CONCERNS ON THE PROPOSED HAZARDOUS CO2 PIPELINE:

A. SETBACK

1. How far from an occupied building (house, office, barn, etc)? Federal minimum 50 feet; SCS 500 feet
2. What is acceptable setback???
    a. ½ mile- 880 yards- 2640 feet
    b. 1 mile 1760 yards- 5280 feet

B. DEPTH

1. How far under crop ground, pastures, hay ground? Federal 12 inches; SCS 3 feet and 4 feet from ground surface to top of pipe.
2. How far under highways, railroads, county roads, township roads, WEB water lines, tiling, creeks, rivers, wetlands, etc? At certain times of the year and under certain conditions, county and township roads can have significant ruts due to the heavy farm equipment going over them. Due to these conditions, what depth of a hazardous pipeline is appropriate? (In the SCS permit to the PUC I think I saw a depth of 25 feet??? under highways.)
3. What is acceptable depth???
    a. 6 feet- 72 inches under crop ground, pastures, hay ground
4. What depth of the hazardous pipeline is acceptable due to natural freezing and thawing of the ground????
    a. How will the temperature of the hazardous CO2 pipeline affect the depth???
    b. 6 feet/72 inches underground to the top of the pipe , to prevent the hazardous CO2 pipeline from heaving or rising over time to the surface due to natural freezing and thawing of the ground.

C. CONCERNS CROSSING AT RIGHT ANGLE:

1. Weight of vehicles- 4-wheel drive tractors, 2-wheel tractors, track tractors, combines, self-propelled silage cutter, semi-truck and trailer loaded with corn, wheat, hay bales, etc., grain carts loaded, gravity wagon loaded, loaded hay mover, loaded silage wagon, etc

D. CONCERNS IF THE HAZARDOUS CO2 PIPELINE THAT RUNS PARALLEL TO ROW CROPS:

1. Same as 90-degree crossing with equipment above-except is there a shock wave produced ahead of equipment?

E. EFFECTS OF HEATED HAZARDOUS CO2 PIPELINE- 80 TO 120 DEGREES F:

1. How will this temperature affect corn, wheat, soybeans, etc; grasses, native plants, etc
2. How will this temperature change the amount of moisture available for the plants?
3. How much evaporation will there be?
4. How will it affect a tree planting after installation of pipe, depending on pipe depth?
5. How will this temperature affect the microbial make-up of the soil?
6. Could this soil temperature lead to new soil pests over the winter?
7. How will this temperature affect livestock pests and diseases?
8. How will this temperature affect wildlife and wildlife habitat?
9. What can be done yearly to appropriately compensate land owners along the route of the pipeline due to loss of crops, etc.???

F. SAFETY CONCERNS WITH HAZARDOUS CO2 PIPELINE:

1. Who will be responsible???
2. Will diesel, gasoline engines operate in area of leak or rupture?
3. What happens to pumping stations and valves during electric outages?
4. When there is a leak or rupture, how will the pipeline be shut down?
5. Will the sensors be controlled by SCS?
6. Could the Hazardous CO2 leak into ground water and nearby wells? If so, what are the effects?
7. Will there be manual shut off valves and who will have access to these? SCS only, local Fire Department, Law Enforcement, Emergency Management, Landowner?
8. Who will alert people of the Hazardous CO2 Pipeline leak or rupture?
   a. How will people be alerted?
   b. When will they be alerted-people need to be alerted immediately? The incident in Mississippi in February 22,2020, NO ONE WAS NOTIFIED OF THE LEAK.

c. Who will be alerted, EMT's, Emergency Management, Law Enforcement, Fire Department, Healthcare Facilities, and those living and working near the pipeline, general public, schools, and area towns/ EMT's, Emergency Management, Law Enforcement, Fire Department, healthcare facilities (in the event additional help, ambulances, helicopters, etc., are needed so they avoid the area of the leak/rupture)???

9. Who will educate and in-service local Fire Departments, EMT's, Emergency Managers, Healthcare Facilities, Law Enforcement, etc., so these individuals know how to provide proper care for themselves and those in the area of the leak or rupture so there is proper medical management. INDIVIDUALS IN THE MISSISSIPPI INCIDENT WERE IMPROPERLY MANAGED MEDICALLY- SOME WERE SENT HOME FROM THE HOSPITAL TOO SOON, ONLY TO RETURN FOR FURTHER MEDICAL TREATMENT AS THEY STILL HAD HIGH LEVELS OF CO2 IN THEIR BLOODSTREAM.
10. Who will provide annual education? Annual education needs to be done due new treatments and staff turnover. Since the education is needed due to the hazardous CO2 pipeline, it should be at the expense of SCS.
11. What safety equipment – breathing apparatus, etc., is appropriate for the various individuals. Since the equipment is needed due to the hazardous CO2 pipeline, it should be at the expense of SCS.
12. Who will provide appropriate CO2 meters, detectors, etc.? Since the CO2 meters, detectors, etc., are needed due to the hazardous CO2 pipeline, it should be at the expense of SCS.
    a. What personnel and citizens will be provided with CO2 meters, detectors, etc.?
    b. Where will CO2 meters, detectors, etc., be placed??? Near cities, towns, schools, highways, county and township roads, homes, etc., along the route of the hazardous CO2 pipeline???
13. Who will pay for the appropriate education, safety equipment and annual equipment upgrades? Upgrades will be needed. The upgrades needed needs to be determined by all entities affected by the hazardous CO2 pipeline: Fire Department, Emergency

Management, EMT's, Healthcare Facilities, Law Enforcement, etc., at the expense of SCS.

14. Any and all education needs to be completed prior to use of the hazardous pipeline.
15. All entities affected by the hazardous CO2 pipeline: Fire Department, Emergency Management, EMT's, Healthcare Facilities, Law Enforcement, etc., need to be involved in selecting all educational and in-service materials, safety equipment, CO2 meters, detectors, etc., at the expense of SCS.

G. HEALTHCARE CONCERNS FOR PEOPLE WHO ARE EXPOSED TO CO2:

1. Short term: breathing problems, circulatory problems, cardiac problems, headaches, sweating, numbness, irritability, disorientation, unconsciousness, death
2. Long term: mental fogginess, lung dysfunction, kidney dysfunction, chronic fatigue, anxiety, insomnia, digestive disorders
3. What are the short and long term effects of CO2 poisoning on the development of an infant, child, teenager???
4. Who pays for for healthcare and/or funeral expenses for those who are exposed to a CO2 leak/rupture???

H. LIABILITY CONCERNS OF HAZARDOUS CO2 PIPELINE:

1. SCS for leaks or ruptures of pipeline in pipe or joint failure?
    a. Has SCS show proof of liability insurance on the permit they have filed with the PUC???
    b. Liability for duration of the use of the hazardous pipeline???
2. If Landowner, Utility, or Construction Company, etc., damages the pipeline?
    a. Landowner will be unable to get insurance for their property with hazardous CO2 pipeline on their property, what are they to do???
    b. Will Utility, Construction, etc., companies insurance cover any damages, etc., when they need to do work in the area of a hazardous CO2 pipeline???

I. WHAT MEASURES ARE GOING TO BE TAKEN TO SECURE THIS HAZARDOUS CO2 PIPELINE FROM ACTS OF TERRORISM???

1. This plan needs to be in place prior to any use of a hazardous pipeline.

J. WHAT MODIFICATIONS CAN BE MADE DURING THE EASEMENT AGREEMENT?

1. Examples: routing of pipeline, setback, depth?
2. Where the Hazardous CO2 Pipeline is near a town, how close would housing be allowed in the future as towns expand?
3. Would tree planting be allowed in easement area? Could a calf shelter be located on the easement area?
4. Limit additional pipelines from being included on the agreement.

K. CONCERNS WITH USE OF EMINENT DOMAIN:

1. Eminent domain should not be used for something that is toxic and hazardous to the public.
2. Laws need to be in place so that if eminent domain is used the easement cannot be sold to a foreign country.

L. HOW MUCH WILL THIS HAZARDOUS CO2 PIPELINE BE TAXED?

1. Who will benefit from these tax dollars? Emergency management, Fire Department, EMT's, healthcare facilities, counties and townships, schools, etc.???
2. How much do taxes need to increase yearly???