

**BEFORE THE OKLAHOMA DEPARTMENT OF MINES
STATE OF OKLAHOMA**

IN RE: The Matter of the Application of:)	
ARBUCKLE AGGREGATES, LLC., for a)	
permit to engage in surface mining and)	Case No. PAN 10-05-IC
reclamation operations in an area of 575)	PAN 10-05-IC2
acres, more or less, located in Sections 23)	Permit #L.E.-2361
and 24, Township 1 South, Range 4 East,)	(Mill Creek Quarry)
Johnston County, State of Oklahoma)	

FINDINGS OF THE CONFERENCE OFFICER

An Informal Conference (**PAN 10-05-IC**) was held on the **2nd** day of **December, 2010**, in Fletcher Auditorium of Murray State College, One Murray Campus, Tishomingo, Oklahoma at 10:30 a.m. It was announced at this Informal Conference that the record for **PAN 10-05-IC** would be held open for additional Exhibit submission to the Oklahoma Department of Mines ("ODM") at its office in Oklahoma City until 4:30 p.m. on January 14, 2011. Exhibits were submitted by both the Applicant and Protestants during this time. All Exhibits became part of the record. The Exhibits submitted by the Applicant during that time were inserted into the "Application For Permit To Engage In Non-Coal Mining", and have been available for public review at the office of Oklahoma Department of Mines ("ODM") in Oklahoma City since January 14, 2011, and at the Johnston County Courthouse in Tishomingo, Oklahoma since August 1, 2011. No additional Exhibits were submitted to ODM between January 14, 2011, and the opening of the record for **PAN 10-05-IC2**.

PAN 10-05-IC2, which was merely a continuation of **PAN 10-05-IC**, was held on the **4th** day of **October, 2011**, in Fletcher Auditorium of Murray State College, One Murray Campus, Tishomingo, Oklahoma at 6:30 p.m.

I. Qualified protestants appearing by virtue of having complied with the rules:

- A. Laurie Anne Williams representing Estate of Ida Sutton Williams
- B. Jason B. Aamodt representing Citizens for the Protection of the Arbuckle-Simpson Aquifer (CPASA)
- C. Clyde Runyan
- D. C.I. Maxwell, Jr.
- E. Bruce Noble representing the National Park Service
- F. Steve Cullinan representing the U.S. Fish and Wildlife Service
- G. Lewis Parkhill, Mayor, representing the City of Tishomingo
- H. Gloria Webb
- I. Phil Converse
- J. Matt Mauck representing the Oklahoma Department of Wildlife Conservation
- K. Marion R. (Dick) Scalf representing the City of Ada
- L. Shannon Shirley
- M. Reginald Robbins

- N. Bill Brunk
- O. Steven Jolly representing the Arbuckle Master Conservancy District for the Arbuckle Reservoir
- P. Carlyle Hill
- Q. Amy Ford representing self and Citizens for the Protection of the Arbuckle-Simpson Aquifer (CPASA)
- R. Floy Parkhill
- S. Ray Lokey
- T. Monta Brown
- U. Randy Fullagar
- V. Terry Beals
- W. Zeno McMillan
- X. Larry Johnson

II. Protestants appearing, but not submitting a letter to ODM requesting an informal conference as required by (45 O.S. 2001 § 724(H)(2) and (4))(OAC 460:10-17-6):

- A. Representative Paul Roan representing House District 20
- B. Don Rhodes representing Rhodes Ranching Company
- C. Linda Hogan
- D. Fred Chapman
- E. David Curtis
- F. Senator-Elect Josh Brecheen representing Senate District 6

III. Appearing on behalf of the Applicant:

- A. Elizabeth Nichols, attorney representing Arbuckle Aggregates
- B. Peter Dawson, President of Arbuckle Aggregates
- C. Geoff Canty, environmental consultant with EST, Inc.

IV. Appearing on behalf of the Oklahoma Department of Mines:

Albert Smith, Mine Inspector
Richard Shore, Mine Inspector

V. SUMMARY OF PROCEEDINGS:

A. Arbuckle Aggregates, LLC ("Applicant") submitted an Application for surface mining of limestone, dolomite, shale, sand, gravel, clay and soil to the ODM on or about May 7, 2010. This application is for a new permit (L.E.-2361);

B. ODM received objection letter(s) to the issuance of said permit and requested an informal conference be scheduled;

C. A Public Notice was published on July 29, 2010, August 5, 2010, August 12, 2010, and August 19, 2010, in the *Johnston County Capital-Democrat* by the Applicant as required by law;

D. A Notice and Order Setting the Informal Conference (PAN 10-05-IC) was given by mail to those Protestants who requested an informal conference and by virtue of the Notice and Order Referring and Setting Informal Conference for the 2nd day of December, 2010, in Fletcher Auditorium of Murray State College, One Murray Campus, Tishomingo, Oklahoma at 10:30 a.m.

E. It was determined that a second Informal Conference (PAN 10-05-IC2) be held based on the Oklahoma Supreme Court's decision in *Daffin v. State ex rel. Oklahoma Department of Mines*, 2011 OK 22, striking down the one-mile limitation for qualified Protestants of permit applications submitted to the ODM.

F. A Public Notice was published on August 4, 2011, August 11, 2011, August 18, 2011, and August 25, 2011, in the *Johnston County Capital-Democrat* by the Applicant as required by law;

G. A Second Notice and Order Setting of the Informal Conference (PAN 10-05-IC2) was given by mail to those Protestants who requested an informal conference and by virtue of the Second Notice and Order Referring and Setting Informal Conference for the 4th day of October 2011, in Fletcher Auditorium of Murray State College, One Murray Campus, Tishomingo, Oklahoma at 6:30 p.m.

VI. **Protestants' Concerns:**

Protestants' concerns are as follows:

- A. Water
 - 1. Water Quality
 - 2. Water Availability
 - 3. Water Regulations
 - a. New Legislation
 - b. Monitoring
 - 4. Beneficial Use Designations
- B. Fish and Wildlife
- C. Wetlands
- D. Highway/Traffic
- E. Dust and Fumes
- F. Noise and Night Activities
- G. Tourism and Recreation
- H. Mine Records and Personnel Accessibility
- I. Property Values
- J. Aesthetic Values
- K. Environmental Impact Statement (EIS)
- L. Administrative Processes

Laurie Anne Williams representing Estate of Ida Sutton Williams – Ms. Williams opposes this application and had several concerns in regard to its approval. First, she did not view Applicant as a good neighbor. She claimed that the company has never come to speak with her, even though her family owns an 8,000-acre ranch in the area. Second, she was concerned that this hearing was premature and that all of the individuals who protested were being lumped together and not counted as individuals. Third, she was concerned that Texas will be benefiting more from this operation than Oklahoma. Fourth, Ms. Williams addressed the fact that the proposed permit is on two sides of a State Highway and a railroad line and the safety impacts crossing both will have on the area. Fifth, she believed that this permit is bad for Oklahoma and the effect it will have on Oklahoma tourism. Ms. Williams presented several exhibits to be included in the record.

Ms. Williams expressed the same concerns at both informal conferences. However, on October 4, 2011 she addressed what she perceived to be the lack of due process involved with this application and was concerned that proper notice was not given regarding any supplements to the original application. She stated that she received the Second Notice and Order Referring and Setting Informal Conference and could not find in that document that anything had been added to the original application submission by Applicant.

Jason B. Aamodt representing Citizens for the Protection of the Arbuckle Simpson Aquifer – Mr. Aamodt's first concern at the December 2, 2010 Informal Conference was in regard to the administrative process used by the Oklahoma Department of Mines (ODM) in making a decision on this permit. He feels that Protestants were not given enough of an opportunity to view the documents submitted by Applicant prior to this informal conference and decision by ODM. Second, Mr. Aamodt was concerned that Applicant will not obtain the necessary permits from other agencies prior to mining. Third, he was concerned about the "significant quantity" of wetlands that will be destroyed by this operation. He noted that a portion of the headwaters of Mill Creek and Pennington Creek will be destroyed by this permit. Fourth, he stated that Pennington Creek has been designated as a High-Quality Water by the Oklahoma Water Resources Board (OWRB) and thus cannot be mined. Fifth, Mr. Aamodt stated that the Arbuckle-Simpson Aquifer is a sole-source aquifer and any additional mining will impair this water. Sixth, he claimed that property and aesthetic values would be substantially reduced if this permit were approved.

Mr. Aamodt expressed the same concerns at the October 4, 2011 Informal Conference. In addition, he reiterated that insufficient notice was given to the Protestants in regard to supplemental information submitted by Applicant. He stated that notice was not given informing the Protestants, or anyone who may have liked to be informed, that the permit had been supplemented since its original submission.

The main thrust of what he presented on October 4, 2011 is whether or not there is a definite mining map on file with the ODM. He stated that several different maps were submitted to the different agencies involved and that key components were excluded on some of the maps; wetland area, stockpiles and an office. He stated that the Applicant's environmental consultants, Blackbird Environmental, altered these maps for the various agencies. Mr. Aamodt also noted that instead of Applicant complying with the law that requires it to get a 404 permit, it is simply trying to draw lines on a piece of paper in order to avoid having to comply with the law.

Clyde Runyan – Mr. Runyan was concerned about property values with so many mines in the area. He was concerned that the water will be depleted from the area and that Mill Creek will continue to diminish. Mr. Runyan was worried about the dust, lights at night and diesel fumes coming from the mining operations. He stated that they have enough mines in the area and do not need anymore. He would like to see the mines pay their share to support the community and schools.

C.I. Maxwell Jr. – Mr. Maxwell's concern is the effect mining will have on the Arbuckle-Simpson Aquifer and the large amounts of water that Applicant will use in their mining operations. He believed that the amount of water used by mines should be limited.

Bruce Noble representing the National Park Service – The National Park Service (NPS) was concerned about the development of the Arbuckle-Simpson Aquifer and the potential impact to springs and streams which rely on this groundwater system. This includes the Chickasaw National Recreation Area. According to NPS data, water from springs and wells in the vicinity of the park are about 10% of what they were when Platt National Park was established on that property in 1906. NPS was concerned that surface mining will disrupt the physical and chemical characteristics of the hydrological system. This includes lowering the ground water level in the aquifer, increasing evaporative loss from the open pits, reducing the amount of water in the aquifer, and reducing the amount of water available to downstream users of Mill Creek. Mr. Noble presented exhibits to be included in the record.

Mr. Noble was also interested in learning more about Applicant's Water Monitoring Plan and the availability of the plan to the public. He asked if the Gay well was one (1) of the nine (9) wells that are being proposed for monitoring.

Steve Cullinan representing the U.S. Fish and Wildlife Service – The U.S. Fish and Wildlife Service (USFWS) was concerned about the Pennington Creek water supply. It has two facilities, the Tishomingo National Wildlife Refuge and the Tishomingo National Fish Hatchery, which rely on Pennington Creek for their water. These areas are involved with migratory birds, as well as, threatened and endangered fish species. As noted in an OWRB study, Pennington Creek is totally dependent upon the Arbuckle-Simpson Aquifer for its spring flow. The USFWS feels that Applicant will have an effect on the Aquifer and Pennington Creek, and requested that no action be taken on this permit application until the OWRB aquifer management guidelines have been proposed and implemented so that senior water right holders on Pennington Creek are protected.

Lewis Parkhill, Mayor, representing the City of Tishomingo – Mr. Parkhill stated Pennington Creek is the sole source water supply for the City of Tishomingo, and the eastern sections of the proposed operations come within one-quarter mile of the headwaters areas of Pennington Creek. Because of this, the City of Tishomingo was concerned about the healthy production of these waters. Mr. Parkhill stated that the mining practices will disrupt the recharge to and flow of Pennington Creek and that dewatering the pit will be a wasteful use of valuable water. He claimed that Mill Creek will also be degraded. Mr. Parkhill was concerned that the many activities, i.e. the National Fish Hatchery, the Slippery Falls Boy Scout Camp, Tishomingo Golf Course, the National Wildlife Refuge and the City of Tishomingo to name a few, which are reliant upon the water from Pennington Creek will be negatively effected if the permit is approved. He stated that approval of this permit will affect the overall quality of life in the area. Mr. Parkhill presented an exhibit to be included in the record.

Mr. Parkhill was also unaware of any revisions to the original permit submitted by Applicant. Mr. Parkhill read into the record a resolution adopted unanimously by the Tishomingo City Council on December 20, 2010. This resolution stressed the importance of the Arbuckle-Simpson Aquifer to the citizens of Tishomingo.

Gloria Webb – Ms. Webb objected to power or money depriving people of water. She was also concerned that the water levels are going to drop because of the mining. She points to Kansas and Texas as having similar problems.

Phil Converse – Mr. Converse objected to the issuance of the permit because of concerns that future mining activities will negatively affect the aquatic fauna and the flow of Pennington Creek.

Matt Mauck representing the Oklahoma Department of Wildlife Conservation – The Oklahoma Department of Wildlife Conservation (ODWC) was concerned with the excessive water use and the potential negative effects to the underlying aquifer and subsequent reduced spring and stream flow this permit may bring. ODWC believes that using pit water for washing aggregates, dust suppression and dewatering is not a viable use of the water, and a reduction in stream flow will result in a significant loss of usable habitat for stream aquatic organisms. ODWC owns over 3,000 acres in the Blue River watershed, which has tremendous hunting and fishing opportunities, and they believe that permitting of this site will reduce the water in the area and impair these opportunities. ODWC is concerned about pit water and the viability of its use in the mining operation and wants to see downstream flows be protected. ODWC felt it is premature to permit this site prior to hydrologic studies by the Oklahoma Water Resources Board (OWRB) being completed. They hold the opinion that pit water needs to be regulated and permitting this site will negatively affect the wildlife activities relying on the waters of the Arbuckle-Simpson Aquifer. The ODWC presented an exhibit to be included in the record.

Marion R. (Dick) Scalf representing the City of Ada – Mr. Scalf was concerned that the proposed mining operations will affect Byrds Mill Springs, which also lies over the Arbuckle-Simpson Aquifer. He stated that this spring is a water source for City of Ada and the associated water districts. He stated that mining below the water table will affect the Byrds Mill Springs recharge area and the water available to the citizens of Pontotoc County.

Mr. Scalf also stated that there is not anything more important to the City of Ada than the future of the Arbuckle-Simpson Aquifer. According to Mr. Scalf, the City of Ada is required under SB 288 to account for every gallon of water that it uses and expects every other water user to abide by the same requirements.

Shannon Shirley – Ms. Shirley was concerned that more mining in the area will further reduce the flow and water available from Mill Creek. She is dependent on Mill Creek for all of her water use. She supported the regulation of pit water and was afraid that eventually the water will be depleted. She was also concerned that allowing mining will destroy the area and that a lot of tourism dollars will be leaving Oklahoma.

Reginald Robbins – Mr. Robbins believed that the spring has been depleted by mining upstream and another mine site is not needed in the area.

Bill Brunk – Mr. Brunk was opposed to mining below the water table because once the water is gone it cannot be replaced.

Steven Jolly representing the Arbuckle Master Conservancy District for the Arbuckle Reservoir – The Arbuckle Master Conservancy District was concerned that mining will reduce the flow of the springs from the Arbuckle-Simpson Aquifer and ultimately the flow into Arbuckle Lake.

Carlyle Hill – Mr. Hill was concerned that current mining in the area has reduced the flow of Mill Creek. He was afraid that if this permit were issued then the same thing would happen to Pennington Creek. He was also concerned that all of the rock in the proposed site will be trucked down to Texas.

Amy Ford – Ms. Ford was concerned about the one-mile limitation imposed by ODM. She is also very interested in bringing pit water under OWRB's jurisdiction.

Ms. Ford represented CPASA at the October 4, 2011 Informal Conference. CPASA was concerned about the sustainability of the aquifer. CPASA was not just concerned about mining's impact on the aquifer, but the long-term impacts that will be placed upon it. It was involved with several meetings since the December 2, 2010 Informal Conference. In particular, it met with Hanson Aggregates and worked out a memorandum of understanding that had some key points in it: management, monitoring, and mitigation. She stated that CPASA felt Applicant should sign nothing short of that and the Applicant failed to agree to those conditions. It was understood that the Applicant will be monitoring the water in the area, but more than that is needed. CPASA felt that the Applicant needs to incorporate a proper management plan, one that includes mitigation. CPASA would like to see the mining industry adhere to the same standards that municipalities in the area have to adhere to. CPASA requested that the permit application be denied.

Floy Parkhill – Ms. Parkhill was concerned that the proposed mining operation will interfere with the natural flow of streams and springs which create Pennington Creek and that, in turn, will affect the quantity and quality of her water supply. She was concerned that this interference with the

water will negatively affect the aesthetic beauty, wildlife, vegetation and recreation opportunities in the area.

Ray Lokey – Mr. Lokey was concerned that proper notification of the Informal Conference had not been received by the people in the area and believed more would be attending if they had have found out about the Conference. Mr. Lokey would also like for ODM to take OWRB's comprehensive study into consideration prior to making a decision on this permit.

Monta Brown – Ms. Brown did not feel that Johnston County needs another mine. She had concerns about depletion of the water by the quarries and the dust from the railroad cars.

Randy Fullagar – Ms. Fullagar was concerned that corporate interests are ignoring the issue of the diminishing amounts of available water in the area. She said that they cannot just move away; this is their home. The Arbuckle-Simpson Aquifer is her only source of water and when it is gone what is she supposed to do for water.

Terry Beals – Mr. Beals was concerned that the proposed operation is simply seeking to take gravel back to Texas to fix the roads. He was also concerned of the effects mining will have on Pennington Creek.

Zeno McMillan – Mr. McMillan was concerned that the current situation with our drought conditions and the mining situation as it is, any future mines would be detrimental to the water supply, not only for now, but for the future.

Larry Johnson – Mr. Johnson was concerned about the water. He was afraid that this mine will create a drop in the water level. He stated that there are too many mines in the Mill Creek area. He indicated there are a bunch of families who live very close to this mining operation and there is been no guarantee of bringing in any rural water if the families run out of water. Mr. Johnson was also concerned that there is already too much truck traffic on Highway 1 and another mine in the area will just exacerbate the problem.

VII. Testimony of Applicant:

Elizabeth Nichols, attorney representing Applicant – Ms. Nichols stated that the Applicant's purpose was to provide some additional information and answers to issues raised in the protest letters and to provide some additional information regarding their plan for the Mill Creek facility. She said that they are concerned with conserving the water in the area and have reviewed every single protest letter. She stated that the Applicant owns the property where the proposed mine

is located. She said that the application for this permit is administratively complete and technically correct. However, they are still in the process of obtaining all necessary permits required for this site.

The Applicant submitted documentation during the December 2, 2010 Conference which supplemented its application. The following areas of the application were supplemented: 1) Phase bonding area amendment ; 2) Corporate officers change; 3) Status of other required permits updated; 4) Detailed incremental bonding map update; 5) Well plugging and completion reports for wells that the Applicant had drilled on the property.

At the October 4, 2011 Informal Conference, the Applicant submitted a letter dated April 26, 2011, from Danny A. Manning with the US Army Corps of Engineers (USACOE) stating that the Applicant does not need a 404 permit. This was the only additional Exhibit submitted by Applicant at this time.

On December 2, 2010, Ms. Nichols stated that the Applicant intends to use all legally available resources of water, which includes pit water. Pit water is not currently under the jurisdiction of the OWRB as ruled by the Oklahoma Supreme Court in the *City of Tishomingo v. OWRB*.

On December 2, 2010, Ms. Nichols also had two general objections. 1) Regarding protestants outside the one-mile radius of the proposed Mill Creek facility pursuant to **45 O.S. 2001 § 724(H)(2)**; 2) Regarding Protestants who did not file an objection letter within the 14 days of publication pursuant to **45 O.S. 2001 § 724(H)(4)**.

On October 4, 2011, Ms. Nichols addressed four (4) issues. First, Ms. Nichols noted that because of the Daffin case, which eliminates the one-mile requirement for Protestants of ODM permit applications, a second informal conference is being held to include all Protestants who sent in timely letters requesting an informal conference.

Second, prior to the record for **PAN 10-05-IC** being closed on January 14, 2011, the Applicant supplemented its application to include a water monitoring and management program. This water monitoring plan is a part of the ODM permit and includes monitoring of groundwater wells, Clement Holder Springs, and daily precipitation. All of this will be done prior to the commencement of mining to establish a baseline of water in the area. All of the monitoring data identified will be provided to ODM and OWRB on a quarterly basis.

Third, Ms. Nichols discussed Senate Bill 597, which was passed this last legislative session in 2011, and its implications on pit water in the Arbuckle-Simpson Aquifer. She also stated that under the direction of the OWRB, the Applicant was part of a group that formulated draft language for SB597.

The Applicant believed its plan goes beyond the requirements of SB597. The fourth issue was the lack of need for a Section 404 Permit from the USACOE.

Ms. Nichols would request that ODM grant their permit because they believe the Applicant meets the requirements in order to receive their permit.

Peter Dawson, President of Applicant – Mr. Dawson stated that once all of the permits are approved, it intends to invest additional monies to develop the business and operate it, which will create employment and tax base in the local community. It is seeking to permit 575 of the 582 acres it owns in addition to leasing approximately 1950 acres of water rights (surface and ground). Mr. Dawson also stated that as part of its mining plan, it intends to install some infrastructure in the quarry. This includes roads, buildings, a truck scale and a crushing plant. It anticipates the business life of the operation is in excess of 50 years.

Mr. Dawson addressed some concerns brought up at the conference. 1) The property does straddle State Highway 1/7, BNSF railway and a County Road. The Applicant intends to obtain appropriate right-of-ways when needed. It may cross under or over the State Highway; 2) Dust and noise concerns will be regulated by appropriate permits; 3) Noise levels will increase compared to current noise levels. However, the noise created will generally not be significant and very manageable; 4) the Applicant has a general plan for water management which would include prioritized sourcing of management, how it plans to use the water, how it plans to recycle the water, and what its conservation practices will be. It will be putting all that on paper and submitting it to OWRB. It will wind up being a part of the permit process as they move forward on their stream water permits. As the laws dictate, new and/or additional permits will be obtained by the Applicant.

Geoff Canty, environmental consultant with EST, Inc. – Mr. Canty stated that the Applicant has evaluated a lot of the issues presented in detail and has incorporated them originally into the permit. He submitted documents as exhibits which supplemented the Applicant's permit application. He noted that there were three (3) recurring concerns and he would like to go into more detail on these. They include 1) Depletion of the aquifer; 2) Polluting the aquifer and the environment; 3) Mining impacts to Pennington Creek.

First, there are concerns about depleting the aquifer. Potentiometric surface maps show that the proposed operation is down gradient of the park and Byrds Mill Spring. In addition, there are at least four (4) wells that are currently monitored or have been monitored recently around this general area. Water monitoring is ongoing at the mines on either side of the proposed site and all mines will continue monitoring into the future. Monitoring data show that this aquifer is more sensitive to rainfall, precipitation, than any mining activity. The water level has very seasonal trends. There are 1,950 acres of water rights that have been leased to offset any possible depletion impacts.

Second, there are concerns about polluting the aquifer. The Applicant is governed by several agencies and is required to maintain several permits, plans and licenses. For example, an air permit regulating fugitive dust will be obtained from ODEQ, and the Applicant already has a storm water permit from ODEQ that will have to be maintained throughout the life of the mine. The latter includes water quality, sediment and erosion control and Best Management Practices (BMP). Applicant is not anticipating dewatering significant amounts from what is currently being dewatered. From a surface water perspective, it will only be allowed to use the amount of water allowed by OWRB. Records will be required to be maintained for all of these issues.

Third, according to maps which have been submitted, this operation will not be located in the Pennington Creek watershed. The Applicant will not be mining in the headwaters of this watershed. The watershed boundary is across the section line road.

VIII. Summary of Issues Presented:

A. Water: - The Arbuckle-Simpson Aquifer is the sole source of groundwater for Mill Creek, Pennington Creek and the other watersheds within its reaches (Rock Creek, Blue River, Byrds Mill Spring and Delaware Creek to name a few). The United States Environmental Protection Agency has designated the aquifer as a Sole-Source Aquifer as a mechanism to protect drinking water supplies with limited water supply alternatives. The proposed mining operation is located in the Mill Creek watershed. Protestants are concerned about the affects another mining operation, specifically Applicant, will have on the availability and quality of water in the Aquifer. There are numerous users in the area that rely on the Arbuckle-Simpson Aquifer for their water needs.

45 O.S. 2001 § 724(I) states: "Each application for a new operation shall contain, where applicable, a list of all other licenses and permits needed by the Applicant to conduct the proposed mining operation." The Applicant's application includes such a list.

The ODM does not issue water permits, but is charged with protecting adjoining property owners under **OAC 460:10-17-14(4)**. This rule states: "During the mining operation and reclamation of work, care must be taken to prevent any excessive drainage or accumulation or release of excess water that may damage the adjoining property of other owners." If the permit is approved, this will be regulated by ODM.

1. Water Quality: - There is concern that this particular mine will contaminate the Arbuckle-Simpson Aquifer and its watersheds. Since Pennington Creek is the sole source of water both for the City of Tishomingo and the Tishomingo Fish Hatchery, there are concerns that additional mining operations will have negative short term and long term effects on the water quality.

Water quality protection falls under the jurisdiction of the ODEQ-Water Quality Division. The Applicant has already secured a Storm Water Construction Permit Authorization (OKR1010501) and is authorized to discharge storm water from the mine into an unnamed tributary of Mill Creek. In addition, a Storm Water Pollution Prevention Plan (SWP3) has been submitted to ODEQ and the Applicant has secured an OPDES General Permit Authorization (OK950048) in order to discharge and/or dispose of industrial wastewater from the quarry. This permit regulates discharges and flows from surface impoundments, inventory of chemicals and raw materials that will be kept on site, and groundwater/well information. If this mine site is permitted and constructed, it will be required to submit annual numeric effluent limitation monitoring to ODEQ.

The Applicant has submitted well completion and plugging reports for the wells dug on their property to address the concerns voiced by the Protestants. Its permit application includes well data from nine (9) wells in Section K of the "OPDES Application for General Permit OKG950000 to Discharge and/or Dispose of Industrial Wastewater at Rock, Sand and Gravel Quarries" which it submitted to ODEQ. The permit also includes an OWRB list of 10 wells constructed since 2000.

2. Water Availability: - Protestants stated that the flow in the creeks and springs within the Arbuckle-Simpson Aquifer has been significantly reduced over the years due to the many interests competing for water. There is concern that an additional mine in the area will lower the water level in the aquifer, cause short term and long term impacts on the aquifer, and further reduce the amount of water available to the other sources. It was expressed that depletion of water in the aquifer will eventually lead to loss of aquatic organisms and reductions of wildlife populations, particularly in Pennington Creek and Mill Creek. Protestants would like to see the Applicant and all other mines in the area held to the same standard regarding water accountability as other water users in the area.

As stated above, Pennington Creek is the sole source water supply for the City of Tishomingo and the Tishomingo Fish Hatchery. Both of these are dependent on a continued flow of water to adequately perform their services and meet the needs of their respective populations. Thus, there is concern that the dewatering and washing operations of another quarry will prove harmful to these populations. The Chickasaw National Recreation Area, operated by the National Park Service, which lies northwest of the proposed site, and the Tishomingo National Wildlife Refuge operated by the United States Fish and Wildlife Service, which lies southeast of the proposed operation, are both within the Arbuckle-Simpson Aquifer, but in different watersheds, and there is concern that decreased water availability in the aquifer due to another mining operation will also affect these sites.

The proposed operation is located in the Mill Creek Watershed. The majority of the concerns presented at these Conferences were in relation to the Pennington Creek Watershed. Even though the proposed operation is not in the Pennington Creek Watershed, Pennington Creek is dependent upon the Arbuckle-Simpson Aquifer for its water recharge. Protestants stated that Byrds Mill Spring,

which is a water source for the City of Ada and associated water districts, Blue River, which is a water source for the City of Durant, and the springs that feed Arbuckle Lake and other small municipalities in the region would be impacted by this new mine and their water supply affected.

Data from the *Arbuckle-Simpson Hydrological Study* shows a reduction in the Arbuckle-Simpson Aquifer over time. The aquifer is recharged solely by precipitation. There are natural fluctuations during wet and dry seasons and from wet and dry years due to precipitation, evapotranspiration, surface runoff, and groundwater infiltration. The study also shows that the Eastern Arbuckle-Simpson Aquifer had an average annual withdrawal between 2004 and 2008 of 5,400 acre-feet per year. This breaks down into 72% (3,897 acre-feet) for public water supply, 18% (963 acre-feet) for mining, 6% (309 acre-feet) for irrigation and 4% (222 acre-feet) for other sources of withdrawal. Withdrawal data in the vicinity of the proposed operation shows between 26 and 150 acre-feet per year. Applicant's two (2) Stream Water applications to OWRB total 311 acre feet.

There are several agencies that have jurisdiction over water issues in Oklahoma. In addition to the ODEQ permits discussed above, the USACOE has issued Nationwide Permit #14 (2009-273) to construct five (5) culverts providing access for the Applicant's quarry expansion.

As noted above, the Applicant has also submitted two (2) Applications For Permit To Use Surface Or Stream Water to the Oklahoma Water Resources Board (2010-0012 and 2010-0013). Application Number 2010-0012 is for 101 acre-feet of surface water at a rate not to exceed 5,000 gallons per minute from a private reservoir on an unnamed tributary to Mill Creek in Section 33 Township 1South, Range 4East, in Murray County. Application Number 2010-0013 is for 210 acre-feet of surface water at a rate not to exceed 5,000 gallons per minute from an unnamed tributary to Mill Creek in Section 23 Township 1South, Range 4East, in Johnston County. According to staff at the OWRB, these two (2) permits are pending approval by OWRB. These include monitoring and flow usage and are both required in order for the Applicant to utilize water for its operation or alter its flow across and/or within its permit boundaries.

3. Water Regulations: - Protestants state that surface mining over a single source aquifer is not allowed. Protestants feel that it is premature to approve this application before additional OWRB studies are complete. They support the regulation of pit water by OWRB. They also support the elimination of mining in the Arbuckle-Simpson Aquifer. The Applicant is willing to comply with applicable laws regarding water, including pit water.

a. New Legislation: - At the time of the December 2, 2010 Informal Conference, OWRB did not have jurisdiction over pit water in a producing mine. However, this was changed with the enactment of **SB597** in May, 2011. SB597 amended **82 O.S. 2001, Section 1020.2** regarding water policy at certain mines and addresses consumptive use of water. This section defines

consumptive use as “diversion of water from a mine pit that is not returned to the groundwater basin or subbasin, or to a mine pit or holding basin, or to a definite stream, or to the land surface from which surface runoff flows into a mine pit. The term “consumptive use” includes the estimated moisture content driven off or carried away with the mined material transported off the mining site, plus the amount of evaporation from the mine pit that exceeds the amount of direct precipitation and surface runoff into the mine pit, plus any amounts for other proposed beneficial uses off the mining site.” This legislation applies only to the taking, using or disposal of water trapped in producing mines inside a sensitive sole source groundwater basin or subbasin. Currently, the only groundwater source declared as sole source in Oklahoma is the Arbuckle-Simpson Aquifer. Initial permit applications filed before August 1, 2011 are exempt. **82 O.S. §2001, §1020.2.C.2.** Applicant submitted their initial permit application May 2010.

The new law also states that by no later than January 1, 2013, the operator of a mine in a sole source groundwater basin or subbasin that is exempted from this act by the provisions of subsection C shall adopt and implement a plan to monitor and submit annual and quarterly reports to OWRB regarding the accumulation and disposition of pit water. Operations that fail to comply with these reporting requirements shall be required to submit more detailed hydrological monitoring information to OWRB as set forth in **82 O.S. 2001, Section 1020.2.D**, unless the operation can show cause why the exemption should continue to apply and the more detailed hydrological monitoring information should not be submitted. (**82 O.S. 2001, Section 1020.2.E.1**)

b. Monitoring: - Applicant submitted “Outline of Proposed Monitoring Program” as a draft to the Monitoring Program that will be implemented for this site. This Monitoring Program involves groundwater, springs, streams and climatological monitoring. It also addresses monitoring consumptively used pit water pending passage of legislation requiring such. All data is proposed to be submitted quarterly to ODM and OWRB. The following provides further detail to Applicant proposed Monitoring Plan.

Groundwater depth will be monitored at four (4) wells on the permit area. These are listed as the Kite Well, Holder Domestic Well, Office Well and the Shop Well. Monitoring will commence prior to mining for all wells except the Shop Well (new construction). Monitoring will commence at the Shop Well within 12 months of initial mining. Groundwater depth will be monitored at five (5) wells outside the permit area. These are listed as the Gay Well, Williams 86822 Well, Williams 92479 Well, Southwest Well and the Hancock Well. Monitoring will commence prior to mining for all wells except the Southwest Well (new construction). Monitoring will commence at the Southwest Well within 12 months of initial mining.

Spring flow will be monitored at the Clement/Holder Spring, which is located on the permit area. Stream flow monitoring will take place at two (2) sites off of the permit. The Mill Creek Near Mill

Creek Gage is currently monitored by the United States Geological Survey (USGS) and the Pennington Creek East of Mill Creek Gage is currently monitored by OWRB. A new rain gage will be constructed on-site and monitor precipitation daily.

Applicant has proposed to develop a Water Source Accounting Program that will meter consumptively used pit water pursuant to state and federal legislation. They also noted that they have a general plan for water management that will be submitted to OWRB. To date, this has not been finalized. SB597 amended **82 O.S. 2001, §1020.2** regarding water policy at certain mines. Applicant will be subject to such legislation. In addition, **Section II.B** of Applicant Monitoring Program states that "Arbuckle will continue to revise its Monitoring Program to include additional details as requested by the Department of Mines until the permit is issued."

4. Beneficial Use Designations: - OWRB rules (**OAC 785:45 Appendix A.3**) have designated Pennington Creek as a High-Quality Water (HQW) and it cannot receive any new point source discharge(s) of any pollutant or increased load or concentration of specific pollutants from existing point source discharge(s) unless the point source discharger can demonstrate to the permitting authority (OWRB) that a new discharge will maintain or improve the current water quality. **OAC 785:45-5-25(c)(3)**. Pennington Creek has been designated as a High-Quality Water. However, Applicant will not be directly mining in the Pennington Creek Watershed and OWRB has not required them to make such a demonstration. It will be mining in the Mill Creek Watershed.

HQW is just one of the beneficial use designations of a water body. Other beneficial use designations of Pennington Creek are a Public and Private Water Supply (PPWS), Cool Water Aquatic Community (CWAC) and a Primary Body Contact Recreation (PBCR). Mill Creek Watershed is designated as a PPWS, PBCR, and a Warm Water Aquatic Community (WWAC). OWRB has rules and regulations dealing with all of these beneficial uses.

B. Fish and Wildlife: - ODWC and the USFWS are concerned that reduction in stream flow will result in significant loss of usable habitat for stream aquatic organisms and negatively effect wildlife activities relying on the Arbuckle-Simpson Aquifer. Both agencies have property that rely on the waters from the Arbuckle-Simpson Aquifer for management of their sites and stated that this loss of water quantity will negatively affect the fish and wildlife populations in these areas (ODWC – 3,000 acres on the Blue River, USFWS – Tishomingo National Wildlife Refuge and the Tishomingo National Fish Hatchery). The reduction in water could also disrupt the migratory bird populations. Both agencies would like to see approval of this permit delayed until applicable OWRB studies on the Aquifer are complete.

C. Wetlands: - There is concern that the aquatic flora and fauna will be negatively affected and wetlands will be destroyed by this operation. Wetlands are subject to regulatory

jurisdiction under Section 404 of the Clean Water Act. **3 U.S.C. §1344**. Section 3.6 (Protection of Natural Resources – Other Licenses and Permits) of Applicant's permit application lists the USACOE. In a letter dated April 30, 2009, Davis A. Manning, Chief of the Regulatory Office of USACOE has given approval to proceed with the installation of new culverts providing access for Applicant's quarry expansion at five (5) crossings of unnamed tributaries to Mill Creek. Applicant also presented a letter dated April 26, 2011 from Danny A. Manning of USACOE stating that Applicant does not need a 404 permit. This is now a part of the ODM permit application.

D. Highway/Traffic: - State Highway 1/7 dissects the property. Protestants are concerned that the mining operation will increase truck traffic on the highway and cause traffic safety issues when material is moved over or under the highway. BNSF Railroad also has a line running parallel to the highway that runs through the permit area. There is concern by the Protestants about the truck traffic associated with mining. ODM regulates truck traffic on the mine site through **45 O.S. 2001 §901, et. seq. (Surface Mine Safety Standards)**. Truck traffic off-site is regulated by the entity with jurisdiction over the road.

Applicant proposed to run water lines and tunnel under State Highway 1/7. The Oklahoma Department of Transportation (ODOT) routinely approves utility lines under highways. If this mining permit is approved by ODM, when the operator is ready to do so, all of the appropriate documents must be submitted to ODOT. Paul Rachel, P.E., Division Engineer with ODOT, stated in a letter dated December 14, 2009, to Pete Dawson with Applicant: "Your request for up to four water lines under the highway can be approved once you determine the exact location and the type and number of pipes that will be crossing under the road." In this same letter, Mr. Rachel stated: "Your proposal for a tunnel under the highway was considered, but because of uncertainty associated with the project, a bridge would be a better alternative." ODM must be copied on all documents.

E. Dust and Fumes: - Protestants are concerned about the level of dust and fumes generated from equipment and vehicles which will be created from the mining operations. ODM regulates dust on-site only under the authority of **45 O.S. 2001 §913.14**. This is to ensure the increased visibility of the equipment operators on-site. ODM also regulates fumes in regard to workers safety and providing safe access to working places under **45 O.S. 2001 §914(1)**.

45 O.S. 2001 §1g states: "Any point source discharge, the disposal of any hazardous waste, as regulated by the Oklahoma Hazardous Waste Management Act, or solid waste, sewage or other wastewater, and any air emission subject to the Oklahoma Clean Air Act, from any mine or mining activity shall be regulated by the Department of Environmental Quality." The Air Quality Division of ODEQ has been given jurisdiction over fugitive dust under **OAC 252:100-29** and Applicant has submitted a Notice Of Intent (**2009-105-NOI**) to ODEQ to construct their facility. If this mining

permit is approved, they will be required to submit a completed application to ODEQ within 60 days of commencing operation of the proposed facility.

F. Noise and Night Activities: - Protestants are concerned about the noise and light that will be generated by the mine site at night. Applicant stated that noise levels will increase some, but will be very manageable.

The hours of operation are established by the operator and it is anticipated that Applicant will take the concerns of its neighbors into account when setting its operational hours. ODM does not have jurisdiction to set hours of operation at mine sites. The operator has noted in the application that blasting will not occur between sunset and sunrise. **OAC 460: 10-31(a).**

The ODM regulates blasting in the State of Oklahoma under the authority of **45 O.S. 2001 §911 (Explosives) and §912 (Drilling for Blasting) and OAC 460:10-31 (Blasting and Use of Explosives).** **OAC 460:10-31-8** addresses blasting requirements of shots and **OAC 460:10-31-9** addresses seismographic measurements at shots. ODM Inspectors conduct inspections on the site and periodically review Blasting Records for compliance. The Blasting Plan for this permit requires that seismic readings be utilized on each shot. **OAC 460:10-31-8(I)** is used by ODM to regulate the frequency level of airblasts measured in dB in Hz. The maximum dB level from a shot is 134.

G. Tourism and Recreation: - Protestants are concerned that the presence of another mine in Oklahoma does not promote tourism. There is concern that the mining in Oklahoma only benefits Texas. A few of the tourist/recreation sites that receive water from the Arbuckle-Simpson Aquifer mentioned by Protestants are the Slippery Falls Boy Scout Camp, Tishomingo Golf Course, Tishomingo National Wildlife Refuge, Chickasaw National Recreation Area (CNRA) and Tishomingo National Wildlife Refuge (TNWR). In addition, many people come to the area merely for its natural beauty and believe that mining takes away from that. These sites are also reliant on water for their management and attractiveness, and representatives from the ODWC, USWFS and NPS asked that this application not be approved until all OWRB reports are complete.

H. Mine Records and Personnel Accessibility – The Protestants simply want to have access to the mine records and be able to contact Applicant in case they have a question or concern. Applicant stated that it intends to be a good neighbor and that this mine will create employment and add to the tax base for over 50 years. **OAC 460:10-1-8** and **OAC 460:10-17-8** address public records and availability for public inspection. As part of its permit, Applicant was required to submit a Blasting Plan. This plan sets out the particulars of the blasting and along with Blasting Logs are available as prescribed under **OAC 460:10-31-6.**

I. Property Values: - Protestants claim that property values will be negatively affected if it this site is mined.

J. Aesthetic Values: - Many Protestants moved to the area for its aesthetic values. They are concerned that the aesthetic values will be negatively effected it this site is mined.

K. Environmental Impact Statement (EIS): - There was a question about the EIS that was completed on this project. The National Environmental Policy Act of 1970 (42 U.S.C. §4321 *et seq.*) does not require that an EIS be prepared for the issuance of an ODM Non-Coal Mining Permit.

L. Administrative Processes: - Protestants are concerned that they were not given enough time to view the documents submitted by the Applicant prior to this conference and the decision by ODM, and that the public notification process did not inform enough people. The question was also raised in regard to whether or not all of the required permits will be obtained prior to the permit being issued.

At the December 2, 2010 Informal Conference, Applicant objected to Protestants residing outside a one-mile radius of the proposed non-coal mining operation, and those not filing written objections within 14 days of the publication being able to participate in this informal conference as set forth in **OAC 460:10-17-6**. It is the responsibility of the Applicant to determine who resides within this one-mile radius and submit such to ODM. All written objections were forwarded to Applicant and Applicant did not submit such documentation to ODM. Accordingly, ODM allowed all individuals who desired to speak to do so at the Informal Conference.

At the October 4, 2011 Informal Conference it was noted that with the decision by the Oklahoma Supreme Court in *Daffin v. State ex rel. Oklahoma Department of Mines*, 2011 OK 22, 251 P.3d 741, that the one-mile limitation for qualified Protestants of permit applications submitted to the ODM was struck down.

There was concern that adequate notice was not given in regard to the original permit application being supplemented by Applicant. It was announced at the December 2, 2010 Informal Conference that the record for **PAN 10-05-IC** would be held open for additional Exhibit submission to ODM at its office in Oklahoma City until 4:30 p.m. on January 14, 2011. Exhibits were submitted by both the Applicant and Protestants during this time. All Exhibits became part of the record. The Exhibits submitted by the Applicant during that time were inserted into the "Application For Permit To Engage In Non-Coal Mining", and have been available for public review at the ODM office in Oklahoma City since January 14, 2011, and at the Johnston County Courthouse in Tishomingo, Oklahoma since August 1, 2011. No additional Exhibits were submitted to ODM between January 14, 2011, and the opening of the record for **PAN 10-05-IC2**.

On January 21, 2011, a letter was sent out to all parties who requested a copy of Exhibits submitted through the close of the record on January 14, 2011. This letter explained that the record was closed and no additional exhibits were being accepted after January 14, 2011. Attached to this letter was an invoice for the Exhibits the party requested. Only four (4) requests for information were made. This letter was mailed to Ms. Laurie Anne Williams, Mr. Jason Aamodt, Ms. Jennifer Back with the Water Rights Branch of the National Park Service and Mr. Pete Dawson, President of Applicant. Payment was received from all parties prior to the Exhibits being mailed.

The time frame established by **OAC 460:10-17-7** was adhered to prior to holding these informal conferences. Licenses and permits from other agencies have been listed in the application. (**45 O.S. 2001 45 §724(I)**).

RECOMMENDATIONS:

There were several issues brought forth during these two (2) Informal Conferences and while preparing these Findings. It is recommended that the following Conditions be placed on the permit as a requirement of approval:

- A. Contact Information and Call List: - In order to keep the adjacent landowners apprised of mining activities, Applicant is to provide all residents within one mile of the permit boundaries with a list of contact numbers for the Mill Creek Quarry. In addition, Applicant is to make an attempt to contact all of these individuals prior to blasting at the number provided by the individuals. The latter is to be added to the "Blasting Warning" section of the Blasting Plan prior to shooting.
- B. Pre-Blast Survey: - In order to determine if mining blasting does have an affect on the nearby structures, it is recommended that Applicant conduct pre-blast surveys on any off-site residential or commercial structure within one-half mile of the permit boundaries prior to any shots being conducted. These surveys are to become part of the permit.
- C. Water Monitoring: - It is evident from the testimony of both the Protestants and Arbuckle-Aggregates that the protection and conservation of water resources in the Arbuckle-Simpson Aquifer is of utmost importance. Applicant submitted a water monitoring program with their application. It is attached to and a part of these Findings. **See State's Exhibit 50.** It is recommended that this program be followed as submitted. In addition, ODM encourages all groups in the area to work together to develop a general plan for monitoring water in the area and that Applicant's water monitoring plan and permit evolve and be modified as the hydrological conditions in the area dictate.

Monitoring data is to be submitted to ODM quarterly for all nine (9) groundwater wells, the spring monitoring point, the two (2) stream flow monitoring points, and the rain gage as listed above and in the Monitoring Program submitted to ODM January 14, 2011. The Water Management Plan Applicant is submitting to OWRB and all water monitoring data will become a part of the ODM permit. In order to obtain baseline data, as stated in Applicant's testimony during this Informal Conference and in compliance with **Section II.B** of its Water Monitoring Program, it is recommended that a minimum of 12 months of baseline data from all the proposed water monitoring locations, except the Southwest Well and the Shop Well, be obtained and submitted to ODM prior to the commencement of mining in order to take into account seasonal differences in water levels and flow. Monitoring of the Southwest Well and the Shop Well shall commence within 12 months of initial mining. It is also recommended that, when applicable, Applicant comply with the terms set forth in **82 O.S. 2001, §1020.2.E.1.**

D. Use of Surface or Stream Water: - Applicant has submitted two (2) Applications For A Permit To Use Surface Or Stream Water (#2010-0012 and #2010-0013) to OWRB. These were submitted as a part of its Application For Permit To Engage In Non-Coal Mining to ODM. Both water use applications are pending approval by the OWRB. It is recommended that the mining permit be issued with the condition that no pre-mining disturbance, mining, and reclamation activities, other than water monitoring, shall be conducted on this permit area (L.E.-2361) until Permit #2010-0012 and Permit #2010-0013 are approved by OWRB. ODM will reserve the right to amend or rescind any requirements of Permit #L.E.-2361 to comply with any terms and conditions imposed by the OWRB in the approval of the mining plan.

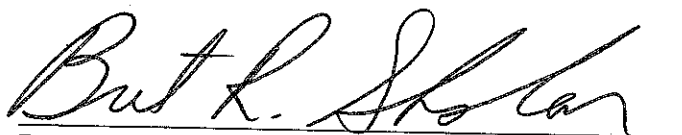
PAN 10-05-IC
PAN 10-05-IC2

December 2, 2010
October 4, 2011

I find this application in compliance with all applicable parts of Title 45 of the Oklahoma Statutes, and the rules and regulations of the Department. Therefore, I recommend that this Application be granted with the conditions as outlined in the Recommendations listed above.

Dated this 2nd day of November, 2011.

Respectfully researched and submitted,

A handwritten signature in cursive script, appearing to read "Bret R. Sholar", written over a horizontal line.

Bret R. Sholar, Informal Conference Officer

Outline of Proposed Monitoring Program
Arbuckle Aggregates, LLC

RECEIVED

JAN 14 2011

DEPT. OF MINES

Arbuckle Aggregates, LLC (hereafter "Arbuckle") submits the Arbuckle Outline of the Draft Monitoring Program dated January 14, 2011 (hereafter "Outline"). The Outline is conceptual in development and presented to address the concerns raised to the Department of Mines regarding Arbuckle's pending Application for Permit to Mine LE 2361. The programs presented in the Outline are to further promote water conservation and protect water resources in the Arbuckle Simpson Aquifer. The Outline is supported by the Monitoring Program Spreadsheet attached hereto as Exhibit A, and the Monitoring Program Location Map attached hereto as Exhibit B.

I. Definitions

A. Consumptively Used Water: The water consumptively used on the Site, including groundwater, surface water and stream water as currently defined by the OWRB and consumptively used pit water as defined by OWRB-ODM Proposed Pit Water Language of 785:30-13-10(d) and subsequent revisions, specifically:

"...water for dust control and other on-site mining operations, plus the estimated moisture content of the minerals anticipated to be transported off the site annually, plus any amounts for proposed beneficial uses off the mining site."

B. General Conditions: The conditions precedent for Arbuckle to implement the Program as presented in the Outline including the monitoring locations and water source accounting aspects are conditional upon Arbuckle's receipt of its mining permit and further defined in Section II.

C. Inner Wells: Those groundwater wells existing or proposed new construction located closest to the Site. The Inner Wells are identified on the Location Map attached hereto as Exhibit B.

D. Meridian: Meridian Aggregates Company, a Limited Partnership. Party to the Meridian Agreement and holder of the OWRB groundwater permit # 2002-602.

E. Meridian Agreement: The Agreement entered into by Meridian Aggregates Company, a Limited Partnership, the United States Department of Interior, National Park Service,

and the United States Fish and Wildlife Services on December 6, 2005, attached hereto as **Exhibit C**. The Meridian Agreement was a compromise for Meridian to receive its groundwater permit # 2002-602.

F. Non Consumptively Used Pit Water: All water as defined by OWRB-ODM Proposed Pit Water Language of 785:30-13-10(e) and subsequent revisions, specifically:

- (A) Water pumped from a quarry pit that is returned to the groundwater basin or subbasin by injection wells, settling ponds or other means of recharge,*
- (B) Water pumped from a quarry pit directly into a storage impoundment constructed by the owner or operator of the mining site and that is not located on a definite stream, This is what we want to receive a credit for.*
- (C) Water discharged from the pit that will flow to a definite stream, provided that such discharge may be subject to regulation by the Oklahoma Department of Environmental Quality,*
- (D) Water pumped from a quarry pit to form a slurry to transport mined material if an equivalent amount of water is returned to the quarry pit or settling pond, and*
- (E) Water that evaporates because of exposure to the atmosphere after seeping or flowing into quarry pits.*

G. Outer Wells: Those groundwater wells existing or proposed new construction located around the Site location, but further in distance than the Inner Wells. The Outer Wells are identified on the Location Map attached hereto as **Exhibit B**.

H. OWRB: Oklahoma Water Resources Board:

I. Pit Water: Is the water contained within the quarry pit. The Pit Water is divided into two categories (1) "Consumptively Used Water" as defined by OWRB-ODM Proposed Pit Water Language of 785:30-13-10(d) and subsequent revisions, and reiterated above, and (2) "Non Consumptively Used Pit Water" as defined by OWRB-ODM Proposed Pit Water Language of 785:30-13-10(e) and subsequent revisions, and reiterated above.

II. General Conditions of Monitoring Program:

A. All of the proposals to the Monitoring Program are pursuant to General Conditions as defined in Section I (B) above. The General Conditions are limited to the time when Arbuckle is actively mining the Site. The Monitoring Program subject to obtaining legal access from landowners to drill and/or monitor, and the geographical and scientific feasibility of monitoring groundwater wells.

B. Arbuckle will continue to revise its Monitoring Program to include additional details as requested by the Department of Mines until the permit is issued. Monitoring locations and the

parameters collected may be modified by Arbuckle, as necessary, to generate useful and meaningful information.

C. Arbuckle will seek all necessary state and federal permits and licenses. Arbuckle will comply with all state and federal laws and regulations.

D. The Arbuckle Monitoring Program including but not limited to the water source accounting aspects is intended to operate until the time the OWRB-ODM Proposed Pit Water Language of 785:30-13-10 is passed into law. Following the passage of OWRB-ODM Proposed Pit Water Language of 785:30-13-10, Arbuckle does not agree to be bound by any stricter requirements than is set forth by law regulating pit water.

E. Arbuckle will develop Best Management Practices (BMPs) to protect the water quality and will be adapted and implemented as necessary at the discretion of Arbuckle or to comply with state or federal law or permits.

F. Arbuckle will develop BMPs to conserve water when beneficial and prudent at the discretion of Arbuckle.

III. Monitoring Locations

A. **Groundwater Monitoring:** Arbuckle has designated an area surrounding the Site as Inner and Outer Wells of existing or proposed groundwater wells to monitor. All of the groundwater monitoring is subject to the General Conditions identified in Section II.

1. Inner Wells

a. **Kite Well** (OWRB # 87495) located in Section 24 on the Site. Prior to the commencement of mining operations, Arbuckle agrees to monitor the Kite Well for water depth level below the ground surface. This monitoring will be funded by Arbuckle and reporting will be provided pursuant to Section IV.

b. **Holder Domestic Well** located on Section 23 of the Site. Prior to the commencement of mining operations, Arbuckle agrees to monitor the Holder Domestic Well for water depth level below the ground surface. This monitoring will be funded by Arbuckle and reporting will be provided pursuant to Section IV.

c. **Office Well** is a new construction well proposed to be located on Section 24 of the Site. If the Office Well is successfully drilled, monitoring of the Office Well will commence prior to mining. The monitoring will be for water depth level below the ground surface. The monitoring will be funded by Arbuckle and reporting will be provided pursuant to Section IV.

d. **Shop Well** is a new construction well proposed to be located on Section 24 of the Site. If the Shop Well is successfully drilled, monitoring of the Shop Well will commence no later than 12 months following the commencement of mining operations on the Site. The monitoring will be for water depth level below the ground surface. The monitoring will be funded by Arbuckle and reporting will be provided pursuant to Section IV.

2. **Outer Wells**

a. **Gay Well** (OWRB # 85152) is located on Section 24 of the Site. Pursuant to the Meridian Agreement the Gay Well is to be monitored by OWRB and the costs associated with the monitoring are to be paid by Meridian pursuant to Exhibit A Section 1.B of the Meridian Agreement. As of December 2010, the monitoring of the Gay Well has ceased, in violation of the Meridian Agreement. Arbuckle has been working with OWRB to encourage Meridian's compliance with the Meridian Agreement. As of the date of submittal of the Outline, this issue is outstanding. Arbuckle is committed to continue to work with the OWRB on the monitoring of the Gay Well. Pursuant to the Meridian Agreement, Meridian retains the obligation to fund the monitoring of the Gay Well for two (2) years following the completion of Meridian's reclamation

activities. Following the completion and satisfaction of Meridian's obligations regarding the Gay Well under the Meridian Agreement, Arbuckle will assume the monitoring of the Gay Well for groundwater level below the surface and report the information pursuant to Section IV.

b. **Williams 86822 Well** (OWRB # 86822) is located in Section 19 of property owned by Carol Sutton. Pursuant to the Meridian Agreement, the Williams 86822 is to be monitored by the OWRB and the cost associated with the monitoring is to be paid by Meridian pursuant to Exhibit A Section 1.B of the Meridian Agreement. As of the date of the submittal of the Outline, to Arbuckle's knowledge the Williams 86822 has not been reported as monitored pursuant to the terms of the Meridian Agreement. Arbuckle is committed to continue to work with the OWRB on the reporting and monitoring of the Williams 86822. Pursuant to the Meridian Agreement, Meridian retains the obligation to fund the monitoring of the Williams 86822 for two (2) years following the completion of Meridian's reclamation activities. Following the completion and satisfaction of Meridian's obligations regarding the Williams 86822 under the Meridian Agreement, Arbuckle will assume the monitoring of the Williams 86822 for groundwater level below the surface and report the information pursuant to Section IV. If Arbuckle is unable to obtain an easement from the landowner, Arbuckle will agree to pay the OWRB to monitor to Williams 86822 Well at an average annual cost not to exceed \$1,600.00.

c. **Williams 92479 Well** (OWRB # 92479, USGS # 342633096494401) is located in Section 25 of the property owned by Carol Sutton. Pursuant to the Meridian Agreement, Exhibit A Section 1.B, the Williams 92479 is to be monitored by the OWRB and the cost associated with the monitoring is to be paid by Meridian. As of the submittal of the Outline the USGS is monitoring Williams 92479 in its Real Time Groundwater Monitoring Program. It is unknown if Meridian is reimbursing USGS for the monitoring of Williams 92479. Pursuant to the

Meridian Agreement, Meridian retains the obligation to fund the monitoring of the Williams 92479 for two (2) years following the completion of Meridian's reclamation activities. Following the completion and satisfaction of Meridian's obligations regarding the Williams 92479 under the Meridian Agreement, Arbuckle will assume the monitoring of the Williams 92479 for groundwater level below the surface and report the data pursuant to Section IV of the Outline. If Arbuckle is unable to obtain an easement from the landowner, Arbuckle will agree to pay the OWRB or USGS to monitor to Williams 92479 at an annual cost not to exceed \$1,600.00

d. **Southwest Well** is a new construction well proposed to be located on Section 26 or 27 of property owned by Warren, Warren and Looney. If the General Conditions identified in Section II are met, and the Southwest Well is successfully drilled, monitoring of the Southwest Well will commence no later than 12 months following the commencement of mining operations on the Site. The monitoring will be for groundwater depth level below the surface. The monitoring will be funded by Arbuckle and data will be provided pursuant to Section IV.

e. **Hancock Well** is located in Section 22 of property owned by Byron Hancock. If the General Conditions provided for in Section II are met, Arbuckle will commence monitoring of the Hancock prior to mining operations. The monitoring will be for groundwater depth level below the surface. The monitoring will be funded by Arbuckle and data will be provided pursuant to Section IV.

B. Spring Monitoring

1. **Clement/Holder Spring** is located on Section 24 of the Site. If the General Conditions outlined in Section II of the Plan are met, Arbuckle agrees to monitor the flow (gpm) from the Clement Spring prior to the commencement of mining operations on the site. The monitoring will be funded by Arbuckle and the data will be provided pursuant to Section IV.

C. Stream Flow Monitoring

1. **Mill Creek Near Mill Creek Gage** (USGS # 07331200) is located on Mill Creek near the town of Mill Creek in Section 2. The monitoring of the Mill Creek Gauge is conducted by the USGS. The Mill Creek Gage is part of the USGS Real Time Stream Flow Monitoring Program and is a matter of public record available at <http://waterdata.usgs.gov>. It is Arbuckle's understanding that Meridian is currently funding the Mill Creek Gage.

2. **Pennington Creek East of Mill Creek Gage** (USGS # 07331295) is located on Pennington Creek near the town of Mill Creek. Pursuant to the Meridian Agreement, Exhibit A Section 1.C, the Pennington Creek Gage is to be monitored by the OWRB and the cost associated with the monitoring is to be paid by Meridian. As of the submittal of the Plan the USGS is monitoring the Pennington Creek Gage in its Real Time Stream Flow Monitoring Program and is a matter of public record available at <http://waterdata.usgs.gov>. It is unknown at this time if Meridian reimbursing USGS for the monitoring of Pennington Creek. Pursuant to the Meridian Agreement, Meridian retains the obligation to fund the monitoring of the Pennington Creek Gage for two (2) years following the completion of Meridian's reclamation activities.

D. Climatological Monitoring

1. **Rain Gage** will be a new construction gage and placed on the Site in Section 24. If the General Conditions in Section II of the Plan are met, Arbuckle agrees to monitor the daily perception prior to the commencement of mining operations. The monitoring will be funded by Arbuckle and the data will be provided pursuant to Section IV.

IV. Data Reporting

A. Arbuckle agrees to provide the data collected in the Monitoring Program to the OWRB and the Oklahoma Department of Mines on a quarterly basis.

V. Water Source Accounting Program

A. Arbuckle will develop a Water Source Accounting Program which will meter the consumptively used pit water pursuant to the General Conditions set forth in Section II(C).

B. Contained within the Water Source Accounting Program will establish a preferential list of water sources to best conserve and protect the water in the Arbuckle-Simpson Aquifer.

OUTLINE OF PROPOSED MONITORING PROGRAM
ARBUCKLE AGGREGATES, LLC

EXHIBIT A

ARBUCKLE AGGREGATES' PROPOSED MONITORING PROGRAM

LE 2361 EXHIBIT A

Groundwater Monitoring

Inner Monitoring Wells		Parameter	Start	Funding	Location ID (OWRB)	Location ID (USGS)	Legal Description
Well 87495 (Kite)	Water level, depth below ground surface	Pre-mining	AA	87495	NA	SE,SE,NW 24-T1S-R4E	
Domestic Well (Holder Domestic Well)	Water level, depth below ground surface	Pre-mining	AA	NA	NA	NE,SE 23-T1S-R4E	
Office Well (new construction)	Water level, depth below ground surface	Pre-mining	AA	NA	NA	S/2,SW or SW,SE 24-T1S-R4E	
Shop Well (new construction)	Water level, depth below ground surface	Within the first 12 months of commencement of mining operations	AA	NA	NA	S/2,SW,NW 24-T1S-R4E	

Outer Monitoring Wells		Parameter	Start	Funding	Location ID (OWRB)	Location ID (USGS)	Legal Description
Well 85152 (Gay)	Water level, depth below ground surface	Ongoing**	Existing	85152	342745096504201	NW,NW,NW 24-T1S-R4E	
Well 86822 (Williams)*	Water level, depth below ground surface	Ongoing**/Pre-mining*	Existing/AA*	86822	NA	SW,NW,SW 19-1S-5E	
Well 92479 (Williams)	Water level, depth below ground surface	Ongoing**	Existing	92479	342633096494401	SE,SE,NE 25-1S-4E	
Southwest Well (new construction)*	Water level, depth below ground surface	Within the first 12 months of commencement of mining operations	AA	NA	NA	TBA	
Well 87475 (Hancock)*	Water level, depth below ground surface	Pre-mining	AA	87475	342655096522501	SE,SE,SW 22-T1S-R4E	

Spring Monitoring		Parameter	Start	Funding	Location ID (OWRB)	Location ID (USGS)	-Legal Description
Clement (aka Holder Spring)	Flow (gpm)	Pre-mining	AA	NA	342722096503701	SW,SW,NW 24-T1S-R4E	

Stream Flow		Parameter	Start	Funding	Location ID (OWRB)	Location ID (USGS)	Legal Description
Mill Creek @ Mill Creek		Stream flow / discharge (USGS Gauge)	Ongoing**	Existing	NA	7331200	SE,SE,SE 3-T2S-R4E
Pennington Creek near Mill Creek		Stream flow / discharge (USGS Gauge)	Ongoing**	Existing	NA	7331295	SE SE SE 34-T1-S-R5

Climatological		Parameter	Start	Funding	Location ID (OWRB)	Location ID (USGS)	Legal Description
Rain Gauge	Daily total precipitation	Pre-mining	AA	NA	NA	NA	S/2,SW or SW,SE 24-T1S-R4E

Water Source Accounting			
Parameter		Funding	Comment
Quarry Pit	Metered: Flow monitor	AA	Surface water to be differentiated from ground water based on hydrology engineering, as provided in 785:30-13-10 (c) (OWRB-ODOM Proposed Pit Water language subject to final approval and promulgation)
OWRB/Holder SW Diversion Point	Metered: Flow monitor	AA	
OWRB/Hancock SW Diversion Point	Metered: Flow monitor	AA	
OWRB/Other (TBD) SW Diversion Points & Permit GW Rights	Metered: Flow monitor	AA	

Water Management Plan

1. Seek and comply with all necessary and required state & federal permits and licenses.
2. Develop Best Management Practices (BMPs) to protect water quality--to be adapted and implemented as necessary or required by permit (subject to AA discretion).
3. Adopt water conservation BMPs when beneficial and prudent (subject to AA discretion).
4. Source water preferentially as outlined in the Water Source Accounting Section.

Reporting

Summaries of raw data will be reported quarterly to the ODM and OWRB. Reported data would include information from AA funded monitoring sites-- ground water levels, spring flow, and climatological information

Footnotes:

* Subject to AA monitoring access being granted by landowner and ODM mining permit approved.

**Ongoing refers to a previously coordinated monitoring effort between state, federal and another mining company adjacent to the Arbuckle Aggregates quarry property. Data is currently collected and publicly available.

OUTLINE OF PROPOSED MONITORING PROGRAM
ARBUCKLE AGGREGATES, LLC

EXHIBIT B

DRAFT

Legend

- AA Monitoring Wells
- Existing Monitoring Wells
- Spring
- Existing Stream Gages
- Aggregate Aggregates
- Hancock - Lease

Scale

0 0.25 0.5 0.75 1 Miles

North Arrow

Map Title

Arbuckle Aggregates
Mill Creek Quarry LE 2361
Monitoring Program Location Map - Exhibit B

Drawn By DJS
Date 11/1/2010
Scale 1" = 1 Mile

☒ AA Monitoring Wells
☒ Existing Monitoring Wells
☒ Spring
☒ Existing Stream Gages
☒ Arbuckle Aggregates
☐ Hancock - Lease

Drawn By: DDS
Date: 1/14/2011
Asst: NALP 2010

Arbuckle Aggregates
Mill Creek Quarry LE-2361
Monitoring Program Location Map - Exhibit B

OUTLINE OF PROPOSED MONITORING PROGRAM
ARBUCKLE AGGREGATES, LLC

EXHIBIT C

STIPULATION FOR WITHDRAWAL OF PROTESTS

This Stipulation is made and entered into between Meridian Aggregates Company, A Limited Partnership ("Meridian"), the United States Department of the Interior, National Park Service ("NPS") and United States Fish and Wildlife Service ("FWS") (collectively "the Parties").

RECITALS

- A. Meridian has determined that the initial annual water requirement for its North Troy Quarry is 1,425 acre-feet. Meridian has obtained a permit to use surface or stream water from the OWRB, which allows Meridian to divert up to 1,425 acre-feet per year from Mill Creek. Meridian intends to pump groundwater from a production well as a supplemental water source for its North Troy Quarry in an amount not to exceed 1,400 acre-feet per year. Meridian will only use groundwater from the production well when the commercially usable water¹ in the process water ponds, the commercially usable water from the mine pit, and commercially usable water from Mill Creek is insufficient to supply the necessary volume of water for Meridian's mining, processing, and related dust suppression operations.
- B. On November 18, 2002, Meridian filed Application No. 2002-602 (the "Application"), with the Oklahoma Water Resource Board ("OWRB") for a groundwater permit to withdraw 1,400 acre-feet per year.
- C. The NPS and the FWS filed timely protests to the granting of a permit to Meridian.

¹ "Commercially usable water" is water that is of sufficient quality to be used for Meridian's mining, processing, and related dust suppression activities and that is physically available when needed to support these activities.

- D. The NPS and the FWS assert that groundwater withdrawals from the Arbuckle-Simpson aquifer may adversely effect springs and streams emanating from the Arbuckle-Simpson aquifer and are desirous of working in a cooperative manner with the Meridian to protect those springs and streams.
- E. The OWRB has set an administrative hearing on the protests of the NPS and FWS and other Parties commencing December 14, 2005.
- F. The Parties acknowledge that other entities and individuals have lodged protests to the Application, but such additional protestants are not Parties to or in any way bound or prejudiced by this Stipulation.
- G. The Parties agree that the preferred conceptual approach for protecting springs and streams emanating from the Arbuckle-Simpson aquifer from possible unreasonable adverse effects from groundwater pumping by Meridian is through the use of monitoring and management of groundwater pumping. The common goal of the Parties is to manage the development of the Arbuckle-Simpson aquifer as a water resource without causing unreasonable adverse effects to springs and streams emanating from the Arbuckle-Simpson aquifer. Groundwater withdrawals and the effects of pumping need to be properly monitored and managed to avoid adverse effects to springs and streams emanating from the Arbuckle-Simpson aquifer. The Parties have determined that it is in their best interests to cooperate in the collection of additional hydrologic and hydrogeologic information pursuant to the monitoring and management plan as set forth in Exhibit A to this Stipulation.
- H. The Parties desire to resolve the issues raised by the protests according to the terms and conditions contained herein.

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, the Parties do agree as follows:

1. The NPS and FWS hereby expressly agree to withdraw their protests to the Application.
It is expressly understood that this Stipulation is binding only upon the Parties hereto and their successors, transferees and assigns, and shall not bind or seek to bind or prejudice any other protestants.
2. In the event the OWRB grants Application No. 2002-602 and authorizes Meridian's groundwater use in an amount of 700 acre-feet per year or less, and at the time Meridian's Temporary Groundwater Use Permit becomes final and is no longer subject to appellate review, the Parties agree to implement Parts I.1. and II. of the Monitoring and Management Plan, attached hereto as "Exhibit A", which is expressly incorporated into this Stipulation as if set forth in full herein. Meridian agrees to refrain from withdrawing any groundwater for beneficial use from the production well prior to the implementation of Parts I.1. and II of the Monitoring and Management Plan.
3. In the event the OWRB grants Application No. 2002-602 and authorizes Meridian's groundwater use in an amount of 701 acre-feet per year or more, and after Meridian's Temporary Groundwater Use Permit becomes final and is no longer subject to appellate review, the Parties agree to implement Parts I.2. and II. of the Monitoring and Management Plan, attached hereto as "Exhibit A", which is expressly incorporated into this Stipulation as if set forth in full herein, within six months after the TRP determines that Meridian's withdrawal of groundwater from the production well will exceed 700 acre-feet per year.

4. In the event the OWRB denies Application No. 2002-602 or in the event Meridian's right to take and use groundwater from the production well is terminated in the future, then this Stipulation shall be null and void, and Meridian shall have no further obligations under the Monitoring and Management Plan attached hereto as "Exhibit A."
5. This Stipulation does not waive any authorities of the NPS and FWS or the United States, including any other agency or bureau not specified in this Stipulation, nor relieves Meridian from complying with any federal laws, including, but not limited to, the National Environmental Policy Act, the Endangered Species Act, the Federal Land Policy and Management Act, and any and all rules and regulations thereunder. It is the expressed intention of the Parties that by entering into this Stipulation, Meridian, NPS, FWS, and the United States are waiving no legal rights of any kind, including but not limited to protesting the revalidation of Meridian's Temporary Groundwater Use Permit.
6. The Parties expressly acknowledge that the OWRB has, pursuant to both statutory and case law, broad authority to administer groundwater resources in the State of Oklahoma and, furthermore, that nothing contained in this Stipulation shall be construed as waiving or in any manner diminishing such authority. The Parties expressly acknowledge that Meridian contends that the OWRB does not have authority or jurisdiction to regulate use of groundwater in the mine pit. Nothing contained in this Stipulation shall be construed as adversely affecting or waiving Meridian's contention in this regard.
7. The Parties agree that a copy of this Stipulation shall be submitted to the OWRB prior to the commencement of the administrative proceedings scheduled to begin on December 14, 2005. At that time, the Parties shall request, either in writing, or on the record at the beginning of the scheduled proceeding, that the OWRB include the monitoring and

management terms contained in Exhibit "A" to this Stipulation as part of the permit terms and conditions, in the event that it grants Application No. 2002-602, in total or in part.

The NPS and FWS shall attend the hearing to offer evidence in support of this Stipulation, but will present no evidence, issues or statements that are adverse to the interests of the Meridian. The NPS and FWS shall not aid any other protestant in any proceeding before the OWRB and/or any Court associated with the issuance of a temporary permit pursuant to Application No. 2002-602.

8. If notice is required to be sent by the Parties, the addresses are as follows:

If to NPS and FWS, then as follows:

Chief, Water Right Branch
National Park Service
1201 Oak Ridge Drive
Fort Collins, CO 80525

Chief, Branch of Water Resources, Southwest Region
U.S. Fish and Wildlife Service
P.O. Box 1306
Albuquerque, NM 87103

If to Meridian:

Environmental Manager
Marin Marietta Materials Southwest, Ltd.
The Fountainhead Building
8200 IH-10 West, Suite 600
San Antonio, TX 78230

9. Any party hereto may transfer or assign its interest in the water rights here involved. Any and all transferees and assignees shall be bound by the terms and conditions of this Stipulation. As a condition to any such transfer or assignment, the transferee and/or assignee shall execute a stipulation expressly stating it is bound to all of the terms and conditions of this Stipulation.

10. This Stipulation shall be governed in accordance with the laws of the State of Oklahoma to the extent not inconsistent with federal law.
11. It is the intention of the Parties hereto that the OWRB shall be kept informed of all activities set forth in the monitoring and management plan attached hereto as Exhibit "A" in the same fashion as are the Parties hereto.
12. By entering into this Stipulation, the federal bureaus do not become a party to any proceeding other than the protest proceeding referenced above or waive their immunity from suit or consent to or acknowledge the jurisdiction of any court or tribunal. Nothing in the Stipulation shall affect any state permitted or federal-reserved water rights of the United States or the United States on behalf of any Indian Tribe or individual Indian and NPS and FWS by entering into this Stipulation do not waive or prejudice any such rights. Meridian, NPS and FWS reserve all legal rights, of any kind, they possess pursuant to or derived from Executive Orders, Acts of Congress, judicial decisions, or regulations promulgated pursuant thereto. No party waives its rights to seek relief in any appropriate forum of its choice not expressly prohibited by this Stipulation.
13. Any commitment of funding by NPS and FWS in this Stipulation or otherwise is subject to appropriations by Congress.
14. This Stipulation may be amended by mutual agreement of the Parties.
15. This Stipulation sets forth the entire agreement of the Parties and supersedes all prior discussions, negotiations, understandings or agreements. No alteration or variation of this Stipulation shall be valid or binding unless contained in an amendment in accordance with paragraph 14.

16. The terms and conditions of this Stipulation shall be binding upon and inure to the benefit of the Parties hereto and their respective personal representatives, successors, transferees and assigns.
17. The Parties may execute this Stipulation in two or more counterparts, which shall in the aggregate be signed by all Parties; each counterpart shall be deemed an original as against any party who has signed it.
18. Other entities may become Parties to this Stipulation by mutual assent of the Parties.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the date(s) written below.

Date: 12-6-05 UNITED STATES DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

By Kenny H. Hines

Title: Manager, Tishomingo Nat'l Fish Hatchery

Date: 12/05/05 UNITED STATES DEPARTMENT OF THE INTERIOR

National Park Service

By Constance A. Rudd

Title: Superintendent

Date: _____

Meridian Aggregates Company,
A Limited Partnership

By: Meridian Aggregates Investments, L.L.C.
Its General Partner

By: Martin Marietta Materials, Inc.,
Its Managing Member



By: Bruce A. Vaio
Title: Vice President

ATTEST:

EXHIBIT A

MONITORING AND MANAGEMENT PLAN FOR FUTURE PERMITTED GROUNDWATER DEVELOPMENT

The purpose of this plan is to describe the obligations of Meridian Aggregates Company, A Limited Partnership (Meridian) and the Protestants (the National Park Service and the United States Fish and Wildlife Service) associated with the monitoring of Meridian's permitted groundwater right. It also describes the format, scope, and responsibilities of a Technical Review Panel (herein after referred to as TRP). Meridian's obligations hereunder shall become effective at the time Meridian's Temporary Groundwater Use Permit becomes final and is no longer subject to appellate review; provided however, Meridian agrees to refrain from withdrawing any groundwater for beneficial use from the production well prior to the implementation of Parts I.1. and II of the Monitoring and Management Plan.

I. Monitoring Requirements

1. In the event the OWRB grants Application No. 2002-602 and authorizes Meridian's groundwater use in an amount of 700 acre-feet per year or less, and at the time Meridian's Temporary Groundwater Use Permit becomes final and is no longer subject to appellate review, Meridian's monitoring requirements shall be as follows:

A. Production Well

- Meridian will ensure that the Meridian production well is metered continuously for discharge. Water level data will be collected continuously as is feasible. Prior to withdrawing groundwater from the production well for beneficial use in its operation of the North Troy aggregate mine, Meridian will conduct one aquifer test in the production well after consulting with the OWRB and the TRP regarding the pumping rate and duration of the test.

B. Monitoring Wells

- During the term of the hydrologic study of the Arbuckle-Simpson aquifer currently being conducted by the Oklahoma Water Resource Board (OWRB), Meridian agrees to cooperate in the monitoring of any and all monitoring wells in the vicinity of the production well. When performing the aquifer test in the production well, Meridian, in consultation with the OWRB and the TRP, will utilize nearby observation wells to determine aquifer characteristics.
- Following the completion of the OWRB hydrologic study of the Arbuckle-Simpson aquifer and for the duration of active mining operations (including temporary suspensions of mining operations and for a two (2) year period following the completion of reclamation activities) of the North Troy aggregate mine, Meridian shall reimburse the OWRB for reasonable costs [not to exceed

\$14,950 in year one and \$4,800 in the following years]² directly attributable to the continuous monitoring of water levels in the following wells: Gay well (OWRB #85152), Williams well (OWRB # 86822), and OWRB #92479. The location of these wells is depicted on Attachment A.1. The TRP may terminate or suspend the monitoring or modify the frequency of monitoring of any and/or all of the afore-mentioned wells at any time.

C. Streamflow and Springflow

- For the duration of active mining operations (including temporary suspensions of mining operations and for a two (2) year period following the completion of reclamation activities) of the North Troy aggregate mine, Meridian shall reimburse the OWRB for reasonable costs [not to exceed \$24,000 in year one and \$6,000 in the following years] directly attributable to the installing, equipping, and maintaining a continuous surface water measurement device at the existing surface water measurement site on Pennington Creek that is downstream of Pilot Springs and upstream of the Tishomingo National Fish Hatchery. The location of this existing surface water measurement site is depicted on Attachment A.1. The TRP may terminate or suspend the monitoring or modify the frequency of monitoring of the afore-mentioned continuous surface water measurement site at any time.

D. Water Chemistry

- Meridian shall reimburse the OWRB for reasonable costs [not to exceed \$15,300]² directly attributable to the collection and analysis of one (1) water quality sample at the production well and the following monitored wells and springs: Mize well (OWRB #86226), Gay well (OWRB #85152), Williams well (OWRB # 86822), OWRB #85145, OWRB # 92479, OWRB #92339, Colvert Springs, and Pilot Springs. Samples will be analyzed for major ions, trace elements and the stable isotopes of hydrogen and oxygen. Samples will be collected once following the aquifer testing of the production well.

E. Reporting

- All monitoring data collected by any party under or as described in this plan shall be fully and cooperatively shared among the TRP and the OWRB.

2. In the event the OWRB grants Application No. 2002-602 authorizing Meridian's groundwater use in an amount of 701 acre-feet per year or more, and after Meridian's

² This amount shall be adjusted each May 1 to reflect the net percentage change in the Consumer Price Index published by the U.S. Department of Labor, Bureau of Labor Statistics, during the immediately preceding calendar year.

Temporary Groundwater Use Permit becomes final, and is no longer subject to appellate review, and six months after the date that the TRP determines that Meridian's withdrawal of groundwater from the production well will exceed 700 acre-feet per year, Meridian's monitoring requirements shall be as follows:

A. Production Well

- Meridian will ensure that the Meridian production well is metered continuously for discharge. Water level data will be collected continuously as is feasible.

B. Monitoring Wells

- During the term of the hydrologic study of the Arbuckle-Simpson aquifer currently being conducted by the Oklahoma Water Resource Board (OWRB), Meridian agrees to cooperate in the monitoring of any and all monitoring wells in the vicinity of the production well.
- Following the completion of the OWRB hydrologic study of the Arbuckle-Simpson aquifer and for the duration of active mining operations (including temporary suspensions of mining operations and for a two (2) year period following the completion of reclamation activities) of the North Troy aggregate mine, Meridian shall reimburse the OWRB for reasonable costs [not to exceed \$23,100 in year one and \$4,800 in the following years]² directly attributable to the continuous monitoring of water levels in the following wells: Mize well (OWRB #86226), Gay well (OWRB #85152), Williams well (OWRB # 86822), OWRB #85145, OWRB #92479, and OWRB #92339. The location of these wells is depicted on Attachment A.2. The TRP may terminate or suspend the monitoring or modify the frequency of monitoring of any and/or all of the afore-mentioned wells at any time.

C. Streamflow and Springflow

- For the duration of active mining operations (including temporary suspensions of mining operations and for a two (2) year period following the completion of reclamation activities) of the North Troy aggregate mine, Meridian shall reimburse the OWRB for reasonable costs [not to exceed \$24,000 in year one and \$6,000 in the following years]² directly attributable to the installing, equipping, and maintaining a continuous surface water measurement device at the existing surface water measurement site on Pennington Creek that is downstream of Pilot Springs and upstream of the Tishomingo National Fish Hatchery. The location of this existing surface water measurement site is depicted on Attachment A.2. The

² This amount shall be adjusted each May 1 to reflect the net percentage change in the Consumer Price Index published by the U.S. Department of Labor, Bureau of Labor Statistics, during the immediately preceding calendar year.

TRP may terminate or suspend the monitoring or modify the frequency of monitoring of the afore-mentioned continuous surface water measurement site at any time.

- For the duration of active mining operations (including temporary suspensions of mining operations and for a two (2) year period following the completion of reclamation activities) of the North Troy aggregate mine, Meridian shall reimburse the OWRB for reasonable costs [not to exceed \$24,000 in year one and \$6,000 in the following years]² directly attributable to the installing, equipping, and maintaining a continuous surface water measurement site at the existing surface water measurement site located downstream of Colvert Springs on Mill Creek. The location of this existing surface water measurement site is depicted on Attachment A.2. The TRP may terminate or suspend the monitoring or modify the frequency of monitoring of the afore-mentioned continuous surface water measurement site at any time.

D. Reporting

- All monitoring data collected by any party under or as described in this plan shall be fully and cooperatively shared among the TRP and the OWRB.
3. Nothing herein shall be construed to obligate Meridian to do anything it is not authorized by law to do in the performance of its obligations hereunder.

II. Management Requirements

A. Goal

- The common goal of the Parties is to manage the development of the Arbuckle-Simpson aquifer as a water resource for Meridian's mining, processing, and related dust suppression activities without resulting in unreasonable adverse effects to the springs and streams emanating from the Arbuckle-Simpson aquifer. The Parties agree that decisions about the development of the Arbuckle-Simpson aquifer as a water resource should be based on the best scientific information available and the Parties will collaborate on technical data collection and analysis.

B. Groundwater Use

- NPS and FWS have no objection to the granting by OWRB of a groundwater permit to Meridian in the amount of 1,400 acre-feet per year. Notwithstanding the foregoing, during the first year of production of aggregate in commercial quantities from its North Troy Quarry, Meridian agrees to voluntarily limit its use of groundwater from any well

² This amount shall be adjusted each May 1 to reflect the net percentage change in the Consumer Price Index published by the U.S. Department of Labor, Bureau of Labor Statistics, during the immediately preceding calendar year.

permitted pursuant to Application No. 2002-602 to no more than 700 acre-feet. This voluntary limitation shall increase proportionately each year up to 1,400 acre-feet per year in the fifth year of production of aggregate in commercial quantities from the North Troy Quarry.

- Meridian agrees to meter all groundwater withdrawals from the production well made pursuant to the permit issued under Application No. 2002-602 and report the same monthly to the TRP.
- Meridian will only use groundwater from the production well when the commercially usable water³ in the process water ponds, the commercially usable water from the mine pit, and the commercially usable water from Mill Creek is insufficient to supply the necessary volume of water for Meridian's mining, processing, and related dust suppression operations.
- Meridian will meter the water pumped from the mine pit and calculate the volume of such water that constitutes groundwater utilizing a formula developed by the TRP that distinguishes the groundwater from surface water runoff and rainfall. Meridian will report this data monthly to the TRP.
- Meridian will measure the amount of water diverted for beneficial use from Mill Creek and report the same monthly to the TRP.
- Meridian will measure the amount of precipitation that occurs at the North Troy Quarry and report the same monthly to the TRP.

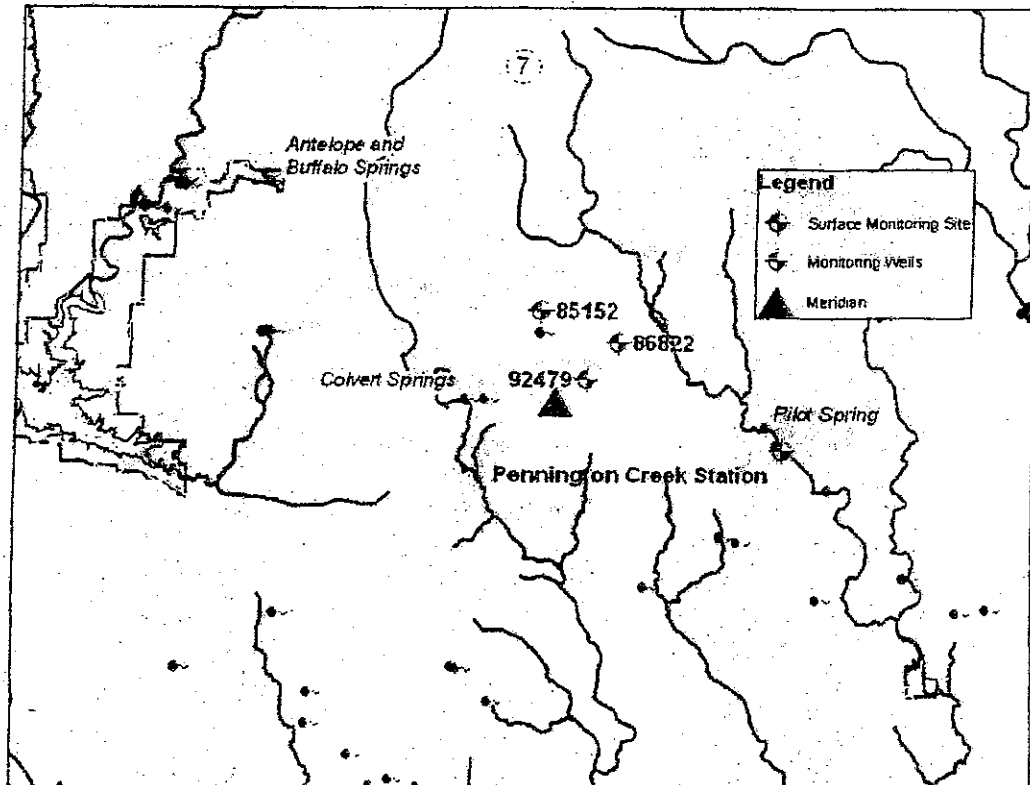
C. Technical Review Panel

- The Parties will create and convene a TRP within sixty (60) days after Meridian's Temporary Groundwater Use Permit becomes final and is no longer subject to appellate review. Membership will include Meridian, the National Park Service, and United States Fish and Wildlife Service. The Parties mutually agree to invite a representative of the OWRB to participate as the chair of the TRP. The Parties may mutually agree to invite other entities to participate in the TRP as appropriate. The TRP shall meet at least once a year. The Parties will agree upon by-laws to govern the activities of the TRP.
- The purpose of the TRP is to:
 - 1) provide a forum for scientific/technical review;
 - 2) disseminate data to the OWRB;
 - 3) share information regarding modeling efforts and model results;
 - 4) identify needs for additional data collection and scientific investigations;

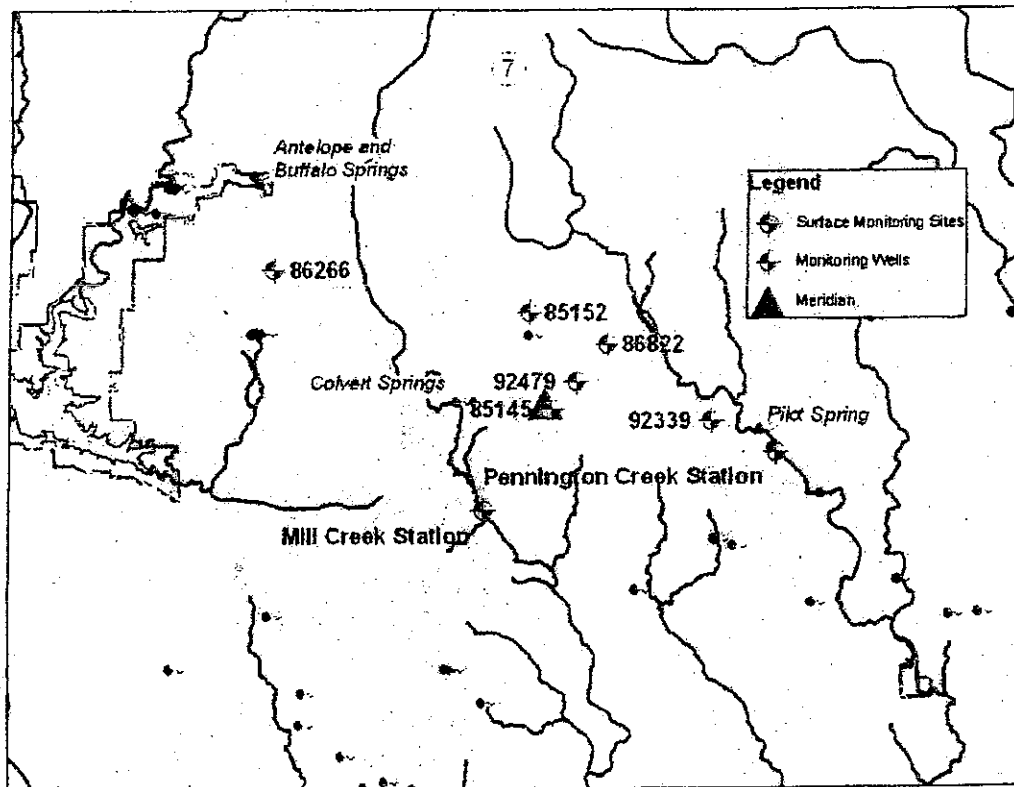
³ "Commercially usable water" is water that is of sufficient quality to be used for Meridian's mining, processing, and related dust suppression activities and that is physically available when needed to support these activities.

- 5) discuss values for monitored variables (water levels, spring discharges, etc.) that, if exceeded, are of concern to the Parties;
- 6) provide a forum for discussion to help develop agreement for prescribed courses of action on technical issues;
- 7) recommend the extent and frequency of monitoring, including but not limited to reductions and/or increases in the monitoring required by this monitoring and management plan;
- 8) recommend replacement monitoring sites as necessary to compensate for unforeseen monitoring problems; and,
- 9) recommend the reallocation of established financial commitments by Meridian for groundwater and surface water monitoring to meet identified needs for additional data collection and scientific investigations, changes in the extent and frequency of monitoring, and the replacement of previously-designated monitoring sites.

Additional meetings of the TRP will be held if requested by any party if monitoring data results in any party developing a reasonable scientific assessment that the springs and streams emanating from the Arbuckle-Simpson aquifer are being or could be adversely effected from the groundwater pumping for beneficial use from the production well permitted pursuant to Application No. 2002-602. Any party requesting such additional meetings will provide all other parties their scientific assessment prior to any such meeting to ensure appropriate scientific review by all other parties. The TRP will review all available data, investigate possible causes, and, if appropriate, suggest a proposed course of action. If there are (1) different interpretations regarding aquifer response and/or the significance of that response to the springs and streams emanating from the Arbuckle-Simpson aquifer; or (2) different opinions on the proposed course of action, the Parties will jointly agree to conduct additional data collection or modeling at their own expense directed at resolving the different interpretations or opinions, if feasible. If that is not successful, the TRP participants will refer the issue to their respective decision-makers. Meridian will inform the OWRB of all mutually agreed upon courses of action. Nothing herein limits or changes the OWRB's authority and any party can petition the OWRB to consider any issue.



Attachment A. 1. Location of monitoring wells and surface water monitoring sites if the permit is granted for 700 acre-ft/yr or less.



Attachment A. 2. Location of monitoring wells and surface water monitoring sites if the permit is granted for 701 acre-ft/yr or more.

NOTICE OF MAILING

A true and correct copy of the foregoing Findings of the Conference Officer and Notice of Departmental Decision was mailed via certified mail, return receipt requested, or was delivered by e-mail on this 14th day of **November, 2011**, with postage prepaid to the following:

Gary Allen
142 Decker Rd.
Wichita Falls, TX 76310

Monta Brown
9379 W. Griffin Rd.
Mill Creek, OK 74856

David Curtis
903 N. Kemp
Tishomingo, OK 73460

Leroy Allen
1404 E. Pontotoc Rd.
Stonewall, OK 74871

Jerry Brown
3358 Brenda Brown Rd.
Mill Creek, OK 74856

Jim Davenport
101 W. Morrow Rd.
Tishomingo, OK 73460

Julie Altman
P. O. Box 1209
Ardmore, OK 73402

Bill & Kathryn Brunk
P.O. Box 280
Fittstown, OK 74842

Emily Dolina
2938 City View Ct.
Norman, OK 73071-6899

Kathy J. Angel
8305 S. Project Lane
Milburn, OK 73450

Phyllis Buckner
105 N. Byrd St.
Tishomingo, OK 73460

Joe Duncan
2323 Buzzard Rd.
Connerville, OK 74836

Barney Austin
1105 Oak Meadow Dr.
Dripping Springs, TX 78620-4078

Carol Burklin
703 N. Johnston
Tishomingo, OK 73460

Dawatha Easterling
3995 N. US Hwy 377
Ada, OK 74820

Terry L. & Retha E. Beals
4001 Golf Course Rd.
Tishomingo, OK 73460

Tommy Burns
1200 W. Seven Springs Rd.
Tishomingo, OK 73460-4406

Eddie Easterling
HCR 64, Box 241
Pontotoc, OK 74820

Kevin Blackwood
P. O. Box 2352
Ada, OK 74821

Geoff Canty
3201 S. Berry
Norman, OK 73072-7436

Rosanna Easterling
3999 N. US Hwy 377
Ada, OK 74820

Bert Bledsoe
23350 CR 1590
Stonewall, OK 74871

Fred Chapman
P. O. Box 1754
Ardmore, OK 73402

Joe Elrod
6101 OK Highway 22 West
Tishomingo, OK 73460

Roy Blevins
P. O. Box 46
Connerville, OK 74836-0046

Bruce Noble/Jennifer Buck
Chickasaw Natl Rec. Area
1008 W. Second Street
Sulphur, OK 73086

Melvin Farmer
8430 W. Rocky Rd.
Mill Creek, OK 74856

Boy Scouts of America
c/o Travis Flood
4500 Bullett Prairie Road
Tishomingo, OK 73460

Phil Converse
P. O. Box 245
Tishomingo, OK 73460

Amy Ford
889 Knight Drive
Durant, OK 74701

Novice Boyd
3000 Golf Course Rd.
Tishomingo, OK 73460

Susan Cravatt
P.O. Box 144
Tishomingo, OK 73460

Jan Frederick
1301 Redbud Lane
Durant, OK, 74701

Josh Brecheen
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