimum distance between the nearest point of blasting and any structures not owned by the operator. The regulation requires DHEC to establish the minimum distance after considering the method of mining, site conditions, proposed directions of blasting, type and use of neighboring structures, previous blasting record, and/or other factors deemed appropriate by DHEC. After considering all required factors per the regulation, DHEC has established 1,000 ft as the minimum distance for the RDA Mine permit.

Flyrock: Flyrock is rock thrown into the air in an uncontrolled manner, which causes the rock to travel outside the protected area. Flyrock leaving the permitted area or property controlled by the mining company is a violation of the Act. Flyrock is very controllable; quarries operate each day throughout South Carolina and the United States without incident. Flyrock is avoided by using a proper blast design and observing standard drilling and explosives loading procedures. As mentioned earlier, South Carolina requires all blasting operations be supervised by licensed blasters. Proper support from reputable explosives manufacturers and technical consultants provides added factors of safety. The operator will contract all blasting operations at the RDA Mine with a licensed blaster. The licensed blaster will provide the blast design and oversee blasting operations and explosives handling.

Blast Monitoring: DHEC currently monitors blasting operations in mines and quarries throughout the state. Monitoring includes both periodic checks of blasting records of the mining companies and use of calibrated seismographs at quarries to monitor blasting operations. Seismographs record the PPVs in the horizontal, traverse, and vertical directions.

Seismographs also records the Air Blast created by explosive detonations. In South Carolina, air blasts are not directly limited by regulation. However, it has been found that by limiting the PPV, the air blast is also controlled, preventing it from reaching damaging levels.

DHEC responds to all complaints and inquiries from citizens regarding blasting. Typically, the agency seismograph is set up, without the knowledge of the company, to record the level of blasting-induced ground vibrations near a concerned party's residence.

Buffers, Setbacks, and Visual Impact: Buffer areas provide distance between the mining operation and the neighboring properties, wetlands, and other designated areas. The Act and Regulations do not have specific requirements for buffer areas. The size of the buffer and setback from the permit boundary is dependent on the nature of the mine, the neighboring land use, and the purpose of the buffer area.

The RDA Mine will have 215.6 acres of the 968.4 acres of permitted area designated as buffer. The buffer width, or setback, from the permit boundary ranges from 50ft to 1,250 ft. in width.

The vegetation in the buffer will remain in its current state or be enhanced to provide for visual screening. Appropriate silviculture practices may be utilized to manage buffer areas that will allow thinning of timber under the direction of a SC licensed Professional Forester. Any land disturbance not consistent with accepted silviculture practices in the buffer areas will require a modification of the Mine Permit prior to the disturbance. All protected streams and wetlands that will not be impacted and/or mitigated, will be buffered by a minimum of 75-foot buffer. Reasonable access to permitted NPDES outfall is allowed within the buffer area.

Noise: With mine operations, the source of noise is the various working machinery at the site plus an occasional low "boom" when blasts occur. The level of noise perceived at residences is usually related to the distance from the source of the sound, weather conditions, topography, and the type and condition of the equipment. Equipment such as trucks, dozers, and loaders usually have an average noise level determined by the manufacturer. Most of the equipment averages 75 to 90 decibels (db) at fifty feet. Sound decreases (attenuates) with distance at the rate of about 3 to 5 db each time the distance is doubled between the source and the person hearing the noise.

The combination of undisturbed vegetated buffers, maintenance of equipment, and distance from the operation will consequently reduce the potential for sound heard offsite. There will be instances when the public will hear equipment (back up alarms, trucks, etc.). Although no government standards exist for environmental noise emitted from this type of industry, The Mine Safety and Health Administration (MSHA) does have noise standards applicable for worker safety to protect hearing. Therefore, noise limited at the source for worker protection has the added benefit of limiting environmental noise beyond the permit area.

A request was made for RDA to develop a mitigation plan to address noise. Because no state governmental standard exists for noise pertaining to the mining industry, a mitigation plan is not being required. However, the mining permit is conditioned for RDA to use best management practices to minimize noise. Additionally, excessive noise levels not typical for a site should be reported to the appropriate SC DHEC regional office: Pee Dee Region-Myrtle Beach Office, 927 Shine Avenue, Myrtle Beach, SC 29577 at (843) 953-0150.

Traffic: A common concern expressed from the public for mining operations is the increase of truck traffic caused by the hauling of mined material. The SC Mining Act does not authorize

DHEC to regulate truck traffic on roads outside the permit boundary. DHEC has jurisdiction to evaluate impacts to public roads only as it pertains to the physical affects from an operation (e.g. blasting, undermining, etc.). The operator is responsible for cleaning any soil accumulations tracked beyond the gate onto the road surface.

Air Quality Impacts: Comments were received concerning the RDA Mine's dust emissions and their possible adverse health effects. The mine is required to have an Air Quality Construction permit. DHEC's Bureau of Air Quality has responded to this concern in its response to comments.

Zoning: Concerns were raised about the placement of this mine in a rural community. Appropriate or compatible land use is determined at the local level. DHEC has no authority regarding zoning in Williamsburg County. Specifically, the S.C. Mining Act states the following in Section 48-20-250: "No provision of this chapter supersedes, affects, or prevents the enforcement of a zoning regulation or ordinance within the jurisdiction of an incorporated municipality or county or by an agency or department of this State, except when a provision of the regulation or ordinance is in direct conflict with this chapter."

Land and Property Value/Economic Impact: Comments were received regarding the possible economic and property value impacts. Normally, all zoning decisions are made at a local level by a city or county zoning authority, usually before a permit request is received by DHEC. DHEC cannot dictate where a facility locates or factor property value impacts into permitting decisions. Contact your local city or county council representatives for more information on how to get involved in local zoning and planning issues.

Community / Quality of Life: Comments were received regarding the potential impacts to the community's way of life. DHEC cannot make its permit decisions based on these factors. The permit decision is based on DHEC's technical review of the permit application and the Act and Regulations in place at the time of the DHEC's review.

Operating Hours: DHEC does not have the authority to regulate operating hours at mine sites.

Light Pollution: A general comment regarding the effects of artificial illumination was received. A request was made to include a permit condition limiting light pollution. A suggestion was received to follow an ordinance set forth by a professional organization. DHEC has not included a permit condition limiting light pollution for a few reasons: 1) RDA has informed DHEC that its intensions are to not operate during nighttime hours, which will cause light pollution to be limited only to security lighting; and 2) the facility's buffer should minimize extraneous light offsite.

Monitoring/Self-Monitoring: Section 48-20-120 of the S.C. Mining Act requires all operators to file an annual report of activities completed during the preceding fiscal year. In addition to this reporting measure, DHEC personnel will perform, at a minimum, an annual inspection of the RDA facility. This inspection will include a site visit and an audit of required seismic and sinkhole monitoring data.

Figure 7 of The Sinkhole Monitoring and Contingency Plan specifies periodic monitoring and reporting procedures. The permit also requires continuous monitoring and reporting of blasting operations, as described in the Blast Monitoring section of this document.

DHEC also investigates, in a timely manner, all credible concerns and/or complaints received from the public.

General Opposition and Support: DHEC received several comments requesting denial of the permit. Several comments in support of the facility were also received. DHEC appreciates all comments made regarding the RDA Mine. However, DHEC does not have the authority to make permitting decisions based on community, business, employee, and/or customer approval or disapproval of the company/facility. DHEC's decision is based on the technical review of an application and the regulatory requirements in place at the time of that review.