ALABAMA SURFACE MINING COMMISSION

INFORMAL CONFERENCE

SHEPHERD BEND MINING, LLC
P-3945, SHEPHERD BEND MINE
PERMIT APPLICATION

DATE

THURSDAY, AUGUST 19, 2010
6:30 P.M.

LOCATION

BEVILL STATE COMMUNITY COLLEGE
SUMITON, ALABAMA

HEARD BY: RANDALL C. JOHNSON, DOCTOR
DIRECTOR
ALABAMA SURFACE MINING COMMISSION

RECORDED BY: ANN R. MILES
HEARINGS REPORTER
DIVISION OF HEARINGS AND APPEALS
ALABAMA SURFACE MINING COMMISSION

This informal conference was held at 6:30 P.m. on the 19th day of August 2010, at the Bevill State Community College, Sumiton, Alabama. The following is a transcript of the proceedings of said informal conference, including testimony and comments by the representatives and citizens.

A P P E A R A N C E S

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FOR THE PUBLIC:

SEE ATTACHED SIGN-IN SHEET

INTRODUCTION

DR. JOHNSON: My name is Randall Johnson; I am the director of the Alabama Surface Mining Commission. We are here tonight to take comments regarding the permit application of Shepherd Bend, LLC, the Shepherd Bend Mine, permit application number P3945. Notice of this informal conference was published in the Daily Mountain Eagle on July 31, 2010. The law allows or provides for public participation in this permitting process by allowing each person who has an interest that may be adversely affected by the proposed mine operation to have an opportunity to speak his or her objections as in the case maybe on behalf of the mining operation or the mining applicant. Anyone wishing to be heard will be given an opportunity to speak. We reserve the right to limit the length of each presentation in order to allow the most parties an opportunity to speak. It doesn't look like we may have that problem tonight. We're required by law to record all the comments that are made at this conference. It's important that when you come up here to speak that you give your name, give your address and give your objections as clearly as you can. We stress that this is just an informal conference. It is not a trial and it's not a formal hearing. It is a chance to say what is on your mind, to express your concerns about this proposed operation, and tell us how you object to the permit. Limit your conversation and your comments to this application specifically. A copy of this transcript will be typed out and will be forwarded to our permit manager who will give it to all of our review staff and they will review all of your comments before making their decisions on their individual parts of the permit application. At the time, of a final decision by this agency on this permit, we will be mailing out postcards or sending out email to all the persons who have made contact with us about this permit application. That postcard will direct you to our web site at http://surface-

mining.alabama.gov where you can go and review the decision. We will address your comments in that permit decision document. You will be able to make copies of that decision on your printer or if you do not have access to a computer, you can make a written request to us for a copy. Anyone wanting a CD copy of what is being recorded here tonight must make a request in writing. There's a cost of $20.00 dollars for a transcript. For those of you who are going to our web site you may want to go ahead and make a copy of that decision as quickly as you can because it will only be there for thirty days. Thirty days is the time frame after the decision is allowed for someone to appeal our decision to our Division of Hearings and Appeals. First, I would like to thank Dean Charles Murray of Bevill State for graciously allowing us to have this here. We appreciate Ken Russell for helping organize the room, getting all of the speaker systems and things set up for us. We're providing you with a card to fill as you came in. We're required by law to give you notice in writing if you attend this conference. If you do not want your name and address or email to be apart of public record, you do not have to fill it out, but if we don't have it we can't send you a notice so that's the caveat to that. The permit we're considering today…Can I have the lights dim please? While we're doing that let me say I'm not a proponent of this operation nor am I an opponent of it. I'm here to listen to your comments and to provide you with some information about it. That's a little bit dim. Can we go to the permit map Brandon please? Okay, that's a little bit better. The permit we're considering here is a 286-acre surface mine located in the Shepherd Bend area of the Mulberry Fork River. Access to the mine is, I think, primarily from Reed's Ferry Road. There are 5 mining increments proposed on this mining operation and there are 4 pollution abatement facilities proposed. The first increment that's going to be mined if it's issued is a 38 acre increment. It has 2 sediment ponds, 34 acres for mining and also some roads involved. In the first increments, lands are owned by Alawest.

These lands were leased to Shepherd Bend LLC 4/22/2010. Mineral rights for this first increment are split ownership. SBLLC owns 4/5 of the mineral rights by deed granted from Drummond Company on 4/22/2010. Allendale Land Co. owns 1/5 of the mineral rights in Increment 1. A lease is still pending for those rights. I might point out that we will not issue this permit until those rights are obtained and proof of that has been given to us. Other mining increments have mining rights pending or not yet obtained. Owners include the University of Alabama, Soterra and Dorothy Bullocks. There is a lease in one of the other increments that has been executed with this company and it's owned by William and Christine Heaton.

The applicant has an NPDES permit from the Alabama Department of Environmental Management that's covering a much larger area than this mine site. I believe it was 1770 acres. We're not considering that area of mining here today, only this 286-acre permit. That NPDES permit authorizes four point source discharge outfalls that are located on this permit. (Dr. Johnson points to the map on the screen.). The applicant has an authorization under a Nationwide 21 Permit from the US Army Corps of Engineers for impacts to waters of the US namely for the construction of 4 sediment basins or pollution control facilities. These will be impacting 1 acre of jurisdictional ephemeral stream. The permittee has applied for an MSHA I.D. but that is still listed as pending. Brandon can we have the full photo 1 please? I apologize for the dimness of these…when this aerial photograph was taken there was apparently a lot of cloud cover in the summer of 2009. There are three existing mine permits or mine areas that are located in the vicinity one of these is the Horse Creek Mine, which is located north of Corridor X. One is the Red Star Mine permit, which is located directly across the river from the Shepherd Bend permit application site. The Quinton Mine permit, which is located south of all of theses mines on the river. The premining land use of the area is 278 acres identified as undeveloped

logging, no management cleared for commercial/industrial and 8 acres permanent water impoundments. The post mining land use proposed after mining will be 280 acres undeveloped land or no current use and 6 acres of permanent water impoundments. We're here today to take your comments on this permit and this permit alone. So, please confine your comments to this permit and to the context of what has been sent in to us.

I would like to introduce my staff members who are here tonight. Most of them are on the permit review staff. The first person I would like to introduce is Ann Miles… if you would raise your hand please. She is my executive assistant and she'll be recording your comments and later transcribing them. Mark Woodley is our permit manager for this particular application and coordinates the review along the review staff. Christa Marks is our staff geologist\hydrologist she reviews those portions of the application. Michael Harrison is one of our registered professional engineers. He reviews design plans for pollution control facilities, roads, and the operation plan portions of the application. Brandon Hamilton reviews the reclamation plan and establishes performance bond amounts for the permit. Bill Kitchens is a geologist who reviews topsoil plans and blasting plans. Robert Allen is our penalty assessment officer and he reviews compliance history of the permittee or the applicant. I personally review biological, cultural and historic resource parts of the application. Milton McCarthy is our Assistant Attorney General. He's our resident attorney. Carla Lightsey is the Chief of Division of Surface Mining Control and Reclamation. She is in charge of our group permitting and review staff. She supervises them. Gail Thompson is an inspection supervisor. She's at the front desk right now; she's getting those cards taken up. She will be back here in a minute. Finally, Brandon Dowdey is our IT Specialist and he's on the computer tonight.

After the close of this hearing, all comments will be reviewed by our staff. We have to render some kind of a decision within 60 days of the close of this hearing. The reviewers will complete their work, which they have started. They started when it was turned in to us. They make recommendations to me for issuance, denial, or modification of the application. If modification is required, within that 60-day period we will send the applicant a notice of that and tell them what modifications have to be made. If the permit is issued or denied we will prepare a written detailed decision document which outlines the reasons for our decision. In all cases our decision will be posted on our website and notification will be sent to all parties to this conference and who ever submitted written comments prior to the conference. Any appeal of our decision must be made to our Division of Hearings and Appeals within 30 days of the notice of our decision. Now, I'm going to just let you raise your hand to come up and talk. Please please be careful there are a lot of wires, there's particularly a wire here that leads to a microphone. Try to stay on this side (pointing to the right side of the podium). There are wires in front so please be careful and don't trip and fall. I don't want to have to have anybody to be taken to the hospital tonight. So, that being said I'll like to see a show of hands for the first person who would like to speak. Okay. I got you and him back here first. He raised his hand before you did. I'm sorry, right behind you. Please don't forget to state your name, your address in addition to your comments. One more thing sorry, if you have any copies of written comments that you want to submit to us tonight give them to us before you leave the podium.

MR. RANDY PALMER: Thank you. I would like to thank the commission for scheduling this hearing. I certainly appreciate all of you for being here too and your interest. Here is a comment that somebody just gave me. My name is Randy Palmer. I am a native of Cordova. I have since moved to Tuscaloosa, Alabama. My address is 67 Cherokee Hills,

Tuscaloosa, Alabama 35404. I'm a certified public accountant. As I said, I'm a native of Cordova. I was involved in some community planning projects and process prior to moving. Ever since we found out that there was an RFP came out on this particular project back, I guess in late 2006 early 2007, we were concerned about it because it was contrary to what our idea of the plan…you know that area was. As you know there's a transportation corridor… a major transportation corridor coming through. Corridor X, I-22 and the city of Cordova was having meeting putting 10% of its population or better into… and into planning sessions to find out a way to bring our community back to prosperity and how to rehab it. You know we had lost a lot of industry; we had lost a lot of jobs in the '60's. We saw the interstate highway and the natural resources like the Black Warrior River as something that would help us come back. So we put together, with the help of experts, a comprehensive community plan called Building Upon A Place for a Sustainable Future. That won a state award for best plan. Now, when we saw this and the proximity of this mine… this proposed mine, the 286 acres, as well as the 1773 acres that would make up the entire project it certainly got our attention. Because at the interchanges…you know if you go to Trussville, if you go to Chelsea, if you go to Calera, or if you go to Madison, Huntsville, or up in there Decatur along those Corridors you're not seeing them strip mine their way back across there. You see commercial development, you see residential development, but we're not seeing strip mines. I 'm sure if that were the thing to do… I'm sure we'd a lot more of if it if it benefited the whole. So, that's one of our major concerns. Now, this is on top of the concerns of the environment. You know this is a particularly beautiful part of the river. We draw a lot of resources from that river our drinking water, and there's any number of reasons but when we started looking at this, we started meeting every Tuesday in the month… every first Tuesday in the month. Groups of concerned citizens and we've met since 2007 like that. We've

been able to develop a consensus but the first thing you have to do is consider what you guys look at because ya'll got a job to do too as a regulatory agency. But it says in the Alabama Surface Mining Commission Administrative Code Chapter 880-X-7 it says and I'm a read to you in just a second. Prohibits service…lets see what the code says it prohibits coal mining and reclamation operations on those lands or areas where the Act states that surface coal mining should not be permitted. Those lands or areas include fragile or historical lands where operations could result in significant damage to important historic cultural scientific or ecstatic value, or a natural system. The code also addresses the renewable resource lands in which the operations result in substantial loss or reduction of long-range productivity of water supply or food or fiber products or where it could affect natural hazard lands. In which the operations could substantially endanger life and property. Such lands to include air, subject to frequent flooding and unstable geology. Now that seems to be the criteria. I'm sure that the permit application process addresses those issues and I would think that the organizations mission…you know would filters down to the objectives and to the pass to achieve those things. So, our group of citizens…you know were concerned about that because we've lived on that river all our life we've fished on that river, we've swam in that river. My wife was baptized in that river and we find that particular part of the river extremely beautiful. So, that talks about the ecstatic appeal of it certainly and I think that we have all I've heard there were significant artifacts there. Now, I know there's been some survey's preformed that show that nothing significant is found. We still are concerned about that because we know of places where there are of human burials. People have tried to take us there and the past several weeks but of course its posted now and of course there's been a timbering operation that the Alabama Historical Commission asked who years ago to be stopped and a letter from Elizabeth Brown, but it was timbered. Now, so we know it's

historic, we know that it's fragile. Right now, that river has locks and damns below it and locks and damns above it. Its got at least two water treatment plants pouring into it. Most of those both of those are out of specs as much as they are in spec. We've got three or four surface mines already in this creek or in this river pouring in there. We've got industry and agriculture upstream of it. All our lives we've lived up there and we've watched that river flow back and forth. Those locks and damns and the drawing of Jasper Water Works Board, the drawing of the Birmingham Water Works Board, the water use for drinking water, Alabama Power draws off that river for industrial purposes and also Miller draws from locus, which I understand have an affect on the Mulberry too. Then we're talking about putting another 2000-acre strip mine on it. That part of the river is impaired. How much more can we do, what else can we do to that river and not significantly change it. There are known endangered species in that vicinity of the river. That comes from the Army Corp of Engineers, they will tell you that. We have renewable resource lands on there. You said the University of Alabama, which I find unbelievable that they would be associated with such a short-sided project but they own or control 1300 or so acres of that public land that's considered up for lease for mining. And that land was granted to them from understanding in reconstruction to sustain the university with sustaining or sustainable type…it's a sustainable resources timberland is what the university has called it. I think if you go down there and you look at the vegetation and trees and that sort of thing on there and I think we'll all agree its timberland. So, we certainly have fiber products down there and a strip a 2000-acre strip mine would certainly cause substantial loss or reduction to the long-range productivity of that. Now, water supply we mentioned a danger to the water supply. We've got a letter but it is in your comments on your site. Where the Birmingham Water Works Board, our largest city is Birmingham, Alabama. They draw water for two hundred thousand for their users

from that Mulberry intake. They wrote a twenty six-page letter in appendences requesting formally that this permit be denied because it threatens that water quality. It threatens the water quality, it threatens the cost of producing that water, they are concerned with the heavy metals they can't get out of that water, they acknowledge that there are ten times the iron and forty times the manganese in that water even if it comes within tolerable specs. So, we're concerned about the water. We're certainly concerned about swimming and fishing and eating anything out of there. A lot of people still use that water substantiate fishing and then the last thing is…you know those …it says in your code that we don't want to do anything that could substantially endanger life and property. Well goodness gracious you know the windows where blown out of the church I was attending in Dovertown, Alabama by the church directly across from Dovertown. Knocked the windows out of the church ya'll. I have sat on my front porch when I lived in Dovertown and clouds of dust would come over and choke me to death. Me and my son both have allergies. Now there are other people like my neighbor Gerald Hallman who is a heart transplant recipient. Who it kills him, it almost kills him. I just got the letter that the lady brought up here from Dr. Cross they have COPD (Chronic Obstructive Pulmonary Disease) and another pulmonary respiratory illness. That type stuff endangers their life. Some people who are friends of mine live on that river and they've lived down there for years. They ain't got river shanties and shacks they paid thirty to sixty thousand dollars for a river lot with their money they worked for all their lives and they put up a two hundred thousand dollar home out there and they intend to live in and raise their children in and retire in. And you're going to have a strip mine within three hundred miles of their property. Their kids got to go to school. I've had three bus drivers call me in the last two days because they are scared to death about meeting service trucks, equipment trucks, and coal trucks on those narrow ways. Not only for their children but for their

own health and safety too. Then we talk about property. You know, we know what blasting we know what that type thing does. We've seen it and there's no since in belaboring that point. And the last thing I want to mention here in this particular part. Is the unstable the frequent flooding and that sort of thing. I think we can look two years ago when we those floods down there two years ago and you know it floods. It's a flood plain. When it floods, I've seen aerial pictures where you can see a line that's flowing in the river. Where it's flowing in the clear water. So we know this are is subject to flood. We know this area we know we have people there who are…dust can hurt them. So those are some concerns that we have as a group. Now other concerns that aren't part of this permit are you know. Who's doing this mine? You know the University of Alabama and Drummond Coal and this city area there's a relationship there that we feel like makes an arms length transaction almost impossible. I question the ethics of any transaction there because you would have to be independent and fact and appearance. So, I question that and my group question that. And the last thing is yes you know there's going to be a hundred and ten jobs created and there will be some auxiliary jobs created with that too. You can go to the…. we've got the best…the Alabama Developmental Office is the best in the nation. They have been for a couple of years. The best in the nation the best people bringing business and industry to our state. You can go to their website and there's a gentleman and I think its at Auburn University in Montgomery Dr. Duravi I think. I maybe mispronouncing his name but he put an economic model and you can go in and use that. You can put numbers in and it will give you the economic impact and yes coal mining in Walker County is one of our best paying jobs. It is and we say in that permit and I was raised on a coal miners wage. I've got two brothers that work with mining operations. You know this is not against coal mining its about responsibility and responsibility to our neighbors and responsibility to our children and just general courteous

and courteousness and respect and respectfulness. Because if you go and look at the numbers which I did you can compare coal mining to any other jobs in there. These are using Walker County statistics and you can come up and say if I put in a hundred and ten jobs well what is going to do? And you can run that just like I did and you can put up…what happens if we go through with our compressive plan and at these interchanges we're able to put two small divisions of fifty five homes each there and lets put a hundred and ten homes there. That area would definitely support as far as land and space a hundred and ten homes and you look at that and there's not a lot of difference. Coal mining still wins out a little bit. It's a good paying job. But that's over a short-term period. Once that mine closes, once the reclamation is done then we're back to square one but instead of having sustainable growth and instead of having timberland, instead of having undeveloped land that can be developed responsibly we've got spoiled land that's been reclaimed and a lot of mining has gone in Walker County. I think it's a myth to think that coal mine, strip mine land is something that is very desirable by business and industry or why did Jasper go down Whitehouse Road to try… they were desperate. I was on that economic development board and they were looking for land to locate a new industrial park, which they sorely needed because they've got a good man in David Knight up there. He's well respected but they didn't have land although all the strip mine land was there it has a stigma to it. So, your land is fouled so after the twelve years that this permit is going to be good for or two years or three years or what ever it is for this particular section. Then it's over then you've got a strip mine land. If you had an alternative use and you've got a billion dollar highway it make sense to follow that and look for a long range plan. And I think I've taken about all the time I want to take here. I appreciate ya'll listening but, I do want to know…this is not about that this is serious business and we don't need to be applauding and we don't need to be doing these things.

This is serious we need to be giving this serious consideration. It's not about me and its not about any of these people that are going to be speaking its not about these people its about all of us. So please be respectful but we ask respectfully that this permit be denied. Thank you.

DR. JOHNSON: Anyone…I'll let you get up there next okay.

MR. HUBERT RODRIGUEZ: Thank you Thank you. My name is Hubert Rodriguez. I am a foreign doctor of the United States legally. More than 50 years. I live in the bend on a slough. I've been living there since 1984. My address is 414 Pineway Drive, Quinton, Alabama Zipcode 35130. I say I have a small house over there since 1984 ten years ago. I been living in that house ever since. The last time they offered me two hundred and fifty thousand. I go over there and fish, take my grandchildren. I have been practicing pediatrics since 1968 in the western part of Jefferson County ACIPCO Bessemer. Not being able to see what happened with the pollution that Alabama Power provide free to us, but the worst polluted place was Jefferson Plant and the Gorgas Plant. They trying to put down signs closed but it still is no good. Now we're going to have this problem too. So, respectful I would like to say that I think our presence speak able by all the basic data I would like to say that we should oppose we should deny this. I think we need to say this, the University of Alabama, the best institution probably in Alabama, is colluding in this facts. When they interviewed the University of Alabama about this, they say "no comment." How could it possible that University of Alabama put in a risk so many lives so many lively hoods? This is something we need to inquire we need to break the University of Alabama to this fault. So, I would like to finish No Pollution. Pollution kills. I have many of friends dying of cancer. I have a good friend his daughter died of Breast Cancer. His wife died of Lung Cancer. He got Colon Cancer. He wears partially a bag with a pouch then he developed (Unintelligible) cancer So, we don't think about those children that are retarded have many

minimal brain dysfunction. They are talking about they cannot learn because the air is subject to pollution of our city and our minerals and then we'll have this risk. So, I would like to finish no pollution, no poisoning, no destruction of our houses with the blasting. Thank you.

DR. JOHNSON: I 'm going to do this, this way; I'm going to go down this side of the room and go row by row and take the people that want to speak. Then I will move the center and then to the other side. Okay? Is that acceptable for everybody? Alright anybody else over here on the front row? Next row? Sir? Okay.

MR. TODD HYCHE: My name is Todd Hyche and I live on the Shepherd's Bend. My address is 15 Riverfront Drive, Cordova, Alabama 35550. I have a Bachelors of Science in Material Science and Engineering. I have five points that I want to bring up from an engineering standpoint today. I've submitted it to the commission its in your file I think it would be good if you would look at it when you have time. Probably the number one concern to me since my family does live there in this permit application it has a falsified record, which it says "there's no residence that are included in the well head protection zone." I have submitted the names of thirty-five households in my comments that I have submitted to you and that's households. And if I was guessing it would somewhere between eighty to a hundred of people, individuals that their only source of water is well water. It's the only source they do not have city water what so ever and these individuals I think deserve to know their ground water is going to be protected. Because in this permit application by Shepherd's Bend it goes on to say that the ground water will indeed be moderately impacted. As an engineer, an engineering community, when we use the word moderately our ears perk up a little bit. Okay, slightly we use that a lot but moderately is substantial. So, I think these citizens that live there deserve to know that their water is going to be indeed protected from the increase of metallic ions and that other things that with it. My

second point is in this permit application and the hydrology section. It repeatedly mentions that there's a lack of ground water on the site. And from a common sense approach one would argue that if there was a lack of ground water in this area there is no way in the world it could support thirty five households. Okay. And another point of interest that I want to bring up is that when this hydrology report was conducted and they conducted wells within this area they conducted samples from two wells. And any engineer would tell you that in order to have statically relevant information you would at least need twenty five data points to get a T distribution and thirty to get a normal distribution of how it would affect in this area. I think the permit has a significant lack of statically relevance in the fact that only two wells were tested and according to the application, it could not pump any water and after five minutes, it was shut down. I think that the common sense would tell you when you have thirty-five families something's wrong with that data point. My third point is the safety factors for the pond construction in this permit application in the permit application it gives a safety factor of 1.5 and you as the professional engineer would know about this for the static of the safety factor of 1.5 the dynamic safety factor is 1.2 for seismic activity. It's my opinion that we should've relook at this I don't believe a 20% safety factor for a seismic activity is sufficient. Because when you go to have an Earthquake your …that's really insignificant to only be protected by 25% or 20% percent. My fourth point that I brought up in my comments that I submitted to the commission was the sediment yield for the property. Which is the sediment runoff that is going to be go from the property into the river. The sediment runoff during mining for this is estimated to be twenty-seven tons per acre per year while mined. So if you just run the numbers on the site and which it specifically gives the exact number I think its 276 acres mined. And if you run the numbers you'll come up with that's fifteen million four hundred forty thousand pounds of sediment yield that has the possibility of

going into the river. That equates to one hundred and seventy five in a half coal trucks dumping in the river every year. And on an average that is a half of coal truck per day of sediment yield possibly going into the river. If you quantify this into the national pollutant discharge permit that it has for seventeen hundred and seventy three acres. We take that fifteen million four hundred thousand pounds of sediment yield and we increase that to 1.15 billion pounds of sediment yield that has a potential of going in the river. That equates to five hundred and seventy four thousand, four hundred and fifty two tons per year. That is thirteen thousand fifty five trucks per year. On the average for eighty eight thousand pound gross vehicle, weight an average of three trucks per day possible sediment yield at the river. I think I read that in the paper the other day where the argument was made that modern mining could not possibly affect sedimentation in the river. I would urge the commission to reconsider the fact to look at the numbers because they're pretty telling. In the first point with wells, I included the names and addresses of all of the households so you as a commission independently inspect that for yourself and find that the findings are true and I thank you for your time.

DR. JOHNSON: Thank you. Anybody else in the second row? Third row?

MR. DARRYL R. JONES: Good evening my name is Darryl Jones. I'm with the Birmingham Water Works and Birmingham Water Works address is 3600 1st Ave North, Birmingham, Alabama 35222. My home address is 559 Bristol Lane, Birmingham, Alabama 35226. My title at the Birmingham Water Works is Assistant General Manager of Operations and Technical Services. I'm an engineer for the Birmingham Water Works as well. We placed a twenty-six page written comments with the commission. I believe many of read those comments we're just going to make a brief statement here tonight and I am going to read from that statement. The Birmingham Water Works Board (BWWB) is concerned about the short term

and long term effects that the Shepherd Bend Mine will have on the water quality in the Mulberry Fork. The Birmingham Water Works Board supplies approximately two hundred thousand people with water pumped from this source. The location of a mine so close to a major public water supply intake should be required to implement the most protective measures available to protect the water from potentially harmful elements that could adversely impact the health of the individuals that drink water from this source. It is our opinion that Shepherd Bend, LLC has failed to adequately assess and mitigate the potentially the negative impacts that their operations could have on this major public water supply. We believe the current permits and permit applications do not adequately assess the current conditions of the soils with respect to toxic materials. That it do not require, and have not planned for, adequate monitoring (water testing) and protection of surface and ground water changes during the mining operation. And it do not impose contaminant discharge limits appropriate for a river classified as a public water supply. The Birmingham Water Works Board must treat the water from the Mulberry Fork to meet regulatory limits for a number of contaminants under regulation of the Safe Drinking Water Act; however, under the current permits and plans, these very same contaminants are allowed to be discharged to the river with no regulation or monitoring limits. Show that adequate engineering has been completed with regard to sedimentation basin design and Spill Prevention, Control, and Countermeasure (SPCC) planning. We believe that the permit do not protect the public water supply from the post-mining impacts. Insufficiently treated mining runoff may contain many metals and organics that, if discharged within 800 feet upstream of the Mulberry Intake Pump Station, could negatively impact the ability of the Birmingham Water Works to provide high quality water to its customers at a reasonable price. Until Shepherd Bend, LLC, and the responsible regulatory agencies, put in place adequate measures to protect the water

quality in the Mulberry Fork, the Birmingham Water Works Board must request that no mining activities be permitted near the Mulberry Intake Pump Station. So, that's our comments and we've submitted our written statements and we thank the mining commission for the opportunity to come before you.

DR. JOHNSON: Next row? Anybody back there? Anybody else on this side of the room? Yes, sir.

MR. HOWARD GAMBLE: My name is Moe Gamble. I live in Nauvoo, Alabama. My address is 55 Myers Road 35578. Okay. I am not representing any companies. I am representing the miners I'm a miner. I worked at the LLC mines and with any luck, I'll be working at the Shepherds Bend, LLC mine. I want to first tell all of the landowners up and down the property that I understand their predicament nobody wants to live next to a coalmine. Heck, nobody wants to live next to an IGA store or a Wal-Mart because of the traffic and what not. But I will promise you this that our mines will meet all state and federal regulations. We will be good to our neighbors as we can be. The water, the dust, we'll go over all of this but we are committed to be good neighbors okay. Okay one of the things that was brought up was how will the operation manager truck traffic in the area? You know we care about your children. We got children, we got grandchildren, we got wives, mothers, daughters that run up and down the roads. We have looked at the evaluation of construction of separate roads as a permittee right now we can't just go out and say were going to build a new road a separate road. This has got to be approved by the state its first of all got to be approved by the land owners. So we are trying to take care of that if that does happen does not happen we are looking at continuous county road monitoring personnel to ensure there is not an accident involved with your children or anybody else. Okay. It was brought up about the operation about dust from blasting. At one of the other

months, we tried gathering water from sediment basins and before the blast spraying it with canopy water and during the blast with water. I was over there when they shot and I watched the canopy, I watched how it worked and it minimized the dust tremendously.

DR. JOHNSON: Okay listen we're not going to have any debates back and forth. Okay. You're going to have to respect the person who's speaking up there and if we start getting into a debate with the crowd I'm going to put a stop to this meeting quickly.

MR. GAMBLE: Hey, I am on your side. For your information, there was two shots that day. There was one ten minutes after the other one. The first one was from a remote water canopy there was very little dust coming from it. The second shot did not have a canopy of water over it, yes sir it was dusty. We can control the dust. Okay, how would the operation provide noise control when they are there? Our operation would run if we have one from 6 a.m. in the morning until 2 a.m. at night Monday through Saturdays. Sundays will be maintenance and there are times that some of our operations we ask for volunteers to work on Sundays to do reclamation work. That may happen but during the night hours when our neighbors are trying to sleep we will ask MSHA to waive the back up alarm law that we have to have in our mines to operate equipment and put strobe lights on there. I know been there done that can hear that alarm for miles under certain conditions and if we put the strobe lights on there that will eliminate some of the problem. Okay. How will the operation manage water quality and protect the Birmingham Water Works Board Intake? First of all the permit we applied for that was approved by EPA and ADEM on Water Standard Guidelines we meet that. Okay. We will construct ponds we will reuse the water. A lot of our sediment basins we will rely on there water for these canopies that will suppress the dust. Okay, for blasting. We'll leave natural vegetation filtering along the river bank I think well I know there's a fifty foot buffer zone along the river.

Okay. Birmingham Water Works contends to mine while having an adverse effect on the water intake system. Has this information been reviewed by ADEM and others? Yes, it has. Keep in mind there was a mine up river of the water intake for five years. Did ya'll hear any problems over that? Okay. Birmingham Water Works contends that the coal seams and the spoil in this are produce acid drainage. Has this information been reviewed? Yes, its been reviewed by ADEM and ASMC. And our permit yes coal is acidic do we put coal in the spoils or run out or do we put where we'll loose it that's our product that's how we make our money. We don't through the coal away we don't put it where it's going to wash away. Okay. Birmingham Water Works contends the coal seams and spoils in this area contain high metal contents has this information been reviewed? Yes, it has been from ADEM and others. I want to tell ya'll something when we where talking about the quality of water its in the river and discharges from our mines. Okay. At one of the meetings that the river keeper had I went to and I went to and I've gone to several of them to see if I could answer some questions. One of the neighbors one of the guys that's got a place down on the river said he seen coal on his dock on the river. And it was hard me to believe this day and age with the laws that we've got with the inspectors are coming around to the mine all the time that somebody could loss coal from their operation. So what did I do I waited until the next heavy rain when it come a delouse okay. I started along Corridor X every down drain… matter fact I started the drain coming from Jasper that goes down the hill the drain that's on the Cordova side that goes down the hill from the other direction and took a water samples. You know what I found…and I put it in jars and put it in a cooler and did all the right things to do with it. What I found was black stuff it was slimy black stuff. And I did the sampling from there Cordova to the West Jefferson cutoff and the Graysville cutoff. All the samples had the same stuff. I was wondering what in the world is it. Well sent if off and had it

analyzed and its algae. The algae and I got the samples from the concrete rains and it wasn't from an infected mining area it wasn't infected from a construction area it wasn't infected by anything. It was algee that because of the heat and the water sitting there this algae grew. Well when we got a heavy rain this water went down the drains and I am assuming that is what this gentleman seen. I probably don't know that wasn't there didn't see it. Also, that sample I sent it off and had it analyzed to find out what it was because I was scared to death. Okay. During that sample there were suspended solids in it those solids were not much different than the solids from our previous LLC mining discharges. There were traces of iron in it there were traces of aluminum in it. Now if ya'll have any doubts about this you don't have to go on mined property just first time it rains while its hot get down there your clear jar check that discharge and you'll see this black slimy stuff. I'm sure as the temperature cools off it won't be there. Okay. Okay water pH over the last four years for our LLC mines has a 7.2 average, which is perfectly neutral. Okay. Will there be any discharges with in 800 feet of the Birmingham Water intake. No, there won't. Our closest ASMC pond, which is a discharge pond to the intake, is 4200 feet. How will operations protect well water in the area? Well within one mile of the permit area, we'll be identified before mining begins. Premining surveys will be welcome to the homeowners and I ask all of you to take that survey and take it seriously. If you got water there they'll check out what you got if we loose that then we will be a proponent and making sure, you have potable water. I assure you okay. On wells, I do want to comment to the monitoring wells that have been talked about previously. By our permit, we've got to monitor we've got to monitor there in before the mining starts. The water in the stratum is got to be monitored for years after we mine it. We check the water prior to mining after we mine through an area we put a new well in that vicinity again and that water is monitored. Okay our people that take water site samples do not

play with numbers remember this…the laws we work under are laws that have come from congress that ADEM, EPA, ASMC, that the CORPs of Engineers all enforce. Any time an officer of the mine signs a contract or signs a document that's required of or does concerns or water concerns if he falsifies any of that information he can be fined a quarter million dollars, put in jail for five years or both. Okay its very serious. So, if that water sampler says he didn't get any water in that particular area I assure you he did not. Okay. How will operation manage blasting controls at the site? We will contract a certified blasting company they're regulated by ASMC and ATF. They will utilize the most effect even available the most technology for blast designs. I will say this they blasted for us at the Cain Creek Mine, we had monitors around seismographs, we'll have them in the Shepherd Bend area. We'll get the mining permit. 95% of all our shots were less than half of what's allowed by law pertaining to vibration and air blast and that's public record. Okay. How will the operation mitigate house damage from blasting? There again this falls in the same category as does the …when your in a distance a one mile distance of the mine area a representative from the mine or mining company will come around and ask if they can do a preblast survey. If you say no and then months down the road or years down the road you say " oh that mine shot my house all to pieces." Well how can we prove that we did it if you let them do the preblast survey then they've got pictures and they know what shape your house was in and if they did do damage why I am sure that you will be compensated for. Okay. What will well let me ask this…will operator consider assisting with the city water system for the Shepherd Bend area? And there is potential that depending on how much mining we do we could pull some water away from a land owner. Probably not because anywhere else I'm sure that they get there water from the river but it is a potential. Okay. The company will be a proponent of improved water access to the Shepherd Bend area. Okay. Will the operation

consider the concerns of increased traffic and road conditions in this area? The company will be a proponent of improved roads in the Shepherds Bend area. Will the operation consider assisting with the volunteer fire station operation for this area? And the company will be a proponent of a local volunteer fire department facility. Okay. Will the operation consider the impact to the local cemetery in the area? And at some of the meetings I have had family members say their concern about ”Well…going to mine through our cemetery” No we are not going to mine through your cemetery. We will help you with maintenance of your cemetery. After the mining’s done, we can work out a deal with the landowner of possibly to give the cemetery some…or give the cemetery some more ground. You know the mines try to help the community we don’t go around and brag about it. But I’m a tell you something the mines help hospitals, okay. They put money in the hospitals, they donate money to churches, we have helped cemetery boards and other mining operations. We have donated money to churches for their poor. Its not to bribe them cause remind them its to help. Okay. Will the operations agree to hire local areas for the jobs of this mine? Recent employment records indicate that on an LLC mine 68% workers from Walker County. 2.4% comes from Jefferson County, 9.4 % comes from Winston County, 1.2 % comes from Blount County, 8.2 % comes from Cullman County, 4.7% comes from Fayette and Marian County and Franklin County we’ve got 1.2% employees. Will this operation be in union mine or non-union mine? The several LLC mines that we’ve had have been non-union. Okay. We are not for or against union operations that’s up to our employees they have the right by law to vote on that. It will not be a draw down. Okay. How does the operation predict against unsightly appearances along the riverbank. There is a fifty-eight buffer along the permit area along the river. What is an estimated economic value of this mine? Jobs and they’ll run a hundred jobs plus or minus a few between the employees the contract

employees and the vendors. There wages will amount to approximately six million dollars a year. The benefits for those same employees will amount to another 4.5 million dollars a year. State local and tax benefits for that mine will amount 1.9 million dollars a year. Federal tax benefit will be approximately three million dollars a year. The state royalty benefit would be approximately four million dollars a year. It was brought about the property about some of the property owners are pending and none are on a lease. That is true. None of these property owners have indicated that their property is not for lease. Okay. Why put a coalmine in this area? The power plant requires certain quality coal we use. There are limited coals of available that means these requirements in Walker County these are some of the last available coals that those requirements. Shepherd Bend coals could improve Gorgas and environmental quality lower sulfur and high BTUs. Also Shepherd Bend Coals could reduce Gorgas ash disposal. Coal has less ash than average coal seams in this area. Opponents are reporting that Horse Creek had over four hundred water quality violations. This is on record. Quinton had seven ADEM water samples that slightly exceeded the permit limits and nine that reaches that slightly exceeded the average limit during the last five years. Horse Creek had one ADEM water sample that slightly exceeded the water limits and three averages that slightly exceeded the average limit. During the last eighteen months, Cain Creek had zero ADEM water samples that exceeded the permit and one averages that slightly exceeded the average permit. There is one other thing that I want to address that I was commented on before and that was about the mine that's land that has been mined and nobody wants a land. I can tell you there's a Saint Louis Cardinal pitcher that does not pitch any more that bought some acreage and a strip mine outside of Freebird, IL. It's probably got a hundred acre impoundment on it that was final pit. He's got a multimillion-dollar home on it. We can go to a lot of areas where there are mined ground that

has been reclaimed, reclaimed properly that can be of a lot of use. You know as miners we're not against the development in the area. Its good for everybody we're all for that. But I want to tell ya'll one thing no matter what development is put along that river system none of it would be monitored as closely as our mining operations. Thank you!

DR. JOHNSON: Darryl could you hold on for just a second. I have a question that I thought of and I didn't get a chance to ask you. The Red Star Mine has been in operation for about five years. Has the Birmingham Water Works encounter any problems in treating the water since that mine has been in operation. I am trying to get a feel for problems that you have had regarding that.

MR. JONES: We have four sources of water for our system the Cahaba River, Lake Purdy, Inland Lake, and right below the Smith Lake damn up in Sipsy Fork on the Warrior River. And we use the Mulberry Fork and that Mulberry intake went active in 1989. It is the most difficult water that we have to treat because of the river system is… the water quality in the river system is a little bit different than the rest of our sources. Over the last five years, we've experienced extreme drought in 2007. When there's not enough rainfall and dilution to take place different things that exist in that river system has a peter. In 2008, 2009 we've had very wet years and you have a lot more rain water so, that helps diluted that water system so those years you don't see things as much. But in 2007, we realized that we had some issues with some Bromi that was coming down. As far as where Arab Alabama that impacted that intake. And we shut that intake down for seven months. We shut it on November 3, 2006 and we couldn't use it again until May of 2007. Because with that contaminate as we treat the water add chlorine to the water it generated a disinfectant by products that's regulated by EPA. We would have exceeded those numbers. So, that's when we became very concerned with all the activity along that river

system because the water quality does change and it does change from one year to the next. And is it all contributed to one particular mine. But we can say we must be concerned with what's happening along that river so that it doesn't impact us more adversely than what we can deal with right now.

DR. JOHNSON: Okay then I have one final question. Your figure of 800 feet from the intake to the mine site was based on the original NPDES permit is that correct?

MR. JONES: That is correct! And based on that entire seventeen hundred acre site there are some portions of it that's closer than this first segment.

DR. JOHNSON: The actual distance and there's the intake I believe and there's the closest out fall and do you know how far that is?

MR. JONES: I do not.

DR. JOHNSON: Thank you. I'm sorry I had to ask those questions they came to my mind. After you sat down. I apologize for that.

MR. JONES: That's no problem.

DR. JOHNSON: Anybody else on that side of the room? Yes sir. Yes ma'am. I can't see very well back there its kind of dark.

MS. JENNIFER SANDERS: My name is Jennifer Sanders and I live 5634 8th Court South in Birmingham, Alabama 35212. I am here tonight as a private citizen. I along with my nine-year-old daughter over there are just two of the two hundred thousand people that are concerned about this. I know that the discussion who has an interest in this could be here. I think that everything that people are saying tonight is important. I mean people are saying things that are on both ends of the spectrum that it's real important that we're all here and we have a chance to talk it. I do think that if this meeting were held or an additional meeting were held a little

closer to Birmingham you ‘d probably get a whole lot more of those two hundred thousand people to turn out and express the kind of concerns that I have. Think the things the gentleman was just saying in terms the issues on the river and the gentleman that was speaking on behalf of the mining was talking it was algae rather than coal that was found on the river but chances are a lot of that algae’s coming up from some of that agricultural run off up river. So when you look at the combined effects of what’s going on this river right now. You get back to what the first speaker was talking about in terms of the fragility of the whole system Yeah this areas got an opportunity right now to really look forward in how it develops in such a way that preserves its ecosystems and it helps not only this immediate area but all of us in central Alabama. Got opportunities there. I’ve been in folks homes up here working doing home health and all of that and I know people want the best for themselves and for the area. They’ve also got a chance to look back towards more resource extractive ways of making a living for a few people but that’s not going to sustain over a long term. So for those of us who live in Birmingham and are concerned about our water quality and on going bases, I believe that the company means best and they have the best of intentions but I think we can all come up with several pages worth of examples where companies have meant the best but bad things have happened. We don’t even have to live very far to come up with some of those situations. I respect everybody’s opinion, I respect that everybody is involved that is trying to do good work and is living up to the best of it but I think there are some concerns here that probably can’t be fully addressed. Thank you.

DR. JOHNSON: Anyone else back there… Yes and please keep it as brief as you can. Let me remind you again we’re not counting claps tonight so hold that down. All you do is slow down the speaker and take up more time.

MS. JANICE BARRETT: I'm Janice Barrett. I live at 635 County Road 118, Tom Creek, Alabama 35672 and I also work for a non-profit organization called Wild South. I have a serious addiction to clean water and forest. So did you hear about the one about the big coal company that wanted to put a strip mine across a river from a drinking water intake bowel? Well theres no punch line because this only sounds like a bad joke it really is no joke at all. What it is is in sane. Seriously and dangerously in sane. What could be more crazy than knowingly pollute our own drinking water? And for what well the economy but some of the poorest states in the country including Alabama are being destroyed by the coal industry because its good for the economy. Well after decades of strip mining, those states are still poor. And their mountains, their wells, and their land are just a worn out mess. The only ones getting rich are the coal company owners and the politicians they support. Yet the cancer spread of Alabama's strip mines is allowed to Shepherd Bend. That's another chunk of Alabama the Beautiful chewed up and spit out. We cannot allow this to happen. It is the very nature of strip mining to be destructive. John Muir said "wilderness is a necessity" and with all my heart I believe that's true. I feel the sacredness in wild places and the sacredness in water. And there are precious few truly wild places left in Alabama. But there are a lot of really beautiful ones that retain quality of the wildness and these are being eaten up by strip mining. The fall sterile, landscape of reclamation where nothing grows but a Wal-Mart for years is no answer to wildness. No even close. I say shame on the University of Alabama for sacrificing their land and their forest and our water to rapacious strip mining. And shame on ADEM for permitting Drummond Coal Company to discharge wastewater into the Mulberry. The fact that it will be discharged near a drinking water intake valve makes it even more crazy. So on behalf of my organization Wild South our members and myself as a water dependent human being I stand strong with the ones

who have guts and the sanity to oppose this permit and the purposed mine in general. And I stand with those who support and fight for the preservation of Alabama's rivers and streams and sustainable clean energy and I stand with the people of Cordova who have a dream of building a local economy that is based on tact ecosystems and their amazing natural beauty of their home land. Thank you.

DR. JOHNSON: Anybody else on this side. Yes sir. And the way things are going I am going to have to hold down to ten minutes or less. So please be brief as you can and get your point across.

MR. JAMES CHAMNESS: I'm going to try and bring a little bit of humor to this I'm a twenty-four year retired coal miner.

DR. JOHNSON: Excuse me can you tell me your name please?

MR. JAMES CHAMNESS: My name is Jimmy Clampton Chamness.

DR. JOHNSON: Thank you.

MR. CHAMNESS: I was fortunate enough to work twenty-two years union for Bank Head Mining Company. Between Cordova and Parrish and from what I understand we used to use ammonia nitrate, which used would put off a big orange vapor less cloud. We would put off three hundred holes and a hundred and fifty feet deep at the blast. From what I understand from talking with friends, now they don't use ammonia nitrate anymore they use a slurry. Which does not put off that vapor less gas that we used to breathe. Which is what's causing me to choke right now while I'm talking. But its I can understand I live at 763 Scott Road around the Lynn's Park area on the river. I was thinking this mine was going to be north of the bridge. I am not an opponent but I'm not for this mine. I just hope that the people that makes this decision make the right decision. Thank you.

DR. JOHNSON: Anybody else? Yes sir.

MR. ARCHIE PHILLIPS: My name is Archie Phillips, 200 52nd Street, Fairfield, Alabama. I was the first original member of the Alabama Surface Mining Commission and I was put there by Governor Wallace and subsequently by Governor Fob James. What happen was my dad got old and retired at Lost Creek. He had him a little farm down there. In the first year he was there, we had gullies and a washing rain came and washed acid water out of the mines…out of strip mines killed every fish in the river. Kind of made me mad so I would get it a plane and fly over all these things that was going on in this strip mining and go to the legislature every year. I would take my slide program and my TV show to get some kind of saying the rules and regulations on mining. At that time, the legislature was just about as corrupt as it is now. The mining companies own the legislatures and I told Governor Wallace, I said Governor Wallace, you're not listening to the people. At that time they could leave the highwall, they could leave all the mess, no topsoil, no replanting, no nothing, and our rivers and streams of Warrior River down there it was just about dead. All the streams up and down through there where just pitiful. So I told him, I said you are not listening to the people. At the time the big problem other than all the pollution was blasting and there was people Glenn Wood and several different places that would go in there and blast what would happen is they would go in there and buster foundations and all they couldn't get insurance and they couldn't sell because they didn't have insurance. They received no sympathy for anybody in the mining industry at that time. So through the efforts of the sportsman and the people that were affected we effectuated the Alabama Surface Mining law and brought about and I helped write most of the regulations and particular the blasting regulations. So what happens is you could have all the engineers in the world tell you that there's not going to be no mud going to go down in that river. That water is

going to be okay and all that kind of stuff but rest assure watch and stars the little people in this state have very little recourse for this sort of thing. The purpose of the mining reclamation commission was to help people solve these problems where they wouldn't be run over by the mining industry. In many of these cases the mining companies after we got the thirteen regulations that was passed that was eliminating the highwall, the acid water, bonding the land and all that kind of things. Then a whole lot of the problems that we had went away. The Warrior River is probably cleaner than its been in a hundred years now. It's a very thought of putting a mine in front of our drinking water is insane absolutely insane. Our mining commission the one I sat on for eight years would've never allowed this permit I can tell you that now. We used to have problems with water improvement commission, it had all kind of money business going on down there issuing these permits. So we had to kind of go around that when they wouldn't do right we just wouldn't give them a permit. So my sympathy is with you people there and my sympathy is with me, I like to drink that water down there in Birmingham and here's the thing about it many of the times strip mines left an area it cost more to reclaim the land than they got out of the coal. Now that's pure stupidity and so its going to come a time and it already is in this country that drinking water and it already costs you more than a gallon of gasoline. Ya'll know that? It already does. Drinking water is the only thing we got that's really survival. Now we can stay warm with some wood in the fireplace if we don't need…but we need the coal, we need the jobs and all that but the thing about that is it must be put on suitable places. There are places they want to strip mine and there's absolutely nothing wrong with it. You don't get runoff water you don't get acid in your streams and it won't mess up your drinking water. Rest assured one thing the eight years I've served there; there were many of person's wells that had the bottom blowed out of them. Don't let nobody tell you …they can promise you

all the engineering they want too but when they start blasting out there it does effect that ground water. You may have put city water or something like that all of these things ought to be considered. I personally as a former member of this organization here want to ask that you give this a very serious consideration. We were designed to help offset any bad effects that strip mining would have on a community that was the purpose of the Surface Mining Commission to be put there in the first place. So congratulate to the group that's came out here tonight and if I was up here and had that problem I would be right here amongst you but it's the wrong place its not that I'm opposed to strip mining this is the wrong place. Thank you.

DR. JOHNSON: Anybody else from the right side. Okay I'm going to split this right down the middle right here, Brandon stand up. Brandon's the center everybody that's on this side…talk to me whose up here that needs to speak on the first row? Okay.

MR. NELSON BROOKE: I'm Nelson Brooke I'm the Black Warrior River Keeper. We're based in Birmingham, Alabama, 712 37th Street South Birmingham, 35222. Want to thank the Surface Mining Commission for giving us this hearing tonight and the opportunity to comment. First off, I just want to say like Mr. Phillips just said this is a really poor site for a coalmine permit and I believe that from the bottom of my heart. As a citizen of the area that drinks the water, its what I drink everyday. I drink a lot of it and I know that the water works board works real hard to get it clean. I know what goes into it and when they say that this mine might impact the water quality I'm listening. Bottle water is not regulated as good as well as drinking water is. So when you have to start turning to bottle water that's a problem. While we are here tonight talking about a small portion of this mine its important to know that seventeen hundred and seventy three acres is the proposed full build out of this mine right next to our drinking water intake on the Mulberry Fork. For those of you who haven't gotten oriented on it

if you're not from up here if you're from Birmingham its north west of Birmingham but real close to where we are now and upstream. The Mulberry Folk is a real important source. This mine at full build out proposes to discharge out twenty-nine ponds into the river that's twenty-nine waste water pollution discharge points that are permitted to pollute the river and its tributaries. We believe the discharges from this mine are way to close to the drinking water supply. Whether its eight hundred feet, four thousand feet I'm not really sure that matters. I just know that's way to close. Shepherd Bend is a large bend in the river right next to the intake and the whole thing is slated to be mined. Two hundred thousand people need this water; I mean that's a lot to mess with. The water works boards comments shine significant light on concerns for water quality and what this mine can do to our drinking water supply. I encourage all of you to read those comments if you haven't you don't have to be a scientist to see that theres a serious threat here. Those comments are available at the Surface Mining Commission, at your local library, and online on the surface mining commission website. Were talking about not only harm to the river water quality in the river but decreased water quality coming into the treatment plant from the intake increased water costs and potentially degraded water quality at the tap both in taste, color, smell, etc. Additionally this isn't just about water supply its about the river. Theres the potential for a real negative impact on other uses such as swimming, fishing, recreation and aesthetics as well as quality of life for local residents that go out there to get away from it all. It's a beautiful area I spend a lot of time on the river there. When that strip mine comes in, I've watched the other ones start up and finish out. It changes everything. The permit application is written allows discharges that will violate Alabama water quality standards that's a problem. Shepherd's Bend own engineer analysis shows that during, its initial phase coming out of the four sediment ponds it would be engineered that during a single ten hour, twenty four hour rain

event and believe me ya'll all know what a real Alabama rain is. Its a lot more rain than that but during a the ten hour ten year twenty four hour rain event those four ponds have a potential to discharge sixteen hundred tons of sediment into the river and tributaries right there, that's eighty-one dump truck loads of sediment. We believe the permit application is flawed, the mining company Shepherd Bend, LLC, listed the Mulberry Fork as having water use classification of fish and wildlife. That's a use designation that says that the water quality is good enough to support fish and wildlife year around. That's a less protected designation than exists on the river here. Not only is this for fish and Wildlife but its also designated to support a use for public water supply and also let me get this right, swimming, other whole body water contact sports. So clearly the mining company didn't really seem to be to worried about the fact that two hundred thousand people get drinking water from here and that theres plenty of locals and non locals use it as a resource for swimming and other uses lots of fishing going on here. Also one thing that's required in the permit application is that the mining company talk about affiliated mines, other mines that are under it where it say sub city areas, purview and their violation history. Well that segment was blank because Shepherd Bend, LLC that's never had a mine under it purview but its connections to Baxter Company and other operators is clear. Baxter Company you heard the gentlemen talk about the search and theres only been a few violations at those mines and I will tell you and how we came to the conclusion that we came too. The Horse Creek Mine is a mine that has now been reclaimed and it was up river and around the bend. Discharge from the Horse Creek Mine, which flows into the Mulberry Fork up stream into the drinking water intake. When we fly over the river, I patrol the river by boat and I've seen I saw problems from the mine when it was operating. Another mine Quinton Mine down the stream along Burnt Cane Creek, which discharges into the river just down stream of the drinking water intake. Massive mine. It was

operating so horribly that there were hundreds of violations just in two years in ’05 and ’06. We actually filed a notice of intent to sue trying to get them to bring their operations into compliance but the department of environmental management swooped in to protect them from our law suite and just fined them five thousand dollars. That’s a slap on the wrist. When you combine the violations at Horse Creek Mine and Quinton Mine and you used the calculations that are used by the federal government, which is what we’re looking at the Clean Water Act. It’s a more protective look at how environmental law should be handled in Alabama than you don’t count a weekly violation as one violation you count it as seven cause its an average for the week. When you have a monthly violation you don’t count it as one Violation you count it as a violation average for the entire month whether it’s twenty eight or thirty-one days. So when we calculate it in that true form look, there were over three hundred and fifty violations from these two mines into the river. We are talking about high amounts of sediment and heavy metals coming in not just small exceedances on a few incidents. We’re talking about serious violations from these mines we’ve looked at lots of mines through out the water shed there are ninety five of them. Not all of the them shed discharge like that. Some of them stay in compliance so we believe that this operator has a prior history of non-compliance and that has not been addressed in this permit application process. There’s also some other issues with the permit things that weren’t in the permit application that are members in other local people have brought to the commissions attention that I won’t go over tonight. Theres also a memorandum of understanding that has been put in place between Surface Mining Commission and the other state agency in charge of permitting our coalmines in Alabama Department of Environmental Management (ADEM) the one that does the waste water permit. What the memorandum does is it takes away some of the clear water act permitting authority from the Department of Environmental Management. We

believe its one of the most important pieces of their permitting purview its called the Pollution Abatement Prevention Plan (PAP). It's the meat it's the engineering document that basically lays out how a mine is going to keep from harming water quality during its phase of operation. Well ADEM's require to receive that from the mining company review it and make a determination as to how to regulate discharges from the mine using that document. No such document was submitted to ADEM and no such document was used in the permitting decision yet a permit was issued and we have appealed that. The memorandum of understanding passes a responsibility for dealing with those engineering questions on to the Surface Mining Commission. State agency does not have clean water act permitting authority in Alabama and so that is a challenge we have raised in our law suite but the reason why I bring that up here tonight is because we think that this state agency while saying they have no responsibility over water permitting in the state and water quality they have assumed that through this memorandum of understanding. The public comment period we believe is flawed in the ASMC permitting process when the public comment period starts, when its announced that a permit application for public review. The entire permit should be on file at the Surface Mining Commission in Jasper and at the local library or what ever designated building. That's not the case not all of the information is in the files in the beginning of the public comment period. So say you as an interested citizen want to go and become informed and find out if your house is going to be affected, your water what ever. Maybe the documents that you need to see aren't in there. How are you going to know when its in the file? We think this is a major problem and that the whole permit application process is flawed as a result. I want to ask as the Black Warrior River Keeper that this permit be denied. On behalf of the organization and all the people that we represent up and down the river, we think that this is a bad idea and we hope you make the right decision.

Thank you. I have thirty-six comments that were given to us by members and people in the Birmingham area who couldn't be here tonight to deliver it to you. I have some additional comments that we generated that I'm going to give you as well as I got a picture of Shepherd Bend that I took from the air and it provides a pretty interesting prospective on the area that is being considered for mining. As well as an aerial photograph of the drinking intake and how close it is to the proposed mine site. Thank you.

DR. JOHNSON: Eddie would you please try to keep it to ten minutes please I'm going to have to…

MR. EDDY HAND: I am going to keep this real short this is not my show. Thank ya'll for being here and its good seeing all of the members of the Surface Mining Commission.

DR. JOHNSON: For clarification its staff not members.

MR. HAND: Well staff members…

DR. JOHNSON: The members are the board members that are not here.

MR. HAND: Workers how about that?

DR. JOHNSON: Thank you.

MR. HAND: I am Eddy Hand and I'm a little bit up stream I live on Smith Lake. We're proud to discharge clean water from smith lake we're proud to be apart of the Warrior River system. We're proud of Nelson and his work and all of the Cordova people and we support their effort in getting this permit denied. I brought a photograph for some of ya'll to look at some mining operation on…its kind of conducive to the Shepherd Bend. It's a bend in the river…I don't know if you can see it well but you can see the bend in the river. Right here you can look at it close afterwards but actually, the bottom of the highwall is below the flow of the river. Now this will impair both the riverbed and the ground water going into the river system. Also do you

see all of this area back here all this area back in there is reclaimed strip mine. You see how much vegetation and how much forest is on that reclaimed strip mine. Over here is another reclaimed strip mine with a lot of vegetation and forest. My main comment is one about the bonds and the bonding system from the Surface Mining Commission. I've dug up a letter here from the Alabama Department Industrial Relations dated in 2001. Apparently the figure of twenty five hundred dollars per acre in that time in 2001 there stating that the current cost for reclamation is four to five thousand an acre. So if you back up back those figures out in economic factors for reclaiming the true actual cost to reclaiming the economic value of this whole project is not as big as you think it is. Also it has here that at that date there were two hundred and ninety forfeited bonds to that date. That's a significant amount of people and companies that have walked away from their bonding responsibility. Also I would…as I get into all of these things that I get into it actually they are more questions than actual answers. I ask these questions has an economic study been done? Has the best management practices for rivers, creeks, streams and water waves been done? Has an endangered species studies been done? Has a replacement of hunting land to comply with the state statue been done? Has the ground water study been completed on this proposed project? Also I would like to say that actual this self monitoring of monitoring wells and sediment issues by the company and by the lack of staff in these permits I feel truly that an independent lab should be hired to do water testing as an outside independent agency and actually test for metals in that particular testing. Also has an emergency plan been completed and filed if you have a breech in the damns? The main concern and I think all of us can agree with that everybody is hit on and I will refer back to this photo. We the people at Smith Lake are trying to get the water ship protected at Smith Lake and that's a full protection. You see right here this is the river and this is a hundred feet obviously a hundred feet

from the river is not an adequate set back for these types of operations. Those set backs and those things especially in a bend in the river like this, where you got such a…on both sides you should have a larger set back than your normal hundred feet. Now I think the Department of Interior is reviewing those set backs now and their stream channeling thing, which would actually require these companies to put back the streams or stay off the streams. I appreciate the comments we support Cordova and I hope ya'll turn the commission turns this permit down to protect the drinking water and the Warrior River system. Thank you.

DR. JOHNSON: Eddie where did your photo come from?

MR. HAND: I shot it from the air in 2000 and what was that date? December 2009. Is this not Shepherds Bend #1 this is the Sloan Mine and the Locust Fork.

DR. JOHNSON: Anyone else on this same row? Alright the next row? Yes sir.

MR. DAVID HANSEN: Good evening. My name is David Hansen. I'm with the Southern Environmental Law Center. My address of the Southern Environmental Law Center is 127 Peach Tree Street, Atlanta, Georgia, Suite 605. We also have an office in Birmingham although the people from that office couldn't be here tonight so I'm here on there behalf. First of all I would like to thank the Surface Mining Commission for having this for giving everyone the opportunity to both here locally and giving everybody an opportunity to come and be heard and hear from you about what the permit is about and to hear from us and to hear from the citizens about what their concerns are where their support is for the permit. I'd like to talk a little bit about what your obligation is; the staff of the Surface Mining Commission? What the Surface Mining Commissions job is? What the Surface Mining Commission has to do with relation to this permit? What the law allows the Surface Mining Commission to do with this permit? Its important to understand that the Surface Mining Commissions job is set out in their regulations

to determine whether not a permit is appropriate to an area is appropriate for surface mining. That's set out in the regulations and some of the things it recognizes are the historic cultural valve of an area. It also mentions water quality, water supply and those sorts of things. Clearly falling within the ability of the Surface Mining Commission to consider is the presence of Birmingham Water Works Boards intake down river from where this mine site is. This is squarely within ASMC regulatory authority and its something that as regulators you must take into account when considering this permit. So the Birmingham Water Works Board has issued comments, I'm not going to rehash what the concerns of theres are but I would like to address a few of the things that have been said in response. The first of those is that there is an ADEM permit and so its not ASMCs job to get into water quality. Quite frankly that's wrong it's directly contrary to the ASMC regulations and its also not really the point here. The ADEM permit does not say that this mine is going to be safe for drinking water. That is not what a national pollution discharge illumination permit says. That's not what and NPDES permit says. An NPDES permit simply says this is within the bounds of the clean water act and within the bounds of use of water shed. It does not mean that the drinking water intake directly down stream is going to be safe and that the water those people are drinking is going to be safe. There two separate laws the Clean Water Act and the Safe Drinking Water Act. There are two separate sets of requirements and a NPDES permit does not address the concerns of the Birmingham Water Works. What were the concerns that as regulators you should have given your authority under the ASMC regs? The next thing is with regards to the abatement plan, now that's a term that's nowhere in the ASMC regulations but you know what it is. It's actually contained with an ADEMs regulations. Now in April of 2009, the ASMC agreed to take those regulations from ADEM and to implement them themselves in the memorandum of understanding. Item 21 of

that memorandum of understanding specifically states that ASMC would be taking over and enforcing all of the pollution and abatement plan regulation that ADEM had. For that reason ADEM never reviewed a pollution abatement plan for this mine. Never looked at any of the regulations, any of the pond designs, any of that to determine whether or not that would be compliant with the law, they squarely through it off on your shoulders. We've kind of been having a game of hide the ball here in Alabama where as ADEM says "Oh we have this memo, your with ASMC so its their job" consistently ASMC we don't regulate water quality. Somebody has to step up.

DR. JOHNSON: Let me respond to that because that's false. We have never said that we do not regulate water quality. We do regulate water quality and we enforce all the effluent limits that are applying to a mine site. We write paper on it if they violate so that's a false statement. We've never said that we do not enforce water quality, we do.

MR. HANSEN: I don't want to get into an argument over what the email said but in this case simply as you said enforcing effluent limits that are in ADEM permits is not enough. Its not all you can do under your regulations you have the ability to do more than that. Whether not you choose to do that but its politically viable or you want to that's a different story. Under your regulations there is an ability to go further and into say this mine, these engineering plans, they don't have any treatment…they are simply retention theres no treatment of the water anywhere in the plans this is simply retention of the water wait it settles and then it flows out. In creating the ADEM permit for example, the Shepherd Bend…required to submit EPA form 2D that form does not have any monitoring requirements for things such as Mr. Jones said Bromine, which is something that they have recently had a problem with at this Mulberry Fork intake. That is nowhere monitored in any of your any of the documents that Shepherd Bend submitted to ASMC

any of the documents that Shepherd Bend submitted to ADEM. Other things like arsenic, aluminum non of those things have been monitored for anywhere on the Shepherd Bend site and simply there's no knowledge of what of whether or not those chemicals are there so there's a great deal of regulatory that ASMC does have that it should choose to use in this case. Specifically in this case such an important cultural drinking water intake right next to this proposed mine. So with that I would like to say thank you again for having this and I hope and I think a lot of us here hope you really consider what the options are here. Seriously, look at what the impacts of this mine really will be and what you are allowed to do under your regulations.

DR. JOHNSON: Anybody else on that row? Okay I will move back to the gentleman in the blue shirt right there that raised his hand. Ya'll are missing that Jamboree game.

MR. BILLY WYLIE: My name is Billy Wylie and I live at 1104 Reeds Ferry Road, Cordova. I am right in the middle of this strip pit area what ever it is there. I just had a couple of comments. I know that it might not be relevant to some people but it is to me. One thing I wanted to comment on was the gentleman said something about the cemetery. Well this property that I live on I have seventeen acres of it now and it's been in my family for over a hundred and thirty years. The cemetery that they were talking about I'm one of the care takers of the cemetery and my father, father-in-law, my grandpa, grandmother, my great great-grandparents all go back up to my great great-grandparents are in there so its kind of a cultural thing to me because my families been there for so long. I know that really doesn't t have any relevance over it but that's one of the things. Where I was growing up with my grandfather taking care of the cemetery we always thought it was on the University of Alabama. I started doing a little bit of research on it as I got older, because we were trying to figure out exactly how much property was with it and come to find out somewhere down the line the university swap some property I

think with Alawest. So I called Alawest and they don't even know there's a cemetery on this property. He just bought it and didn't even know it was there. He said what's there two or three graves? and I said Naw, there's over a hundred graves and a lot of them are unmarked. That's just one thing and another thing we' re talking about all the people that live below me that are on wells that the city or public water ends at my house. Some of these people live almost two miles below me. Well the water line is so small we can't even get a fire hydrant put at our house, the nearest fire hydrant is like four miles away. So if they are talking about brining city water in they are going to have to rerun a line for a long way to get to these people, that's another thing. Back in I guess it was in the '70's we have wells on our property that's four hundred I mean seven hundred and four foot deep. I live up on the ridge they had a strip mine it was about a little small one they had a big drag mine doing it and it was about probably two in half miles from my house. Well we had problems out of our well the pump was in the well and it kept caving in on it messing it up and we finally got city water but that's another thing. Every body needs to be that live there need to be concerned about their water and we're concerned about the traffic. The road we live on its one lane, you can't even pass a car on it. I'm telling you. Where it goes through my property is almost eight hundred foot. Its one lane, there's like six foot high banks on each side of the road its been there for over a hundred years. There's just a lot of questions we have that's about the safety, and we already on the Gorgas road going to work. I love the Corridor X and I work in Birmingham and it cuts some time off but a friend of mine came to see me the other day almost got run over by the coal trucks that's already running on this thing right now. When you start getting into these country communities on off this land road, we just have a lot of questions. I know they brought up my whole family lives in this and we got about thirty two acres and some more of my kin folks I think about four have about a quarter

mile from me. My property joins on with my aunt and they claiming that they've talked to her about leasing her property. My sisters' joins own to my aunts and nobody's said anything to us. So we just got a lot of questions and nobody's answering. All at once, they talking about they're fixing to get this permit and start. Somebody needs to be telling us something. We appreciate ya'll and thank you and I don't want to keep a lot of time.

DR. JOHNSON: Thank you.

MR. GERALD HYNCH: I'm Gerald Hynch, 2040 Underwood Farry Road. Right at the Fork Reed, Cordova, Alabama 35550. I just got about two or three comments here and maybe I'll quit. I will let you know. I'm a Jesus man and I hope everybody here is, especially ya'll. Cause if I was working in your job I don't think I could stay. Ya'll got a bad job I can tell you that right now. I wouldn't dare give somebody a permit and I hope ya'll won't either to tear somebody's house. I think I would have to quit because Jesus says you suppose to love your brother and your neighbor. We are going to have to love one another if we go to heaven and if ya'll going to heaven you going to have to put up with me and I'm a low down rascal and I'm going to tell you. The first thing is that it proposes two hundred and eighty six acres. I hope that's not a prerequisite for the university to think well if they started up here, we'll get it. Please don't let hat happen. Cause that's not good to let them in to start with because they always want a little bit more. Our property value is…listen my house is two hundred foot from the University of Alabama's line and I know what its going to do cause that mines just closed over cross the river over there. It's a little over a mile away mile and a quarter maybe. I've got severe damage but the lawyer says you to far away well what's it going to do two hundred foot away from my house. Now I would hate for ya'll house to be tore up. I really would and anybody else in here. I don't want to see anybody's house to be torn up, but that's something ya'll need to think about

because it's a bad situation. All these things that everybody's said I don't think I've heard anybody lie somebody stretched the truth time or two but I'm not going to call any names. I would like to invite you people to come down, you can come three at once four or five we've got enough boats to carry all of you if you would just come. I want to show you what the results really are and we've been going with TV people on the river and showing them, its real. That's the reason I would like to invite ya'll to come before you make that decision and take a boat ride with us and let me tell you and show you what's going on down there. We can prove our point if you'll just do that and I will beg you to do that because its important. Its important to us because my house value is already gone. If I wanted to just mention of that strip pit would kill that property. You can't even sell property down there now. You can't sell a house with any value and the insurance company says mine is like a hundred and thirty seven thousand dollars. That's what I would have pay insurance on but I couldn't get it. Now it would be less than half of that if I could sell it or I probably couldn't sell it. That's something ya'll need to think about. Now like I said everything that's been said is pretty much true but nobody has touched the bottom line of this and I'm going to say it the bottom line is Alabama football. The university's gotta have that coal strip to pay for that high priced football they've got going on down there and its not right and GOD don't appreciate it GOD don't like his river tore up. Thank you.

DR. JOHNSON: Thank you.

MR. BILL LOLLAR: My name is Bill Lollar 898 Big Hollow Road. I'm a resident down there in Shepherds Bend that's Cordova, Alabama 35550. Thank you for being here and thank you for taking our comments and taking time. There's been a lot going on a lot of peoples talked. I am a resident I know what's going on you know the sediment the silt its real. Okay I've lived in that area my whole life. Where I live presently since 1987. I recently…my slough

entrance at my home was eight feet deep and now its three feet. To be honest with you I don't know how and I know were not here to talk about other mines but I don't know how the Red Star Mine got away with all the discharge. What I would like to see is the Corp and I know its not on your control but we got to get some sounding done on the main channels of the river. The rivers filling in all the sedimentation whether it be algae or what ever it is but it looks like coal fines to me and to give you a little bit of back ground I've worked in power generations for thirty two years. I know what coal is and I know what coal fines are and I've dealt with it all of my life. Year before last during the floods I had eight inches of measured sediment in my front yard that we had to do something with and there was coal fines in it. All right, the point being I think the permit needs to be denied I also think the permit process is flawed. The reason I say that I had contacted the Corp through the proper channels to build a dock at my residence. I live adjacent to Shepherd Bend. I wanted to put in a bulkhead, I wanted to put in a pier boat dock well the email I have a copy here and I will leave it with you from KCE Horn. He's from Birmingham division. It says for me to build this pier now this is what I've got to do. It says" The Corp of Engineers must ensure that projects authorized by Department of the Army permit pursuant to section 10 of the rivers and harbors act and section 404 of the clean water act also comply with the provisions of the endangered species act and national historic preservation act. Specifically after reviewing our ESA database, which is Endangered Species it was determined that species are known to occur near your property. What I'm saying is the mining operations have not thoroughly researched the endangered species for this area. If I have to go through all of this just to build a pier why does coal companies not have to go through all of this to put in a coal mine. The economic value of coal is understood. I told you I worked in power generations I know that coal is viable product that's not the argument. Argument like Mr. Phillips said this is not the

right place for a coalmine and it will never be. Ten years from now, that's no need…in my opinion to try these permits again because it will never be the right place on the side of a river bank like this but I appreciate the time and thank you.

DR. JOHNSON: What's in the box?

MR. LOLLAR: For the people that don't know there's eleven hundred and twenty five written comments in this cardboard box and one of the things that ya'll have said this public time was for was for people that was adversely affected by this mine. Well there's eleven hundred and twenty five of them that think that they are adversely affected by this mine.

DR. JOHNSON: Okay I am still on this side of the room. I think I moved about five rows back and I see somebody on…in the red shirt. Please.

MR. ALAN PARIS: Hello everyone. Thank you for the commission and everyone whose come out tonight for being here. Thanks for Bevill Community College for putting us on. I think we should all be very proud of the democratic process that we're taking part in. Enlighten of everything that has happened in the Gulf over the last past summer I'm sure we're all here tonight because we're hoping that there is real substance to our democracy still today. I'll get to that.

DR. JOHNSON: Could you…I'm sorry to interrupt you but could you tell us your name?

MR. PARIS: My name is Allen Paris and I live at 3539 Mary Taylor Road, Apt 510, Birmingham, Alabama 35235. I drove a long way tonight to be here because I'm very concerned. I'm going to make two short points. I'm going to get right to it. The first point is that if we heard about a man that came along the river that close to the water intake spout he dumped arsenic, lead, and mercury into the water we'd probably try him as a terrorist.

Wouldn't we? The recent Birmingham News article said that tests have found the coal in this particular site contains a high level unusually high level of those particular elements for coal. So this coal is more dangerous than your average coal according to what the Birmingham News said. Now I don't know how many of you are familiar with New York City but it has a watershed in up state New York that is protected by some of the most stringent environmental laws that has ever been imposed by the United States for water. Its been that way for hundreds of years that's one of the reasons New York City has some of the best water in the country. Now why does New York City deserve better water than we have here in Birmingham? Also in up state New York there is this bridge that happens to cross the stream that feeds into that watershed. After 9/11 that bridge was closed because they were concerned that a terrorist might come along and dump poisons into the water for New York City. Why does New York City deserve better than we have? That's what I want to know. Now the last point I want to make is that I am originally from Calhoun County, Alabama and its been profiled on a nightly news program as one of the most polluted counties in America. I can tell you as seen it first hand growing up you don't want to be in one of the most polluted counties in America. The economy dies, companies do not want to locate there no matter how many tax insensitive you give them. If we do this ten, fifteen years down the road we are going to be back here talking about lawsuits talking about how the economy is collapsing. Birmingham has enough problems already. Do we really need to compound it by polluting our water system raising our water rates? Don't we already have a sewer system with problems? How many companies are going to want to locate to a city that doesn't respect its citizens enough that they don't pollute the water system right across from the water intake. I mean that's so stupid. Please deny this permit. Thank you very much.

DR. JOHNSON: The gentleman with his hand up in the middle there. You got your hand up first I'm going to take you. Yeah you. Alright then. For the record, this is not the gentleman that I was pointing too. Your okay I was just…. (Crowd laughs).

MS. SHERRI JOHNSON: My name is Sherri Johnson. I live at 173 Tugboat Lane, Quinton, Alabama. I am approximately 8 tenths of mile from the Cherokee Mining picture showing you have in the middle. We've touched on a lot of subjects how don't nobody wants to live next to a Wal-mart. I prefer to live next to a Wal-mart than living next that mines. The roads were in better condition, the noises a lot less. You touched on the trucking on the roads and how they're going to be very safe and well I've almost been hit twice in the last two years by coal trucks. One time I had a piece of coal come off and hit the front of my vehicle. So I reported to Dora but nothing seems to be done about it. Our roads are not one lane we're talking about burn wall road. We've also touched on the dust, how the dust is to a minimum. We'll I'm 8 tenths of a mile from this mine and every morning I come out and there's a gray haze that you can't even see through over your windshield. So maybe your area would be a little bit less than ours. We've talked about the noise, how they are going to keep the noise down. You know we were all promised this to our neighborhood. Can you imagine until 2 o'clock in the morning eeeerrrr, beep beep, beep, and it comes right through your walls. If you got kids and you can't sleep you still got to get those kids up to go to school. We talked about mitigation on home damage. Well lets talk about mitigation because nobodies willing to talk to me about mitigation. I've got two broken trusses up in the attic, I've got numerous cracked sheet rock, I've got crown molding down the hall with finishing nails coming out of about this much (She holds up her hand and measures from her in index finger to her thumb. I've got cracked numerous in my foundation. One end when it rains really hard there's a river running under my house as of this

past winter I have mold and mildew under my home. Nobody's talking to me about mitigation. Unless you want to count that twenty five hundred dollar offer, they offered my attorney. Which he would get forty percent of it? Well I have estimates on my foundation we're talking about ten thousand dollars just to get that repaired. So you want talk mitigation lets talk mitigation on our homes down there. I hope your areas going to do better than ours. I'm to the east-southeast Cherokee Mining. I feel like we are going to be getting blasting off of your mines too. We had Corridor X come through they gave us a little shaking not to bad. We had the mines come through I can play the tapes of my house rattling. I would like to submit (a photo)…this is just one of my broken trusses in the attic. These were taken yesterday. This is just mold on one of my joists under my house. So in conclusion our neighborhood would like to ask that you deny this permit. Because our homes have had all they can take down there. Thank you.

DR. JOHNSON: Thank you. This is the gentleman that I was referring too.

MR. RICK WILLIAMS: I took that as a compliment. Good evening. I feel like the preverbal fish in the barrel tonight. As I stand before you tonight as a coal minor. I stand as third generation coal miner. You can say I don't have any thing to do with this; I don't have a dog in this hunt. My name is Rick Williams County Road 77 Arley, Alabama 35541. I live on Butler Branch Smith Lake. I can understand the concern that you have for your river and as I've seen it happen tonight as the gentleman before me spoke if maybe some of you as you heard me say that I was a coal miner might not hear another word I say. What I challenge you tonight is I think misrepresentation and alteration of facts is one of the greatest evils we have this day in time. I feel like there is no such thing as fact anymore only data being manipulated back and forth. Thank you. This is nothing for applause and citizens around Shepherds Bend I understand your concern when I was child Taylor Coal Mining stripped right across the slough from me and

Archie, you mounted a fish for me when I was like six years old but I still got it and when I seen you I told my dad that's Archie Phillips. You know I can remember as a child strip mining was right across the lake from us. I had concerns as a kid…we fished the lake I still have a residence on the lake now. What I challenge you tonight instead of us opposing one to the other because agendas are also very dangerous. I've heard University of Alabama, Drummond Coal, all these other things mentioned tonight. I think we need to understand there are innocent men and women who depend upon the coal industry to make a living. Friend I'll tell you we must be more dependent on coal at best we have eight hundred years of feasibly extractable coal in the United States. Mr. Palmer the Middle East has eighty years worth of oil at best. So I understand your concerns for the mining in the Shepherds Bend area I also feel that somewhat you may chase me out of here also. I worked at the Quinton Mine. I work for the B. E. K for the company that was over there. There has been manipulation there to where there was four hundred violations since that mine shut down. I think record will show the actual amount of ADEM citations that mine has had since. Horse Creek also, Cane Creek one violation and R we just completed on the other side of Jasper with zero. So there is definitely a legacy of coalmine that I know some of you are very, very bitter against but I challenge you tonight do not hold this generation of coal miners accountable for crimes committed thirty years ago against you. There was very little of any regulation, Coal Company basically done, as they wanted. I can understand the bitterness that some have toward the coal industry. Tonight what I want to reintegrate to you is the purposed intake of side the mine maybe I can address those. The commission though you can answer these the actual distance from the mine discharge to the Birmingham Water Works Intake does anybody have that number?

DR. JOHNSON: It's a little over four thousand feet.

MR. WILLIAMS: Forty two hundred feet. Not the eight hundred that is being waved around like a flag. Someone said that doesn't really matter. Friend the greater the distance between the intake and the discharge you'll find a less amount of sediments. The twenty-seven tons worth of sediment that this mine will produce there are sediment ponds in place. This sediment will not be running into your river directly. The more we oppose one another the worst this is going to be. We could work hand in hand with the coal industry. Please let the coal industry work hand in hand with you. There's such a bitter taste for the coal industry the Birmingham Water Works Board actually tested for thirty-six metals from Red Star thirty-six metals from Black Warrior how many of those metals were found? Commission? Seven metals were found. Five that occurred in tap water, two that occurred in drinking water, and there was not a first metal that was found that did not actually occur in your river. So please I challenge you tonight as some think that this has been portrayed as a David and Goliath. The coal is industry is more as Goliath. There are some seventy million here sixty to seventy minutes is going to impact. So as this is a David vs. Goliath type of scenario, understand there are men and women that this is going to affect on the other side. So I ask you tonight is please as this process goes on I want to thank the commission for having us and letting us speak as the fish in the barrel I had to come and speak my peace and I am affected by this. I would like to ask all of those that are involved let temperance, let patience let these things work continue voicing your opinions. Silence has gotten this country where we're at now. So the more we keep quiet the more big business will come along. I would like to say this tonight I am blood bought, born again Christ man myself. The love of Christ would take us as farther than coal ever will, amen. Have a goodnight thank you for hearing me tonight as I said some may not even want a seen me or heard my voice that I had told you here tonight but I do appreciate your ear. Thank you commission.

DR. JOHNSON: I got one more in the back here on that side then I'll switch to this side. Did you want to speak back there? Oh, ok.

MS. SARA ADELAIDE ABELE: Hi ya'll. Thought we'd would mix it up a little in generation wise. Speak from a student prospective. My name is Adelaide Abele; I go to the University of Alabama at Birmingham. I live at 1514 14th Street South, Birmingham, Alabama 35205.

MS. MALLORY FLOWERS: My name is Mallory Flowers. I am a student at the University of Alabama and I live in the dorms. I don't know if you need like…

MS. ADELAIDE ABLE: We've got a few more students back there with us if ya'll want to stand up and wave to everyone. We are part of something called The Coalition of Alabama for Students Environment (CASE). Which is that's in a state our universities are a part of it. Regionally that's apart of the Southern Energy Network that is based out of Atlanta. Nationally that is apart of a partnership of the Energy Action Coalition. Also that is the Sierra Student Coalition, which I work actively with, and that is part of the Sierra Club which I'm sure you all know very well. So we are representing a lot of different I guess organizations and groups of people locally and nationally. That are working with the youth voice. So I guess basically all we really wanted to say was just that we believe we need to move beyond some short term solutions. Making decisions that moves us towards a clean just and sustainable future for all people. We're not here to fight to say one should win and everyone else looses their jobs. It needs to be more holistic than that. We need to build all people up with a cleaner future because this is just not going to last. So, I think Mallory had something she wanted to say.

MS. FLOWERS: We're here to let everyone know that we support the public against the strip mine. We want you to know that we will do everything in our power and our resources

to pressure and hopefully prevent the University of Alabama from leasing this land. We want you to know we have a lot of Crimson Pride at the University of Alabama and that is not something that we want to see traded in for a strip mine. We request this permit is denied and we hope you that providing a reasonable and sustainable energy alternatives to this area we can provide for the same jobs that would other wise be provided through a coal mine in this area. We can all work together and find common ground on this issue and provide for our future today.

MS. ADELAIDE ABLE: Something I forgot to say was that we felt called to speak because we are the generation that is going to inherit these issues strip land compromised drinking water, ground level Ozone, a failing economy and also environmental justice issues. Look at Perry County, look at the TBA Spill. This mine is just going to perpetuate those issues.

MS. KAREN C. PALMER: Hello my name is Karen Cordell Palmer. My address is 67 Cherokee Hills, Tuscaloosa, Alabama 35404. I'm an elementary school teacher certified in the state of Alabama to teach children in grades 1-6. With most of my experience with teaching First and Second graders or six and seven year olds. I am required to follow the Alabama Course of Study issued by the Alabama State Department of Education.. The Alabama Course of Study states these objectives for second graders, identify positive and negative ways people affect the environment? Then the course of study gives examples for teachers to use and these are the examples listed: polluting water, throwing trash on roadways, and causing erosion. I am required by law to teach this to children. I like that part of my job because I believe it is important for children to learn this. My next point is per the Administrative Code of the Alabama Surface Mining Commission the agency prohibits coal mining on those lands or areas where operations could result in significant damage to a aesthetic values, or natural systems. In

simple terms as I would use with six and seven year olds if the Alabama Surface Mining Commission grants a permit for strip mining they are disrespecting and disobeying their own administrative code. The Director of the Alabama Surface Mining Commission stated to the Birmingham News that we don't like to have to deny permits but if one deserves to be denied, we will do it. My question is this why doesn't the ASMC like to deny permits and does that mean that you do like to grant them. You have a code to follow to determine if a permit should be granted or denied, so whether you like to deny permits or not should not enter into the thought process. If this permit is granted, I think a six or seven year old would ask the questions why you didn't follow your own code and do you have personal interest in this operation. I formally request that a surface mining permit be denied.

MR. HOLLAND WAKEFIELD: Hi my name is Holland Wakefield. I live on 3221 Thomas Avenue, Montgomery, Alabama 36616. I came with the other students from the University of Alabama. This is the most people I have ever spoken in front of in my life. One thing that we learned in school is that it is very important to study history. Over the last several decades hundreds…over a great many decades throughout West Virginia, Kentucky, Tennessee as economies have relied more and more on the support of coal for their economy. The economies have slowly died out as the coal was slowly run out. One thing that I can absolutely guarantee will happen to you if you let economy rely to much on coal the economy here will also die out. The people will have to move not all of you will be able to find jobs here in the long run. Yes this will support they say a hundred and ten jobs, a hundred plus or minus jobs here that will last what ten, twenty, or thirty years. Then the coal will be exhausted and future generations will have to move. If you want your children, your grandchildren, your great grandchildren to grow up in the same pace that you did to go to the same schools you did, to fish

in the same river that you did, and to go to the same church you did then I formally request that this be denied.

DR. JOHNSON: Sorry he already had his hand up back there and I thought he was not going to come up but that's why I ….

MR. ROBERT SHATLUCK: I'm Robert Shatluck, 3812 Spring Valley Circle, Birmingham, Alabama 35223. I am one of the Birmingham people. The first I heard of this was the Birmingham News article Sunday. I do not know to what standard you think. Residents of Birmingham have had an adequate opportunity to put in comments. I would like to request the commission if there is any way to extend the comment period for a week, two weeks. Tomorrow I will get in contact the Warrior River people and perhaps the Birmingham Water Works person to get their views as to whether Birmingham residents have had sufficient opportunity to register their views and I myself personally will try to generate some emails from friends and others.

DR. JOHNSON: Anybody else on this side. Yes sir.

MR. CARL THOMPSON: Can I borrow your I T man for a minute?

DR. JOHNSON: Well what you going to do with him?

MR. THOMPSON: I just need…could you bring back up the permit map that actually shows the bend in the river? See the bend comes down right here. Oh, by the way my name is Carl Thompson. I live at 304 River Chase Rd., Cordova, Alabama 35550. If you could go down on this map to the very tip as far down as you can go to where that bend is I am as deep in the bend as you can get. We've been there now for little over twelve years. Built a house down there. Pretty much the same type of land that is proposed for stripping now. It was just a river bank timber land farm land but now its my home. When we first moved down there it took us three months to get power. Then a few more people moved in so we got power down there.

Then it took a year to get a phone down there. So we building our house living in campers, while we building our house, we got a phone after a year because more people move in. A few more people moved in oh at this time this was a logging road coming down to the house. Billy was talking about where the road comes through his property, at that point is where the county road ends. My house is approximately by the road four in a half miles past Billy. So it was logging road just to get back down to that house. So we've gone through that period of time. Finally got a few more people to move in down there. Build a few more houses, so the county has come down now supposedly took over the road and is keeping it up. Now we have a one lane paved road. Oh and my mailbox was at Billy's front yard for that first three years. They finally moved the road down to Big and County Road we've got a one lane road that comes down there now and it comes with in a mile in a half of my house. That's how far my mailbox is from my house now a mile in a half. Then I have to myself and a few folks sitting on the other side of Billy we have to keep up the road for the other mile in a half down there. So I guess if you would look at it from this day and point we would have to drive through the pit to get to our house once the mining starts. By the way, we do have well water and we cannot get city water. That improvement has not come to our properties yet. So as I said and there are a couple of other houses down there and these are not shacks by any means. My house is not a mansion by any means but it is on four acres of land, it is a twenty-eight hundred square foot house. With nineteen hundred square feet of porch, two story, two-car garage as nice as any home I've ever owned. It's insured for a little over four hundred thousand dollars. There are some other people here that have homes that are about the same as mine that are in approximately the same location. Now to say that we will not be adversely affected by this mine is ludicrous. Also, while we are on the subject of the bend of the river there, this past year when we had the floods I

also had…where it came up onto my bank I had approximately twelve inches of silt on the bank for about fifteen feet. That had to be moved off. It killed all the sod that we had placed out there but you know nobody's replaced that for me. The slough that comes up beside my house when we moved there twelve years ago…had access to that slough. I have a little over eleven hundred feet of water frontage on that slough that I can no longer use, because I can't get a boat in there. I can't build a pier, can't build a boathouse there, the front of its stopped up. I had dreams of eventually people building houses and building subdivisions in this area to develop it so eventually my property would become worth more. I would be able to retire there and now that's all going away. It's because of the mine and you know I'm not against the coal mine. My brother in law we've talked about the coalmine on the other side of the river. There used to be a flat top mine on the other side of the river there just next to Quinton. Matter fact my brother in laws name was Quinton and he was killed in that mine about twenty years ago but you know its just not the right place for a mine. There are other things that this property could use for. You know its already being started…there are already houses being build up there over the last twelve years, I have seen the community start to grow. I have seen you know more people coming in…its just like you've dreamed for this for all of these years you've worked hard and then all of a sudden its coming through and its being swept away. I understand about reclamation and I understand how its done, I understand how long it takes before this property can be restored back the condition it the condition it could be used for residential property. That will not happen in my lifetime, I'm 59 years old. You know the average life span I got twenty years maybe less it won't be reclaimed in that length of time. So all of that's just gone, there is a lot of negatives about this.

You know the other thing is we talked about the wells and things like that. That there be no wells down there or no property. There are in that neighbor hood at least thirty families with wells. You know to say the least we have to have a way of getting in out of our property. I think we deserve that. I spent a lot of money down there, I spent a lot of money in Walker County, pay a lot of taxes but you know I oppose the mine and I just wanted to make it public. I do appreciate your time; ya'll have a nice evening.

DR. JOHNSON: I really do want to thank all of you people on the front row for helping me police that cord. If it wasn't for you, I will forget about it too. How many people do we have left that wants to talk? Okay, we are approaching 9:10 p.m. and I'm going to end this at 9:30 p.m. so please be brief. I am starting with you back here on the end. Looks like we have about four or five people left.

MS. RACHEL ROWELL: My name is Rachel Rowell and that man that just spoke is my neighbor. We, my husband is going to say something about this I'm not going to say anything mainly except about the wells. We did come here in 2003, built a house, moved in 2007, we didn't know anything about the mines because we are from Birmingham. You know hind sites you know we can't do anything about we're here and we will be retiring here and we'll have to live here. The main concern that has been mentioned to me here that I'm going to talk about is the wells and the people that are all people. That are full time people we're not talking just part time people come down here on the weekend stuff, but one of the concern to me the gentleman that first spoke that was a miner that talked about within a mile. Well I spoke to a hydrologist I think at your area (referring to ASMC). She said a half a mile generally; well it doesn't matter really where it least two miles whatever or two in a half miles from there. The Star Mine that just closed the Red Star Mine is just above us; we're down in the bottom end

down there. Its across from the river and its above us and we have our house shaking. I was standing in my kitchen and I had a big mirror an antique mirror that came out from the wall and I am not lying to you it was at least two in a half inches and hit a candelabra three times from a blast from over there. We're how far from there and even further okay. Nobody's come to my house and ask me about putting us on the list. Cause we want all that stuff. We want our mines; we want our wells checked we want our house checked we want all of that stuff. The hydrologist said to me on the phone that they could extend that. She gave a half a mile she said they could extend that to five miles. Well do we request that if it does go through we hope that it doesn't we are included in that. Five miles but we're only two in a half because from the Red Star Mine we've had all of this happen. I've had crown molding in my house to split open two inches you know brand new house. So the monitoring of the ground water also is important and I know Todd address this in the beginning Todd Hyche. You know they said quarterly in the permit and there's like I think it's four or eight…four above and four below ground I'm not sure how that works. We request that if it was granted that they would do that more often because we do depend on our wells. We have no access again to city water at all. If our well runs out, I mean we got to have water to shower water to drink to cook with. We really ask that you please, please consider that very strongly because all these people are affected, we may be further down but its going to affect us if the other mines do. The noise we could already hear on Red Star when they were doing the reclaiming that's all you can hear is noise where I live. My house is very sound tight but you can hear it inside of the house and look how far we are. So please just consider that and we appreciate you listening to our comments tonight.

DR. JOHNSON: Thank you.

MR. KENY ROWELL: Thank you for allowing me this opportunity to speak. I'll try to be brief. My name is Kenny Rowell and I am opposed to strip mining in the Shepherd Bend area in the Walker County. I would like to say why first of all I want to say my wife and I bought property in Shepherd's Bend six years ago and began preparation for building a house. We built a house and moved in almost three years ago. We live near Mr. Thompson that spoke earlier we've enjoyed living in Walker County and have met many wonderful people. The Shepherd's Bend Community is made up of four neighborhoods. We live in a neighborhood at the tip of the U shape bend in the river. There's a neighborhood on the left side of the curve a neighborhood on the right side of the curve our neighborhood at the bottom and then the neighborhood where the others live up in the center right next…adjacent to where that property is. I found that our neighborhood is made up of honest hard working people and that I am proud to call them my neighbors. We've even formed a neighborhood association and collected money to pay a local construction company to repair the dirt roads in our area. We also put up speed limit signs and encourage everyone that lives there to obey the speed limits. I know the strip mine placed in the middle of these four neighborhoods will be very detrimental to us. I speak for my family and the majority of the Shepherd's Bend community where I live. We moved here so our families, children, grandchildren and friends also could enjoy the hunting, fishing, water recreation on the river and hiking in the woods. A strip mine in the center of our neighborhoods would drive away 85 to 95% of the deer and turkey in the area. The runoff from the mine will continue to fill in the slough s and the main channels of the river. I can't say exactly how it will effect the fishing we may not know this for sure until a year or many years has passed by. I know a mine will effect our water quality though. There are seven site built homes and many manufacture homes in my neighborhood alone we're all on well water and have no offers from

any company or municipality to install a public water system out there. There are seven families in my neighborhood excuse me there are more than seven families that live here full time. This is a vital throbbing community. I've been told that if a strip mine is allowed in Shepherd's Bend and the blasting collapses our wells that the mining company will bring us water until they can re-drill our wells. My question is what if this occurs multiple times? Will they continue to bring drilling me a new well and bringing me water until live on if the blasting keeps collapsing wells? Also if the water becomes contaminated with iron, manganese, aluminum, arsenic, lead or mercury no amount of well drilling will automatically solve that problem. Also I'm concerned about the effects that the necessary blasting of strip mine does will have on my house. The Red Star Mine is approximately one in half miles up river from my house. I have felt the after effects of blasting at that mine. It shakes my entire house. One day the blasting was so strong as I was walking down the hallway in the center of my house it knocked me completely off balance and I had to grab the wall to catch my balance. That's how much it shook my house. My house is a well-built house. I spent over three hundred thousand dollars on it, it had a strong foundation, and special roof trusts put on it. I know my house will not with stand the blasting of mine this close to it. My house will be destroyed and the only recourse I will have is to file a law suite to try and get some compensation for the damage done. Now the fella that spoke earlier that was coal minor. Said that they wanted to work with us cooperate with us and take care of these issues well the lady that was up here told you what to her house and she told you what she was offered as compensation. Its ridiculous, then there is not fair compensation offered. Unfortunately in the state of Alabama, there's no fund set up to automatically compensate people for the damage done to their property. Its not automatic thing that if your property is damaged you get a check from some insurance company or from some other person. You have to go to

court, okay. The blast will destroy our homes little by little. When the blasting does damage our houses the only recourse we have is to file a law suite to try and recover some amount to compensate for the damage done. Personally, I plan to spend my near retirement years and my retirement years hunting and fishing instead of in an Alabama Courtroom. Also, I plan to spend my retirement savings on things for my family to enjoy like a pontoon boat or fishing equipment not on lawyer fees. I propose a solution to this dilemma that we're faced with about the strip mine at Shepherd's Bend I proposed that Shepherd's Bend Mining Company or what ever the mining company name is be allowed to mine at another location. A location not right on the banks of the river in the sharp bend of the river. A location not in such a delicate area for the wildlife and so close to our wells and a main water intake for the city of Birmingham. Yes our country is depend on coal just as we depend on gasoline for our cars. Yes coal miners need jobs they have families to feed too. There is coal in more areas than Walker County. With our knowledge and technology of today can't someone find a better location to mine coal at. Yes, there is coal under ground at Shepherd's Bend but there are coal deposits in other areas of Walker County I am sure. Thank you for allowing me this time to speak and thank you for being here.

DR. JOHNSON: Thank you. Anybody else on this side. Okay, I'm going to the front row left ma'am…yes.

MS. KIM INGRAM VANCE: My name is Kim Ingram Vance. I live at 1546 Dovertown Road that's Cordova, Alabama 35550. There's been a lot of good comments tonight that I was going to touch on and you have brought a lot of it to the floor front. I'm here mainly because I am somebody's mother. I have always taught my kids to stand up for what ever is right. I've drugged them out here tonight Joe's 7, he's asleep on the front row, Molly's 13. I'm

against the permit being given being so close to the river. I'm a mile away from the river. I've been employed with Alabama Power Company for over twenty-one years. My grandfather's name, he's a miner; he's etched on the miner statue in Barney. I'm not against coal mining I'm against where it's going. It's going to affect our drinking water and our quality way of life for our children. So with that being said I am against the permit process. So, thank you.

DR. JOHNSON: I think I saw one hand back here. Yes mam.

MS. CHARLOTTE HAMILTON: Good evening my name is Charlotte Hamilton. Our home is at 500 Pine Lane, Quinton, Alabama 35130 or 5 not sure which of those. I'm just an ordinary person, I'm not an engineer, I do have college degrees, but they are certainly not in engineering. My opposition to the permit is after the flood at our home our home is right on the water we had thirteen inches of mud for over one hundred feet that we had to remove. In that mud were seems of coal not black algae it was coal. Because there would be a layer of mud then a little small seem of coal. I am very sorry I did not take pictures of that I did take pictures of the mud. Our yard is not thirteen inches higher than it was, we had to raise one of our piers we raised it fifteen inches. Its leveled with part of our yard. The other part of our pier is low, killed all of our grass. Those of you who have been through this before know what happen. We cannot afford flood insurance because we are too close to the river. So what ever happens we just have to deal with it. We did deal with it, but it is not return to what has been. The blasting that has occurred also has damaged our foundation and caused some cracks in our sheetrock. No one ever came to our home for a premining survey or anything like that. I don't know where these people get these ideas but in reality at our home that has not happened. I'm very much against this permit and ask you to please deny it and find another place for the mining. Thank you very much.

DR. JOHNSON: Did I have anybody else? We will get him first then you. Okay we're approaching 9:25 so make it brief and I'll try and get the last two or three people.

MR. RAY MANASCO: My name is Ray Manasco. I live down on Warrior River live at 812 Riverview Rd., Quinton. The gentleman up here while ago said that mining these days not like they were thirty years ago they are better today. Well I tell you what mining was in our back yard for the last five years, we know what its all about. Be glad to take you down to our house and show you the damage we had a storm seller didn't we Mr. Kitchens? Mr. Kitchens knows me very well. You can't use the storm seller anymore because the walls are busted, floors busted, stays full of water. We complained about we never got nothing we never got anyone down from the mining company. They were saying that they come in and help the people well they didn't. We never saw one never. Mr. Kitchens come down there one time and I said Mr. Kitchens what happen if we have flyrock? He said, "Ray, I'll go up there and shut them down." Well we had flyrock; lot of us around here can vouch for that not just myself. One of the flyrock went through my son's pickup truck. So, I called Mr. Kitchens and said Mr. Kitchens are you going to shut them down? He said, "Well Ray I'll go up there and talk to them I'll speak to them." That's a fact. One day we had a blast and I mean it was a bad one we still got damage from it. So I called Mr. Kitchens I said Mr. kitchens I want you bring your seismograph out here it was a bad one, gave him the time and date. We went out there and he says dog on it ray I forgot to plug it up the last time I was down here. I thought Mr. kitchens was a one-man operation but it's a bunch of these guys over here, women. Good to see you good to meet you. So you want to talk about mining years in the past being bad well I tell you what we just spent the last five years of pure misery. Our back yard is a dump, front yard we got a beautiful river and we like to keep it that way. Wife and I retired moved down here seven years ago and we

spent the last five years listening to the nukes blasting off, dynamite going off, horns whatever you name it, nobody care nobody. You ask them to come down and talk to you can't do that. Ask Mr. Kitchens for help we didn't get it, but at this point in time, Mr. Kitchens we're going to ask you again deny that request for the coal mining. It's a bad place and we'd appreciate if you would be on our side we need you. Thank you.

MR. NEIL HEIGHTS: We thank you for tonight. My name is Neil Heights I live at 15 Riverfront Drive; right across from the pumping station that pumps the Birmingham Water Works. I sit out on my pier regularly and there is something everyone here tonight has failed to say. The water flows from north to south but when the pumps kick on the water there, discharge places are going to be down the river, the water comes back up the river. The pump see the pump there (pointing to the picture on the screen) at Katie Byrd. It pumps the water and it pulls it right back up the river. The mud that comes out of the strip which I've witnessed it during the high waters and the rains you go up the river you can see the mud that comes off the bank of the highwalls up there but its been repaired lately. The water consistently sits there and goes down the river comes back up the river the rivers had all it could take right there. I'd like to tell the guy the young guy that was up here and said he had coal mined all his life. I coal mined I started in 1975. Coal miners know when things are bad and when things are good. If you lived there on that river…my pier right there right across from the pumping station ya'll are more than welcome to come at anytime, you would see the destruction that the coal that the strip it would do to the Birmingham drinking water because pulls it right in there to it. I thank ya'll for being here tonight.

DR. JOHNSON: I had one more over here. Didn't I have one more over here? If not then…there you are I new I saw a hand somewhere. This is going to have to be the last one folks.

MS. NELDA JOHNSON: My name is Nelda Johnson. I live at 737 Riverview Road, Quinton, Alabama 35130. My comment is that the mining company don't tell you how bad all the dust is. I have asthma and I can't hardly breathe I can't even go outside because we have to literally wash the deck down so I can even go outside. The noise…I had to leave my home because I couldn't even sleep. My son, they came a bad blast and they always come back after a blast and they look on that thing and they'll always say it's within the guidelines. There were rocks flying and it almost killed my son. There were rocks this big (Putting her hands up as an example) that went in someone air-conditioning unit. It messed up my neighbors truck. Big rocks, there were rocks dented into the grass but its within guidelines. My son was in the slough not in the main river in a slough and rocks pelted him and almost killed my son. Now I ask you if that was your son or your daughter how would you feel? I'm asking and I'm begging please, please do not pass this. Please I don't want anybody else to have to go through what we've had to go through. Thank you.

DR. JOHNSON: I think that got everybody. I appreciate you coming tonight we appreciate hearing your words and we will take them into consideration when we make our decision on this permit. We hope to have something out on this like I said within thirty days. Please drive careful going home. Thank you.

CERTIFICATE

STATE OF ALABAMA)

WALKER COUNTY)

I hereby certify that the above and foregoing proceedings were electronically recorded taken down by me in shorthand or otherwise and questions and answers thereto were typewritten by me, and that the foregoing represents a true and correct transcript of said hearing. I further certify that I am neither of counsel nor of kin to the parties of the action nor am I anywise interested in the result of said cause.

Ann R. Miles
Hearings Reporter

June 30, 2010

Citizens Opposed to Shepherd Bend Surface Mine
c/o Mr. Randall Palmer, CPA
67 Cherokee Hills
Tuscaloosa, Alabama 35404

Dr. Randall Johnson
Director
Alabama Surface Mining Commission
P. O. Box 2390
Jasper, Alabama 35502-2390

RE: **Shepherd Bend Mine**
ASMC Permit Application P-3945

Dr. Johnson

We appreciate the opportunity to express comments regarding the above referenced surface coal mining permit application for the proposed Shepherd Bend Mine located on the Mulberry Fork of the Black Warrior River (BWR) near the City of Cordova, Alabama. We respectfully request that the Commission carefully consider the issues posed by members of nearby communities, users of the Mulberry Fork of Black Warrior River for purposes of recreation and sustenance, consumers of drinking water provided by the BWR, and other concerned citizens, and deny this permit because these issues cannot be mitigated with an adequate degree of certainty.

ISSUES

Health and Welfare of Citizens

A primary concern of the public is the proximity of the 29 wastewater discharge points to the raw water intakes of the Birmingham Water Works Board. The BWR supplies the Birmingham metro area with its drinking water. *"The Birmingham Water Works, Black Warrior Riverkeeper and area residents protested to ADEM. The drinking water intake is within 800 feet of proposed points upstream where treated water from mining operations would be put into the Mulberry Fork, the Water Works had written ADEM. "The proximity of the proposed mining operation to such a major municipal water supply intake is unprecedented to our knowledge and represents an incompatible use," Mac Underwood, general manager of the water system, wrote in December 2007."* (The Birmingham News, December 14, 2008, *"Birmingham Water Works, Environmental Group surprised permit issued to mine"*, Kent Faulk, December 14, 2008).

The discharge would also threaten other users downstream as well. The Jasper Waterworks water source is upstream from the site, but the effect of the locks and dams on the waterway frequently affects the water flow. It has been observed that at times the waters flow upstream as well as downstream, and are not "flushed out" during dry periods allowing contaminants to accumulate beyond acceptable levels. The waters on this section of river are already stressed from inadequate control of municipal, institutional, agricultural, industrial and mining discharge, and will be compromised even further with the addition of yet another surface mine on its very

banks. Thousands of citizens use the BWR for recreational purposes including swimming, water skiing, canoeing & kayaking, fishing, and boating, and many still use the river as a food source. We are concerned about the toxic effect pollutants discharged into the waters will have on people who swim there or eat fish and game taken from the area.

We know at least one heart transplant patient living in the area who will be impacted, and many others with cardio-pulmonary disease who will be affected by the impact of dust and other airborne particles caused by the mining process. Such airborne pollution also threatens otherwise healthy individuals. We know first hand that dust levels will increase because we experienced the clouds of dust from previous mining activity located across the BWR upstream of the Dovertown and Barney communities near Cordova. We are sure that that mining operation also assured the Commission that dust and airborne particles would be controlled, however, the fact remains that it was not adequately controlled and our communities suffered.

Another issue is the negative psychological impact of noise, air, and water pollution and the destruction of the unspoiled natural beauty of the Land and the River. Many of the families in these communities have lived here for generation after generation; their ancestors are buried here. More recently others have made relatively large investments in property in the area because of the proximity to the BWR and its natural beauty and tranquility. The proposed mining activity would certainly have a negative impact on their psychological well-being.

The risk of injuries and deaths to our children and family members from traffic accidents will dramatically increase with transportation of heavy equipment, coal trucks, and service vehicle traffic on narrow, winding roadways. These roadways are used daily by school buses carrying our children and the route is the only way to and from our homes so everyone living in the area will be subject to this increased risk. Such incremental traffic also increases the dust and other airborne pollutants in the area.

Devaluation of Property

As mentioned above, many citizens have resided in the area for generations and are made of the dirt from the land their ancestors settled, and others have made more recent investments in this property because of its natural beauty and solitude. In addition to the sentimental and emotional value this property provides, it, of course, has a financial value as well. It is obvious that property adjacent to the proposed mining area will be negatively affected immediately by blasting and resulting flyrock, subsidence resulting in cracked foundations and walls, dust accumulation, noise pollution, and truck traffic, but one must also consider that the land will be unsightly during the extraction process, during the time it must remain disturbed, and during the reclamation process, then for generations thereafter. Even if an impeccable reclamation process could be completed, strip mined land carries a negative connotation as ruined land. It is obvious to the general public that strip mined land isn't attractive to prospective residents and related commerce. It actually is a detrimental activity to the revitalization of the community and diminishes the aesthetic and financial value of the land adjacent to the mine and surrounding

communities. We have never seen or heard evidence of any community having strip mined its way back to prosperity. Having a big scar on the very banks of the Mulberry Fork will be devastating to the areas value as a site for recreation and eco-tourism, one of the most attractive assets in this impoverished area.

Incremental wear and tear on roads and bridges
The roads, bridges and paved culverts that service the communities near the mine are narrow, as roadways in rural areas tend to be, and just aren't designed and constructed for the purposes of heavy industrial traffic. These structures cannot withstand the increased heavy industrial traffic that can be expected with the mining operation. The resulting potholes, loose asphalt, damaged shoulders, chunks of rock and gravel, and ruts will also cause damage to the personal vehicles of residents and visitors to the area. Bad road conditions, as previously mentioned, will also contribute to injuries and death from traffic accidents.

Negative Environmental Impact
Even though a pollution abatement plan may work perfectly on paper, this area is prone to frequent flooding, as experienced recently and widely documented in the newspapers and on TV news. This allows not only the sediments and toxic contaminants not already contained, but those that have been collected in impoundments, to spill untreated into the BWR. This certainly would have a negative impact on our drinking water and would also affect the fishery and aquatic plant life. Examples of visible mining damage has been observed by fisherman of the BWR and can be observed at Horse Creek and Barton Creek where siltation from mining has reduced the depth and accessibility dramatically over the years. On Horse Creek for example, fisherman using depth finders often noted an average depth of approximately 14 feet, now, the average depth is approximately 4 feet.

The disturbance and loss of 286 acres (of the proposed 1,774 acre mine) of forested land and wetlands will most certainly have a negative impact on current wildlife in the area and it will be decades before it can be reforested and be suitable as sustainable wildlife habitat once again. Also, we question whether a thorough scientific study has been performed to determine whether endangered species are present in this section of the BWR. Such species are present in tributaries to this section of the BWR and would likely be present in the BWR as well.

Economic Opportunities
Future Interstate Highway 22 (aka Corridor X) is an Appalachian Regional Commission highway designed to bring economic prosperity to isolated regions of Appalachia. The Cordova community has approximately 70% of its citizens living at or below the poverty level. This proposed surface mine is within three miles of the southern interchange to Cordova. This interchange serves as a gateway into this historic but depressed community, and the land in the general proximity of this interchange has a much higher potential for long-term, positive and sustainable, commercial and residential growth than would be generated by short-term and exploitative extraction projects, and the relatively few short term jobs it would create. *"When*

Corridor X opened, Governor Riley said we should be selective about what we bring into the community, and we just don't feel like this is the best thing to bring in." (Daily Mountain Eagle, *"Residents to Meet Tonight to Discuss Proposed Strip Mine,"* Melissa Bonds, December 13, 2007).

In 2005 the City of Cordova developed an award winning Comprehensive Plan *"Building Upon Place for a Sustainable Future"* (attached). The River, creeks, wetlands, and streams of the Black Warrior River Basin and available open space around them are considered major building blocks to revitalization of the community. This highway is not scheduled for completion until 2012 and a surface mining project near this interchange, prior to an adequate opportunity to implement plans for long-term sustainable economic growth, denies nearby communities the benefit of a Billion dollars plus taxpayer investment; preempts the opportunity even before the completion of the project. This is a *Fire, Ready, Aim* approach and the short-sightedness of the proposed use of this land for surface mining should be apparent especially when one looks at the positive economic growth along other transportation corridors in the State (e.g., I-65, I 20/59, Hwy 280, I-459, I-565, and I-359). At the very least this project should be delayed until the highway project is complete and the opportunity for more positive economic development can at least be attempted. The *incremental opportunity cost* in addition to the squandering of the Billion dollars plus taxpayer investment could never be recovered.

Are the Environment and the Public Being Protected and Served by ASMC and ADEM?
We believe the facts, issues, and questions raised regarding this controversial, proposed activity describe exactly what both ASMC and ADEM were organized to guard against. We certainly believe that the eco-system created by the Mulberry Fork of the Black Warrior River is a fragile area; we can observe that this natural system certainly possesses an impressive aesthetic appeal. The public also can understand how mining this land could result in substantial loss or reduction of long-range productivity of renewable resource lands, water supply, food and fiber products. Further, letters from the Alabama Historical Commission and MRS Consulting indicate the probability that historical artifacts and sites exist in the area. Media clips can attest to the frequency of flooding in the area, and I believe our comments address our concerns regarding the threat to life and property. Excerpts from ASMC code and ADEM mission statement are presented below and exactly express our concerns regarding the threats related to this proposed mining operation.

The *Alabama Surface Mining Commission Administrative Code* *"prohibits surface coal mining and reclamation operations on those lands or areas where the Act states that surface coal mining should not be permitted."* Those lands or areas include *"fragile or historic lands where operations could result in significant damage to important historic, cultural, scientific, or aesthetic values or natural systems."* The Code also addresses *"renewable resource lands in which the operations could result in substantial loss or reduction of long-range productivity of water supply or of food or fiber products; or affect natural hazard lands in which the operations*

could substantially endanger life and property, such lands to include areas subject to frequent flooding and unstable geology."

The mission statement of the Alabama Department of Environmental Management states: *"Alabama is blessed with a wealth and variety of natural resources which provide significant social, economic, and environmental benefits and opportunities for the citizens of Alabama. Our mission at ADEM is to protect and improve the quality of Alabama's environment and the health of all its citizens."*

Perception of a Lack of Independence between ADEM & ASMC

We have observed during the course of this controversy that the term *"rubber stamp"* is often used when referring to the permitting process at both ADEM and ASMC. This of course refers to the perception by the public that approval is just part of the process, and that the two agencies do not work independently to facilitate and approve permit applications. We do not want to believe that this is the case, but independence absolutely must be demonstrated both in fact and appearance before the trust of the public is earned.

How can a perception of independence be fostered when both formal and informal agreements exist between ADEM and ASMC that delegates the responsibility of review of pollution abatement plans to ASMC? Which agency is charged with protecting the public under the Clean Water Act, and which agency is charged with regulating mining? Is the current practice acceptable, and does it provide and adequately administer protection afforded under the Clean Water Act? Does this system of shared responsibility adequately protect Alabama's waterways and the health and welfare of the environment and citizens? For what reason can ADEM not meet its obligation, and what rationale would adequately explain the abilities of the ASMC to properly evaluate the effect a mining proposal might have on the environment? These two agencies have two completely different objectives and should be, in fact and appearance, independent. This issue must be resolved prior to issuance of a surface mining permit.

Carelessness in the Application Process

During the process of obtaining the required permits for the NPDES wastewater discharge permit, ADEM was sued for certain procedural and substantive mistakes which we contend they made during the NPDES permit process for Shepherd Bend. ADEM also did not respond to our request for a public hearing. *"Officials with the Birmingham Water Works and an environmental group said they were recently surprised to learn the state's environmental agency had given a permit to a proposed coal strip mine to discharge water into a river close to a major drinking water intake. The (Birmingham) water system and Black Warrior Riverkeeper officials a year ago protested the Alabama Department of Environmental Management's issuing the proposed permit and asked the agency to hold a public hearing on the issue. The surprise came when the groups found out that ADEM issued the permit four months ago without telling them.* (The Birmingham News, December 14, 2008, *"Birmingham Water Works, Environmental Group surprised permit issued to mine"*, Kent Faulk, December 14, 2008) There are still unresolved

questions regarding the authority of the Commission to issue a surface mining permit before clarification and litigation processes relative to this matter have been finalized.

Many of our citizens have called the Alabama Surface Mining Commission, frequently, to inquire of the permit status of the proposed mine; asking specifically, "had an intent to apply for a permit, or a permit application been submitted?" only to be rudely informed, at times, by agency representatives that "we have never heard of Shepherd's Bend, LLC or any other proposed mine in that area...we don't know nothing about it." The attitude and tone of the representatives response alone was insulting and certainly doesn't serve to develop any sense of trust between the agency and the public it is supposed to serve. With this degree of carelessness, negligence, and instances of bad judgment exhibited by representatives of the Agencies involved, how can citizens feel comfortable that the pollution abatement and mining plans, as presented, will be diligently and competently executed and that Shepherd's Bend, LLC will be adequately monitored to assure strict compliance to regulations?

Archaeological Concerns

On December 12, 2007, MRS Consultants, LLC provided us with their findings after conducting background research for archaeological sites in the area (letter attached). Although no historic properties were listed, it was noted that "numerous archaeological sites are recorded on the banks and terraces above the Mulberry Fork of the Black Warrior River, including a possible shell mound site and several other sites considered potential sites for the National Register of Historic Places and warrants a more thorough investigation. The majority of the acreage within Shepherd Bend had NOT been evaluated for the occurrence of cultural resources, especially prehistoric archaeological sites.

Further, in a letter from Elizabeth Ann Brown, Deputy State Historic Preservation Officer on December 13, 2007 (attached), there are six known archaeological sites in the vicinity of the proposed mine and that the area possesses a high probability for the presence of additional archaeological sites and such sites may contain human burials.

Local residents in the area can take you to a shell mound in the vicinity and also to areas purported to be location of human burials and want to be assured that these sacred and historical grounds are not desecrated.

Ethical Questions

Shepherds Bend, LLC is affiliated with Drummond Coal Company, in appearance and fact, and shareholder Gary N. Drummond has served as a Trustee of the University for a number of years, has been a major contributor to UA, and currently is a Trustee Emeritus; certainly in a position to exert influence on decision making at UA. The public questions the ability of any leasing transactions to be conducted at arms length in light of this relationship, be it in-fact or perceived.

"UA officials told that ***Drummond officials had encouraged the university to open its land to strip mining***. Andreen said UA officials were aware that Drummond Coal is buying leases near UA's tract. "That makes it an appropriate time for us to take a hard look at the best use of our property," Andreen said." (*The* Tuscaloosa News, *U A Mining Plans Upset Cordova Residents*, Lucinda Coulter, May 25, 2007).

"UA had sought bids to work the land from mining companies in May (2007), though it appeared to have hit a dead end after receiving no response. Cathy Andreen, UA spokeswoman, said that Shepherd Bend has not contacted the university about leasing mineral rights, though university leaders are still open to proposals. Andreen has said the university was initially interested in turning the timberland into a mine because of a rise in coal prices. Andreen said that Shepherd Bend has not contacted the university about leasing mineral rights, though university leaders are still open to proposals. "If we receive a proposal, it will be considered at that time," she said. Andreen said that UA wants to be a good citizen and reiterated there are no current proposals before the university to develop the land into a coal mine." (Tuscaloosa News, *"Critics Seek Hearing About Proposed Mine"*, Adam Jones, December 23, 2007).

We request an investigation be conducted regarding the relationship of Drummond Coal Company, Shepherds Bend, LLC, and the University of Alabama as related to this controversy prior to issuance of a surface mining permit. The majority of the land included in the mining proposal (1,300 + acres of 1,773) is controlled by the University of Alabama, however, is considered public lands that were granted to UA as a sustainable resource for university funding. Any transaction should absolutely be transparent and monitored to assure that it is conducted at arms length. On December 23, 2007, Cathy Andreen, spokesperson for UA, said Shepherds Bend had not contacted them about leasing the mineral rights; however, this contradicts her earlier statement on May 25, 2007 where she admitted that Drummond officials had encouraged the university to open its land to strip mining. Are negotiations being privately conducted? Is Drummond exerting undue influence to pressure UA to open land to them for purposes of strip mining? What meetings, emails, and other correspondence has taken place between University officials and representatives of Drummond Coal? Are any UA employees involved in this process related in fact or appearance to Drummond Coal? These questions must be answered, and the process accountable to the public.

CONCLUSION - We respectfully request a conference to discuss these and other issues prior to issuance of this permit. We ask that informed representatives of the Alabama Surface Mining Commission and Shepherd Bend, LLC be present to address our issues and answer questions we have regarding this project. The majority of the citizens concerned about the consequences of mining activities on the Black Warrior River in and near their respective communities and homes work or have other commitments during the day therefore we request that such conference be conducted on an evening, after business hours, during the work week, at a location reasonably convenient to the community, and at a time that will allow those citizens a reasonable amount of time to travel to the conference site after the days work. We consider the end of business hours

for this purpose to end at 5:00 p.m. and specifically request that such a conference would be held no earlier than 7:30 p.m.

The controversy surrounding this surfacing mining proposal has been ongoing for over three years. It has been, and continues to be, the subject of costly litigation. Citizens living in the area are vehemently opposed to such controversial, and potentially devastating activities on the BWR, users of the BWR for purposes of recreation, drinking water, and sustenance are opposed to the project, The Birmingham Water Works Board is opposed to the project as it threatens the source of the drinking water supply and equipment used to collect and process raw water from the BWR. So, other than Shepherds Bend, LLC and purchasers of the coal....who directly benefits from this proposed activity? Further, the informal "understanding" for sharing responsibilities between the Alabama Surface Mining Commission and the Alabama Department of Environmental Management just isn't appropriate and makes it difficult for us to exercise our right as citizens to challenge permits. This also brings to question the effectiveness of both agencies to regulate surface coal mines and protect our threatened waterways. Again, we respectfully request that this permit be denied.

Respectfully Submitted

Randall Palmer, CPA
For Citizens Opposed to Shepherd Bend Surface Mine

Attachments

CC: Mr. Bob Riley, Governor of State of Alabama
Mr. Ken Salazar, U. S. Secretary of Interior
Mrs. Lisa Jackson, Administrator, Federal EPA
Mr. Mark Nufort, EPA Region 4
Ms. Karrie Jo Shell, EPA Region 4
Senator Jeff Sessions
Senator Richard Shelby
Representative Artur Davis
Representative Robert Aderholt
Dr. Malcolm Potera, Chancellor, University of Alabama
Dr. Judy Bonner, Provost, University of Alabama
Dr. Robert Witt, President, University of Alabama
Mr. Mac Underwood, Birmingham Water Works Board
Mr. Don Welch, Jasper Water Works Board
Mr. Adam Jones, Tuscaloosa News
Mr. Kent Faulk, Birmingham News

Mr. Brian Kennedy, Daily Mountain Eagle
News Department, Montgomery Advertiser
News Department, ABC 33/40, Birmingham, Alabama
News Department NBC 13, Birmingham, Alabama
News Department CBS 42, Birmingham, Alabama
News Department Fox 6, Birmingham, Alabama

BIRMINGHAM
WATER WORKS

August 19, 2010

Public Comments pertaining to the Shepherd Bend Mine Permit

The Birmingham Water Works Board (BWWB) is concerned about the short term and long term effects that the Shepherd Bend Mine will have on the water quality in the Mulberry Fork. The BWWB supplies approximately 200,000 people with water pumped from this source. The location of a mine so close to a major public water supply intake should be required to implement the most protective measures available to protect the water from potentially harmful elements that could adversely impact the health of the individuals that drink water from this source. It is our opinion that Shepherd Bend, LLC has failed to adequately assess and mitigate the potentially negative impacts that their operations could have on this major public water supply. We believe the current permits and permit applications DO NOT:

- Adequately assess the current conditions of the soils with respect to toxic materials
- Require, and have not planned for, adequate monitoring (water testing) and protection of surface and ground water changes during the mining operation
- Impose contaminant discharge limits appropriate for a river classified as a public water supply. The BWWB must treat the water from the Mulberry Fork to meet regulatory limits for a number of contaminants under regulation of the Safe Drinking Water Act; however, under the current permits and plans, these very same contaminants are allowed to be discharged to the river with no regulation or monitoring limits.
- Show that adequate engineering has been completed with regard to sedimentation basin design and Spill Prevention, Control, and Countermeasure (SPCC) planning
- Protect the public water supply from post-mining impacts

Insufficiently treated mining runoff may contain many metals and organics that, if discharged within 800 feet upstream of the Mulberry Intake Pump Station, could negatively impact the ability of the BWWB to provide high quality water to its customers at a reasonable price. Until Shepherd Bend, LLC, and the responsible regulatory agencies, put in place adequate measures to protect the water quality in the Mulberry Fork, the Birmingham Water Works Board must request that no mining activities be permitted near the Mulberry Intake Pump Station.

Moe Gamble

ANSWERS TO SHEPHERD BEND QUESTIONS

1. How many acres are included in the permit?
   a. ~1773 acres in the ADEM NPDES Permit. This is not mining acres.
   b. ~306 acres in the USACOE NPW21 Permit. This is not mining acres.
   c. ~286 acres in the ASMC Mine Permit. Only 278 mining acres.

2. How will the operation manage truck traffic in the area? This is under continued evaluation.
   a. Construction of separate road for access to and from the mine operations.
   b. Continuous county road monitoring personnel will be utilized.

3. How will the operation provide dust control in the area?
   a. Sprinkler system or water truck operation along mine roads
   b. Evaluating water canopy system to operate during blasting.

4. How will the operation provide noise control in the area?
   a. Equipment operated will be installed with latest noise reduction systems.
   b. Back-up Horn Safety System Daylight Only and Night Time Strobe Light Safety System.

5. How will the operation manage water quality and protect the B'ham Water Works Board intake?
   a. Meet the required EPA/ADEM water quality guidelines.
   b. Construct Ponds and re-use of mine water for dust control.
   c. Leave all natural vegetation filtration along the riverbank.
   d. Silt Fence along the permit

6. BWWB contends the mine will have an adverse effect on its water intake system. Has this information been reviewed? Yes, by ADEM and others.
   a. The BWWB is trying to enforce drinking water standards on the mine discharge.
   b. The BWWB has operated the past 5 years with a Mine right beside it with no problems.

7. BWWB contends that the coal seams and spoil in this area produce acid drainage. Has this information been reviewed? Yes, by ADEM, ASMC, and others.
   a. The water pH over the last 4 year period for mines in this area is: 7.2 (neutral)
   b. The coal is what is removed from the site and not left for drainage.
   c. The BWWB based their statement upon a "grab sample" from a coal yard not mine rock.

8. BWWB contends that the coal seams and spoil in this area produce high metals content. Has this information been reviewed? Yes, by ADEM and Others.
   a. BWWB sampled for 36 individual metals
      1. Only 7 items were even found. All of which previously exist in the river.
      2. Only 3 items even have a Drinking Water standard.
      3. NO samples increased the metals at the BWWB Intake.

9. Will there be any water discharges within 800 feet of the Birmingham Water intake?
   a. NO. The closest ASMC pond to the BWWB intake is ~4,200 feet.

10. How will the operation protect well water in the area?
   a. Wells within 1 mile of the permit area will be identified before mining begins.
   b. Pre-mining surveys will be offered to homeowners.

11. How will the operation manage blasting controls at the site?
    a. Contract with a local certified blasting company regulated by ASMC and ATF.
    b. Utilize the most effective and available technology for blast designs

12. How will the operation mitigate house damage from blasting?
    a. Use highest quality blast designs and materials to reduce vibration and air blast.
    b. Pre-mining surveys will be offered to homeowners within one mile of the permit.

13. What will be the work schedules, particularly weekends and night operation schedules?
    a. 6am to 2am operations Monday – Saturday, Maintenance Sundays

14. Will the operation consider assisting with a city water system for the Shepherd Bend area?
    a. The company will be a proponent of improved water access to the Shepherd Bend area.

15. Will the operation consider the concerns of increased traffic and road conditions in this area?
    a. The company will be a proponent of improved roads for the Shepherd Bend area.

16. Will the operation consider assisting with a volunteer fire station operation for this area?
    a. The company will be a proponent of a local volunteer fire department facility.

17. Will the operation consider the impact to the local cemetery in the area?
    a. The cemetery will not be mined and the company will offer maintenance assistance.

18. Will the operation agree to hire local area residents for the jobs at this mine?
    a. The mine will hire the best qualified and available employees with the most experience to make this mine a safe, secure, and profitable operation. It would be advantageous to the operation if these qualified employees resided in the local areas.
        i. Recent employment records indicates residence of:
            1. Walker County - 68.0%
            2. Jefferson County - 2.4%
            3. Winston County - 9.4%
            4. Blount County - 1.2%
            5. Cullman County - 8.2%
            6. Fayette County - 4.7%
            7. Marion County - 4.7%
            8. Franklin County - 1.2%

19. Will this operation be a UMWA mine or non-union?
    a. This will be determined by the mine employees
    b. The company will not promote nor campaign against union representation.

20. How will the operation protect against unsightly appearances along the river bank?
    a. There will be a 50 acre buffer along the permit and the river.

21. What is the estimated economic value of this mine?
    a. Jobs – Potentially 100 Direct and Contract/Vendor jobs.
    b. Wages – Approximately $6,000,000 Total per year
    c. Benefits – Approximately $4,500,000 Total per year
    d. State/Local Tax Benefit – Approximately $1,900,000 per year
    e. Federal Tax Benefit – Approximately $3,000,000 per year
    f. State Royalty Benefit – Approximately $4,000,000 per year

22. Property Questions
    a. In the ASMC permit area we have some property owners pending (not under lease). None of these property owners have indicated that the property is not for lease.

23. Why put a Coal Mine in this area at this location?
    a. Quality of Coal
        i. Gorgas Power Plant requires a certain quality of coal to be used. There are limited coals of available that meet these requirements. In Walker County, theses are some of the last available coals that meet these requirements.
        ii. Shepherd Bend coals could improve Gorgas Environmental Quality – Low Ash, Low Sulfur, High BTU/lb
        iii. Shepherd Bend coals could reduce Gorgas Ash disposal. This coal has less ash than the average coals in this area.

24. Opponents are reporting that Quinton and Horse Creek have over 400 water quality violations.
    a. During the last 5 years Quinton had 7 ADEM water samples that slightly exceeded the permit limits and 9 averages that slightly exceed the average limit.
    b. During the last 5 years Horse Creek had 1 ADEM water sample that slightly exceeded the permit limits and 3 averages that slightly exceeded the average limit.
    c. During the last 18 months Cane Creek had 0 ADEM water samples that exceeded the permit limit and 1 average that slightly exceeded the average limit.

Codes - Impact Study -

Iron -

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WATERKEEPER® ALLIANCE
MEMBER

August 19, 2010

Dr. Randall Johnson, Director
Alabama Surface Mining Commission
P. O. Box 2390
Jasper, AL 35502-2390

Re: Shepherd Bend Mine
ASMC Permit Application P-3945

Dear Dr. Johnson:

Thank you for the opportunity to offer additional public comments by Black Warrior Riverkeeper, Inc. ("BWRk") to the Alabama Surface Mining Commission ("ASMC") on the Shepherd Bend Mine permit application. While we know that the ASMC depends upon the Alabama Department of Environmental Management ("ADEM") to determine NPDES permit limits and water quality standards, we believe the shared authority between ADEM and the ASMC for coal mining operations in Alabama gives the ASMC both the right and the duty to deny Shepherd Bend's mine permit application in this case.

While ADEM may be the sole authority for setting NPDES permit limits, it is the ASMC's responsibility by law and regulation to ensure that both the pollution abatement and prevention plan as well as the sediment control and treatment structures for this mine operate in such a way as to protect designated water uses. Here the permit application and public comment file, when read together, demonstrate that there is simply no way (even with the best, most rigorous oversight possible by your agency) that the inadequate pollution abatement and prevention ("PAP") plan and sediment control structures outlined by Shepherd Bend will prevent the contamination of the drinking water supply. The Birmingham Water Works Board ("BWWB") has submitted detailed comments and information on this issue. Moreover, we attach two affidavits by recognized and credentialed experts in the environmental field which also support the conclusion reached by the BWWB. It is not enough for the ASMC to take the NPDES permit limits set by ADEM and make Shepherd Bend design an operation to comply with those limits. The ASMC has an affirmative and independent obligation under applicable law to ensure that the operation of Shepherd Bend will not cause or contribute to water quality violations.

The ASMC was created pursuant to the Alabama Surface Mining and Reclamation Act of 1981 (Ala. Code §§9-16-70 through 9-16-107) "to provide such regulation and control of surface coal mining operations as will reduce injurious effects to the environment and resources of the State." Although ADEM may retain primacy on NPDES permitting issues, the ASMC is required by law to ensure that "any permit issued pursuant to this article to conduct surface mining operations shall require that such surface coal mining operations will meet all applicable performance standards." Ala. Code § 9-16-90. General environmental performance standards applicable to all surface coal mining operations and enforced exclusively by the ASMC require the mine operation at a minimum "protect all surface areas . . . to effectively control erosion and attendant . . . water pollution" and to "protect offsite areas from . . . damage occurring during the surface coal mining." Id.

How can the ASMC possibly permit a mine where the application conclusively demonstrates that the water being discharged from mine will have 10 times the level of iron and 40 times the level of manganese recommended by the Environmental Protection Agency for safe drinking water? How can the ASMC possibly permit a mine which has the ability to discharge the equivalent of 81 dump truck loads of sediment into the Mulberry Fork during one 10 year, 24 hour rain event? And that discharge is only from four sediment basins draining the mine's initial 355 acres, a fraction of the entire 1,773 acre site to be mined. Excessive siltation from uncontrolled erosion at a mine site can be as destructive to the aquatic ecosystem of a stream or wetland as acid mine drainage. *See* November 16, 2007 Letter from James S. Cherry, II, Alabama Department of Conservation and Natural Resources, to David Muncher. Siltation similarly affects drinking water quality and treatment costs. While such a discharge might meet the legal requirements of ADEM's NPDES permit, it does not satisfy the ASMC's separate oversight responsibilities to ensure that surface and offsite areas are protected or water pollution is controlled.

Not only was the ASMC formed specifically to establish a statewide program to reduce adverse effects to the environment that result from surface coal mining, the agency must "exercise the full reach of state constitutional powers to provide protection of the public interest through effective control of surface mining operations." The public interest cannot be served by a mine that will drastically increase costs of drinking water treatment and present a very real threat to public health, according to the BWWB. Just because ADEM arguably failed to do its job to write an NPDES permit that protects water quality, the ASMC cannot similarly neglect its responsibilities to act in the public interest.

Finally, on July 9, 2010, Shepherd Bend's authority to discharge under the Army Corps of Engineers ("ACOE") Nationwide Permit 21 ("NWP 21") was apparently reinstated. This reinstatement occurred even though the ACOE suspended the use of NWP 21 in the Appalachian region on June 17, 2010. In light of this national policy decision, we believe it is entirely inappropriate for Shepherd Bend to be allowed to discharge under NWP. As the Office of Surface Mining recently commented in another context, it is not "fair, appropriate or scientifically valid . . . to apply the new protections only in central Appalachia . . . . Streams are ecologically significant regardless of the region in which they are located."

If Shepherd Bend Mine is permitted by the ASMC, at a minimum the ASMC should require the operator to apply for an individual ACOE permit before mining. According to a U.S. Department of the Interior letter in the application file, projects "impacting more than 0.5 acres of wetlands . . . likely require an Individual Department of the Army Permit." *See* December 4, 2007 Letter from William J. Pearson, U.S. Department of Interior, to David Muncher. Shepherd Bend Mine will fill at least an acre of wetlands. *See* September 10, 2008 Letter from Cindy House-Pearson, ACOE, to David Muncher. Where, as here, the proposed mine discharges in such close proximity to the drinking water supply, an individual ACOE permit would at least allow for a meaningful evaluation of the individual or cumulative impacts of fills on water quality, public health and the environment. With 95 active coal mines in the Black Warrior River watershed, coal mining is one of the biggest threats to water quality at this time. The cumulative effect of numerous mines, many of them with poor records of compliance, is a threat not only to general water quality, but also to wildlife habitat, recreational uses and drinking water. Requiring Shepherd Bend to obtain an individual ACOE permit would at least allow for a consideration of some of those effects.

For the forgoing reasons and based upon our earlier permit comments, we ask the ASMC to deny the permit application by Shepherd Bend.

Sincerely,

Eva Dillard
Staff Attorney
Black Warrior Riverkeeper, Inc.

Expert Report of Warner Golden

I. Qualifications and Experience

1. I am Warner Golden, P.E., a Senior Engineer and Partner with NewFields, an environmental consulting firm headquartered in Atlanta, Georgia with an office in Birmingham, Alabama. I hold a Bachelor's Degree in Engineering from the Georgia Institute of Technology. I am a Professional Engineer licensed in the states of Alabama, Georgia, and Mississippi, a member of the American Society of Civil Engineers, and a member of the Air and Waste Management Association of Alabama. A C.V. detailing my education, employment history, research, and representative publications is attached as Exhibit A to this report.

2. I have over twenty years experience in civil engineering and environmental projects and specialized expertise in surface water and contamination assessment projects. I also have experience in various environmental remediation projects involving the remediation of water pollution.

3. I am familiar with the discharge-related provisions of the federal Clean Water Act and the related regulations and guidelines. I am also familiar with Alabama's National Pollutant Discharge Elimination System ("NPDES") program and its accompanying regulations and guidelines, including Alabama's narrative water quality standards.

4. I have worked on various projects involving NPDES permits and discharges over the last twenty years, and am familiar with the design of pollution abatement and/or prevention plans ("PAP plans"). I assisted in the preparation and design of such plans for several pulp and paper mills in Mississippi and for a facility in Eufaula, Alabama. I am familiar with Alabama Department of Environmental Management's ("ADEM") "Guidelines for Minimizing the Effects of Surface Mining and Surface Effects of Underground Mining on Water Quality" (hereinafter "PAP Plan Guidelines"), which include sections designed to help control sedimentation and harm from haul roads at mining sites such as the Shepherd Bend mine.

5. As a result of my work with NPDES permits, the development of PAP plans, and other wastewater modeling work I have conducted, I am familiar with design features and best management practices necessary to minimize the discharge of harmful pollutants into water. I am also familiar with the critical importance of such design features and best management practices in minimizing harm to the environment.

6. My publications for the last 10 years are as follows:

"Risk Management as a Land Use Issue: Case Study Application of GIS Analysis for Determining Remediation Requirements for Future Land Use Options and Implementation," Golden, W. and Odle, B., 2007 Soil and Groundwater Technology Association Annual Meeting Rotherham, United Kingdom

"Real Time Basin Wide Conductivity Monitoring," Golden, W and Hall, W. L., 1991 Coalbed Methane Symposium, Tuscaloosa, Alabama

7. In the previous three years, I have not testified as an expert in a trial or by deposition in any litigation.

II. Areas of Investigation/Opinions

I have been asked to investigate and form opinions on the following issues related to ADEM's issuance of an NPDES permit ("the permit") for the Shepherd Bend mine in Walker County, Alabama:

- The importance and essential nature of a complete PAP plan in assessing a surface mining operation's impacts on water quality;
- Whether the limited SEDCAD analyses for ponds 8 and 10 submitted by Shepherd Bend with its permit application comply with ADEM's PAP Plan Guidelines;
- The exemptions from discharge limits in the permit, and whether the exemptions from discharge limits in the permit are protective of water quality and assure compliance with water quality standards; and
- The failure to set discharge limits for certain pollutants present in mining discharges and the impact of this failure on water quality standards.

III. Facts Relied Upon

I have considered the following information about the Shepherd Bend mine site in forming my opinions. The information I considered has included facts that I would ordinarily consider and rely on in reaching opinions about a site.

1. I have reviewed the permit application, the draft permit, comments of the Birmingham Water Works Board and the Black Warrior Riverkeeper on the draft permit, and the final permit.
2. Based upon my review of these documents, I have learned the following facts:
    a. On October 10, 2007, Shepherd Bend submitted its application for a NPDES permit from ADEM to authorize the discharge of water from its mining operations into the Mulberry Fork of the Black Warrior River and certain tributaries.
    b. Shepherd Bend plans to release discharges from its mining operations within 800 feet of the Mulberry Raw Water Pump Station, a drinking water intake maintained by the Birmingham Water Works Board. The Mulberry Raw Water Pump Station is a source of drinking water for the Birmingham water system.
    c. In November of 2007, ADEM released a draft permit which proposed the authorization of Shepherd Bend's discharges at the site.

d. In December of 2007, Black Warrior Riverkeeper and the Birmingham Water Works Board submitted comments on the draft permit. Both entities raised concerns regarding the proximity of the mining operation to its drinking water intake valve and other water quality impacts.

e. On July 21, 2008, ADEM issued a final permit to Shepherd Bend. The final permit became effective on August 1, 2008. ADEM attached its response to the Birmingham Water Works Board and Black Warrior Riverkeeper comments on the draft permit to this final permit.

f. Shepherd Bend did not submit a PAP plan to ADEM during the permitting process.

g. The Shepherd Bend site is 1,773 acres.

h. Shepherd Bend will have 29 outfalls at the site, and will release a variety of pollutants including iron, manganese, aluminum, sulfates, chlorides, total dissolved solids ("TDS"), and total suspended solids ("TSS") and will result in changes to the pH of the receiving waters.

i. The Mulberry Fork of the Black Warrior River, where 11 of the 29 outfalls will release their discharges upstream of the Mulberry Raw Water Pump Station, is classified for "Public Water Supply" and "Fish and Wildlife" uses pursuant to Alabama's water quality criteria. These 11 outfalls discharging into the Mulberry Fork drain approximately 886 acres, 50%, of the site.

j. The remaining 18 outfalls all discharge into the Mulberry Fork or its tributaries downstream of the Mulberry Raw Water Pump Station which are also designated for "Public Water Supply" and/or "Fish and Wildlife" uses.

k. The permit contains general discharge limitations for iron, manganese, and TSS. However, the permit drops these limits during the vast majority of precipitation events, as explained further below.

l. The permit does not set any discharge limitations for aluminum, total dissolved solids, sulfates, or chlorides.

IV. <u>Opinions</u>

Based on information contained in the permit application, draft permit, and final permit, and my experience, education, and training in reviewing NPDES permits and designing measures to minimize discharges that degrade water quality, I have formed the following opinions.

A. PAP Plan/Violation of Water Quality Standard with Sediment Discharges from Pond Eight

i. *No PAP - Importance of a PAP Plan*

1. The PAP plan is an essential element of any NPDES permit for a mining facility. Without a PAP plan, there is no meaningful way to determine the total impact of the discharges from the site on the water quality of the receiving waters.

2. The PAP plan is a site-specific, detailed document which explains the measures that a mining operation will employ to minimize its impacts on water quality resulting from precipitation driven runoff. Pursuant to ADEM regulations and good engineering practices, PAP plans typically include an explanation of the design of sediment ponds at the site and diagrams of this design for all ponds, plans to minimize impacts from mining on nearby streams, plans to minimize sediment and other pollutants' release from haul roads, and plans to minimize the effect of non-point source pollution from the mining operation.

3. Based on information in the permit application, ADEM did not review any PAP plan before granting the permit to Shepherd Bend because Shepherd Bend did not provide a PAP plan to ADEM.

ii. Pond Design for Pond 8, Violations of Water Quality Standards

4. Pond design and orientation, one element of a PAP plan, has a major impact on how much sediment is discharged from a site such as the Shepherd Bend mine. This is particularly true at the Shepherd Bend site given the steep slopes present at the site.

5. Instead of submitting a PAP plan to ADEM, Shepherd Bend appears to have only submitted a SEDCAD analysis for its sediment ponds at Basins 8 and 10, two of the twenty-nine basins on the site. The SEDCAD analysis provides a hydrologic routing of the 10 year, 24 hour precipitation event through the theoretical sediment pond and provides an estimate of sediment collected in the pond and the amount allowed to pass through the pond. There is no indication that the sediment ponds at Basins 8 and 10 have actually been designed properly, as there are no plans and specifications for construction included in the SEDCAD analyses.

6. Without design plans and specifications for the sediments ponds at Basins 8 and 10, it is impossible to verify that these sediment ponds comply with ADEM's PAP Plan Guidelines because there is insufficient detail. ADEM could not possibly make a determination that the designs are adequate to provide for protection of water quality without details of the pond design for all sediment ponds including layout on topographic map, orientation of inflow and outfalls to check for short circuiting, pond size to verify retention time and sediment capture, dam width and side slopes to verify slope stability, outlet structure size and orientation, outlet works erosion protection to prevent the downstream toe of the dam, and slope protection measures, etc.

7. Notwithstanding the incompleteness of the information provided, the SEDCAD analysis for the sediment pond at Basin 8 reveals that the release of sediment from this pond alone will cause or contribute to a violation of Alabama's water quality standards.

8. First, the SEDCAD analysis assumes that the sediment ponds will capture 90% of the sediment from the site and prevent it from being released. This is high for a sediment pond and could be difficult to achieve in practice, especially as the retention time for the pond is reduced as sediment builds up over time.

9. Moreover, according to Shepherd Bend's SEDCAD analysis for pond 8, during the 10 year, 24 hour precipitation event, 3,142 tons of sediment will be washed from the 183 acres of open mine into the sediment pond for basin 8. Sediment pond 8 will then discharge approximately 329 tons of this sediment into downstream wetlands and the Mulberry Fork. This is the equivalent of more than 16 dump trucks of sediment. Notably, Shepherd Bend did not provide a SEDCAD analysis for precipitation events less than the 10 year, 24 hour precipitation event. While it is not possible to precisely extrapolate the amount of sediment released in smaller precipitation events from the amount released in the 10 year, 24 hour precipitation event, the amount of sediment would be significant because of the steep slopes associated with the Shepherd Bend mine.

10. Assuming the ratio of sediment discharged per disturbed mine area for pond 8 applied to the entire 1,773 acre site, the entire site will discharge approximately 3,187 tons of sediment into downstream wetlands and the Mulberry Fork. This is the equivalent of 160 dump trucks of sediment resulting from one storm event.

11. The release of this amount of sediment from pond 8, just one of the 29 proposed ponds, violates Alabama's water quality standards. The SEDCAD analysis indicated the peak sediment concentration (TSS) in the discharge will be 11,165 mg/l. Mass balance calculation indicates the average TSS of the discharge will be approximately 5,000 mg/l. This large amount of TSS violates Alabama's water quality standard providing that state waters must be free from wastes that will settle to form bottom deposits and interfere with classified water uses such as Public Water Supply and Fish and Wildlife uses.

12. The SEDCAD analysis for pond 10 is deficient in the same way as the analysis for pond 8, and also demonstrates that discharges at this pond alone would violate Alabama's water quality standards.

13. ADEM could not have determined that a PAP plan for the site was adequate to provide for the protection of water quality because no PAP plan was submitted with the permit application, and because the two pond designs provided do not comply with ADEM's PAP Plans Guidelines and will cause a violation of Alabama's water quality standards.

B. Exemptions in the Permit and Violations of Water Quality Standards

1. The permit includes generally applicable daily average and daily maximum discharge limitations for iron, manganese, and TSS, but exempts discharges of these pollutants during most precipitation events.

2. For any precipitation event greater than a 2-year, 24-hour precipitation event, the permit exempts discharges of iron from any discharge limitation.

3. For all precipitation events, the permit exempts discharges of manganese and TSS from any discharge limitation.

4. The exemption of discharges of iron in most precipitation events will cause a violation of the water quality standards for the receiving waters because the discharges are not effectively treated or controlled. As noted in the Birmingham Water Works Board's ("BWWB") comments on the draft permit, the discharge limits set for iron are ten times higher than the secondary maximum contaminant loads for total iron concentrations under the Safe Drinking Water Act. These lenient discharge limits are not applicable in precipitation events greater than a 2-year, 24-hour precipitation event, thus in many precipitation events, discharges of iron will violate the water quality standards. As noted by the BWWB, the discharge limits and exemptions for iron are not protective of drinking water uses.

5. The exemption of discharges of manganese during all precipitation events, including even small precipitation events, will cause a violation of the water quality standards for the receiving waters because the discharges are not effectively treated or controlled. As noted in the Birmingham Water Work's Board's ("BWWB") comments on the draft permit, the discharge limits set for manganese are forty times higher than the secondary maximum contaminant loads for total manganese concentrations under the Safe Drinking Water Act. These lenient discharge limits are not applicable in precipitation events, thus in many precipitation events, discharges of manganese will violate the water quality standards. As noted by the BWWB, the discharge limits and exemptions for manganese are not protective of drinking water uses.

6. The exemption of discharges of TSS during all precipitation events, including even small precipitation events, will cause a violation of the water quality standards for the receiving waters because the discharges are not effectively treated or controlled.

C. Errors in ADEM's Bases for the Discharge Limits

1. The permit sets general discharge limits for iron, manganese, TSS, pH, and flow (most of which do not apply during most precipitation events, as discussed below).

2. According to its Response to Comments, ADEM used mass balance calculations "to determine expected contaminant levels under critical conditions." On the basis of these calculations, ADEM determined that the discharge limits in the permit would be protective of water quality for both precipitation-driven and non-precipitation-driven discharges. However,

due to a misapplication of discharge limits in these calculations, ADEM's conclusion is flawed and incorrect.

3. Specifically, ADEM applied the final permit's general discharge limits – i.e., the limits from which the vast majority of precipitation-driven discharges are exempted – to Shepherd Bend's expected precipitation-driven discharges, as presented in the permit application. On the basis of this calculation, ADEM determined that the TSS concentrations at the Mulberry Intake would be at acceptable TSS concentrations of 35 and 70 mg/l.

4. In applying the general discharge limits to precipitation-driven discharges, ADEM improperly failed to consider that the precipitation-driven discharges would not be subject to the general discharge limits under the terms of the permit. Rather, the vast majority of precipitation events would be exempt from any discharge limits whatsoever. Accordingly, ADEM's application of the general discharge limits to precipitation-driven discharges to justify limits in the permit is not a valid analysis, as the 35 and 70 mg/l general discharge limits for TSS, as a matter of example, simply would not apply.

5. As a further matter, ADEM improperly failed to consider any non-precipitation discharges from Shepherd Bend in its analysis setting the general discharge limits. As noted above, ADEM considered only precipitation-driven discharges coming from the Shepherd Bend site, which artificially decreased the amount of discharges that ADEM considered in its analysis.

6. For example, under an appropriate analysis, ADEM should have used the average discharge of 5,000 mg/l TSS, as obtained from the pond 8 analysis, in addition to the precipitation-driven flows from the application. This mass balance calculation using the same remaining parameters used by ADEM results in a river concentration of 229 to 384 mg/l TSS at the Mulberry Raw Water Pump Station.

D. Failure to Set Limits for Total Dissolved Solids, Sulfates, Chlorides, and Aluminum

1. The permit fails to set any discharge limits for TDS, sulfates, chlorides, and aluminum, all of which are known to be present in significant levels in typical discharges from coal-mining operations.

2. Failure to include discharge limits on these pollutants will cause a violation of the water quality standards for the receiving waters because the discharges are not effectively treated or controlled (because there are no limits on them), and will render the water unsuitable as a source of drinking water.

IV. Conclusion

In summary, ADEM could not possibly have determined that discharges from the Shepherd Bend mine would not impair water quality or cause a violation of water quality standards without reviewing a complete PAP plan for the site. The SEDCAD analyses submitted to ADEM by Shepherd Bend do not comply with ADEM's PAP Plan Guidelines and would permit the release of large amounts of sediment into receiving waters. ADEM's exemption of iron, manganese,

and TSS from almost all precipitation events, and failure to include limits on TDS, sulfate, chlorides and aluminum in any case, will also cause a violation of Alabama's water quality standards.

This 10th day of March, 2009.

Warner Golden, P.E.

EXHIBIT A

WARNER GOLDEN, P.E.

Senior Engineer

EXPERIENCE SUMMARY

Mr. Golden is a senior engineer and partner with NewFields Atlanta, Georgia. Mr. Golden has over 20 years of consulting experience on a wide range of civil engineering and environmental projects including environmental program management and cost management of residential remediation projects. His expertise is in surface water, soil and groundwater contamination assessment projects including permitting, work plan development, technical approach, cost management, and implementation methods. Mr. Golden also has experience in a variety of remediation projects including petro-chemical refineries, oil and gas production and distribution facilities, RCRA sites, superfund sites and wastewater treatment facilities throughout the U.S., the U.K. and the Caribbean.

EDUCATION AND TRAINING

B.S. in Civil Engineering, Georgia Institute of Technology, 1983

REGISTRATIONS AND PROFESSIONALAFFILIATIONS

Professional Engineer, State of Alabama, #17714
Professional Engineer, State of Georgia, #18082
Professional Engineer, State of Mississippi, #11155
Member American Society of Civil Engineers
Air and Waste Management Association of Alabama

WORK EXPERIENCE

NewFields, LLC, Birmingham AL, Senior Engineer, September 1997 – present
Dames & Moore, Atlanta, GA / Birmingham AL, Project Engineer, 1987 - 1997

REPRESENTATIVE PROJECT EXPERIENCE

Technical consultant for the London 2012 Olympics Delivery Authority including value engineering and review of soil and groundwater remediation plans for construction zone 5. The 2012 Olympics site includes redevelopment of large brownfields site along the River Lee. Work included development of a 3D model for subsurface conditions including groundwater, clays and Victorian era fill materials.

Program and cost management for Bayer Crop Science Factory Lane Site in New Jersey including cost estimating, financial controls, engineering support, and contracts management. The project involves sampling soil and groundwater, property management and groundwater treatment system operations.

Program and cost management including estimating and financial controls, engineering support, and contracts management for NewFields role as General Contractor at the Anniston Lead Site project in Anniston, Alabama. The project involves the sampling and remediation of several thousand residential properties in the area of Anniston as a result of historic industrial operations and lead contamination.

Designed and managed implementation for soil and groundwater remedial project at the Aberdeen Pesticides Dumps Site in Aberdeen, North Carolina. The five individual sites thoughout the county included the following project scope of work: demolition, excavation and thermal desorption of 130,000 tons of soil, groundwater monitoring, progress and expenditure tracking by site for PRP allocations. Developed and implemented financial controls for $45 million soils and $10 million groundwater remedial projects.

Technical consultant and project manager for a petrochemical refining facility of Commonwealth Oil Refining Corporation in Penuelas, Puerto Rico. Project tasks have included since 1999: civil design, RCRA compliance, remedial cost estimates and implementation oversight including Environmental Indicators, NPDES Permitting, RFI Work Plans, decommissioning and demolition studies of former refinery production units, solid waste management units, wastewater treatment facilities, groundwater product recovery, spent materials neutralization and disposal, lab packs, SPCC, SWPPP and FRP plans.

Cost estimating for development of environmental liability profiles for five Chevron petrochemical refining facilities around the U.S. including Port Arthur, Texas and Cincinnati, Ohio.

Cost estimates for environmental remediation and infrastructure demolition of former petrochemical refining facilities, Commonwealth Oil Refining Company, Inc., Penuelas, Puerto Rico.

Cost estimates for environmental remediation and review of remediation plans for Potlach wood treatment facilities throughout U.S.

Designed and managed implementation of removal action at former Tifton Chemicals chlorinated pesticide and metals formulation facility in Lakeland, Florida.

Designed and managed implementation of removal action at the former Valley Chemical pesticide formulation facility in Greenville, Mississippi.

Technical direction and cost estimation for design and implementation of removal action at the former Red Panther pesticide formulation facility in Clarksdale, Mississippi.

Design consulting services for remedial action at Central Chemical pesticide formulation facility in Pennsylvania.

Site design and consulting services for water management infrastructure at Coalbed Methane production well fields in west Alabama including well sites, wastewater treatment facilities, transmission pipelines, effluent discharge diffusers and monitoring station design, construction and operation. Clients included Arco, Taurus Exploration (Energen) and a cooperative organization of the 11 area producers.

Wastewater and effluent mixing zone and modeling assimilation studies for the petrochemical refinery facility of Refineria Isla in Willamstead, Curacao.

Wastewater effluent modeling and design for river discharge diffuser at Georgia Pacific Leaf River Pulp Operations in New Augusta, Mississippi.

NPDES permitting and SW Pollution Prevention Plan development for Georgia Pacific Leaf River Pulp Operations in New Augusta, Mississippi.

NPDES permitting and SWPPP development for International Paper pulp and paper mill in Mississippi.

Wastewater and effluent modeling for South Carolina Electric and Gas Company at the Canadys, Wateree and Williams Electric Generation Stations in South Carolina.

Wastewater and effluent modeling and NPDES permitting for U.S. Navy Southern Division for permanently moored nuclear submarine training facility in South Carolina.

Environmental liability profiles for Shell Chemical sites worldwide.

Compliance Audits nationwide for Tenneco facilities.

Compliance audits nationwide for Tamko Asphalt Products facilities.

Waste and wastewater pond investigation and closure cost estimating for Mead Coated Board in Eufaula ,Alabama.

NPDES and BMP development for Mead Coated Board in Eufaula,Alabama.

SW Pollution Prevention Plan development for Mead Coated Board in Eufaula, Alabama.

PUBLICATIONS

"Risk Management as a Land Use Issue: Case Study Application of GIS Analysis for Determining Remediation Requirements for Future Land Use Options and Implementation," Golden, W. and Odle, B., 2007 Soil and Groundwater Technology Association Annual Meeting Rotherham, United Kingdom

"Real Time Basin Wide Conductivity Monitoring," Golden, W and Hall, W. L., 1991 Coalbed Methane Symposium, Tuscaloosa, Alabama

Expert Report of Robert Angus

I. Qualifications and Experience

1. My name is Robert Angus. I am a professor in the Biology Department at the University of Alabama at Birmingham. I hold a Bachelor's Degree in Zoology from the University of Wisconsin and a Ph.D. in Zoology from the University of Connecticut. A C.V. detailing my education, employment history, research, and representative publications is attached as Exhibit A to this report.

2. I have over thirty years of experience in researching the ecological health of aquatic systems, including rivers and creeks in the Black Warrior River drainage in Alabama. Specifically, my research has focused on the effects of toxic substances and silt from coal mining, industrial activities, urban runoff and treated wastewater on the biological health of aquatic ecosystems.

3. I am familiar with the discharge-related provisions of the federal Clean Water Act and the related regulations and guidelines. I am also familiar with the Alabama's National Pollutant Discharge Elimination System ("NPDES") program and its accompanying regulations and guidelines, including Alabama's narrative water quality standards.

4. I understand that Alabama has both numeric and narrative water quality standards that are intended to support water uses for Fish and Wildlife and Public Water Supply. In particular, I know that Alabama's standards include a provision that forbids sediment discharges from collecting on river bottoms.

5. I understand that mining sites must have a Pollution Abatement/Prevention Plan ("PAP Plan") associated with them to comply with state regulations and guidance, and that this plan details the ways in which sediment and other pollutants will be kept out of a receiving river or stream.

6. My publications for the last 10 years are as follows:

McClintock, J.B., Angus, R.A., Ho, C., Amsler, C.D., Baker, B.J. 2008. Intraspecific agonistic arm-fencing behavior in the Antarctic keystone sea star *Odontaster validus* influences prey acquisition. Marine Ecology Progress Series 371: 297–300.

Viamonte, L.D., Marion, K.R., Hofer, S.C., Angus, R.A. 2007. Five Mile Creek bioassessment study: baseline evaluation of stream health using fish communities. Journal of the Alabama Academy of Science 78:231-247.

McClintock, J.B., Angus, R.A., McClintock, F.E. 2007. Abundance, diversity and fidelity of macroinvertebrates sheltering beneath rocks during tidal emersion in an intertidal cobble field: Does the Intermediate Disturbance Hypothesis hold for less exposed shores with smaller rocks? Journal of Experimental Marine Biology and Ecology 352:351-360.

Gavand, M.R., McClintock, J.B., Amsler, C.D., Peters, R.W., Angus, R.A. 2007. Effects of sonication and advanced chemical oxidants on the unicellular green alga *Dunaliella tertiolecta* and cysts, larvae and adults of the brine shrimp *Artemia salina*: a prospective treatment to eradicate invasive organisms from ballast water. Marine Pollution Bulletin 54(11):1777-1788.

Stanko, J.P., Angus, RA. 2007. In vivo assessment of the capacity of androstenedione to masculinize female mosquitofish (*Gambusia affinis*) exposed through dietary and static renewal methods. Environmental Toxicology and Chemistry 26(5):920-926.

Estes, E.C.J., Katholi, C.R., Angus, R.A. 2006. Elevated fluctuating asymmetry in eastern mosquitofish (*Gambusia holbrooki*) from a river receiving paper mill effluent. Environmental Toxicology and Chemistry 25(4):1026-1033.

Angus, R.A., Stanko, J.P., Jenkins, R.L., Watson, R.D. 2005. Effects of 17α-ethynylestradiol on sexual development of male western mosquitofish (*Gambusia affinis*). Comparative Biochemistry and Physiology, Part C 140:330-339.

Stanko, J.P., Angus, R.A. 2005. Paper manufacture and its impact on the aquatic environment. Reviews of Environmental Contamination and Toxicology 185:67-92.

Jenkins, R.L., Wilson, E.M., Angus, R.A., Howell, W.M., Kirk, M., Moore, R, Nance, M., Brown, A. 2004. Production of androgens by microbial transformation of progesterone in vitro: a model for androgen production in rivers receiving paper mill effluent. Environmental Health Perspectives 112: 1508-1511.

Blackwell, E.A., Angus, R.A., Cline, G.R., Marion, K.R. 2003. Natural growth rates of *Ambystoma maculatum* in Alabama. Journal of Herpetology 37: 608-612.

Jenkins, R.L., Wilson, E.M., Angus, R.A., Howell, W.M., Kirk, M. 2003. Androstenedione and progesterone in the sediment of a river receiving paper mill effluent. Toxicological Sciences 73:53-59.

Angus, R.A., Weaver, S.A., Grizzle, J., Watson, R.D. 2002. Reproductive characteristics of male mosquitofish (*Gambusia affinis*) inhabiting a small southeastern U.S. river receiving treated domestic sewage effluent. Environmental Toxicology and Chemistry 21:1404-1409.

Angus R.A., McNatt H., Howell W.M. and Peoples S.D. 2001. Gonopodium development in normal and 11-ketotestosterone-treated mosquitofish (*Gambusia affinis*): a quantitative study using computer image analysis. General and Comparative Endocrinology 123:222-234.

Jenkins, R., Angus, R.A., McNatt, H., Howell, W.M., Kemppainen, J.A., Kirk, M., and Wilson, E.M. 2001. Identification of androstenedione in a river containing paper mill effluent. Environmental Toxicology and Chemistry 20:1325-1331.

Tolar, J.F., Mehollin, A.R., Watson, R.D., and Angus, R.A. 2001. Mosquitofish (*Gambusia affinis*) vitellogenin: identification, purification, and immunoassay. Comparative Biochemistry and Physiology Part C 128:237-245.

Onorato, D., R.A. Angus, and K.R. Marion. 2000. Historical changes in the ichthyofaunal assemblages of the upper Cahaba River in Alabama associated with extensive urban development in the watershed. Journal of Freshwater Ecology 15:47-63.

Angus, R.A., B. Dass, and P.D. Blanchard. 1999. Quantification of the expression of a temperature-sensitive pigment allele in sailfin mollies (*Poecilia latipinna*) by image analysis. Pigment Cell Research 12(2):126-130.

7. In the previous three years, I have not testified as an expert in a trial or by deposition in any litigation.

II. Areas of Investigation/Opinions

I have been asked to investigate and form opinions on the following issues related to ADEM's issuance of an NPDES permit ("the permit") for the Shepherd Bend mine in Walker County, Alabama:

- The exemptions from discharge limits in the permit, and whether the exemptions from discharge limits in the permit are protective of water quality and assure compliance with water quality standards;
- The failure to set discharge limits for certain pollutants present in mining discharges and the impact of this failure on water quality standards; and
- The specific impacts of this permitted discharge on fish and wildlife in the Mulberry Fork of the Black Warrior River.

III. Facts Relied Upon

I have considered the following information about the Shepherd Bend mine site in forming my opinions. The information I considered has included facts that I would ordinarily consider and rely upon in reaching opinions about a site.

1. I have reviewed ADEM's water use classifications for the Mulberry Fork and its tributaries; the permit application; the draft permit; comments of the Birmingham Water Works Board, Black Warrior Riverkeeper, and United States Fish and Wildlife Service on the draft permit; the final permit; and the expert report of Warner Golden.

2. Based upon my review of these documents, I have learned the following facts:

    a. On October 10, 2007, Shepherd Bend submitted its application for a NPDES permit from ADEM to authorize the discharge of water from its mining operations into the Mulberry Fork of the Black Warrior River and certain tributaries.

    b. In November of 2007, ADEM released a draft permit which proposed the authorization of Shepherd Bend's discharges at the site.

c. In December of 2007, Black Warrior Riverkeeper and the Birmingham Water Works Board submitted comments on the draft permit. Both entities raised concerns regarding the proximity of the mining operation to its drinking water intake valve and other water quality impacts.

d. The United States Fish and Wildlife Service commented on the Shepherd Bend project in December 2007 and March 2008. Although the agency concluded that no endangered species exist at the site, it made several specific recommendations to minimize harm to aquatic species, including a numeric turbidity limit of 10 nephelometric turbidity units ("NTUs") in the permit and the maintenance of riparian buffers.

e. On July 21, 2008, ADEM issued a final permit to Shepherd Bend. The final permit became effective on August 1, 2008.

f. Shepherd Bend did not submit a Pollution Abatement/Prevention Plan ("PAP plan") to ADEM during the permitting process. The PAP plan is a site-specific, detailed document which explains the measures that a mining operation will employ to minimize its impacts on water quality. Pursuant to ADEM regulations, PAP plans typically include an explanation of the design of sediment ponds at the site and diagrams of this design for all ponds, plans to minimize impacts from mining on nearby streams, plans to minimize sediment and other pollutants' release from haul roads, and plans to minimize the effect of non-point source pollution from the mining operation. The PAP plan is an essential element of any NPDES permit for a mining facility. Without a PAP plan, there is no meaningful way to determine the total impact of the discharges from the site on the water quality of the receiving waters.

g. The Shepherd Bend site is 1,773 acres.

h. Shepherd Bend will have 29 outfalls at the site, and will potentially release a variety of pollutants including iron, manganese, aluminum, arsenic, cadmium, copper, lead, selenium, zinc, total dissolved solids ("TDS") and total suspended solids ("TSS").

i. The Mulberry Fork of the Black Warrior River, where 11 of the 29 outfalls will release their discharges, is classified for "Public Water Supply" and "Fish and Wildlife" uses pursuant to Alabama's water quality criteria.

j. The remaining 18 outfalls all discharge into tributaries of the Mulberry Fork which are designated for "Public Water Supply" and/or "Fish and Wildlife" uses.

k. A "Fish and Wildlife" designation means that the water is suitable for fishing, propagation of fish, aquatic life, and wildlife.

l. The permit exempts iron, manganese, and TSS from discharge limitations during the vast majority of precipitation events, as explained further below.

m. The permit does not set any discharge limitations for aluminum, TDS, sulfates, or chlorides or any of the other heavy metals commonly associated with mine runoff (e.g. arsenic, copper, cadmium, lead, zinc, selenium).

n. Since the permit does not limit the levels of toxic substances that may be discharged from the mining site, it fails to adopt the recommendations from the Fish and Wildlife Service to protect fish and wildlife in the Mulberry Fork and its tributaries.

o. The river is already suffering from abuse. Portions of the Mulberry Fork are currently listed as "impaired" (i.e. on the 303(d) list), which means that they are already sufficiently impacted by human inputs that they are unable to support their designated uses.

IV. Opinions

Based on information contained in the permit application, draft permit, and final permit, the report of Warner Golden, and my experience, education, and training in evaluating pollutant discharges and their effects on aquatic ecosystem health, I have formed the following opinions.

A. Exemptions in the Permit and Violations of Water Quality Standards

1. The permit includes daily average and daily maximum discharge limitations for iron, manganese, and TSS, but exempts discharges of these pollutants during most precipitation events, as explained in further detail below in paragraphs 2 and 3.

2. For any precipitation event greater than a 2-year, 24-hour precipitation event, the permit exempts discharges of iron from any discharge limitation.

3. For all precipitation events, the permit exempts discharges of manganese and TSS from any discharge limitation.

4. Precipitation events carry the most potential for harm to aquatic life in the receiving waters from a mine site. The stormwater leaving the site carries heavy metals and other toxic pollutants from mining activities. Furthermore, the sediment leaving a site will settle onto stream bottoms, filling in crevices and depriving fish, insects, mussels and other aquatic organisms of habitat needed for daily living and/or spawning. For example, the larval forms of many aquatic insects require spaces between cobble on stream bottoms to hide from predators. Some fish need similar spaces in which to deposit their eggs. In heavily sedimented streams, such species become extirpated from the system. Sediment clouding the water reduces primary productivity (photosynthesis) and alters the types of plants that can grow in the system. Turbidity interferes with fish sight; it reduces their visual feeding efficiency and interferes with reproductive behavior of species that rely on visual cues.

5. The site will discharge approximately 3,187 tons of sediment during 10-year, 24-hour precipitation events, according to the accompanying report of Warner Golden. While it is not possible to precisely extrapolate the amount of sediment released in smaller precipitation events from the amount released in the 10 year, 24 hour precipitation event, the amount of sediment would be significant because of the steep slopes associated with the Shepherd Bend mine. The sheer volume and velocity of runoff from a site as large as the Shepherd Bend mine site will result in scouring in the receiving waters, which further degrades habitat and harms fish and wildlife. Whatever sediments are not moved downstream during the storm event will remain to smother the bottom habitat of the stream and fill in the interstices in the gravel. Also, by filling in pools, sedimentation reduces the habitat heterogeneity (i.e. riffles, runs and pools – both deep and shallow) characteristic of an undisturbed stream.

6. The exemption of discharges of TSS during all precipitation events, including even small precipitation events, will cause a violation of the water quality standards for the receiving waters because the discharges are not effectively treated or controlled.

B. Failure to Set Limits for Total Dissolved Solids, Sulfates, Chlorides, and Aluminum

1. The permit fails to set any discharge limits for total dissolved solids (TDS), sulfates, chlorides, aluminum and other metals, all of which are known to be present in significant levels in typical discharges from coal-mining operations.

2. Failure to include discharge limits on these pollutants will cause a violation of the water quality standards for the receiving waters because the discharges are not effectively treated or controlled (because there are no limits for the pollutants), and will harm aquatic life in the Mulberry Fork and its tributaries.

3. Specifically, heavy metals are toxic to aquatic organisms. Depending on the concentration in the receiving water, they may be acutely toxic (cause death within a short period of time) or may cause chronic toxicity – impairing growth, behavior and reproduction. Excessive sediment loads are highly destructive to aquatic ecosystems. They scour the stream during storm events and, by settling out when flow slows, they bury the system. This fills in the spaces between rocks where invertebrates live and many fish spawn. Instead, the bottom becomes an anaerobic layer of smelly "muck." Any toxic substances, such as heavy metals that are in the sediments tend to become re-distributed into the water column the next time they are disturbed, such as by a rain event. Chronic turbidity also modifies the primary productivity of the system, alters the kinds of plants that can live in the system and impairs any activities of the fish or invertebrates that rely on sight.

IV. Conclusion

In summary, ADEM could not possibly have determined that discharges from the Shepherd Bend mine would not impair water quality or cause a violation of water quality standards without reviewing a complete PAP plan for the site. Moreover, ADEM's exemption of iron, manganese,

and TSS from almost all precipitation events, and failure to include limits on TDS, sulfate, chlorides, aluminum and other heavy metals at all, will cause a violation of Alabama's water quality standards because of its harm to fish and wildlife in the Mulberry Fork and its tributaries.

This 10th day of March, 2009.

Robert Angus

Robert Angus, Ph.D.

EXHIBIT A

Curriculum Vitae Robert A. Angus

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Education

B.S.	1968. (Zoology) University of Wisconsin, Madison, Wisconsin
Ph.D.	1977 (Zoology) University of Connecticut, Storrs, Connecticut. Doctoral Dissertation: Origin and distribution of multiple clones in unisexual fishes.

Academic Position

Professor, Department of Biology, University of Alabama at Birmingham

Employment

1998-	Professor of Biology, University of Alabama at Birmingham
1984-1998	Associate Professor of Biology, University of Alabama at Birmingham
1978-84	Assistant Professor of Biology, University of Alabama at Birmingham
1977-78	Postdoctoral Research in fish population genetics, University of Connecticut.
1972-77	University of Connecticut teaching assistantships in introductory biology, comparative vertebrate anatomy and ecology

Memberships

American Association for the Advancement of Science, American Fisheries Society, Alabama Fisheries Association, Alabama Academy of Science, Sigma Xi, Society of Environmental Toxicology and Chemistry

Editorial Boards

Associate Editor, The Journal of Heredity (1983 - 2001)
Editor, Alabama Fisheries Association Newsletter (1995 - present)

Reviewer of Manuscripts/Grant Proposals

American Midland Naturalist, American Naturalist, Archives of Environmental Contamination and Toxicology, Auburn University Environmental Institute, Biology of Reproduction, Bulletin of Marine Science, Cooperative Institute for Coastal and Estuarine Environmental Technology, Copeia, Environmental Science & Technology, Environmental Toxicology and Chemistry, Evolution, Fishery Bulletin, General and Comparative Endocrinology, Genetics, Gulf of Mexico Science, Journal of Alabama Academy of Science, Journal of the American Water Resources Association, Journal of Heredity, Maryland Sea

Grant, Mechanisms in Development, National Institutes of Health, National Science Foundation, North American Journal of Fisheries Management, Pakistan Journal of Scientific and Industrial Research, Southwestern Naturalist, U.S. Environmental Protection Agency, Waveland Press, West Publishing Company

Research Interests

Aquatic toxicology, especially fishes.

Publications (Peer-reviewed)

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2. Angus, R.A. and K. R. Marion. 1993. Producing a quality recreational fishery in the Bear Creek Reservoirs of Northwest Alabama: Assessment of current physical and biological conditions. Submitted to Tennessee Valley Authority. 83 pp.

3. Bohac, C.E., R.A. Angus, and K.R. Marion. 1993. Evaluation of conditions and improvement options for Upper Bear Creek Reservoir. TVA Technical Report Series TVA/WR - 93/6, TVA, Chattanooga, TN. 135 pp.

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40. Angus, R.A. 1987. Genetic and biochemical studies of pigment variants in Poeciliid fishes. ASB Bull. 34:98.

41. Tarbox, N.T., and R.A. Angus. 1986. Phenol resistance in mosquitofish (*Gambusia affinis*): a study of physiological mechanisms. J. Ala. Acad. Sci. 57:113.

42. Cline, G.B., C.W. Hardwick, Jr., and R.A. Angus. 1986. Isozymic similarities and differences among three populations of stone crabs, *Menippe mercenaria*, from near shore waters of the Gulf of Mexico. J. Ala. Acad. Sci. 57:131.

43. Angus, R.A. 1985. Fluctuating asymmetry in pure vs. intergrade mosquitofish populations. ASB Bulletin 32:60.

44. Angus, R.A. 1982. A temperature-sensitive melanistic mutation discovered in a natural population of sailfin mollies (*Poecilia latipinna*). ASB Bulletin 29:51.

Graduate Students

James Diggs. Ph.D. anticipated 2011. Dissertation title: Genetic variation within and between populations of glade-specific species in the genus *Dalea*.

Bryan Arwood. M.S. anticipated 2010. Thesis title: Evaluation of advanced oxidants as a treatment for enhancing the breakdown of steroids in wastewater.

Patricia Jackson. M.S. anticipated 2010. Thesis title: A survey of endocrine disrupting compounds in surface waters in the vicinity of Birmingham, Alabama.

Samiksha-Ashok Raut. Ph.D. anticitpated 2009. Dissertation title: Effects of endocrine disruptors on biomarkers of reproductive function in the western mosquitofish, *Gambusia affinis*.

Paul D. Melvin, III. Ph.D. 2007. Dissertation title: Sperm production and vitellogenesis as biomarkers of endocrine disruption in the male western mosquitofish, *Gambusia affinis*.

Louis D. Viamonte. M.S. 2007. Thesis title: Five Mile Creek bioassessment study: Baseline evaluation of stream health using fish communities.

Kevin J. Morse. Ph.D. 2005. Dissertation title: The effects of urbanization on the health of fish and benthic macroinvertebrate communities in the Upper Cahaba River watershed.

Jason P. Stanko. Ph.D. 2005. Dissertation title: Reproductive and developmental effects of bioactive constituents of pulp mill effluent on female mosquitofish, *Gambusia affinis*.

Eleanor J. Estes. M.S. 2004. Thesis title: Fluctuating asymmetry in eastern mosquitofish (*Gambusia holbrooki*): a comparison of populations inhabiting polluted and nonpolluted rivers.

Jaideep V. Honavar. M.S. 2003. Thesis title: Assessment of ichthyofaunal assemblages as indicators of sedimentation in the upper Cahaba River and its tributaries.

Peggy M. Kyzer. M.S. 2003. Thesis title: The effects of urban development on freshwater ecosystems: A literature review.

Heather B. McNatt. M.S. 2002. Thesis title: Effects of Paper Mill Effluent on a Population of Eastern Mosquitofish, *Gambusia holbrooki*.

Joseph F. Tolar. M.S. 1999. Thesis title: Mosquitofishes as sensitive indicators of environmental estrogens.

Paul D. Blanchard. Ph.D. 1991. Dissertation title: Pigment cell studies in sailfin mollies.

J. Mark Brubaker. M.S. 1983. Thesis title: A study of fluctuating asymmetry in mosquitofish populations in polluted and nonpolluted environments using a new scale staining technique.

Teaching

Lecture/Lab Courses

BY212 Human Genetics (taught once or twice/year since 1978)
BY245/345 Fundamentals of Scientific Investigation (taught once/year since 1993)
BY312 Genetics (taught once or twice/year since 1978)
BY313 Genetics Laboratory (taught four times)
BY501 Advanced Biology for Teachers (taught once or twice/year since 1987)
BY555 Principles of Scientific Investigation (taught once/year since 1994)

Non-Lecture Courses

BY 397 Advanced Directed Readings
BY398 Undergraduate Research
BY399 Honors Research
BY499 Seminar in Biology (Genetics)
BY695 Special Topics in Biology
BY696 Special Topics in Biology II

Other Teaching

BY109 Human Population Pressures and the Environment (Guest lectures on water resources)
MGE 700 Human Genetics (Guest lecture on population genetics)
ENH 663 Biological Processes and Pollutant Impacts in Water (Guest lecture on methods of sampling freshwater fish populations)
CJ572 Biological Methods in Forensic Sciences (Guest lecture on probability and statistics)
UAB Special Studies - MCAT Review Course (Lectures on quantitative methods and genetics)
UAB Summer HPOPP (Health Professions OPPortunity) Enrichment Program (Lectures on human genetics)
UAB Biology Update Workshop for High School Teachers (Lecture on recent advances in molecular Genetics)
UAB Biomedical Methods Course for Birmingham High School Teachers (Lectures on computer programming in BASIC)
Talladega College - Biomedical Methods (Guest lecture on electrophoretic methods in biology)
Samford University ENVM503 - Quantitative Methods for Environmental Decision Makers (Statistics)

Eddie Hand
Smith Lake
788 County Road 97
Bremen, AL. 35033
Publisher of Smith Lake Living Magazine

- Residents of Smith Lake want to be a Good neighbor and we are glad that the water on Smith Lake is clean, upon it's released from the lake. We have over 48 volunteer water testers around Smith Lake drainage area to maintain clean water.
- Smith Lake residents are working on a proposal to get the watershed protected. The warrior river being a major water supply for many cities and citizens should have more protection.
- The 100 foot setback for a mining operation next to the river should be increased and more land should be protected.
- The bonds for strip mining should be increased to help protect the fisheries, wildlife, water supply, and endangered species. (See Attached Memo ADIR)
- Is the strip mining of the University of Alabama land been reviewed by the University Green Report – Committee.(See Attached Report)
- Has an economic study, best management practices plan for rivers-creeks-streams-roadways, endangered species study, replacement of hunting land, and ground water study be completed on this proposed project?
- Can the highwall for strip mining go below the flow of the river endangering the ground water and river bed?
- Water testing should be tested by an independent lab without influence of the company or governmental agencies. Testing for heavy metals should be included in test results.
- Does the proposed plan have ground water test site?
- Has an emergency plan been completed and filed for a break in dams at sediment basins?

Thank you
Eddie Hand

6/29/01

ALABAMA DEPARTMENT OF INDUSTRIAL RELATIONS
NON-FUEL SURFACE MINING FACT SHEET

- 430 active permits currently.
- 6 new permits (average) issued each month.
- 10,300 acres bonded on active sites, with an additional 8,500 acres not bonded.
- 639 total permitted sites (active, abandoned, pending release).
- $500^{\pm}$ sites exempt by mineral category or illegally operated.
- $1{,}000^{\pm}$ sites operated by state, county, and city road departments are exempt.
- Less than 50% of all surface mining activity is inspected while mining is in progress.
- Additional funding needed for inspections.
- $2,500/acre bond is inadequate. Current cost to reclaim is $4,000-$5,000/acre.

SURFACE MINING RECLAMATION FUND

- 290 forfeited bonds to date.
- $268,259.00 forfeited bond fund total to date.
- $11.2 million - estimated cost to reclaim 290 forfeited bond sites.
- Estimated 2,800 acres disturbed on forfeited sites.
- Estimated $102{,}000^{+}$ acres abandoned from all forms of non-fuel surface mining (pre-law, permitted, illegal, exempt sites).
- $420 million cost to reclaim all abandoned non-coal sites in state (at $4,000/acre).

Note: Regulation of surface coal mining is responsibility of Alabama Surface Mining Commission.

Compare

	Year	Overall Grade	Administration	Climate Change and Energy	Food and Recycling	Green Building	Student Involvement	Transportation	Endowment Transparency	Investment Priorities	Shareholder Engagement
University of Alabama	2010	B-	C	B	B	D	B	A	C	A	--
University of Alabama--Birmingham	2010	D	D	D	D	D	D	D	F	C	F
Auburn University	2010	C+	B	C	C	D	A	B	C	A	F

UNIVERSITY OF ALABAMA

COLLEGE SUSTAINABILITY REPORT CARD 2010

B-

Administration	**C**	Although the administration has not formally committed to sustainability, the master plan includes guidelines for energy efficiency and responsible resource use on campus. The University of Alabama Environmental Stewardship Committee was formed in fall 2008 to promote awareness of and participation in sustainability efforts on campus. The committee is creating a website to detail sustainability events, projects, and news. The university purchases Energy Star, Green Seal, and EPEAT-registered products.
Climate Change & Energy	**B**	In 2009, UA completed its first ever greenhouse gas emissions inventory to establish a benchmark for future reductions. The school's energy policy calls for specific temperature settings in winter and summer. Life cycle cost analysis is performed for all large equipment purchases to ensure that the school selects energy-efficient models.
Food & Recycling	**B**	In 2008, all dining halls went trayless, eliminating approximately 6,000 pounds of solid waste per week. Bama Dining spends 7 percent of its annual budget on local food and offers exclusively fair trade coffee. The school composts 102 tons of preconsumer food waste annually and donates leftover desserts, breads, and canned goods to the local soup kitchen. The university dining halls also recycle used cooking oil.
Green Building	**D**	UA is currently in the process of submitting four residence halls, with a total of 480,922 square feet, for Energy Star certification. Low-flow toilets, urinals, and faucets can be found in eight campus buildings, including the Bryant-Denny Stadium.
Student Involvement	**B**	A student government group promotes sustainability on campus, as well as at athletic events. The University of Alabama Environmental Council worked with the school to expand its recycling program, and students developed a green guide to be distributed to incoming freshmen.
Transportation	**A**	Introduced to the campus in 2009, the Zipcar car-sharing service offers the use of six vehicles, including two hybrids. Membership to the BamaBikes program grants community members access to 36 bikes across campus. The CrimsonRide transit service operates four routes, free of charge, on weekdays year round. The master plan focuses on creating a pedestrian-friendly environment and reducing vehicle use on campus.
Endowment Transparency	**C**	The University of Alabama makes a list of cash holdings, external managers, and mutual funds available to the public, and sends the information upon request.

Investment Priorities	A	The university aims to optimize investment return and is currently invested in community development loan funds. ~~The university is exploring, but not currently invested in, renewable energy funds.~~
Shareholder Engagement	--	The university does not have the ability to vote proxies, as its entire endowment is invested in mutual and commingled funds.

Alabama Surface Mining Commission
P. O. Box 2390
Jasper, AL 35502-2390

Attn: Dr. Randall C. Johnson

My name is Karen Cordell Palmer. I am an elementary school teacher, certified in the state of Alabama to teach children in grades 1-6, with most of my 12 years of experience teaching first and second graders, or 6 and 7 year olds. I am required to follow the Alabama Course of Study, issued by the Alabama State Department of Education. The Alabama Course of Study states this objective for second graders; Identify positive and negative ways people affect the environment; then, the Course of Study gives examples for teachers to use. Negative examples include polluting water, throwing trash on roadways, and causing erosion. I and all other teachers in the state of Alabama are required by law to teach this. I like that part of my job very much because I agree that young children need to learn this.

Also, per the administrative code of the Alabama Surface Mining Commission, the agency prohibits surface coal mining on those lands or areas where operations could result in significant damage to aesthetic values or natural systems. In simple terms, as I would use with 6-7 year olds, if the Alabama Surface Mining Commission grants a permit for a strip mine at Shepherd's Bend, they are disrespecting and disobeying their own Administrative Code.

The director of the Al. Surface Mining Commission stated to the B'ham News that "we don't like to have to deny permits, but if one deserves to be denied, we will do it." My question is ,"WHY doesn't the ASMC like to deny permits?" It has a code to follow to determine if a permit should be granted or denied, so whether it LIKES to deny permits or not should not enter into the thought process. If this permit is granted, I think that even a 6-7 year old would ask the question, "Why didn't you follow your own code? Do you have personal interests in this operation?"

I formally request that a surface mining permit be denied.

Sincerely,

Karen Cordell Palmer
67 Cherokee Hills
Tuscaloosa, AL 35404
205-633-3759

Subj: **Shepherd Bend Mine ASMC Permit Application P-3945**
Date: 8/19/2010 4:20:02 P.M. Central Daylight Time
From: RDShatt@aol.com
To: info@blackwarriorriver.org
CC: fmshattuck@aol.com, shattc04@aol.com, thomas.w.shattuck@vanderbilt.edu

August 19, 2010

Dr. Randall Johnson, Director
Alabama Surface Mining Commission
P. O. Box 2390
Jasper, AL 35502-2390

delivered by hand at Sumiton meeting

Re: Shepherd Bend Mine
ASMC Permit Application P-3945

Dear Dr. Johnson,

I am a retired lawyer. I first learned of this matter from Sunday's *Birmingham News* newspaper article. I have begun to study the comments posted at http://surface-mining.alabama.gov/P3945/Shepherd%20Bend%20Mine%20Comments/P3945Comments.pdf.

I do not know enough yet to have an opinion whether the permit should be issued or not or on the merits of the comments that have been posted.

I intend to attend the meeting this evening. I will submit this letter both via email to the Black Warrior River organiization and in person to the Commission at the meeting.

In the coming days I intend to more fully inform myself. In the meantime, I am depending on the Commission and all other involved governmental officials to have adequately considered all the comments made in opposition to the permit and to act in a fully responsible manner to protect Birmingham's water. If the permit is issued, there is a good chance I will join with those opposing the permit issuance in taking further lawful actions to prevent the strip mining from occurring, including efforts to seek removal of governmental officials who act to approve the permit and allow the mining, and seeking judicial and legislative remedies.

If the Commission has discretion not to issue the permit at this time, I urge the Commission not to issue the permit at this time.

Sincerely,
Robert Shattuck
3812 Spring Valley Circle
Birmingham, AL 35223
(205) 967-5586

Robert Shattuck