MINUTES OF REGULAR MEETING
CHAMPAIGN COUNTY ZONING BOARD OF APPEALS
1776 East Washington Street
Urbana, IL 61802

DATE:	**December 12, 2024**	**PLACE:**	**Shields-Carter Meeting Room** **1776 East Washington Street**
TIME:	**6:30 p.m.**		**Urbana, IL 61802**

MEMBERS PRESENT: Brian Andersen, Cindy Cunningham, Lee Roberts, Jim Randol

MEMBERS ABSENT: Bryan Holderfield, Chris Flesner

STAFF PRESENT: John Hall, Charlie Campo, Jacob Hagman

OTHERS PRESENT: Ann Thomas, Carol Curtis, Diana Sheets, Mary Hay, Carolyn Trimble, Ralph Trimble, Deborah Campbell, Tim Prescott, Linda Williams, Japhie Ramkumar, Dave Ramkumar, Vijay Shah, Shahnon Delamar, Claire Vail, Michele Brown, Betty Johnson, Daniel Rushforth, Jennifer Hlubocky, Graham Duncan, Harold Diamond, Karen Kane, Diane Marlin, Joseph Hooker, Mary Jadernak, John Walsh, Pam Richart, Lan Richart, Randy Locke, Andrew Rehn, Annie Adams, Paige Spanger, Rudi Mortimer, Sharon DeCelle, Geri Theobold, Emily Kerlin, Thomas Skotteng, Lois Kain, Kim Curtis, Rebecca Beyler, Phil Nyman, Duane Kimme, Nancy Uchtmann, James Keys, Mike Folk, Mary Krick, Chris Berti, Josh Burdick, Erie Godoy, Bruce Adams, Ed Roy, Marie Roy, Joyce Hurd, Bill Glithero, Roger Inman, Cathy Inman, Chris Stohr, Jennifer Putman, Jan Carter Niccum, Ted Hartke, Megan Barron, Michael Tilley, Philip Hult, Teresa Jarvis, Wyatt Muse, Colette Ackermann, Jessica Shortz, Karen Folk, Virginia Husting, Roxanne Sawhill, Miranda Bullok, Ann Berger, Emily Kerwin, Susan Appel

1. Call to Order

The meeting was called to order at 6:39 p.m.

2. Roll Call and Declaration of Quorum

The roll was called, and a quorum was declared present.

Mr. Hall said a temporary chair was needed. Mr. Andersen nominated Ms. Cunningham, seconded by Mr. Roberts. The vote was carried by voice vote.

Ms. Cunningham informed the audience that anyone wishing to testify for any public hearing tonight must sign the Witness Register.

3. Approval of Minutes – June 27, 2024 & July 11, 2024

Mr. Randol made the motion, seconded by Mr. Andersen, to approve the minutes from June 27th,

2024, and July 11th, 2024. The motion passed by voice vote.

4. Correspondence – None

5. Audience participation concerning matters other than cases pending before the Board - None

6. Continued Public Hearings

Case 130-AT-24

Petitioner: **Zoning Administrator**

Request: **Amend the Champaign County Zoning Ordinance to add "Battery Energy Storage System" as a new principal use under the category "Industrial Uses: Electric Power Generating Facilities" and indicate that a Battery Energy Storage System may be authorized by a Special Use Permit in the AG-1 Agriculture, AG-2 Agriculture, B-1 Rural Trade Center, B-4 General Business, I-1 Light Industry, and I-2 Heavy Industry Zoning Districts; add requirements and fees for "Battery Energy Storage Systems"; add any required definitions, and make certain other revisions to the Ordinance as detailed in the full legal description in Attachment A.**

Mr. Hall said there's a new memo handed out tonight with a few large attachments. Mr. Hall said the first is a revised draft amendment. Mr. Hall continued that he has been reviewing NFPA 855 over the past few months, and one of the attachments to the memo is an excerpt of pages one to forty-two of NFPA 855. Mr. Hall continued that these pages are the body of the code, including additional explanatory materials. Mr. Hall said he wanted to draw attention to two items in NFPA 855.

Mr. Hall said the first is on page 855-20, a table summarizing the relevant sections for outdoor BESS installations which are the type the County will most likely see. Mr. Hall continued that the rest of that section references relevant parts of NFPA 855. Mr. Hall cautioned that just because you read one part of NFPA 855 doesn't mean you've read all of the essential parts for any of those considerations and getting your head around that is a real challenge. Mr. Hall said he doesn't expect every Board member to read NFPA 855, but he wanted to have it as a document of record so the public could refer to it.

Mr. Hall said the second important table in NFPA 855 is on page 855-24 and summarizes all the technology-specific requirements for the various electrochemical energy storage systems. Lithium-ion, which is the kind of technology before the board in case 144-S-24. has the fewest concerns of any of the technologies, which is a good thing and is why it's so popular. Mr. Hall continued that even though lithium-ion has problems, science has a good handle on dealing with those problems.

Mr. Hall said he was going to walk through the changes to the amendment. Mr. Hall didn't know why they originally proposed BESS to be simply a special use permit approved by the ZBA. Mr. Hall said they've been concerned all along about the safety considerations. Mr. Hall continued that there's a decommissioning plan, and anytime there's a decommissioning plan where the County could be spending money it is important to have those projects reviewed by the County Board. Mr. Hall proposes making BESS special use permits a County Board special use permit. Mr. Hall continued that BESS special use permits would still come through the ZBA, and the ZBA would make a recommendation to ELUC (Environmental Land Use Committee), and ELUC would recommend to the County Board.

Mr. Hall said the second change is improvements to the street setback requirements, making it the same as anything else in the ordinance. Mr. Hall said that the new state act regulating wind and solar farms had come out when the amendment was first proposed. Mr. Hall continued that many of the requirements for wind and solar farms are being overridden by that act. Mr. Hall said that the County has never been able to adopt an amendment that would bring the requirements in line with the State requirements, which is why he's following the old requirements for the BESS amendment since the State hasn't stepped in and put in lower standards yet, so the ZBA should go with the standards that are known and trusted.

Mr. Hall said the third significant change was the separation from property lines. Mr. Hall said he and Mr. Campo had spent a lot of time working on that recently, and the concerns with solar farms, which are sounds coming from the inverters, are very similar to BESS because there's an inverter. Mr. Hall added that the BESS units have some ventilation operating all the time, which is why it is best to adopt standards similar to those required for solar farms. Mr. Hall said it isn't a significant change, but it does increase the separations that were being proposed, especially for parcels that are no larger than 10 acres, which is the same as what is required for solar farms.

Mr. Hall said that one added item missing from the original amendment text is that if the BESS units are next to a farm field and there's no house within 530 feet, the separation from the property line should only be 10 feet. Mr. Hall continued that the previous version stated that the separation needed to be 200 feet, but he doesn't see why a farm field needs 200 feet of separation from a BESS facility. Mr. Hall said the petitioner could ask for a waiver, but waivers can be controversial, and if it is possible to avoid a waiver, that's a good thing.

Mr. Hall said the change to the text amendment is the recommendation to the ZBA. Mr. Hall continued that if the Board thinks the separation needs to be 200 feet, it can be changed back. Mr. Hall added that many comments about the separation were received from the private sector, and Mr. Hall believes those comments were well-founded. Mr. Hall added the separation for BESS facilities is the same as for a solar farm. Mr. Hall said the goal of the BESS text amendment is to bring it in line with solar farms.

Mr. Hall said the next big group of changes regarding NFPA 855 are similar to what was discussed in Case 144-S-24 that was before the Board previously. The Hazard Mitigation Analysis, which has to be approved by the relevant Fire Protection District. Mr. Hall continued that the Hazard Mitigation Analysis never has to be presented to the ZBA; it's between the Fire Protection District and the developer. Mr. Hall said that once the Fire Protection District approves the Hazard Mitigation Analysis, the developer has to file a copy with the Department of Planning & Zoning so that there is a record of it.

Mr. Hall said another item NFPA 855 requires is a commissioning report before going into operation, which the Fire Protection District has to accept and the developer will need to file a copy with the Department of Planning & Zoning.

Mr. Hall also added access drive requirements similar to what was seen in Case 144-S-24, where every part of the BESS facility has to be within 100 feet of an access drive. Mr. Hall said that the BESS units are usually about 10 feet apart, but every point has to be within 100 feet of a service drive. Mr. Hall stated that the 100 feet did not come from NFPA 855 but from the local Fire Protection Districts. Mr. Hall said that he doubts any local district has a requirement, but they can comment on that and change it if they want.

Mr. Hall said that the original version of the text amendment had a section dealing with smoke and fire

detection, fire control and suppression, and spill of electrolytes, which is not an issue with lithium-ion battery systems, but this amendment is intended to deal with all the known BESSs, and some of those units have to deal with electrolytes. Mr. Hall said that he's written in the requirements for the typical outdoor remote location, which means 100 feet from a property line, 100 feet from a street and 100 feet from a building. Mr. Hall said the standard way to deal with a fire in lithium-ion BESS is to let the fire burn out. Mr. Hall said that NFPA 855 takes the approach that if you're more than 100 feet from anything, letting a fire burn out isn't going to be an issue, and the local fire protection district can decide if fire control and suppression, including water, should be required. Mr. Hall added that NFPA allows the local district to make that decision. Mr. Hall continued that the way the text amendment is written is required if the Fire Protect District wants it or if this Board determines that it's necessary; otherwise, it's unnecessary. Mr. Hall said there are requirements for explosion control, which were written to meet the basic requirements of NFPA 855. Mr. Hall continued that this goes back to the Hazard Mitigation Analysis and what explosion control the developer decides to provide based on the test that the manufacturer did. Mr. Hall said that there is not much in the draft ordinance on explosion control except that you have to comply with NFPA 855.

Mr. Hall said there is a paragraph about whether a BESS will be in or on a building. Mr. Hall said that he hopes the Board never has to address that, but Champaign County is a big county, and it might happen at some point. Mr. Hall said that NFPA 855 has a lot of standards and that this draft amendment just refers to the basic requirements and if something like that is ever proposed, it will require a lot of detailed review.

Mr. Hall said that NFPA 855 has something called remediation measures, where NFPA 855 requires the developer to provide authorized service personnel to assist emergency first responders if there's ever an issue with the equipment, whether that be a failure or some other kind of accident. Mr. Hall said that returning to the testimony in Case 144-S-24, that's exactly what was heard. Mr. Hall said the developer would be required to provide authorized people there to help for the project's lifetime if it was needed, and that was because NFPA 855 requires it. Mr. Hall continued that NFPA 855 goes so far as to require hazard support personnel to sit there and babysit the BESS in case of ignition or reignition. Mr. Hall did note that the hazard support personnel is only required if the Fire Protection District wants to require it, so that's another instance of where the requirements for a BESS are going to largely be up to the Fire Protection District and the Fire Protection District presumably isn't going to agree to an emergency response plan if they don't agree with everything that the developer is doing. Mr. Hall said that the petitioner in Case 144-S-24 says there won't be a BESS without an emergency response plan, so the Fire Protection Districts are in a strong position since this ordinance gives them a lot of authority. Mr. Hall continued that he plans on getting a copy of this draft text amendment sent to the relevant Fire Protection Districts for feedback. Mr. Hall said that this text amendment doesn't require anything that NFPA 855 doesn't already require, and it has always been said that NFPA 855 requirements had to be met.

Mr. Hall said the last attachment to the memo is a presentation from the 2024 Illinois Renewable Energy Conference on BESS units. Mr. Hall said they presented much basic information with the previous memo, but this handout does better than any article he's seen. Mr. Hall continued that the presentation goes over how BESS are made up of cells, modules, racks, and containers, as well as the UL 9540A testing protocol, which tests each one of those levels for failure to see what kind of mitigation measures are necessary, which is the point of the Hazard Mitigation Analysis.

Mr. Hall said that when looking at pictures of BESS facilities, you see access drives, which goes back to the access drive requirement. Mr. Hall ended by saying he knows there will likely be questions because

he just provided the Board with a lot of material, and he is sorry it took so long, but it took a while to get a handle on NFPA 855. Mr. Hall said that the case is not ready for action tonight, and he is willing to answer questions, or the Board can continue the case to a future date.

Ms. Cunningham thanked Mr. Hall for his work because this is a huge lift, and the Board is towards the leading edge of BESS regulation in the County because Mr. Hall's work has been pioneering. Mr. Andersen asked if there was a particular date to which the case should be continued. Mr. Hall said there needs to be a specific date, but the docket has been thrown into so much turmoil lately with canceled meetings and the need to continue other cases. Mr. Hall said a tentative date of January 30th, 2025, would work because there's a good chance that two of the cases docketed for that meeting will not need to be on the agenda. Mr. Hall said if those two cases are off the docket, Case 130-AT-24 could be included on January 30th, 2025. Mr. Hall continued that if those two cases need to be heard, this case could be continued until March 13th, 2025. Mr. Randol asked if it would be okay to continue the current case to March 13th, 2025, to ensure the Board has the opportunity to clean up the current cases. Mr. Hall said that would be fine.

Mr. Randol, seconded by Mr. Andersen, moved that Case 130-AT-24 be continued to March 13th, 2025. The motion passed by voice vote.

7. New Public Hearings

Case 157-AT-24

Petitioner: **Zoning Administrator**

Request: **Amend the Champaign County Zoning Ordinance as follows regarding a temporary moratorium on Carbon dioxide Sequestration Activity:**

1. Add the following definitions to Section 3.0 Definitions: CARBON DIOXIDE SEQUESTRATION ACTIVITY.

2. Amend Section 5.2 as follows:
   a. Add "CARBON DIOXIDE SEQUESTRATION ACTIVITY" to be temporarily prohibited by means of a safety moratorium in all Zoning Districts.

3. Add new Section 5.5 Safety Moratorium on CARBON DIOXIDE SEQUESTRATION ACTIVITY and provide as follows:
   a. That the purpose of the temporary safety moratorium is to allow time for the Champaign County Board to adopt a comprehensive ordinance(s) regulating the sequestration of carbon dioxide within its borders.
   b. That all CARBON DIOXIDE SEQUESTRATION ACTIVITY pending or proposed after the effective date of the amendment shall be held in abeyance and shall not be approved by Champaign County until the revocation of this temporary moratorium.
   c. That the moratorium shall expire in 12 months after the effective date of the amendment.

Ms. Cunningham said that the general public was very concerned about this issue and that the Board would hear testimony from Prairie Rivers Network, Prairie Research, and the respective mayors of

Urbana and Champaign. Ms. Cunningham said that after that, she would call on other people who have signed the witness registry, and if additional people would like to provide testimony, they may do so. Ms. Cunningham asked that, with respect to all of the meeting attendees' time, please don't repeat comments that have been previously made. Ms. Cunningham said the Board is also listening to everyone and is very concerned about this issue. Ms. Cunningham called the first witness.

Andrew Rehn, 511 W Oregon in Urbana, Illinois, with Prairie Rivers Network and Pam Richart with Eco Justice Collaborative Champaign, Illinois, approached the testimony microphone. Mr. Rehn said they will present the case not just for a moratorium but also for all counties in the state to ban carbon dioxide sequestration under the Mahomet Aquifer and its recharge areas. Mr. Rehn said he would provide an overview of why this was important. Mr. Rehn said the Mahomet Aquifer covers 15 counties; Champaign County is about half covered by the aquifer, located about 100 feet below the ground, and has been designated a sole-source aquifer. Mr. Rehn explained that the sole-source designation means the US Environmental Protection Agency has identified that the region wouldn't have an economically feasible alternative should the aquifer become contaminated. Mr. Rehn referenced his presentation slide titled Our Sole Source Aquifer and stated in the project review area, which includes the aquifer outline and the two recharge areas in Ford and McLean County, that the sole source designation was done in 2015 to protect the aquifer from toxic waste from going to a landfill near the aquifer. Mr. Rehn thanked everyone who worked to get the sole-source designation for the aquifer.

Mr. Rehn said that carbon dioxide sequestration captures carbon dioxide from industrial activity, such as creating ethanol, concrete, or steel or burning fossil fuels for power. Mr. Rehn said the created carbon dioxide is transported to a location for sequestration or that sequestration can happen on-site. Mr. Rehn explained that sequestration means injecting carbon dioxide underground into an underground storage formation. Mr. Rehn said, in this case, the Mt. Simon Sandstone aquifer is a saltwater aquifer located about a mile or so underground, which is where the carbon would be sequestered, and the Mahomet aquifer is above it. Mr. Rehn continued that there are a few different pathways that would expose the Mahomet Aquifer to carbon which has been sequestered. Mr. Rehn said one way is from the injection well, which Ms. Richart will address later, but that an injection well is what is used to sequester the carbon dioxide, and the well can be a source of failures, which could result in carbon dioxide leaking along the well and into the aquifer. Mr. Rehn said a site could also have a monitoring well, which isn't used for injection but could fail, and contaminate the aquifer. Mr. Rehn said there could also be a geologic failure when the cap rock (which keeps the carbon dioxide underground) fails, and the carbon dioxide rises to the surface because the carbon dioxide wants to move back to the surface. Mr. Rehn said the last possibility is abandoned wells, including oil and gas wells. Mr. Rehn said some of these wells might be known while others might not be known or may not have been properly sealed creating unknown pathways to the aquifer.

Mr. Rehn said that when a leak occurs, water would mix with the carbon dioxide and create carbonic acid, which would acidify the aquifer. Mr. Rehn said that salinated water could mix with fresh water, changing the water chemistry. Mr. Rehn said the biggest concern with that mixture is the change in the water chemistry would cause the release of heavy metals or other contaminants in the aquifer, which could contaminate the drinking supply. Mr. Rehn said this would be similar to Flint, Michigan, where the water chemistry was changed, resulting in lead pipes leaching into the water. Mr. Rehn said this information is from a Department of Energy study that identified water threats due to carbon dioxide sequestration.

Mr. Rehn referenced a slide in his presentation titled What Is Carbon dioxide Sequestration, which showed a red area that references the Mt. Simon Sandstone aquifer as an excellent space for storage,

even though it is located below the Mahomet Aquifer. Mr. Rehn said carbon dioxide sequestration is becoming popular because of the Inflation Reduction Act, which was signed in 2022 and created a tax incentive of $85 per tonne of carbon dioxide. Mr. Rehn said that the types of sequestration projects being discussed would be about 90 million metric tonnes, which would result in about $7.6 billion in tax breaks for those doing the sequestration.

Mr. Rehn said there are currently three locations within the aquifer's region planned for sequestration, and none of those are located in Champaign County, which is why this is a good time for the County to take action. Mr. Rehn said that no companies have publicly stated they plan to sequester carbon dioxide here, but he suspects those projects will soon impact the County. Mr. Rehn said that the Inflation Reduction Act was signed 2 years ago, and he predicts Champaign County will soon have requests for sequestration, so the Board should act to protect the Mahomet Aquifer. Mr. Rehn said the current projects in the region are One Earth, Heartland Greenway – Vervain, Heartland Greenway – Compass, and ADM Maroa. Mr. Rehn said Ms. Richart would discuss regulations.

Ms. Richart asked the Board if they were wondering who regulates the wells and the regulations. Ms. Richart said that the EPA (Environmental Protection Agency) regulates the wells via the Safe Drinking Water Act, and the regulations deal with such items as characterization, monitoring requirements, and emergency plan reporting. Ms. Richart continued that regulations have been in place since 2011, and state-level legislation was passed in 2024, which stated that the Illinois EPA would have regulation power over sequestration in the state. Ms. Richart said that both she and Mr. Rehn lobbied to get that bill to include more regulations than at the federal level to include items like soil and gas monitoring, a water impact report, and alternative water supply if there's a leak. Ms. Richart said that the Illinois bill also provides protections for landowners who haven't consented to the project, along with a minimum number of years a project has to be monitored by an operator or developer of 30 years. Ms. Richart stated that for all the good the bill did, it didn't ban carbon dioxide sequestration below the Mahomet Aquifer as she had hoped. Ms. Richart said that 12 state legislators representing the areas impacted by the Mahomet Aquifer signed a letter supporting the carbon dioxide sequestration ban, which didn't happen. Ms. Richart repeated that the state Carbon dioxide Capture and Sequestration (CCS) Act does require an alternative supply of potable water if the aquifer is contaminated. Ms. Richart continued that the federal EPA designated the Mahomet Aquifer as a sole-source aquifer, which means no there is no reasonable alternative drinking water is available if the aquifer gets contaminated, which would have hefty economic impacts on the region. Ms. Richart stated that the Mahomet Aquifer accounts for 92% of the public water supply for surface and groundwater, and for 77% of suppliers, an alternative water source is not economically feasible.

Ms. Richart stated that she and Mr. Rehn spoke before ELUC back in August, but since that meeting, the ADM well site in Decatur has experienced two leaks, which highlights the concerns about carbon dioxide sequestration under the Mahomet Aquifer. Ms. Richart explained that there are two monitoring wells at the Richland College campus in Decatur, the only class six project approved by the federal EPA. Ms. Richart said that this location was a pilot project and stored 1 million metric tonnes, and now a second project is in development. Ms. Richart continued that the original project started in 2017, and an additional 3.5 million metric tonnes of carbon dioxide has been stored, which brings the total to 4.5 million metric tonnes.

Ms. Richart explained that intermittent electrical failures started in September 2020, impacting the monitoring of one of the wells. Ms. Richart continued that by January 2023, the well needed to be partially capped so repairs could be made to allow the well to function fully. Ms. Richart said the EPA went out and did inspect the well. Ms. Richart added that by October 2023, well corrosion had been

identified, and the well needed to be sealed, resulting in the site having just one monitoring well in operation. Ms. Richart said the story of the corroded ADM well was published in March 2024 by E&E News Politico. Ms. Richart said the EPA inspected the well in June of 2024 and issued a notice of violation. Ms. Richart continued that by October 2024, the remaining well was discovered to be leaking, and carbon dioxide sequestration was halted. Ms. Richart continued that in November of 2024, 24 wells were identified that can serve as escape routes for CO2, and these different wells made it hard to monitor them for leaks. Ms. Richart said ADM used EPA-approved 13 chrome steel which corrodes in saline aquifers, and ADM admitted to not following their emergency plan, which included shutting down CO2 injecting after the monitoring well leak was discovered. Ms. Richart said that sequestration continued, and the general public and authorities were not notified, even as regulations for the Safe CCS Act were being discussed. Ms. Richart said Governor Pritzker signed the Safe CCS Act a half-mile from the leaking well. Ms. Richart said that there is little guidance for installing carbon dioxide sequestration wells. Ms. Richart continued that no citations were issued to ADM during this time, and they were allowed to stay operational.

Ms. Richart said that the EPA acknowledges that there is a level of uncertainty in the early stages of any injection project, and when there is uncertainty, there should be consideration about possible pollution of groundwater, in this case, the Mahomet Aquifer. Ms. Richart showed a slide in her presentation explaining that there are multiple upcoming carbon dioxide sequestration projects under review by the EPA, and none are in Champaign County. Ms. Richart said these upcoming projects are over 100 times the size of the Decatur ADM project, with additional projects that are 50 times the size of the ADM project being considered before September 2025.

Ms. Richart reminded the Board of the People's Gas natural gas leak under the Mahomet Aquifer, where People's Gas didn't acknowledge the leak until 2016, with costs of providing replacement water exceeding $10 million by 2020. Ms. Richart continued that it has been 8 years since the leak was acknowledged and that there is still no replacement water for the residents impacted by it. Ms. Richart said the leak was a learning opportunity to demonstrate the importance of protecting the aquifer.

Mr. Rehn said that the risk level for the aquifer needs to be zero, and regulating something is creating a risk, and letting it happen provides an opportunity to spoil the aquifer. Mr. Rehn continued that a ban on carbon dioxide sequestration, not a moratorium, is certain to protect the Mahomet Aquifer. Mr. Rehn asked the Board to pass the moratorium to provide a year to understand the impact of carbon dioxide sequestration on the Mahomet Aquifer. Mr. Rehn said that the moratorium wont impact any pending projects under the Mahomet Aquifer, so he encourages the Board to approve the moratorium before any projects are proposed in Champaign County. Mr. Rehn continued by stating that the Champaign State's Attorney wrote a memo saying the moratorium would likely survive any legal challenges from parties looking to do carbon dioxide sequestration. Mr. Rehn also shared that retired University of Illinois at Urbana-Champaign law professor Eric Fryfogel stated it would be legal for the Board to ban carbon dioxide sequestration under the Mahomet Aquifer and require special use permits for sequestration outside the Aquifer. He stated that support for the moratorium is not support for a ban it just allows more time for research. Mr. Rehn said Ford and DeWitt counties have passed similar bans, and he hopes Champaign will do the same soon. Mr. Rehn asked if he and Ms. Richart would take questions now or later in the meeting. Ms. Cunningham said the time for questions is now. Ms. Cunningham asked the Board and staff if they had any questions, and no questions were asked. Ms. Cunningham thanked Mr. Rehn and Ms. Richart for their testimony, and they returned to their seats.

Ms. Cunningham asked for Randy Locke to come to the microphone. Mr. Hall said Mr. Locke won't be at the meeting until 8:30.

Ms. Cunningham called for Diane Marlin to testify.

Diane Marlin of 400 S. Vine St in Urbana, Illinois, approached the testimony microphone. Ms. Marlin said that as the mayor of the City of Urbana and former member of the Illinois Mahomet Aquifer Protection Task Force, she supports amending the Champaign County Zoning Ordinance to include text for a temporary safety moratorium on carbon dioxide sequestration activities in Champaign County. Ms. Marlin said this step would be the latest and most logical in a series of actions to protect the Mahomet Aquifer for the past 10 years. Ms. Marlin continued that the Aquifer serves as the primary source of drinking water for the Urbana community, over 100 municipalities, and thousands of rural residents in a 15-county area in central Illinois and is essential for many agricultural businesses and industrial uses. Ms. Marlin repeated that the federal EPA designated the Mahomet Aquifer as a sole-source aquifer, which means there are no reasonable available drinking water alternatives if the aquifer becomes contaminated or compromised. Ms. Marlin continued that local communities, governments, and other stakeholders have worked hard over the past years to protect the aquifer. Ms. Marlin stated that a coalition of 20 local governments and stakeholders blocked the proposal to landfill PCBs (Polychlorinated biphenyls) and manufactured gas-plant waste over the aquifer in Clinton, Illinois. Ms. Marlin added that the coalition successfully petitioned the federal EPA to designate the Illinois portion of the Mohamet aquifer as a sole-source aquifer.

Ms. Marlin said that the Illinois General Assembly founded the Mahomet Aquifer Protection Task Force in 2017, and the task force was charged with developing a state plan to maintain the quality of the aquifer water, identify current and potential threats to the aquifer, identify steps for long-term protection, and make legislative recommendations to protect the aquifer. Ms. Marlin stated that in 2018, the task force published their report with ten recommendations for action, with the top priority of funding Prairie Research Institute to use a helicopter-based time domain electromagnetic technology to create a detailed 3D map of the aquifer. Ms. Marlin continued that the Champaign County First coalition, led by the Champaign County Chamber of Commerce, adopted mapping as a priority project, and they've been lobbying for federal and state support to fund mapping since 2020. Ms. Marlin said that in 2022, the Champaign County Board allocated a half-million dollars in American Rescue Plan Act funds for H10 mapping in Champaign County, which the Prairie Research Institute completed. Ms. Marlin continued the Illinois General Assembly passed SB 1289, the Safe Carbon Capture and Sequestration Act, which created a regulatory and safety framework for carbon dioxide sequestration projects. Ms. Malrin said it was a start but didn't go far enough.

Ms. Marlin said that in 2024, U.S. Senator Dick Durbin allocated a million dollars in congressionally directed funding for H10 mapping of Iroquois, Vermillion, and Ford counties, while the Boone County Board has allocated additional funding for H10 mapping. Ms. Marlin continued that State Senator Paul Fauci and Representative Carol Ammons sponsored SB (Senate Bill) 3968 and HB (House Bill) 5874 to ban carbon dioxide sequestration through and under the Mahomet Aquifer, and while there was a vote in the recent veto session, the vote to move the bill out of committee was blocked. Ms. Marlin said she strongly supports this moratorium on carbon dioxide sequestration activity in Champaign County, and the answer is just as clear as the water from the Mahomet Aquifer: to protect the quality and quantity of water in the sole-source aquifer. Ms. Marlin continued that while the moratorium is temporary, she believes a ban on such projects should be passed for the entire aquifer. Ms. Marlin returned to her seat.

Ms. Cunningham called Joseph Hooker to testify.

Joseph Hooker of 1514 Country Lake Drive in Champaign, Illinois, approached the testimony

microphone. Mr. Hooker said he is a retired assistant city attorney with the City of Champaign and performed most of the legal work for the two coalitions of local governments; one that successfully petitioned for the sole-source aquifer designation and the other one that successfully settled a lawsuit with area-wide disposal to prevent them from having a PCB landfill unit at Clinton Landfill. Mr. Hooker continued that during doing legal work and working with our other legal team, he became very acquainted with the kind of sketchy ability of some state agencies to protect us in these situations because he senses that state agencies primarily rely on the experts hired by the permit applicants and don't have a robust way of testing the evidence presented by those applicants and experts. Mr. Hooker added that the Clinton Landfill situation had a battle of credentialed experts, with both sides having impressive credentials, but came to diametrically opposed conclusions about whether the PCB landfill could be safely operated over the aquifer.

Mr. Hooker stated that the notion of allowing something like carbon dioxide sequestration under the Mahomet Aquifer is extremely fraught, along with the State's ability to monitor the sequestration and to question the designs being put forward. Mr. Hooker continued that private companies are being driven by financial interests, which he also finds problematic. Mr. Hooker wanted to reiterate that given the current regulatory framework, along with the relationship between permit applicants and State regulators, the only sensible solution is a ban and to require that carbon sequestration happen somewhere other than under the Mahomet Aquifer. Mr. Hooker returned to his seat.

Ms. Cunningham said that while the Board waits for Mr. Locke, she will call names in order from the witness registry to keep the meeting moving.

Ms. Cunningham called Deborah Campbell to testify.

Deborah Campbell of 1518 West Park Avenue in Champaign, Illinois, approached the testimony microphone. Ms. Campbell wanted to thank the Board for what they do to keep their constituents and all of Champaign County safe. Ms. Campbell mentioned that water is the most important thing; if water is contaminated, that water will be lost. Ms. Campbell returned to her seat.

Ms. Cunningham called Vijay Shah to testify.

Vijay Shah, of 1107 W Green St Apt 322 in Urbana, Illinois, approached the testimony microphone. Mr. Shah is a PhD student at the University of Illinois at Urbana-Champaign in the Chemical Engineering Department. Mr. Shah doesn't study carbon dioxide storage; he studies carbon dioxide capture. Mr. Shah explained that there are multiple ways to store carbon, and the one that Mr. Rehn and Ms. Richart explained was done by injecting the carbon dioxide underground for storage. Mr. Shah said there are multiple other ways to store carbon. Mr. Shah said that one of the ways is to react the carbon dioxide with something caustic like bleach or drain cleaner, which would turn carbon dioxide into carbonate minerals so the carbon dioxide can be stored in a way that is not mobile like gas is underground. Mr. Shah continued that terrestrial sequestration is another way to store carbon, which is growing trees. Mr. Shah said that trees take in the carbon dioxide and store it in their roots, and while some of the carbon dioxide is released, more carbon dioxide is stored than released. Mr. Shah said the third way was recently revealed in an academic paper from the University of Minnesota - Twin Cities, where one turns the carbon dioxide into graphitic carbon dioxide like a coal briquette. Mr. Shah said that graphitic carbon dioxide can be stored underground, and nothing will happen if it comes into contact with water.

Mr. Shah said carbon dioxide is like a super solvent and can solubilize heavy metals. Mr. Shah continued that the reason for injection storage is a financial incentive attached to it, and the other

previously mentioned storage methods aren't technologically or economically feasible at the scale needed to remain carbon-neutral and not exacerbate the climate crisis. Mr. Shah quoted University of Michigan – Ann Arbor professor Kyle Powys Whyte, "The last person you want hitting the panic button in a bad situation is the one who caused the problem in the first place." Mr. Shah said we have caused this carbon dioxide problem in Western civilization for a tiny fraction of human history. Mr. Shah said the struggle with seeing how we think that solutions being rushed into will not have equal or worse consequences than the mistakes of putting carbon dioxide into the air. Mr. Shah continued that even with the protections that the EPA provides for drinking water resources, Mr. Shah doesn't have faith that federal legislation will protect our local interests and that it comes down to community action like what is happening tonight.

Mr. Shah said that many of the risks of carbon dioxide sequestration can go unacknowledged. Mr. Shah continued that the Board heard about how carbon dioxide leaks or cap rocks fails. Mr. Shah stated that many well failures are caused by poor construction. Mr. Shah also noted that injecting carbon dioxide underground could disturb other gasses underground, resulting in gasses trying to rise to the surface. Mr. Shah said Illinois has done a good job prioritizing clean water in his hometown of Skokie, Illinois, where fluoridating the water has occurred for a long time. Mr. Shah said water protections are a hallmark of the Illinois State Legislature, and he sees no reason why financial incentives should cloud that clear vision. Mr. Shah continued that fresh water is a special gift on Earth, from the Great Lakes to the aquifers that contain potable water. Mr. Shah said he supports a moratorium and, eventually, a ban on carbon dioxide sequestration under the Mahomet aquifer. Mr. Shah returned to his seat.

Ms. Cunningham called Ann Berger to testify.

Ann Berger of 101 W Windsor Road, Apt 1110 in Urbana, Illinois, approached the testimony microphone. Ms. Berger said that engineering experts who developed the technology have presumably told the Board it is safe, while experienced geologists have looked at the containment strata and confirmed it is reliable. Ms. Berger said she is not an expert in anything, but she does have a 78-year career as a human, and she proposed that the problem that needs to be addressed most intensively and with ruthless honesty is not engineering or geology but humans themselves. Ms. Berger said that for all the breathtaking scientific intelligence and technological genius, humans are not and never will be omniscient or fail-safe and don't catch all the flaws. Ms. Berger said she wants to point out that human problems, including design flaws, poor maintenance, inadequate safety measures, sloppy cleaning in critical areas, and inadequate disaster training, are all ordinary human shortcomings that were identified by investigators as significant components at Three Mile Island, Deepwater Horizon, at Fukushima (location of a nuclear accident at a power plant in Japan in 2011), space shuttle Challenger, the Titanic, and many more. Ms. Berger said humans always have and always will learn from their mistakes, which is why our species has achieved unimaginable heights of intelligence. Ms. Berger said this is also the reason humans have unimaginable suffering on one another. Ms. Berger said that water is life itself. Ms. Berger asked, with all the fervor she could muster, that the Board refuse to let Central Illinois become the mistake from which America learns the irreversible tragedy of pitting the goals of carbon dioxide sequestration against the reality of rapidly diminishing, threatened, and vulnerable water supply. Ms. Berger returned to her seat.

Ms. Cunningham called Harold Diamond to testify.

Harold Diamond of 101 W Windsor Road, Apt 3109 in Urbana, Illinois, approached the testimony microphone. Mr. Diamond said he wants to discuss the liability of things going wrong, which is totally astounding, and it's worthwhile to put a rough figure in front of the Board if carbon dioxide

sequestration goes forward and a major incident occurs. Mr. Diamond said that perhaps 500,000 people would have their water supply affected, and since the Mahomet Aquifer is sole source, there is no simple way of replacing this water. Mr. Diamond said if people have to provide their own water, it might cost $1,000 a year, which would mean $500 million a year and perhaps in perpetuity. Mr. Diamond said that companies that propose carbon dioxide sequestration likely don't have liability insurance for those impacted by the contamination. Mr. Diamond said that if things go wrong, the companies might go bankrupt or state the contamination isn't their problem, and the people impacted by water contamination will be stuck. Mr. Diamond said carbon dioxide sequestration amounts to unlimited liability, and it's unreasonable to allow such projects to take place. Mr. Diamond said he hopes the Board uses its power to prevent that. Mr. Diamond returned to his seat.

Ms. Cunningham called Annie Adams to testify.

Annie Adams of 1506 S Carle Street in Urbana, Illinois, approached the testimony microphone. Ms. Adams said she supports the text amending the Champaign County Zoning Ordinance to include text for a temporary safety moratorium on carbon dioxide sequestration activity in Champaign County as the Mahomet Aquifer is the sole source of drinking water. Ms. Adams said she agrees with Illinois State Senator of the 51st district, Chapin Rose, that there is no amount of risk that is acceptable. Ms. Adams thanked the board and returned to her seat.

Ms. Cunningham called on Paige Spanger to testify, but Ms. Spanger didn't come forward to provide testimony.

Ms. Cunningham called on Sharon Decelle to testify, and Ms. Decelle waived her speaking rights.

Ms. Cunningham called on Emily Kerlin to testify, but Ms. Kerlin said she signed the wrong form.

Ms. Cunningham called on Susan Appel to testify, but Ms. Appel said she also signed the wrong form.

Mr. Hagman announced that additional attendance sheets were available for people to sign if they had not already done so.

Ms. Cunningham called on Mr. Locke, but he hadn't arrived yet. Ms. Cunningham asked Mr. Hall if the witness registry could be closed and reopened when Mr. Locke arrived, and the Board could move forward with the Finding of Facts. Mr. Andersen asked if there was an expected arrival time for Mr. Locke. Mr. Hall said 8:30 pm.

Mr. Randol made the motion, seconded by Mr. Roberts, for a 10-minute break. The motion passed via voice vote. The Board will reconvene at 8 p.m.

At 8 pm, Ms. Cunningham declared the meeting back in session.

Mr. Randol made the motion, seconded by Mr. Roberts, to close the witness registry and proceed with the Findings of Facts. The motion passed via voice vote.

Mr. Hall pointed out to the Board that the version of the amendment is the version that was before ELUC in September 2025, and there is a typo on the second page under subparagraph 5.5. 3b, where it is referred to as a 6-month moratorium. Mr. Hall stated that the rest of the memo talks about a 12-month moratorium, and the 6-month mention is a typo. Mr. Hall continued that the proposal put forward is a

12-month moratorium.

Mr. Hall also pointed out that since the County Board adopted the Land Resource Management Plan in 2010, they have never had a proposed text amendment that stated that the amendment was necessary to achieve the Land Resource Management Plan. Mr. Hall said they have been given the option for the text amendment before the Board: It will help achieve or is necessary to achieve. Mr. Hall said the Land Resource Management Plan states that objective 8.1 ensures adequate and safe groundwater supplies for human and ecological purposes at a reasonable cost. Mr. Hall said that based on the testimony given tonight, the Board could determine the text amendment is necessary to achieve that objective of the Land Resource Management Plan, and if it's necessary to achieve that objective, and it's necessary to achieve the Land Resource Management Plan. Mr. Hall said that as far as the purpose of the Zoning Ordinance, he believed you could find this amendment is necessary to achieve the purpose of the Zoning Ordinance to secure adequate light, pure air, safety from fire and other dangers, necessary to conserve the value of land throughout the County, and necessary to promote public health, safety, comfort, morals, and general welfare. Mr. Hall said that the Board has never had a text amendment where the option was "is necessary," and he wanted the Board to consider that.

Mr. Randol made the motion, seconded by Mr. Roberts, to proceed to the Summary Finding of Fact. The motion passed via voice vote.

Summary Finding of Fact for Case 157-AT-24

From the documents of record and the testimony and exhibits received at the public hearing conducted on December 12, 2024, the Zoning Board of Appeals of Champaign County finds that:

1. **The proposed Zoning Ordinance text amendment {WILL HELP ACHIEVE/IS NECESSARY TO ACHIEVE} the Land Resource Management Plan because:**

    i. **The proposed Zoning Ordinance text amendment {WILL HELP ACHIEVE/IS NECESSARY TO ACHIEVE} Land Resource Management Plan Goal 8.**

Mr. Randol said the proposed Zoning Ordinance text amendment IS NECESSARY TO ACHIEVE the Land Resource Management Plan.

    ii. **The proposed Zoning Ordinance text amendment WILL NOT IMPEDE the achievement of Land Resource Management Plan Goals 1, 2, 3, 4, 5, 6, 7, and 9.**

    iii. **The proposed Zoning Ordinance text amendment is NOT RELEVANT to Land Resource Management Plan Goal 10.**

2. **The proposed text amendment {WILL HELP ACHIEVE/IS NECESSARY TO ACHIEVE} the Zoning Ordinance because it will:**
    i. **{WILL HELP ACHIEVE/IS NECESSARY TO ACHIEVE} the purpose of the Zoning Ordinance.**

Mr. Randol said the proposed text amendment IS NECESSARY TO ACHIEVE the purpose of the Zoning Ordinance.

Mr. Hall added the PowerPoint presentation by Andrew Rehn and Pam Richart to the Documents of Record on December 12th, 2024. Mr. Hall also added a handout from Randy Locke with the Illinois State Geological Survey and said he expects a presentation. Mr. Hall added an email from Todd Kinney in support of the moratorium. Mr. Hall said the last document to add is a two-page handout from Pam Richart opposing carbon dioxide storage under the Mahomet Aquifer.

Mr. Hall said the Board could move to adopt the Finding of Fact and Documents of Record at this time, and they must do it before taking final action. Mr. Hall stated that he hopes the Board can hear from Randy Locke tonight because testimony not given at the ZBA meetings is generally not allowed at ELUC, and Mr. Locke's testimony is essential. Mr. Hall hoped the Board would allow his testimony, but it was their decision.

Mr. Randol asked about continuing the case to a future date to give Mr. Locke time to present his information before the Board. Mr. Hall said he hoped that all the time needed would be another 20 minutes and that the meeting could take a break if they wanted.

Mr. Randol moved to take a 20-minute break, which Mr. Roberts seconded. The motion passed via voice vote.

Ms. Cunningham reconvened the meeting at 8:34 pm.

Mr. Roberts moved to reopen the witness registry, which Mr. Randol seconded. The motion passed via voice vote.

Ms. Cunningham called Randy Locke to testify.

Randy Locke of 906 W Hill St in Champaign, Illinois, wanted to discuss the technical aspects of how the carbon dioxide sequestration wells are built and work. Mr. Locke presented on behalf of the Illinois State Geological Survey (ISGS), where he is the chief scientist for research and development. Mr. Locke explained that his background is in geology, hydrogeology, and geochemistry. Mr. Locke added that the PRI and ISGS don't take positions; he's just providing technical information. Mr. Locke said that the ISGS is a resource for all stakeholders as they are a repository for natural resources and geologic data and endeavor to provide accurate and objective earth science information and research to support the protection of environmental quality, economic development, and public safety.

Mr. Locke said the earth stores water, saline water that is mineralized water, oil, and natural gas in porous spaces of rock units. Mr. Locke showed the empty spaces between porous rock being filled with water on a slide where fluid is typically stored and part of the subsurface used for carbon dioxide capture, utilization, and storage. Mr. Locke stated that carbon dioxide capture typically removes carbon dioxide from point sources such as power plants, ethanol plants, and other industrial facilities. Mr. Locke said there is also newer technology to remove carbon dioxide directly from the air using Direct Air Capture. Mr. Locke said that carbon dioxide must be transported and either used or stored once carbon dioxide is captured. Mr. Locke continued that current uses of carbon dioxide cannot accommodate the amount captured, so it needs to be stored.

Mr. Locke said in 2022, the PRI produced a Carbon dioxide Capture Utilization and Storage (CCUS) report that provides extensive background information. Mr. Locke said a full report copy can be found at https://www.ideals.illinois.edu/items/125493. Mr. Locke continued that geological storage occurs only

in suitable geology. Mr. Locke said storage typically occurs over 3000 feet underground and is sealed with rock, prohibiting captured carbon's upward migration. Mr. Locke said the Illinois region is within a geologic structure called the Illinois basin, a bowl-shaped geologic structure in the subsurface covering much of Illinois, Indiana, and Kentucky. Mr. Locke showed the slide titled Illinois Basin Geology, which shows the location of Decatur, Illinois, on a map, along with a geological diagram from the surface to over a mile underground and shows the different characteristics of the rock, including which depths are better for storage and which aren't. Mr. Locke explained that the diagram also shows the types of water quality encountered as you head deeper underground. Mr. Locke said shallow groundwater resources are within the upper 200 to 500 feet from the land surface, and the Mahomet Aquifer and other shallow aquifers in East Central Illinois are less than 200 feet from the surface.

Mr. Locke said as you go into the subsurface, even 1,000 feet below the surface, the water is not drinkable and is about the same salinity as seawater. Mr. Locke continued that the water gets more mineralized as you go farther into the subsurface. Mr. Locke said the exception is the St. Peter Sandstone, which is about 3,300 feet below the surface in the Decatur area and is the deepest underground water source according to the federal EPA and must be monitored for carbon dioxide storage projects. Mr. Locke continued that while that aquifer is suitable for drinking, it is not used for drinking water. Mr. Locke explained that as you go deeper, the water became more mineralized, and by the time you got to the bottom of the image (7,165 feet below the surface), the water was six or seven times as salty as seawater.

Mr. Locke continued that the Mt. Simon Sandstone is about 1,600 feet thick and is one of the region's most significant potential storage locations or sinks for carbon dioxide subsurface storage. Mr. Locke continued that the Mt. Simon Sandstone is paired with the Eau Claire formation cap rock, which is 500 feet thick and is shale. Mr. Locke explained that shale is non-permeable, which hinders any fluid below it from flowing upwards.

Mr. Locke said the Mahomet Aquifer Protection Taskforce evaluated current and potential contamination threats. Mr. Locke said potential contamination routes were abandoned wells, while legacy landfills were deemed potential threats. Mr. Locke continued that contamination threats include nitrate, arsenic, and road salt, among other items. Mr. Locke mentioned the most recent attempt to identify threats, potential threats, and routes for consideration for the protection of the Mahomet Aquifer and provides a good basis for what needs to be considered when protecting the Mahomet Aquifer.

Mr. Locke said the ISGS is a repository for well records, borings, and other subsurface information. Mr. Locke said he looked at the sole-source aquifer project review area and identified over 24,000 well bores, of which 95% are less than 400 feet deep, and there are no carbon dioxide injection wells within that footprint. Mr. Locke continued that several types of wells do fall within the footprint. Mr. Locke mentioned the wells and their depths because they relate to the Class VI permitting and development of injection wells used in carbon dioxide sequestration. Mr. Locke continued that the federal underground injection-control Class VI well-permitting program is designed to ensure underground drinking water sources are not contaminated by carbon dioxide injection. Mr. Locke said there's a range of key requirements, including developing a series of plans for any project that would be considered, and site suitability is expected and must be demonstrated for sites to qualify for sequestration sites. Mr. Locke added that regulations for well construction standards and monitoring protocols protect potable water, like the Mahomet Aquifer, from potential risks. Mr. Locke said that to ensure transparency and accountability through reporting to the federal EPA, any site operator must collect data from the monitoring program and provide it to the federal EPA.

Mr. Locke said he wanted to explain the permitting process on the Class VI Permitting Process slide. Mr. Locke described step 1 as pre-construction, which can take two or three years. Mr. Locke explained that it is currently around two-plus years before a site can be considered before the developer can construct any portion of their facility. Mr. Locke said the second stage is pre-injection, when wells and other infrastructure would be implemented. Mr. Locke continued that this step requires additional reporting, modeling, and approval from the federal EPA before any permit or authorization for injection could be obtained. Mr. Locke said that step three is the injection portion of the project. Mr. Locke continued that step four is post-injection. Mr. Lock added that there is a 50-year post-injection requirement after the carbon dioxide is injected into the subsurface. Mr. Locke said that there needs to be a demonstration of non-endangerment to the federal EPA's satisfaction before a project could be allowed to stop monitoring.

Mr. Locke said he wanted to explain the injection well design and added that the 24,000 wells he mentioned had to be constructed based on existing construction design standards. Mr. Locke said the Illinois Department of Public Health has water well codes, other standards apply to oil and gas wells, and Class IV standards apply to carbon dioxide sequestration wells. Mr. Locke explained that requirements are based on international standards developed over decades of well engineering experience and adaptation. Mr. Locke said carbon dioxide injection wells need to meet the standards set by the American Petroleum Institute (API) or the American Society for Testing and Materials (ASTM). Mr. Locke continued that in areas with fresh water, such as shallow aquifers, there are additional safety barriers to be placed around the well. Mr. Locke showed a cross-section of the CCS2 well in Decatur, which was done to scale and demonstrate the distances between layers underground. Mr. Locke said the different shale sections on the diagram indicate a low permeability layer, which would trap fluids as they move upwards.

Mr. Locke explained that the cross-section of the well shows a diagonal pattern, where the cement would be placed, and the diagonal lines represent a steel tube that would be used in the well construction. Mr. Locke said that, in total, there are three steel layers and three concrete layers between the inside of the injection well and the exterior where fresh groundwater would exist. Mr. Locke continued that this is the standard design for Class VI wells.

Mr. Locke said that besides the six layers on the exterior of the well, there is a production tube inside where the carbon dioxide is contained and transported. Mr. Locke explained that the carbon dioxide is not in contact with any part of the well besides the center portion and that the center tube is designed to specifications that are a part of the Class VI well.

Mr. Locke said the ADM – Decatur site was used to help understand the technical issues related to deploying carbon dioxide storage. Mr. Locke continued it was a project that had multiple objectives, including some rigorous scientific objectives, and included a thorough risk assessment process to evaluate what features, events, or processes could potentially create risk. Mr. Locke continued that for the ADM – Decatur location, there were 123 features identified, and 88 scenarios from those features were evaluated and put into the site design and operation and are still a part of the project to inform future activities, along with being involved in conversations with regulators and other potential storage sites and stakeholders around the world.

Mr. Locke said the monitoring well design in Decatur is unique. Mr. Locke said there has been a lot of news coverage about the integrity of the two injection wells in Decatur, which are both deep monitoring wells. Mr. Locke said both wells had zones open within and above the storage reservoir. Mr. Locke said the zones had openings that valves could actuate, and mechanical issues occurred within those wells,

resulting in a hydraulic isolation failure and the zones not remaining separated. Mr. Locke said under typical conditions, the pressure in the lower part of the wells is higher, allowing the movement of fluids upward along the well. Mr. Locke continued that this mechanical issue resulted in the lower portions of the well being sealed off and no longer connected to the other zones in the well. Mr. Locke said the original design for the wells was not commercial, but that had been addressed. Mr. Locke stated that the operation of those wells shifted over, and their design was changed because of those mechanical integrity issues. Mr. Locke said the ISGS has been working for 15 years to try to understand the technical aspects of carbon dioxide sequestration. Mr. Locke added that since this was an early demonstration project, ISGS has participated in various groups, from the local to international levels, to try and provide experience, assessment, and technical details of the projects to ensure they are done to international standards.

Mr. Locke said the ISGS is working with the International Organization of Standards Technical Committee (ISO/TC) 265 and 40 other countries to develop standards worldwide to deploy CCS at sites safely. Mr. Locke said he didn't go into the Safe CCS Act, but the act and state and federal regulatory bodies prioritize groundwater protection and safe storage.

Mr. Locke said the risk to the Mahomet Aquifer from carbon dioxide sequestration remains low because of the regulatory requirements, site information, data collection, reporting, and long-term monitoring requirements. Mr. Locke continued that the ISGS, Illinois State Water Survey, and the PRI have participated in various projects to assess the technical feasibility and potential for deployment. Mr. Locke said the ISGs has collected environmental data and has been monitoring several sites over the last 15 years, but it has not collected any data indicating that carbon dioxide sequestration has impacted potable groundwater quality. Mr. Locke said if there are any follow-up questions, to contact Tiffany Jolly since she is the usual point of contact. Mr. Locke returned to his seat.

Ms. Cunningham asked if anyone else wanted to provide testimony.

Ms. Cunningham called Ted Hartke to testify.

Ted Hartke of 1183 County Road 2300E in Sidney, Illinois, is very concerned that anyone would want to punch holes through the aquifer. Mr. Hartke said the aquifer is too essential and a high-quality resource to let any risk happen. Mr. Hartke noted that even though the ISGS said a Class VI well would be okay for the Mahomet Aquifer, he disagrees with that and believes that the Board needs to err on the side of caution. Mr. Hartke's biggest concern is for the County Board and jurisdictions over controlling wells. Mr. Hartke said he is worried that as soon as a moratorium and ban are passed, those efforts will be overridden by the State government, the folks looking for jobs, and the union workers who want to make money drilling wells and building pipelines. Mr. Hartke said the Board is going up against a giant financial boondoggle, which is $85 per metric tonne for storing carbon dioxide underground, and the County will go up against multi-billion dollar companies that are going to sue the dickens out of the County, and the result is bankruptcy.

Mr. Hartke said that he hoped the jurisdiction of Podunkville County would stand up. Mr. Hartke said he saw what happened to the wind farm and solar farm zoning, and he believes it will happen with BESS zoning as well, and the County will get jammed up. Mr. Hartke said he didn't have the guts to provide testimony to speak earlier while the experts provided technical information, but he is talking about the political part. Mr. Hartke said he wished the Eco-Justice collaborative, Sierra Club, and PRN people that are still at the meeting to use their political power to pressure state legislators to ensure that aquifer protection is carried through. Mr. Hartke said there had been two false starts so far during the original

act, the state legislators failed to make the Mahomet Aquifer a no-go zone for injection wells, and the second time, the protection of the aquifer got jammed up because the committee refused to hear it. Mr. Hartke said he believes the Democrat union bosses came in and said they want to proceed with the Gibson City sequestration well, which is just outside the aquifer but within the recharge zone. Mr. Hartke continued that the unions won that battle in the backroom deals just a month ago. Mr. Hartke said that this group is the first step in bringing attention to carbon dioxide sequestration. Mr. Hartke noted it would take a lot of people who live in the County to send a strong message to the Governor that they want the aquifer protected. Mr. Hartke thanked the Board and returned to his seat.

Ms. Cunningham called Jan Carter Niccum to testify.

Jan Carter Niccum of 3 Brian Court in Savoy, Illinois, said he was around when the issue at Clinton with dangerous materials that were going to be shipped down from Chicagoland, and he got a special breakout session scheduled for the Illinois Municipal League (IML) with then-state senator Mike Frerichs and Chapin Rose. Mr. Niccum said at the last minute that the powers in the state legislature said they weren't going to talk about that issue. Mr. Niccum said that Chicago dictated what could happen in Central Illinois, and this is again happening with carbon dioxide sequestration at the ADM location in Decatur. Mr. Niccum said he hopes the Savoy residents can be protected for eternity from the risk of water being contaminated. Mr. Niccum said that while there is a limited chance for risk, it isn't zero, and he hopes the Board will eventually ban carbon dioxide sequestration. Mr. Niccum returned to his seat.

Mr. Randol motioned to close the witness registry, which Mr. Roberts seconded. The motion passed via voice vote.

Mr. Randol motioned to adopt the Findings of Fact, the Documents of Record, and move to final determination, which Mr. Roberts seconded. The motion passed via voice vote.

Mr. Hall reminded the Board that they are voting on the moratorium only, and no further action can be addressed in this meeting.

FINAL DETERMINATION FOR CASE 157-AT-24

Pursuant to the authority granted by Section 9.2 of the Champaign County Zoning Ordinance, the Zoning Board of Appeals of Champaign County determines that:

> **The Zoning Ordinance Text Amendment requested in Case 157-AT-24 should {BE ENACTED/NOT BE ENACTED} by the County Board in the form of attached hereto.**

Mr. Randol motioned that the Zoning Ordinance Text Amendment requested in Case 157-AT-24 should BE ENACTED by the County Board in the form of the attached hereto, which Mr. Roberts seconded.

Roll Call Vote

Andersen – Yes **Randol – Yes** **Roberts – Yes** **Cunningham – Yes**

The motion was approved four to zero.

Ms. Cunningham told the audience they could leave while the Board addressed administrative matters.

8. Staff Reports – None

9. Other Business – Review of Docket

Mr. Randol said he's having shoulder surgery at the end of February and will be out for 6 to 8 weeks. Mr. Hall asked if Mr. Randol would be at the 2/13/25 meeting, and he said he would. Mr. Andersen asked if the meeting schedule was adopted for 2025, and Mr. Hall confirmed it was.

Mr. Hall said that a new member, Bryan Holderfield from Mahomet, has been appointed to the board, but he was unable to attend tonight's meeting. Ms. Cunningham asked about Mr. Ewell's status, but Mr. Hall and Mr. Campo weren't aware of when his term was up.

Mr. Roberts motioned to adjourn the meeting, which Mr. Andersen seconded. The motion passed via voice vote.

10. Adjournment – 9:10 pm

Respectfully Submitted,

Secretary of the Zoning Board of Appeals