APC MINUTES

November 19, 2025

Members present: John Reece, Abby Journay, Don Calhoun, Steve Hernly, Jim Hufford, Jason Brewer, Terry Alfrey, Coy Applegate, Amy Alka

Members absent: Tom Kerns, Adrian Moulton, Todd Holaday, Will Greer

Legal Representation: Jason Welch

Staff present: Debra Johnting, Area Planning Director and Kristi Halloran, Recording Secretary

Others present: Ed Thornburg, Tom Chalfant, Rob Davis, Adam Hunt, Hugh Caperton

President Calhoun: It's 7:00 o'clock so we'll go ahead and start the meeting of the Area Planning Commission. The first goal is approval of the minutes from the October 22, 2025 meeting. Is there a motion to accept the minutes?

J. Hufford: I'll make the motion to accept the minutes as presented.

Vice President Applegate: I'll second.

President Calhoun: It's been moved and seconded to accept the minutes from the October 22nd meeting. All those in favor say aye. "Aye." All those opposed no. Motion passes. To get our meeting started petitioners will have 15 minutes to present their petition. During this time there will be no interruptions or questions. After the presentation the board may ask questions. Anyone wanting to speak for or against will have three minutes each and then the petitioner will have an additional five minutes to respond to comments. So, what we are here for tonight is to see about adding an amendment to add Carbon Capture Sequestration to the Unified Ordinance in M-2 zone.

D. Johnting: Yes, the commissioners have asked us to consider adding an amendment to the Unified Zoning Ordinance adding CCS or Carbon Capture Sequestration to the Unified Zoning in M-2 as a special exception, in the table for special exception and you have a copy of the amendment. It just says to add that to the table and then there is a brief description: The process of capturing the carbon dioxide from emission sources compressing and transporting it and injecting it deep into deep geologic formations for permanent storage. We have some folks here who know a lot more than that and a lot more than I do who have agreed to come and tell the board what it is, answer any questions, where it's going to go. We appreciate your time for coming and you can come forward. They've been to the commissioners meeting. They've been into our office. They've helped out with the description and kind of explained to us a little bit.

Thank you for your time. If you guys would explain what it is and then take questions from the board. That would be great.

R. Davis: I'm Rob Davis the chairman of Cardinal, just to identify myself. I think I'll probably let these guys introduce themselves. We have a partnership with Vault. Cardinal and Vault together have One Carbon Partnership which is in the name you might see on the some of the information that you're getting. It's our intention to capture the CO_2 that we currently send into the atmosphere, compress it and put it down into a deep well and for geologic storage to take the carbon and the CO_2 out of the atmosphere. So for that in brief I'll let you guys introduce yourself and carry on.

A. Hunt: Adam Hunt. As Rob mentioned I am a project manager with Vault 44.01. I manage the One Carbon Partnership project so I kind of organized everything from permitting to construction, planning the drilling, planning all activities associated with the project.

H. Caperton: Hugh Caperton also with Vault 44.01 but I'm also a member of One Carbon Partnership as is Mr. Davis. I've actually been spending quite a bit of time here in the Union City community and in the Winchester area for about four years as we've looked to speak with land owners, speak with stakeholders. Proud to say that we've worked very diligently to have 99% voluntary participation in our project area. The entire project from a surface perspective will take place on Cardinal's property that is as you all are all aware already zoned as M-2. In working with them, just sitting tonight having dinner over at the A&B it's nice to run into familiar faces that we've gotten to know over the last four years. I think that speaks a lot to the project. I think it speaks a lot to Cardinal's reputation here in the community and what they've done over the last 17 years. The CO_2 that would ultimately be compressed and stored that storage happens in an interval called the Mount Simon formation that sits approximately 3,700 vertical feet under our feet right now. So it's deep. These projects are permitted both at the federal level and the state level. The permitting process at the federal level takes, we've been in process there for over three years. We have currently received a draft permit from EPA Region 5. It's called a Class 6 permit. The permit application is about 600 pages long, highly technical. It is highly regulated. That draft permit will then go to what they call a permit to construct and then about nine months after that we will have a permit to inject. During that time, we will also go through a state permitting process that's code at the DNR in Indianapolis. We're working extensively with them as well. Adam, I, and Mr. Davis are glad to answer any questions that you all might have. I think one of the things I wanted to say was one the openness and communication that we've seen from residents, elected officials alike, certainly members of the community and our involvement there over the last four years and the permitting process with which we go through with both the federal and the state level as well. I'll pause there on a relatively quiet evening for everybody ahead of the holiday.

President Calhoun: Approximately how many gallons will you be pumping down into the ground a day?

H. Caperton: That's about 400,000 tons per annum. So the entire volume that's currently emitted into the atmosphere that we breathe in and breathe out every day. The total volume of that will ultimately be sequestered once we have the appropriate state and federal permits.

R. Davis: Just one clarification, we currently compress about 30% of that okay that would go into beverages, food consumption and livestock production. It's the other end of that process but so that will cease and all of that will go down the well.

J. Hufford: How is it transported out to where it needs to go?

A. Hunt: So all the facilities for the project are on site. So there's a flow line that runs from what we call the compressor building that compresses the CO_2 after the wellhead which is about 600 feet away so it's all within Cardinal's Property just kind of north of the grain haul roads within the facility just south of the train track. So you'll see in addition of a building just by the fermenter tanks and then just the six inch diameter flow line that just runs out to the wellhead.

J. Hufford: You said it's compressed. How compressed?

A. Hunt: About 1500 PSI. So there's a fair amount of compression that goes into it. It takes a fairly large motor with stages of compression and some cooling there but that's required to get it into the right state to be able to inject it below ground.

J. Hufford: Have you ever had any problems?

A. Hunt: Like?

J. Hufford: Like any kind of problems you know when you're doing this with other sites?

A. Hunt: It's a well-known technology that it's done quite regularly. It's well studied but like any industrial process there I'm sure there have been issues in the past. With regards to ours, like it's a fully engineered design process to appropriately and safely compress it and send it out to the wellhead. The EPA process that covers everything subsurface and the safety of the containment of the CO_2 below ground and then anything above ground is a fully engineered process to all regulated essentially industrial process standards for compressing industrial fluid.

R. Davis: Everything we're doing is proven technology that's been going on. They use it now for enhanced oil recovery where they pump CO_2 in the ground and drive the oil. There's no new technology. There's nothing that's "first of its kind" in what we're talking about so this is proven technology.

H. Caperton: There's approximately 6,000 miles of CO_2 pipelines, about 5,000 of those lay in the US and about 1,000 miles north of the border in Canada. Majority of those systems have been operational since the late 60s, early 70s primarily in the southwest United States.

R. Davis: But we're not applying for a pipeline. Everything is right there.

J. Hufford: That's was going to be my next question. Pipeline.

R. Davis: There's no pipeline. It's just what we call the process pipe to go from the compressor to the wellhead. That's the only pipe that we have.

J. Brewer: I'm not an expert in this at all, but how much area do you have to pump this into? Does it ever fill up? How many years can you do this?

H. Caperton: So the actual formation we will inject into, this Mount Simon formation. It is present from effectively St. Louis, as far east as east of Columbus, as far north into southern Ontario, Canada around Toronto, as far south as Kentucky. So it's a vast area now but it is sandstone right. You know it behaves if you ever take a bottle of water during the summer time and you pour it out on the sidewalk and it just kind of absorbs that right it doesn't run like the surface of your table. It's absorbed. That sandstone formation there's actually a very tiny areas of voided space so minuscule areas and that CO_2 three things happen as you would inject CO_2. The majority of it is actually trapped in that porosity and permeability of that rock and then most of it also dissolves and it's got some salt water down there. Highly, highly salty water not like swimming in the ocean and then ultimately some of it mineralizes over thousands of years. So could you ever fill the tank up? No. Effectively how I would describe it is dropping an odd drop worth of water into a swimming pool.

R. Davis: We're expecting that our pool from our well will be roughly a half a mile in radius after 30 years. So we're not talking very big.

J. Hufford: So it's very slow rate of absorption?

R. Davis: There's a lot of porosity down there to fill. So.

A. Hunt: But that interval of sandstone down there is about 500 feet thick so it's not like a tiny sliver of a rock. It's a lot of rock that you're injecting into down there, with a lot of volume.

President Calhoun: Can it be recaptured?

A. Hunt: No, not in this case. It's permanent storage. You will hear CCS call carbon capture and storage sometime but effectively there it's permanent sequestration in most cases. Sometimes in enhanced oil recovery there will be some form of recovery of the CO_2 but in our case here it's permanent down there never to be pulled out again.

President Calhoun: Anybody else got any questions?

J. Reece: You mentioned it goes to St. Louis. Is that right?

H. Caperton: So the sandstone formation, it's not a cavern. It wouldn't be a void of space underground. It's literally a sandstone formation. That sandstone formation runs from that area that I described previously. But the actual CO_2 injected at the facility, to Rob's point, over a 30 year period would have about a half mile radius that it would ultimately stay in. That's the area that over that amount of time. One of the things I like to describe is like you do one of these projects in downtown Indianapolis. That same formation sits under Indianapolis just like it sits under Winchester/Union City, really the extent of the state of Indiana for all intents and purposes.

J. Reece: So there's a situation called the New Madrid Fault which is active right now. Would that impact what happens here?

H. Caperton: No sir. So one of the many processes and analysis that we have to do as part of our permitting process is actually look for the presence of faulting in the area. We worked with area land owners across approximately 7,400 acres central to the Cardinal facility there in Union City. And we did seismic testing where we had trucks in the fields worked with the landowners post harvest to do that to actually identify and see if there was a presence of any faulting there. So that New Madrid system that you referenced is really kind of southwest Indiana and I'm going to get my states mixed up here but parts of Tennessee, parts of Missouri that is a very active system actually when we take calls as an organization for that area we advise that you would have to move actually east, northeast of that system as to not interfere with that fault system. But that should have absolutely zero impact on anything here in eastern Indiana specifically in Union City.

J. Reece: Is this the only plant that's going to contribute? Are you going to truck it in from other places?

H. Caperton: It'll only be from Cardinal Ethanol. Yes sir. No nothing trucked in piped in or anything like that.

A. Hunt: Yeah that's even part of the approval process with the EPA. When you permit one of these projects you need to define all of the sources where the CO_2 is coming from, the volumes of CO_2 and this is permitting only for Cardinal Ethanol.

J. Welch: Just to clarify we're not voting on this particular project tonight. We're only voting on adding this to the UZO as a possible use. If it's going to be used there would have to be a separate hearing if this is approved. So we're not talking about this project specifically we're talking about the process in general.

D. Johnting: The vote would actually go before the BZA. Once it's added to this category and just to get an idea, the land owners are identified. I think they're on board already. They're well aware of it. But just in more detail specifically where it will be on the ground, who is affected and that hearing, a special exception hearing, goes before the BZA. But we had to do this to even say yes it's in our ordinance and we do allow it and where we allow it. Anyone else after this we have to go through a rezoning hearing prior. Cardinal Ethanol is already zoned M-2.

J. Hufford: You said 30% of it now is being captured and used to send out. Why can't you do it with all of it?

R. Davis: Well, you could. For one thing the CO_2 coming in which is Air Products that we've contracted with they don't want it to depend 100% on our product because people like carbonation in their Pepsi and if we're not running they don't have any. So they'll only take a portion of what we have plus the revenue that we would generate from putting it underground for capturing hazardous materials is greater than what we are getting from the Air Products to compress it.

President Calhoun: So when we vote on this it will be a ...

D. Johnting: A favorable recommendation. Then it will go to all commissioners, two cities and seven towns. It would really only affect the commissioners, what the commissioners are in charge of but anytime we change the zoning ordinance everyone votes on it.

President Calhoun: So we'll need to vote on proposed amendment number one and then one for the number two.

J. Welch: Yes. Two separate ones.

President Calhoun: I would entertain a motion for a favorable recommendation for proposed amendment number one.

J. Hufford: I'll make a motion for a favorable recommendation.

Vice President Applegate: Second.

President Calhoun: It's been moved and second. Roll call them.

K. Halloran: OK. Jim Hufford, yes. Jason Brewer, yes. Coy Applegate, yes. Terry Alfrey, yes. Amy Alka, yes. Steve Hernley, yes. John Reece, yes. and Abby Journay, yes. Don Calhoun, yes.

President Calhoun: So that is a favorable recommendation?

K. Halloran: Yes.

President Calhoun: The next one would be the definition of carbon capture and sequestration. I'd entertain a motion for that too.

Vice President Applegate: I'll make the motion.

J. Hufford: I'll second.

President Calhoun: It's been seconded, proposed amendment number two. Roll call vote.

K. Halloran: Coy Applegate, yes. Terry Alfrey, yes. Amy Alka, yes. Steve Hernley, yes. John Reece, yes. Abby Journay, yes. Don Calhoun, yes. Jim Hufford, yes. Jason Brewer, yes. Favorable recommendation.

President Calhoun: Those will go out to the governing bodies.

D. Johnting: Yes. We'll send it to the commissioners. Do you have that meeting date?

K. Halloran: No I do not.

D. Johnting: It's the first Monday in December.

K. Halloran: Sorry. I didn't bring that I apologize.

J. Hufford: I have a question. This goes out to the two cities plus seven towns and they all have to vote favorably on this.

D. Johnting: They do not however I doubt if Winchester is ever going to have carbon sequestration in the city. First they'd have to get through rezoning, have a business that would be able to support that and so but it is a change to the Unified Zoning Ordinance. All ten entities are a part of that so they will all be notified. They'll all get an ordinance to sign. If they don't sign that within 90 days is the same as a signature. Generally they just go ahead and sign it because you know sometimes things are, CAFOs for example, only affect Ag Intensive. Some things only affect certain city or just the city so it will go to the commissioners first.

J. Hufford: You said it's a half mile right, so really the only city is Union City that would be even close.

H. Caperton: Correct.

J. Hufford: Then probably Harrisville.

D. Johnting: Yes, so it will go to the commissioners meeting December the first.

President Calhoun: I'd like to thank you guys for coming and explaining it to us.

H. Caperton: I'll be at the facility the rest of this week if you want to come by and chat more and the week of the first. Probably the week of the fifteenth too. Thank you all very much.

A. Hunt: Thank you.

President Calhoun: Is there anything else that needs to be brought up the meeting tonight?

D. Johnting: We do not have a meeting in December but we do have a meeting already in January for a rezoning hearing. That's all I have.

President Calhoun: If that's it, then I'll entertain a motion to adjourn.

J. Hufford: So moved.

President Calhoun: Thank everyone for coming tonight!

D. Johnting: Happy Holidays. See you after the first of the year and thank you everyone for being so diligent all year.

President Calhoun: We've had a good turnout this year.

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President, Don Calhoun Vice President, Coy Applegate

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Recording Secretary, Kristina Halloran