# Powerpoint Presentations of Concerns Valley Oaks CAFO Permit # MOG010872

Speaker	Page on Which Powerpoint Starts first slide of each presentation is blue
Dr. Dennis Block, DO, FACEP; RPH	1
Karen Lux, Real Estate Agent, ABR, GRI Lone Jack, MO	6
Rachel Lynn Foley, BRST, JD	13
Mary F. Haskins, Ph.D. in Biology, Rockhurst University, Kansas City, MO	21
Elizabeth & Ryan Deich Neighboring Centennial Farm	37

4/3/2018

# **Health Concerns**

Valley Oaks
DNR Hearing
Permit # MOG010872

Dr. Dennis Block, DO, FACEP; RPH Jennie Vargas, NP-C, BSN, MPA

# There is no safe drug! **Antibiotics Used in CAFOs**

- Pathogens common in CAFOs
  - **Antibiotic resistance** 
    - · Common for CAFOs to administer antibiotics-subtherapeutic
      - Same antibiotics that humans are administered
        - » Tylosin-Zithromax also known as Zpak
        - » Tetracycline-Doxycycline

#### MRSA (Difficult to treat because of the overuse of antibiotics in animals)

- study assessed the association between exposure to dairy/veal & swine industrial agriculture & the risk of MRSA infection. The study found that proximity to livestock operations & crop fields treated with manure were each associated with MRSA, skin and soft-tissue infection.
- AMR (antimicrobial resistance)
  - » direct relationship between the use of antimicrobials & the spread of resistance through animals and/or the environment causing resistance in human populations
- Example-2018 Diabetic foot wound, 6 different bacteria resistant to ALL oral antibiotics
- **Byproducts** 
  - Urine
    - Secrete 30-90% of the antibiotics they consume
    - A case study Iowa Department of Public Health on the effects of CAFOs on the environment
      - Showed the presence of antibiotics & antibiotic-resistant microbes in the earthen manure lagoons. The tests revealed an antibiotic in an earthen manure lagoon monitoring well. Four differen antibiotics (tetracyclines, sulfonamides,  $\beta$ -lactams, and macrolides) were found in detectable concentrations (EPA Risk Assessment Evaluation for CAFOs)
  - Feces/Manure
    - Growing body of evidence supports theory that antibiotic resistant pathogens are found on animal operations and in the environment in & around production facilities SPECIFICALLY in manure

4/3/2018

## **Hormones**

#### **Used for Feedlot Calf Performance**

- Virtually all CAFO calves use hormones. Even though Valley Oaks has said they will not use hormones, if it becomes necessary to use hormones in the future, this is what one can expect...
  - We have no guarantee that the calves Valley Oaks purchase have not used
- Why use hormones? Allow for cattle to be finished earlier (less time on feed & fewer resources per pound of meat)
- Of the implants approved for use
  - 3 are naturally occurring (estradiol, progesterone, & testosterone)
  - 2 are synthetic (zeranol & trenbolone
- A 3-ounce serving of beef from an implanted steer has 1.9 nanograms of estradiol, and a 3-ounce serving of beef from a non-implanted calf has 1.3 nanograms.

#### If used, where do the hormones end up?

- In our food-increase in estrogen levels
- In animal carcasses
- In the waste
  - Concern: There is very little data to quantify the release rates of hormones to the environment from CAFOs
- Waterways-Affecting aquatic life
  - Steroid hormones pose potential risks to fish & other aquatic organisms, even at extremely low concentrations
  - Fish-causes changes in sex hormones
    - Effecting their reproduction capabilities



### **Disease Transmission**



Crowding

(CAFO-Confined Animal Feeding Operation)

A steer/heifer in 50 sq ft. (confined to the size of a bathroom)

- Opportunity for more disease because of close proximity
- CAFOs attract mosquitos, flies, rats, & other vermin to contaminate water and air







4/3/2018

#### Contaminated Ground & Surface Water

- · Concentrated waste
  - Quantity of the waste produced
    - Manure -65#/calf = 290 tons/day
    - Urine-3.5 gals/calf = 24,500 gals/day
- Feces produces

18'x36'x5' swimming pool (average size) Full of urine daily

- Nitrates-Blue Baby Syndrome, various cancers-thyroid & bladder, negative reproductive outcomes-miscarriages, diabetes, thyroid conditions-hypothyroidism
- Drug Residues
- Phosphorus

Valley
Oaks

• Microorganism Transfer Via Buildings

- Runoff
- Land application
- Private wells
- Manure sold

03/19/2018

Contaminated waters flow into unnamed tributary of East Branch Crawford Creek

4/3/2018

Feces 03/19/2018

### **Public Health Concerns**

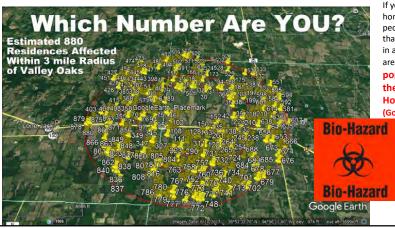
- Risk of infection from disease transmission
- Health impact due to exposure from contaminated ground and/or surface waters
  - Water pollution is possible at virtually any point in a CAFO like Valley Oaks
    - Production area, spills, overflows, wastes on tractor/truck tires
    - Stormwater that mixes with manure wastes, silage leachate
    - Pipes or hoses carrying wastes can break, waste storage structures can overflow or burst
    - Field tiles or catch basins can drain wastes directly into surface waters



- E. coli-bacteria lives in the intestines of healthy cattle
  - Millions of germs can be released in a bowel movement from an infected animal
    - Waste can enter the H2O through different ways, including sewage overflows, sewage systems that are not working properly, polluted storm water runoff, & agricultural runoff. Wells may be more vulnerable to such contamination after flooding, particularly if the wells are shallow, have been dug or bored, or have been submerged by floodwater for long periods of time. (CDC)
- Respiratory effects
  - Lone Jack Schools are less than 3.75 miles from Valley Oaks

\*The number of homes within a 1.5 mile radius of the Valley Oaks proposed CAFO site, 154, is more than 10X that of the average for all other CAFOs in the KC region (14.67) & is nearly 12X that of the average for the other two beef cattle CAFOs in the state of Missouri (11.84). Why would anyone approve, or even want to locate an operation like this in such a densely populated area?

\*154 homes are located within a 1.5 mile radius of the Valley Oaks proposed CAFO site, and more than 880 are within 3 miles. Why would anyone approve, or even want to locate an operation like this in such a densely populated suburban area?



If you average 880 homes, with just 3 people per home, that is 2,640 people in a THREE-mile area – more population than the city of Holden, MO! (Google maps)

Would you approve a CAFO in the city of Holden, MO?

4/3/2018

#### **Current & Past Violations by Mr. Ward**

- FIVE Federal Clean Water Act Violations \$95,000 civil penalty EPA Region 7
- Violations of the Missouri Clean Water Law Permanent Injunction \$13,500 Civil Penalty
- · This is just the beginning of the list...

#### **DNR Violations/Concerns**

- Sunshine Law Violation in arranging CAFO tours \$5,000
- Given the hundreds of responses concerning this hearing but the room size limited the number who attend may not truly represent all who are interested

#### Valley Oaks CAFO Health Concerns

- MRSA/ARM-Antibiotic Resistance
- Pathogens including Protozoans, Bacteria, Viruses, & Fungi: 150+ that impact human health
- Contaminated waters flowing near 880 homes (1000's of people)
- Animals/Wildlife also carry these pathogens further distances

4/3/2018

· Built in a 100 year floodplain

# Summary

#### Ask yourself?

- How is Mr. Ward going to prevent the antibiotics, hormones, diseases, contaminations, & public health concerns in his lagoons and the fields at which he spreads his manure from contaminating Missouri waters?
- How is he going to guarantee the runoff is not going into our groundwater that seeps below and runs in to our wells or water sources? Or the runoff which continues into Truman Lake where fisherman fish?
- With Mr. Ward's proven track record, how can we trust these pieces of paper?
- Will he do what he says?
- He will be responsible to monitor his own company. Can we trust him?
- YOU, Missouri DNR, are our only hope to stop this company from running this factory in our neighborhood.







#### **ONE MORE**

- If this operation had ONE MORE head of cattle, they
  would be REQUIRED (as a Class IA) to meet 3000
  feet setbacks, get a site-specific permit, and report
  regular monitoring. Just ONE MORE head of cattle.
- AND, what is the difference in the amount of waste/pollution produced by adding just ONE MORE animal to make it 7,000????

### Literature Cited

- http://essays.biochemistry.org/content/61/1/1
- www.ncbi.nlm.nih.gov/pubmed/24043228
- www.ncbi.nlm.nih.gov/pmc/articles/PMC4494381/
- Worsham, Karl. 2017. "All I Do Is Win": The No-Lose Strategy of CAFO Regulation Under the CAA. J of Food Law &
- Fate of Endogenous Steroid Hormones in Steer Feedlots Under Simulated Rainfall-Induced Runoff
  - D. Scott Mansell, Reid J. Bryson, Thomas Harter, Jackson P. Webster, Edward P. Kolodziej, and David L. Sedlak Environmental Science & Technology **2011** *45* (20), 8811-8818 DOI: 10.1021/es202072f
- www.agweb.com/article/hormones-in-beef-myth-vs-fact-naa-university-news-release/
- www.sierraclub.org/michigan/why-are-cafos-bad#feces
- Burgos J, Ellington B, Varela M. Presence of multidrug-resistant enteric bacteria in dairy farm topsoil. J Dairy Sci. 2005;88(4):1391-1398. Link: <a href="https://www.ncbi.nlm.nih.gov/pubmed/15778307">www.ncbi.nlm.nih.gov/pubmed/15778307</a>
- Ward MH. Too much of a good thing? Nitrate from nitrogen fertilizers and cancer. Rev Environ Health. 2009;24(4):357-363. Link: <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3068045/">www.ncbi.nlm.nih.gov/pmc/articles/PMC3068045/</a>. Chiu H, Tsai S, Yang C. Nitrate in drinking water and risk of death from bladder cancer: An ecological case-control study in Taiwan. Journal of Toxicology and Environmental Health, Part A. 2007;70(12):1000-1004. Link: <a href="https://www.ncbi.nlm.nih.gov/pubmed/17497410">www.ncbi.nlm.nih.gov/pubmed/17497410</a>
- Ward MH, Kilfoy BA, Weyer PJ, Anderson KE, Folsom AR, Cerhan JR. Nitrate intake and the risk of thyroid cancer and thyroid disease. Epidemiology. 2010;21(3):389-395. Link: <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2879161/">www.ncbi.nlm.nih.gov/pmc/articles/PMC2879161/</a>
  Spencer JL, Guan J. Public health implications related to spread of pathogens in manure from livestock and poultry
- operations. Public Health Microbiology: Methods and Protocols. 2004:503-515. Link: www.ncbi.nlm.nih.gov/pubmed/15156064
- www.cdc.gov/healthywater/drinking/private/wells/disease/e\_coli.html
- $\underline{www.organic consumers.org/scientific/growth-hormones-fed-beef-cattle-damage-human-health}$

4/3/2018

# Karen Lux

karenrlux@gmail.com

This PowerPoint information is submitted to DNR regarding concerns with Valley Oaks **CAFO Permit** Application # MOG010872

# Our 7th Generation Most Affected

- -I am Karen Lux, daughter of Jack and Carolyn Wilkinson whose property neighbors the Valley Oaks Steaks CAFO site of which part is a **Centennial Farm** that has been **established since the late 1800's**.
- -I am a life-long resident in this community and now my husband and I are raising our 3 young boys here also, the **7**<sup>th</sup> **generation** of our family.
- -Nine grandchildren in total that were expected to be able to utilize this ground for their continued lives and I am submitting to the record, letters from four of those grandchildren.
- -Many generations have utilized and maintained and worked hard to preserve this land in order to continue to pass it down to the next generation. My father is a small-scale, neighboring cattle farmer and my mother is a very successful local real estate agent and I have followed in her footsteps.

4/3/2018

## Not a Good Steward of the Land



March 26, 2018 - CAFO/Slaughterhouse in background

- There are no waterways or terraces to slow down the water runoff.
  - The terraces that were previously established were not maintained, have now eroded & don't function properly.
- Lack of ground cover, grass waterways, and inadequate terraces will allow manure to enter the waterway at a much faster rate which in turn will pollute our waterways.
- With the increasing trend for floods in the Midwest, this is a definite point of pollution for the waters of this state.
- This Water Shed flows to the already impaired 303(d) waterway of S. Grand River.
- "It was because of their potential to spill that EPA acting under the Clean Water Act designated CAFOs as point sources of pollution"

4/3/2018

Sources: Peterson et al 2013/MDNR 2018 303(d) waters/Greenfield Advisors Kilpatrick CAFO Review

# NO Proper Field Management – No Ground Cover – Terraces Not Maintained

- Valley Oaks Nutrient Management Plan submitted to the DNR, states they intend to spread manure on the parcel of ground in which the facility is located.
- Concern in regards to this parcel of land:
  - · No ground cover
  - · Corn stubble has been removed
  - **Crop rotation** also helps to battle against the forces of erosion and this property has only grown corn.
- All of the above allow for faster run off, especially into the waterway that runs through it, which is FEMA high risk Zone A flood plain area and would require flood insurance to build in.
- · Where taller weeds are left
  - Terraces not maintained and created ditches 4/3/2018





Crop Rows Run Downhill

3/28/18

# Not Following Nutrient Management Plan

- March 18, 2018
- On this particular piece of land, manure was applied before a forecasted large rainfall
- The manure was not disked into the ground as stated it would be on page 7, Sect A
- Again, according to the Nutrient Management Plan, Sect D #3, no surface application of manure is allowed if precipitation, likely to create runoff, is forecasted to occur within 24 hours of the planned application.



4/3/2018

# 290 TONS per DAY = 35 ELEPHANTS

Per Valley Oaks' permit application, they expect to manage 106,212 tons of manure produced per year

- 290 tons <u>PER DAY</u> for 6999 cattle.
- -290 tons per day is equivalent to 35 Elephants!
- -290 tons per day is the same amount of sewage handled per day for a city of nearly 210,000 people...that would be Independence and Lee's Summit, MO, combined!

"Per Valley Oaks application the mass of 10 of these elephants will be bagged and sold daily – HOW IS THAT POSSIBLE?"

That equals a total of 11,600 bags (weighing 50 lbs each) sold EACH day.

# Major Water Runoff and Pooling

- March 19, 2018
- The forecast was for rain and the rainfall in our area was 1.47 inches. (Weather Underground)
  - Pictures taken show the runoff from this property running south towards 50 Hwy
  - Along with pooled water on the northern edge of their CAFO buildings near the FEMA floodplain waterway.





# Violating Land Permit



4/3/2018

March 19, 2018

- Also, land disturbance permit states waters shall be FREE from:
  - used tires
  - car bodies
  - appliances
  - · demolition debris
  - used vehicles or equipment
  - solid waste
    - as defined in Missouri Solid Waste Law.
  - Pictures taken during rainfall shows a tire around the waters of the state.

10

# Tire Under Water and Put into Water of State



March 26, 2018

3.48 inches of rain

Average Monthly Rainfall in March & April is between 2-4 inches.

Rain falls throughout the year in Lone Jack.
The most rain falls during the 31 days centered around June 4, with an average total accumulation of 5.0 inches.

Source: Weatherspark.com

Within a 3 mile radius of Valley Oaks Steaks there are estimated <u>880</u>
residences where families live – where possibly your family lives. This count does not even take into consideration the thousands beyond that 3 mile radius that will also be affected.



# PROPERTY VALUES WILL DECLINE

- As a real estate agent, I cannot fathom the effect this will have on our community property values.
- Per, Dr. John A. Kilpatrick, Ph.D., MRICS, Real Estate Appraiser No.553.002007, with Greenfield Advisors LLC, regarding the impacts of CAFO's on property values,

"In short, it is clear from the broad array of empirical studies and case studies that diminished marketability, loss of use and enjoyment, and loss of exclusivity results in a diminishment which can range from 50% to nearly 90% of otherwise unimpaired value for homes which are adjacent to the facility. Negative impacts are noted at distances exceeding 3 miles, and in the case of a flood or other weather event, waste from the facility can be spread over far greater areas." Greenfield Advisors Kilpatrick CAFO Review

4/3/2018

# Would you, Mr. David Ward, be willing to place this facility next door to one of your housing developments?

- Johnson County has 65 people per square mile and this community is an ever-growing area.
- There are 12 1A/1B CAFOs in this region, which spans from southern Bates County to the lowa border.
- Average of only 14.67 homes each per 1.5 mi radius with those 12 CAFO's.
- As compared to the Valley Oaks Steaks location which has 154 homes within a 1.5 mi radius of the site.
- 10X more than the Average!

Source:(worldpopulationreview.com) 4/3/2018

	Firm	County	CAFO Class	Acres in 1.5 Mi. Radius	Sg. Mi. in Radius	Species	Homes in 1.5 mi Radius
	Phillips Farms	Cass	1B	4,500	7	Hogs	21
	Pork Plus	Bates	1B	4,500	7	Hogs	48
	Triple P Broilers	Benton	1B	4,500	7	Broilers	5
	Cloud Farms Broilers	Benton	1B	4,500	7	Broilers	10
9	Pine View Hogs	Gentry	1B	4,500	7	Hogs	15
	Advanced Pork	Atchison	1B	4,500	7	Hogs	2
	Murphy Brown Hogs	Davies	1B	4,500	7	Hogs	3
	WFHF Hogs	Davies	1B	4,500	7	Hogs	13
	Missouri Egg	Harrison	1A	4,500	7	Eggs	10
	Smithfield 10	Gentry	1A	8,800	13.75	Hogs	15
	JOCO Eggs	Johnson	1A	4,500	7	Eggs	9
	Smithfield Foods	Gentry	1A	12,000	18.75	hogs	25
							14.67
	Average						homes
	Valley						154
	Oaks	Johnson	1B	4,500	7	Cattle	homes

# David Ward, Owner of Valley Oaks

- Woodbury Homes of Grain Valley, Mo., has <u>pleaded guilty to a criminal charge of providing a false document to the U.S. Environmental Protection Agency</u> at EPA's Region 7 headquarters in 2007. Principal owner of the company is David Ward, of Grain Valley, who is also the principal owner of Ward Development & Investment Co. of Grain Valley. Ward paid a \$95,000 civil penalty in 2006 for <u>five federal Clean Water Act violations</u> by Ward Development at the same work site. (EPA Press Release 6/7/2007)
- Permanent Injunction \$13,500.00 Civil Penalty assessed against David L Ward, Randall W Sallee & Sallee/Ward Investments Inc for any & all past violations of the Missouri Clean Water Law & Regulations (5/18/2004 Missouri Case.net)
- DNR did not receive discharge monitoring report for monitoring period ending August 2017 to September 2017.
- Suspension due to failure to prevent inhumane handling and slaughter of livestock February 2017
- When big business can come into our established community and tell a multigenerational farmer "If you find you can't deal with it, you can come to our office and we will make you an offer...." our county and state government is not working for the people.

# **History of Legal Actions**

Valley Oaks
DNR Hearing
Permit # MOGO10872

Rachel Lynn Foley, BSRT, JD kcbankruptcy@gmail.com

Why are the residential neighbors of Valley Oaks and others so concerned about 6,999 head of cattle moving into Lone Jack, Missouri?



Because of David Ward's repeated lack of compliance and lack of concern for the Clean Water Act and MDNR will only visit once every five years due to lack of staffing!

4/3/2018

4/3/2018

August 21, 2000, the State of Missouri & Missouri Clean Water Commission sued David Ward for violations.



The case was settled 2 years later in 2002 right before the start of the jury trial scheduled on 5/20/02.





This time a permanent injunction is issued and fines assessed in the amount of \$13,500.



#### New Clean Water Act violations occur on April 4, 2005.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VII
901 NORTH FIFTH STREET
KANSAS CITY, KANSAS 66101
REGIONAL HEARING CLERK

BEFORE THE ADMINISTRATOR

IN THE MATTER OF

Ward Development & Investment Co. 620 North Outer Road Grain Valley, MO 64029

Respondent

Proceedings under Section 309(g) of the Clean Water Act, 33 U.S.C. § 1319(g) Docket No. CWA-07-2006-0122

CONSENT AGREEMENT FINAL ORDER

This is the 3<sup>rd</sup> violation that we are aware of in a five year span.

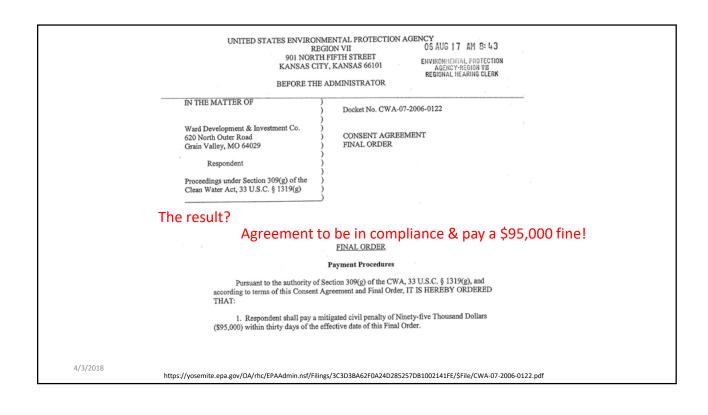
#### This is

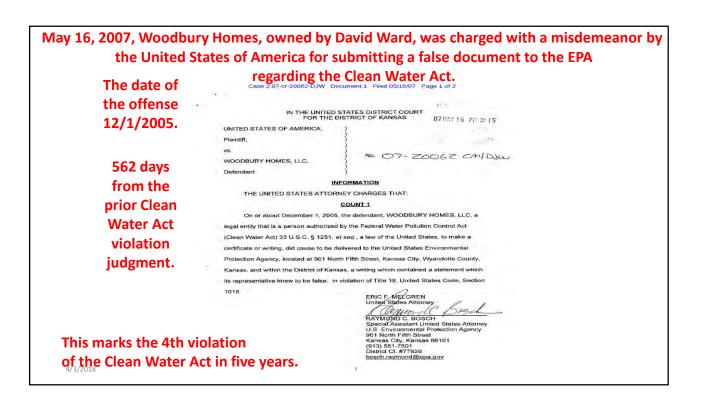
**322** days since the settlement with the State of Missouri for the last violations of the Clean Water Act.

4/3/2018

https://yosemite.epa.gov/OA/rhc/EPAAdmin.nsf/Filings/3C3D3BA62F0A24D285257DB1002141FE/\$File/CWA-07-2006-0122.pdf

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION VII 05 AUG 17 AM 8: 43 901 NORTH FIFTH STREET ENVIRONMENTAL PROTECTION AGENCY-REGION VII REGIONAL HEARING CLERK KANSAS CITY, KANSAS 66101 BEFORE THE ADMINISTRATOR IN THE MATTER OF Docket No. CWA-07-2006-0122 Ward Development & Investment Co. 620 North Outer Road CONSENT AGREEMENT FINAL ORDER Grain Valley, MO 64029 Respondent Proceedings under Section 309(g) of the Clean Water Act, 33 U.S.C. § 1319(g) **Five Counts** Failure To Install Appropriate Best Management Practices Lack of erosion control Failure To Install Appropriate Best Management Practices Failure to maintain silt fencing. Failure to Perform and Document Site Inspections **Discharge Without a Permit** Failure to Develop an Adequate Storm Water Pollution Protection Plan https://archive.epa.gov/region07/public\_notices/CWA/cwa-archive/web/html/ward\_development\_grain\_valley\_mo061406.html 4/3/2018 https://yosemite.epa.gov/OA/rhc/EPAAdmin.nsf/Filings/3C3D3BA62F0A24D285257DB1002141FE/\$File/CWA-07-2006-0122.pdf





*aAO 245E (Rev. 12/03) Jud Sheet I	lgment in a Criminal Case for Organizational I	Defendants		
	UNITED STATES DISTRICT COURT			
/ <u>-</u>	Di	strict of	Kansas	
	ES OF AMERICA V.	JUDGMENT IN (For Organizational	NA CRIMINAL CAS Defendants)	SE
WOODBUR	Y HOMES, LLC	CASE NUMBER: J.R. Hobbs		01
THE DEFENDANT	ORGANIZATION:	Defendant Organization's	Attorney	
pleaded guilty to coun	1 of the Information			
pleaded nolo contendo which was accepted by	y the court.			-
was found guilty on co after a plea of not guil	ount(s)			<del></del>
The organizational defend	ant is adjudicated guilty of these offe	nses:		
Title & Section 18 U.S.C. § 1018	Nature of Offense Delivering a False Writing		Offense Ended 12/01/2005	Count 1

#### This is the 5<sup>th</sup> incident involving the Clean Water Act.

#### U.S. Environmental Protection Agency Annual Noncompliance Report (ANCR)

A State-by-State
Summary of Violations and Enforcement Response
At Smaller Clean Water Act Dischargers under the
National Pollution Discharge Elimination System (NPDES) Program

Calendar Year 2009 (March 2011)

Dave's MHP	MO0112232	MO
David Ward WWTF	MO0132691	MO
Democrat Astro-1 Chales MARTE	1400430534	***

4/3/2018

https://echo.epa.gov/system/files/ANCR\_2009.pdf

#### And again in 2010...

#### **U.S. Environmental Protection Agency** Annual Noncompliance Report (ANCR)

A State-by-State Summary of Violations and Enforcement Response At Smaller Clean Water Act Dischargers under the National Pollution Discharge Elimination System (NPDES) Program

#### Calendar Year 2010

1		1	
Da Vid Ward WWTF	MO0132691	MO	
D. La ' Let be seneme	1100120521	110	

4/3/2018

https://echo.epa.gov/system/files/2010\_ancr\_final\_report.pdf

#### February 22, 2017 there was a notice of suspension for inhumane slaughter of livestock.

#### ed States Department of Agriculture February 22, 2017 Hand Delivered by IIC UPS Tracking # 1Z09R6A40196817725 Office of Field

Mr. David Ward, Owner Springdale District

Valley Oaks Steak Company, Est. M46017 1921 W. 50 Hwy Lone Jack, MO 64070 4700 S. Thompson Suite B-201 Springdale, AR 72764 Voice 479-751-8412 Fax 479-751-9049

NOTICE OF SUSPENSION

Dear Mr. Ward,

This serves as official notification by the Food Safety and Inspection Service (FSIS) of the suspension of the assignment of inspection personnel related to your Slaughter process at Establishment M46017, Valley Oaks Steak Company, located at 1921 W. 50 Hwy., Lone Jack, Missouri, as per Regulations 500.3(b) (Rules of Practice). The Notice of Suspension (NOS) is based on your failure to prevent inhumane handling and slaughter of livestock at your facility as required by 9 CFR 313.16(a)(1) and 313.16(a)(3).

#### One Day later the FSIS issues an abeyance in exchange for corrective and preventive actions...

Dear Mr. Ward,

On February 22, 2017 the Food Safety and Inspection Service (FSIS) notified you of the suspension of the assignment of inspection personnel at your facility. This Notice of Suspension was based on Title 9 Code of Federal Regulations (CFR) Rules of Practice 500.3(b) due to your establishment's failure to prevent inhumane handling and slaughtering of livestock at your facility as required by 9 CFR 313.16(a)(1) and (3).

On February 22, 2017, you provided a written response to the Notice of Suspension via email, beginning a dialogue with FSIS that resulted in your final Action Plan submission on February 23, 2017. FSIS analyzed the corrective and preventive measures provided in your Action Plan responses, which included actions to prevent the recurrence of inhumane handling of livestock. Therefore, FSIS will hold the suspension in abeyance pending verification by FSIS personnel that your Action Plan is effectively implemented. This letter serves as formal notification that the suspension is being held in abeyance.

An abeyance is a moratorium on the effect of a suspension. Once a suspension is imposed, the Agency may put it into abeyance if the establishment undertakes corrective and preventive actions that the the Agency finds will ensure the conditions that were the basis for the suspension will be eliminated, and your action plan is effectively implemented.

4/3/2018

#### But 298 days later... Valley Oaks Steak Company LLC **December 21, 2017** MOG822236 → | ≋ Missouri Department of drame **NATURAL RESOURCES** 2 Valley Oaks Steak Company LLC 1120 NW Eagle Ridge Blvd Orain Vulley, MO 64029 **Failed to Submit Monitoring Report** Dear Permittee: Missouri State Operating Penuit MOG822236 was issued to Valley Oake Stask Company for the Valley Oake Stask Company (LC in Johnson County; This penuit sets forth specific effluent limitations, monitoring requirements, and specific permit conditions regarding the facility. The Missouri Department of Natural Resources has not received the discharge monitoring record for the uncultoring report for the uncultoring period ending in Augure 2017 to September 2017. By January 25, 2018, please submit the report to the address below. Your facility will be considered nor in compliance until the violation(s) are addressed. As always, the Department is willing to meet with you to discuss the violation(s) and the actions necessary to bring your facility into compliance. If you would like to schedule a meeting or have questions, plones content Adria Palmer at 816-251-0726, by mail at 500 Northeast Colbern Road, Lee's Summit. MO 64086, or by email at nation palmen@dmmm.exe. If you have already provided this information, the department appreciates your efforts to return your facility to compliance. KANSAS CITY REGIONAL OFFICE 0121 Adria Palmer Technical Assistant, Permitting and Assistance Unit £3 4/3/2018

Why are the residential neighbors of Valley Oaks and others so concerned about 6,999 head of cattle moving into Lone Jack, Missouri?

Because David Ward, no matter if he is acting as Ward Development, Sallee Ward, Woodbury Homes, Valley Oaks Steak Company, any other entity Ward entity or as an individual, has shown he would rather pay fines for repeated violations of the Clean Water Act rather than follow the rules and regulations designed to keep us and our children safe.

If you don't protect our children's health by ensuring clean water & general compliance with the law, who will?

4/3/2018

# Mary F. Haskins, Ph.D.

#### **Expertise in:**

### **Environmental / Ecological Issues**

- Professor of Biology
- Rues Distinguished Scholar
- Biology Department
- · Rockhurst University
- 1100 Rockhurst Road
- Kansas City, MO 64110
- Mary.Haskins@Rockhurst.edu
- 816.501.4006

4/3/2018

This powerpoint is submitted to DNR regarding concerns with Valley Oaks CAFO Permit Application # MOG010872

# Why would DNR approve a CAFO...

- if BEST practices are NOT currently followed why would you assume they will be followed in the future?
- jeopardizing Missouri's natural capital and environment thus damaging the ability of Missouri citizens to thrive?
- in an area deemed unsuitable by a geohydrology report?
- that built a lagoon that drains wastewater into Missouri state waters?
- among urban clusters as identified by the 2010 U.S. Census?
- located within a 1.5 mile radius of 154 homes / 3 miles of 880+ homes?
- within 3 miles of Powell Gardens, a nationally renowned tourist attraction?

4/3/2018

# Discrepancies between geohydrology reports Why does the VO report not acknowledge the karst and bedrock?

- VO report states "No karst features were observed at or near the site."
- The USGS clearly identifies the region as a karst or potential karst site.
- A more detailed geohydrology report submitted by Grobbel 2018 clearly states the area is not suitable due to karst features and bedrock.

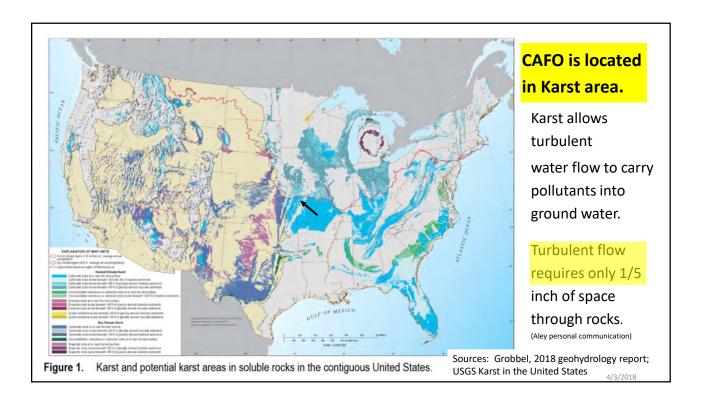
VO report also stated unnamed tributary of East Branch Crawford Creek may be adversely impacted in the event of lagoon/treatment failure. Question: Heavy rains could also carry contaminants into surface waters. Are berms being constructed to keep rain water out of this area?

Geohydrology reported submitted by VO states already constructed wastewater lagoon is expected to flow into Missouri state waters

Any runoff from the lagoon or land application system will flow east-northeast into an unnamed tributary of East Branch Crawford Creek. The tributary exhibits gaining stream characteristics and contained small pools during the evaluation.

How can a permit be approved when the submitted geohydrology report acknowledges wastewater runoff will flow into MO state waters?

Source: Geohydrologic Report Posted on DNR website for VO



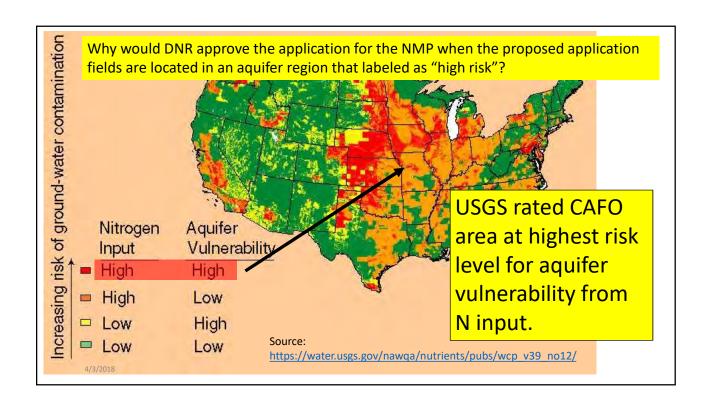
# Question: Does NMP account for lag in nutrient availability?

- Nutrients may require decomposition before plants can access
  - Example:
    - 12% organic nitrogen might be available from 1 year ago
    - 5% might be available from 2 years ago
    - 2% might be available from 3 years ago
  - Dates of manure applications may not coincide with plant nutrient uptake thus allowing nutrients to reach ground/surface waters.
    - Fall applications produce high nitrate losses in early spring.
  - Increasing nitrogen input increases risk of aquifer contamination.

Sources: Bumbla (accessed 4/2018)

Missouri DNR: CAFO Nutrient Management Technical Standard (3/4/2009)

http://nmplanner.missouri.edu/regulations/Nutrient Management Tech Standard-FINAL 3-4-09.pdf



### Questions regarding manure/nutrient control:

- What is the **specific** protocol for monitoring field perimeters confirming that no manure runs off of property?
  - (MO CAFO NMTS A2(3)e(iii) page 6 3/4/09)
- Berms, for controlling runoff, are mentioned in the application (p 1):

 Most recent application states berms will be built to divert stormwater from production area.

- Confusion on timing? (see next slide)
- Location?
- Size?
- USEPA requires diversion of clean water including runoff from adjacent land. (page 72 USEPA 820-R-13-002 July 2013)
  - Recent photographs of the property during a 3.48 inch rainfall indicated water was uncontrollably running off of the property. Where is the evidence of berms controlling clean water runoff? What is the relationship between observed flooding and the already constructed wastewater lagoon?

4/3/2018

# Confusion on timing of berm construction

VO application dated Dec 2017 p 1

"Berms and storm sewers have been constructed...."

 Application posted with DNR Mar 16 Public Notice states berms "...will be constructed...." Clean Water Diversion
Berms and storm sewers have been constructed to divert clean stormwater from the production area.

A potential source of unplanned waste from animal confinement facilities is from storm water coming into contact with pollutants. Potential pollutants include cattle, manure, mortalities, feed, diesel fuel, and oils and lubricants from farm equipment. However, all of these potential pollutants are kept under roof at this farm and do not come into contact with storm water.

Valley Oaks Steak Company, LLC

December 2017

Berms and storm sewers will be constructed to divert clean stormwater from the production

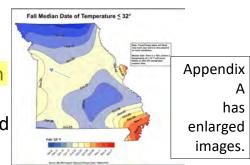
4/3/2018

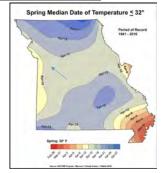
PART 7 – DIVERSION OF CLEAN WATER

25

#### Questions regarding timing, soil conditions, placement

- 1. Are all setbacks **really** in compliance?
- 2. Proposed manure application dates?
  - December (12 fields) ground is frozen
  - October potential for frozen ground
  - November potential for frozen ground
  - April potential for frozen ground
- 3. Will manure continue to be spread within 24 hours of precipitation events like neighbors have recently witnessed?
- 4. Approx. 13 fields are listed with slopes >20% ex: F065B, F066A, F071H all have slopes up to 50%
- 5. Specifically how will manure application rates be monitored to prevent over application? 4/3/2018





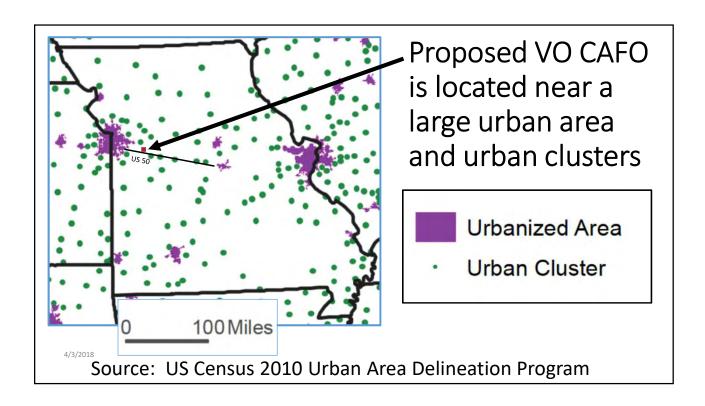
In the event of water contamination from manure spills and/or stormwater mixing with manure, will the VO CAFO be bonded so they will be responsible for remediation of the damage?

How will methane buildup be prevented to prevent the potential for explosions?

If not bonded, then how much taxpayer money is typically needed to pay for remediation from CAFO accidents?

4/3/2018

Source recommending CAFO bonding: Donham et. al. 2006



## Hazards Posed by Manure

- Plant nutrients e.g., N and P
- Chemicals e.g.,
  - · Growth hormones
  - Antibiotics
  - Food additives
  - Cleaning chemicals
  - Animal blood
  - Silage leachate
  - Copper sulfate (footbaths for cattle)
- Pathogens (150+ impact human health)

  - Protozons, e.g,. Giardia, Cryptosporidium
  - Bacteria e.g., Escherichia coli
  - Viruses
  - Fungi

4/3/2018

Prior history with CAFO's throughout the U.S. has demonstrated contamination of ground/surface water are inevitable.

Protozoan prevalence in feedlots is very high

States with high concentrations of CAFOs experience on average 20 to 30 serious water quality problems per year as a result of manure management problems (EPA, 2001).

Source:s Gerba and Smith 2005; National Association of Local Boards of Health 2010

Questions: Pathogen survival in manure is influenced by time, moisture, temperature, and oxygen levels.

- 1. Is there a minimum/maximum amount of time for manure storage in shed?
- 2. What level of dehydration is proposed?
  - letters sent to neighbors discussed surface application of dry manure
  - page of application (p3) states manure/bedding dehydrated to 80%
  - definition of dry manure is <75% moisture</li>
     per code of MO state regulations 10 CSR 20-6.300 dated 9/30/12
- 3. Will temperatures in manure storage shed be monitored?
- 4. Will manure in storage shed be aerobically or anaerobically managed? (methane buildup will be higher if the system is entirely anaerobic)

4/3/2018

# Giardia and Cryptosporidium can infect virtually EVERY mammal

Potential *Giardia/Cryptosporidium* production VO → 106,212 tons (= 907,185 grams) feces / yr

Animals can pass
10 Million *Giardia* cysts / gram manure
10 Billion *Cryptosporidium* oocysts / gram manure

### Potential annual production at VO:

9,071,850,000,000 = 9 trillion *Giardia cysts* 9,071,850,000,000,000 = 9 quadrillion *Cryptosporidium oocysts* 

Appendix A details how disking Crypto into soil enhances survival of oocysts and increases risk to groundwater.

4/3/2018

Source: Petersen et. al., 2012; Van Herk, et al., 2004

Infective dose =	Amount of manure (in grams)	907,185		
	Potential Giardia / gram	10,000,000		
10 cysts	(9	trillion)		
Potential Number of Infective Giardia Produced 9,071,850,000,0				
Potential for Infection	Potential for Infection Potential Total Number of			
Produced/Surviving Giardia Doses (10) Capable of Producing Infection				
25% 226,796,250,000 226.8				
0.0001%	0.0001% 907,185 9,			
Even if only one millionth of the potential Giardia produced				
survive that is 9,072 infective doses.				

# Prevalence of *Giardia* in feedlots animals is high One pinhead holds 187 cysts

4/3/2018

Sources: Ralston et. al., 2007; Van Herk et. al., 2004; dose calculations Haskins

Infective dose =	Amount of manure (in grams)	907,185	
	Potential Crypto / gram	10,000,000,000	
10 oocysts		(9 quadrillion)	
Potential Number	9,071,850,000,000,000		
Potential for Infection	Potential Total Number of		
Produced / Surviving Surviving Cryptosporidium Doses			
25%	6 226,796,250,000,000	226.8 trillion	
0.000019	90,718,500	90 million	
Even if only one Billionth of the notential			

Cryptosporidium produced survive that is
90 Million Infective Doses of Cryptosporidium

One pinhead holds 272 environmentally-tough, freeze and chlorine resistant infective doses.

4/3/2018 Source: Robertson et. al., 1992; Petersen et. al., 2012; Van Herk et. al., 2004; dose calculations Haskins

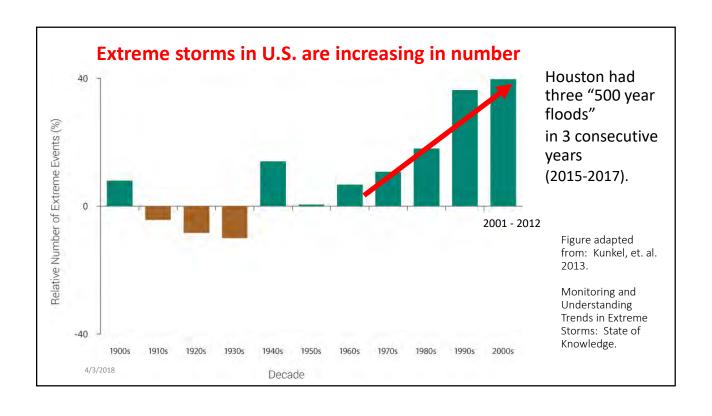
# Proposed area has shallow soils and is underlain by both Kansas City Limestone and Shale

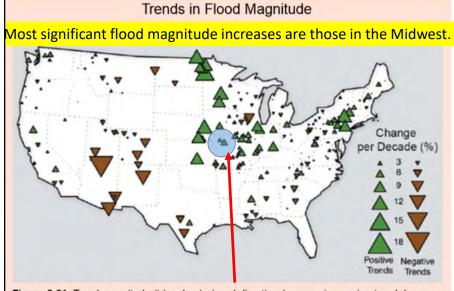
- Limestone (karst) allows turbulent flow of pathogens / pollutants
- Shale breaks down to form clay which increases runoff chances
  - Runoff pollutes both surface water and can later infiltrate groundwater

Shallows soils / Limestone / Shale do not adequately protect ground / surface water from pathogen / pollutants.

If neighbors located south of the VO facility discover an increase in pollutants and pathogens in their streams, what reporting procedure would they use to alert the state? What steps would the state take to investigate the problem?

4/3/2018 Sources: CDC 2018, Boyer et. al., 2009, Ralston 2001, USGS, Van Herk 2004





Green triangles indicate increasing trend for floods in Midwest.

Land use changes will increase flooding risk.

**Figure 2.21.** Trend magnitude (triangle size) and direction (green = increasing trend, brown = decreasing trend) of annual flood magnitude from the 1920s through 2008. Local areas can be affected by land-use change (such as dams). Most significant are the increasing trend for floods in the Midwest land Northeast and the decreasing trend in the Southwest. (Figure source: Peterson et al. 2013 b). 4/3/2018

Valley Oaks CAFO is located in a 1:100 year flood zone

10% chance of a 1:100 year flood within the next 10 years

(calculated using web-based extreme weather calculator)

#### **Vision Statement:**

The Missouri Department of Natural Resources helps Missouri citizens **thrive** by balancing a healthy environment with a healthy economy.



Will DNR help Missouri citizens thrive by preventing environmental damage to Missouri's Natural Capital?

4/3/2018

Ecosystem services worldwide valued at an average of \$140-\$165\* Trillion/year

Most of value is outside the market BUT if service is lost/damaged then repair/replacement to restore service would be very expensive.

Local ecosystem services are worth millions of dollars and should not be jeopardized by the proposed CAFO. Assuming damage occurs, how much money will the state pay to restore damage to local ecosystem services?

\*inflation adjusted from Costanza, 2014

PROVISIONING SERVICES	REGULATING SERVICES	CULTURAL SERVICES	Table 1.	
The "products" obtained from ecosystems Foods Fibers Ornamentals Medicines Biofuels Fresh water	Benefits obtained from the regulation of ecosystem processes Climate regulation Flood prevention Erosion control Pest control Pollination Seed dispersal Disease regulation	Nonmaterial benefits obtained from ecosystems Educational Recreational Sense of place Spiritual Cognitive development Stress relief Gardening	services include: provisioning, regulating, cultural and supporting services.	
Genetic resources  Serv  4/3/2018	Source: Millennium Ecosystem Assessment. Ecosystems Human Well-Being: Synthesis; Island Press: Washington, DC, USA, 2005).			

# In closing, why would DNR approve a CAFO

- jeopardizing Missouri's natural capital and environment thus damaging the ability of Missouri citizens to thrive?
- in an area deemed unsuitable by a geohydrology report?
- that built a lagoon that drains wastewater into Missouri state waters?
- among urban clusters as identified by the 2010 U.S. Census?
- located within a 1.5 mile radius of 154 homes?
- located within a 3 mile radius of 880+ homes?
- within 3 miles of Powell Gardens, a nationally renowned tourist attraction?

The denial of the proposed VO CAFO permit will allow a significant number of Missouri citizens to thrive by protecting local natural capital and ecosystem services. Therefore, I appeal to you to deny the proposed permit.

#### Literature Cited

Aley, T. 2018. Personal communication. Ozark Underground Laboratory, Protem, MO.

Armstrong, S., D. Smith, P. Owens, B. Joern, and C. Williams. 2009. Manure Spills and Remediation Methods to Improve Water Quality. Chapter 7 in Genetic Engineering, Biofertilisation, Soil Quality and Organic Farming. Sustainable Agriculture Reviews, Ed: Eric Lichtfouse. Vol 4: 421 p. Publisher: Springer.

Bhumbla, D. Agriculture Practices and Nitrate Pollution of Water. (accessed April 1, 2018). https://us-rem.com/restoration-ag/water-pollution/

Bortulussi, R. 2008. Listeriosis: a primer. Canadian J of Medicine: 179(8): 795-792.

Boyer, D., E. Kuczynska, and R. Fayer. 2009 Transport, fate, and infectivity of *Cryptosporidium parvum* oocysts released from manure and leached through macroporous soil. Environmental Geology. 58:1011-1019.

Costanza, R., R. deGroot, P. Sutton, S. van der Ploeg, S. Anderson, I. Kubiszewski, S. Farber, R. K. Turner. 2014. Changes in the Global Value of Ecosystem Services. Global Environmental Change. King, B.J. and P.T. Monis. 2007. Critical processes affecting Cryptosporiudium oocyst survival in the environment. (Review Article). Parasitology. 134:309-323.

Donham, Kelley, S. Wing, D. Osterberg, J.L. Flora, C. Honde, K.M. Thu, P.S. Thorne. 2007. Community Health and Socioeconomic Issues Surrounding Concentrated Animal Feeding Operations. Environmental Health Perspectives. National Institute of Environmental Health. 115(2):317-320.

4/3/2018

Gerba, C. and J. E. Smith. 2005. Pathogenic Microorganisms and Land-Applied Wastes. Journal of Environmental Quality. 34:42-48.

Grobbel, C. 2018. Hydrogeology report submitted separately.

Kunkel, K.E., T.R. Karl, H. Brooks, J. Kossin, J. Lawrimore, D. Arndt, L. Bosart, D. Changnon, S. L. Cutter, N. Doesken, K. Emanuel, P.Y. Groisman, R.W. Katz, T. Knutson, J. O'Brien, C.J. Paciorek, T.C. Peterson, K. Redmond, D. Robinson, J. Trapp, R. Vose, S. Weaver, M. Wehner, K. Wolter, and D. Wuebbles, 2013. Monitoring and understanding trends in extreme storms: State of Knowledge. Bulletin of the American Meteorological Society. 94: 499-514.

National Weather Service Extreme Weather Predictor.

https://www.weather.gov/epz/wxcalc\_floodperiod

Pachepsky, Y.A., A.M. Sadeghi, S.A. Bradford, D.R. Shelton, A.K.Guber, T. Dao. 2006. Transport and fate of manure-borne pathogens: Modeling perspective. Agricultural Water Management. 86: 81-92.

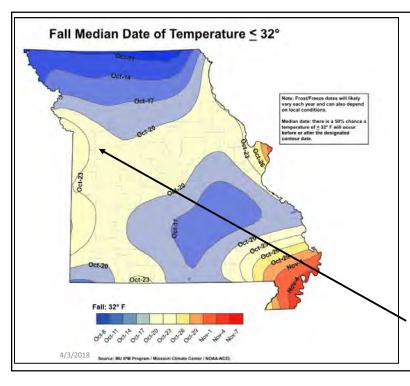
Petersen, J. H. Enemark, A. Olsen, M.G. Amin, A. Dalsgaard. 2012. Transport of *Cryptosporidium parvum* Oocysts in Soil Columns following Applications of Raw and Separated Liquid Slurries. Applied and Environmental Microbiology. 78(17) p. 5994-6000.

Robertson, L.J. A.T. Campbell, and H.V. Smith. 1992. Survival of *Cryptosporidium parvum* under Various Environmental Pressures. American Society for Microbiology. P 3494-3500.

USGS. Karst in the United States: A Digital Map Compilation and Database. David J. Weary and Daniel H. Doctor. Open File Report 2014-1156, 2014. <a href="https://pubs.usgs.gov/of/2014/1156/pdf/of2014-1156\_hi-res-pdfs/of2014-1156">https://pubs.usgs.gov/of/2014/1156/pdf/of2014-1156\_hi-res-pdfs/of2014-1156</a> figure 1.pdf

# Appendix A

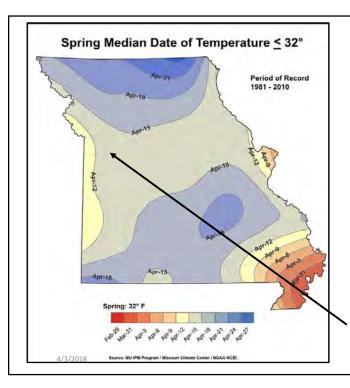
4/3/2018



Manure cannot be spread on frozen ground

October proposed for manure spreading

50% freeze dates occur BEFORE Oct 20 at proposed CAFO site



Manure cannot be spread on frozen ground. Disking should be to depths of at least 4+ inches.

April is a proposed manure spreading month

50% of freeze dates occur AFTER April 15 at proposed CAFO site

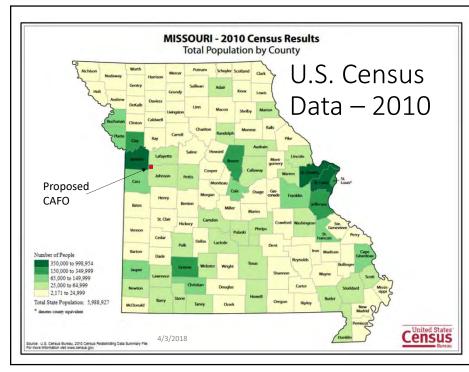
# Transport, fate and infectivity of Cryptosporidium

- All cattle, especially feeder cattle, can carry Cryptosporidium
- Disking manure into soil increases survival of Crypto oocysts
  - better protection from sun / increased soil moisture
- Oocysts can survive months to years in soil
- Cool temps, e.g., winter, increases cyst leaching out of manure
- Oocysts can then more easily move through soil during spring/summer precipitation events

Sources

4/3/2018

Boyer et al 2009; King and Monis 2006; Petersen et. al., 2012; Van Herk et. al., 2004



Back in 2010 Johnson Country ranked in the 3<sup>rd</sup> level (out of 5 levels) of most populated counties in Missouri.

The exact CAFO location is 0.25 miles from 1 of the 3 most populated counties in the state.

The upcoming census may move Johnson county into an even higher level.

# SAY NO TO VALLEY OAKS Elizabeth and Ryan Deich

Permit # MOG010872

DNR Public Hearing

#### Introduction

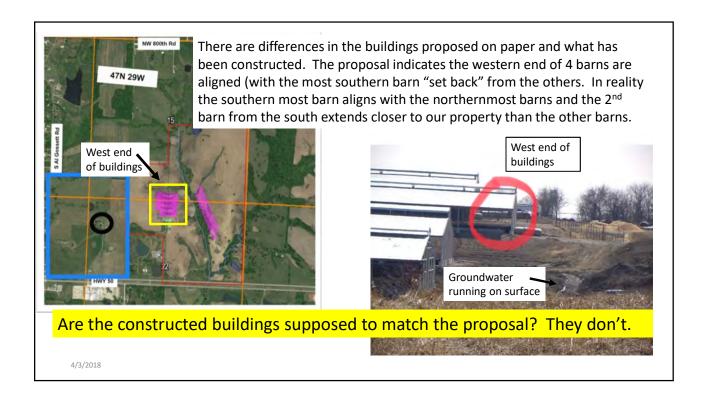
- Ryan & Elizabeth Deich
- Speaking on behalf of Chamness Trust and our children



4/3/2018

#### **BAD LOCATION**

- 100 plus years Century Farm
- 5th & 6th generation currently reside on the original homestead
- 1,800-2,000 ft from our house
- Adjoining property west side of VO



#### **ANIMAL WASTE**

6,999 Cattle	1 Day	45 Days	365 Days
Manure*	454,935 lbs/ 227 tons	20.4 million lbs / 10,236 tons	166 million lbs/ 83,025 tons
Water Usage **	69,990 gal	3.1 million gal	25.5 million gal
Urine Output*	24,496 gal	1.1 million gal	8.9 million gal

Per 100 Cattle	1 Day	30 Days	365 Days
Carcass	75,000 lbs/	2.25 million lbs/	27.3 million lbs/
(Animal Waste)	37.5 tons	1,125 tons	13,687 tons

# Health Risks related to Manure Contamination

#### Table 2 Select pathogens found in animal manure.

Pathogen	Disease	Symptoms
Bacillus anthracis	Anthrax	Skin sores, headache, fever, chills, nausea, vomiting
Escherichia coli	Colibacilosis, Coliform mastitis-metris	Diarrhea, abdominal gas
Leptospira pomona	Leptospirosis	Abdominal pain, muscle pain, vomiting, fever
Listeria monocytogenes	Listerosis	Fever, fatigue, nausea, vomiting, diarrhea
Salmonella species	Salmonellosis	Abdominal pain, diarrhea, nausea, chills, fever, headache
Clostirdum tetani	Tetanus	Violent muscle spasms, lockjaw, difficulty breathing
Histoplasma capsulatum	Histoplasmosis	Fever, chills, muscle ache, cough rash, joint pain and stiffness
Microsporum and Trichophyton	Ringworm	Itching, rash
Giardia lamblia	Giardiasis	Diarrhea, abdominal pain, abdominal gas, nausea, vomiting, fever
Cryptosporidium species	Cryptosporidosis	Diarrhea, dehydration, weakness, abdominal cramping

Sources of infection from pathogens include fecal-oral transmission, inhalation, drinking water, or incidental water consumption during recreational water activities. The potential for transfer of pathogens among animals is higher in confinement, as there are more animals in a smaller amount of space. Healthy or asymptomatic animals may carry microbial agents that can infect humans, who can then spread that infection throughout a community, before the infection is discovered among animals.

4/3/2018

9

#### Would you CHOOSE to live next to:

- The same amount of sewage as living next to 210,000+ people
- The smell of 290 tons of manure produced on a daily basis (in addition to whatever amount is stored on site)

WE DO NOT CHOOSE THIS!

#### **Past Violations**

- Clean Water Commission 2000, 2002
- EPA 2004, 2005, 2009, 2010
- USDA 2017
- DNR 2017

4/3/2018

#### **BAD LOCATION**

At least 154 homes are located within 1.5 miles of the CAFO site -more than 10 times that of the average for all other CAFOs in the KC region (14.67), and it is nearly 12 times that of the average for the other two cattle CAFOs in Missouri (11.84).

More than 880 homes are located within three miles of the CAFO.

Evidence of health problems for those living near CAFO's has been known for decades and continues to increase.

However, regulators and politicians RARELY, IF EVER, share that knowledge with those living near CAFO's.

This lack of transparency then exposes families to environmental risks of which the families may be unaware. Government should work small farmers not just corporate farmers and donors.

- Avery et al. 2004
- Bullers 2005
- Centers for Disease Control and Prevention 1998
- Kilburn 1997
- Merchant et al. 2005
- Mirabelli et al. 2006
- Reynolds et al. 1997
- Schiffman et al. 1995, 2000
- Thu 2002
- Thu et al. 1997
- Wing and Wolf 2000

Source:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1817697/

4/3/2018

#### Other Health Risks

Hypersensitivity Pneumonitis- AKA Farmer's Lung -- It results in a type III hypersensitivity inflammatory response and can progress to become a chronic condition which is considered potentially dangerous.

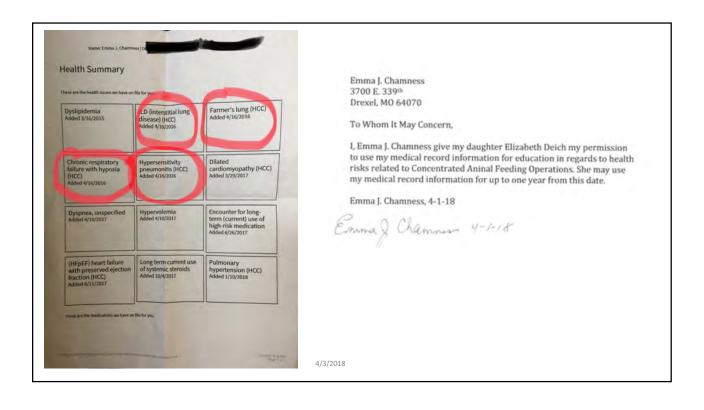
**Pulmonary Fibrosis** 

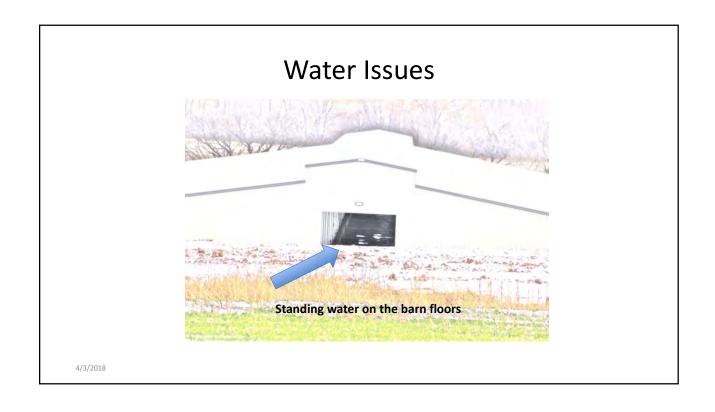
Per DNR, Phillips Farms In Drexel, MO is a Class 1B hog CAFO – 21 houses are within 1.5 miles

My parent's house is one of those 21. My mom was diagnosed with Farmer's Lung 4-4-2016. She subsequently developed pulmonary fibrosis.

She now requires 15 liters of oxygen to walk, is mostly confined to a chair, and requires medication costing \$21K per MONTH.

Median life expectancy for those diagnosed with farmer's lung is 2.5 years.









# Wildlife – several bald eagles are nesting in this area











4/3/2018

## Why not sell???

- We were here first! We did not ask for this!
- My family heritage and history
- Our Children's Birthright
- Decreased property value

### THEIR FUTURE









#### Farms! Not Factories



4/3/2018

#### Sources

Slide 5 – Based on Google Maps

Slide 6 - \*Based on 1 steer 65 lbs per day and 3.5 gal per day https://fergusonfoundation.org/lessons/cow\_in\_out/cowmoreinfo.shtml

\*\*Based on 1 gallon per 100lbs/ 1000 lb steer https://beef.unl.edu/amountwatercowsdrink

Slide 7 – The Center of Disease Control -- https://www.cdc.gov/nceh/ehs/docs/understanding\_cafos\_nalboh.pdf

Slide 8 – The Mayo Clinic -- https://www.mayoclinic.org/diseases-conditions/pneumonitis/symptoms-causes/syc-20352623