

PROPERTY ASSESSMENT APPEALS FOR HOMES NEAR FACTORY FARMS

KENTUCKY GUIDE

2011

Please note that this guide is for 2011 and may not be applicable to later years. To confirm that the laws and rules cited in the guide have not been modified since publication, and if you wish to receive legal advice, you should consult an attorney licensed in Kentucky. You may also wish to review the materials on your state's property tax website for updated information.

***This Guide isn't intended to be the provision of legal advice. The authors of this Guide are not providing legal services to you in the Guide, and the protections of an attorney-client relationship do not arise merely from this Guide.
Please consult a licensed Kentucky attorney if you wish to obtain legal advice.***

*W. Henry Graddy, Betsy Bennett, Randy Strobo
W.H. Graddy & Associates, Attorneys at Law
103 Main Street, PO Box 4307
Midway, Kentucky 40347
(859) 846-4905*

*with the assistance of the
Environmental & Natural Resources Law Clinic at Vermont Law School*

TABLE OF CONTENTS

Introduction	4
Flowchart	5
Checklist	6
Background Information	7
The Appeals Process	9
I. Step 1: Finding out What Your Current Assessment Is	9
II. Step 2: Conference with the Property Valuation Administrator (PVA)	9
III. Step 3: Appeal to the Local Board of Assessment Appeals (BAA) . . .	11
A. Filing the Appeal	11
B. The Hearing	12
IV. Step 4: Appeal to the Kentucky Board of Tax Appeals (KBTA) . . .	13
A. Filing the Appeal	13
B. The Hearing	14
1. Before the Hearing	14
2. At the Hearing	15
3. After the Hearing	16
V. Step 5: Appeal to the Circuit Court & Beyond	16
Glossary	18
Appendices	
A – Ideas for Information to Submit about Your Property	20
B -- Examples of Devalued Properties	27
C – Links to Helpful Assessment Information	34
D – Other Resources	35
E – Factory Farm Impacts Fact Sheet	37

INTRODUCTION

This Guide is for Kentucky property owners who want to challenge their property tax assessments because the assessments don't account for the negative impacts nearby factory farms have on their properties.

The economic, environmental, public health, labor, social, and ethical problems associated with factory farms are becoming increasingly familiar, as evidenced in two recent reports by major non-governmental organizations: *Putting Meat on the Table: Industrial Farm Animal Production in America* (Pew Commission) and *CAFOs Uncovered: The Untold Costs of Confined Animal Feeding Operations* (Union of Concerned Scientists). These problems are often keenly felt by rural communities, and one impact is lower property values for those who live near the factory farms.

If you live near a factory farm, your property tax assessment should reflect that fact. Your assessment should account for any of the negative impacts the factory farm has on your property. If it doesn't, you may wish to challenge your assessment so that you can receive a fair one. This Guide will help you do that. It provides step-by-step information on the tax appeals process in Kentucky, including some ideas about factual information to include in your challenge and information on additional resources. As you'll see, the Guide provides more detail about the first few levels of the process, which aren't formal court proceedings.

It's important to understand that this Guide isn't intended to be the provision of legal advice. The authors of this Guide aren't providing legal services to you in the Guide, and the protections of an attorney-client relationship don't arise merely from this Guide. Instead, the Guide is intended to help you as you navigate the appeals process. We encourage you to check the recommended websites, call your local officials, or consult with a licensed Kentucky attorney if you have any questions or to verify information such as filing deadlines.

The Guide is available at www.factoryfarmtaxprotest.org, and the website also has access to some other resources. If you don't have access to the internet at your home, you should be able to use the internet at your local public library.

Note¹

This Guide applies to appeals of assessments made by local assessors, not appeals based on equalization. (Kentucky's Department of Revenue "equalizes" all the state's assessments among the counties, which could increase the assessments in some counties. If that happens the State will give public notice, and there are separate procedures to appeal.)

If you decide to appeal your assessment, your tax bill will be based on the assessment you request. Then, if you don't succeed, you'll receive a supplement bill later (with interest if later than December).

¹ Ky. Rev. Stat. Ann. §§ 133.150, 133.160, 133.170; Kentucky Dep't of Revenue, *Appeals Process for Real Property Assessments (Appeals Process)*, available at <http://revenue.ky.gov/NR/rdonlyres/C3AA7CB7-0C28-43D4-8607-E7C3729259B1/0/62F003.pdf>.

CHECKLIST

This is a basic checklist for the steps you need to take to challenge your assessment. Please refer to other sections in the Guide for detailed information.

- ___ **Step 1:** Find out what your assessment is by:
 - ___ Receiving notice of a change from your Property Valuation Administrator (PVA), or
 - ___ Checking the tax roll during the tax roll inspection period (usually the 1st Monday in May to the 3rd Monday in May).

- ___ **Step 2:** Contact your PVA and have a conference *before the end of your county's tax roll inspection period.*
 - ___ Be prepared to give your "declared value" (your requested assessment).
 - ___ Be prepared to give evidence supporting your declared value.

- ___ **Step 3:** Appeal to your county Board of Assessment Appeals (BAA).
 - ___ File an appeal form/letter with BAA *by one working day after the inspection period ends.* The appeal form/letter should contain:
 - ___ General information about your property;
 - ___ Confirmation that you had a conference with your PVA;
 - ___ Your opinion of your property's fair cash value and your reasons.
 - ___ Attend the informal BAA hearing and present evidence to support your case.

- ___ **Step 4:** Appeal to the Kentucky Board of Tax Appeals (KBTA).
 - ___ File your appeal *within 30 days of the date the BAA mailed its decision to you.*
 - ___ Send an original + 4 copies of a letter to the KBTA. The letter should:
 - ___ Be in writing;
 - ___ Be signed by you;
 - ___ Be called "Petition of Appeal;"
 - ___ Explain the reasons for your appeal.
 - ___ Also file 5 copies of the BAA's decision.
 - ___ You can deliver the letter in person or send it by certified mail, return receipt requested.
 - ___ Attend the KBTA hearing and present evidence to support your case.

- ___ **Step 5:** Decide whether to appeal the KBTA's ruling to your county Circuit Court.

BACKGROUND INFORMATION²

Each year in Kentucky, real properties are assessed to help calculate taxes. “Real property” is basically real estate – land and improvements on the land, such as houses. Your tax bill is determined by applying state and local tax rates to your property’s assessed value.³

Your **assessment date** is January 1st of each year. The county **Property Valuation Administrator (PVA)** assesses the properties in the county each year, and every four years the PVA or his/her staff has to physically inspect your property. (But the state Department of Revenue assesses some things like franchises and public utilities.)

PVAs are locally elected for four-year terms and they must be certified by the state. PVAs are overseen by the state **Office of Property Valuation**, which is a division of the state Department of Revenue.

You’ll receive notice of your assessment whenever there’s a change from the previous year.

According to Kentucky law, an assessment is usually based on the **fair cash value** (or **market value**) of a property, which is estimated as the “price it would bring at a fair voluntary sale.”⁴ In a “fair voluntary sale,” the buyer desires but is “not compelled” to buy it; and the seller desires but is “not compelled” to sell it.⁵ Assessments for agricultural/horticultural properties can be based on their **use values**, but they’re assessed separately from residences on farms.⁶

In Kentucky, the sale price of the property is generally the “best evidence” of its fair cash value, as long as the sale was recent, fair, and voluntary.⁷ Some other techniques assessors use to value property are the **comparable sales** method, the **income approach**, and the **cost approach**.

Under the **comparable sales** method, the assessor looks at the sale prices of properties that are similar to yours to estimate your property’s market value. For the **income**

² The sources for this section are: *Appeals Process*, *supra* note 1; Kentucky Dep’t of Revenue, *Kentucky Property Valuation Administrators Directory 2010-2014*, available at <http://revenue.ky.gov/NR/rdonlyres/A49D334B-21F9-43E5-9D64-9EBF57681D4F/0/pvadirectory201014.pdf>; Ky. Rev. Stat. Ann. §§ 131.020, 131.030, 131.315, 131.340, 132.010, 132.020, 132.0225, 132.190, 132.200, 132.220, 132.370, 132.380, 132.420, 132.450, 132.690, 133.020; Ky. Const. § 170; *Helman v. Ky. Bd. of Tax Appeals*, 554 S.W.2d 889, 890-91 (Ky. Ct. App. 1977); *Barrett v. Reynolds*, 817 S.W.2d 439, 442 (Ky. 1991); *Jefferson County PVA v. Oxford Properties, Inc.*, 726 S.W.2d 317, 320 (Ky. Ct. App. 1987); *Ky. Bd. of Tax Appeals v. Gess*, 534 S.W.2d 247, 249 (Ky. 1976); The Appraisal Foundation, *Uniform Standards of Professional Appraisal Practice, Rule 1-4*, available at <http://www.uspap.org/toc.htm>.

³ Some properties, such as pollution control and alcohol production facilities, are only subject to state taxes. Also, some properties are exempt from taxation, such as those used for public, charitable, or religious purposes.

⁴ Ky. Rev. Stat. Ann. § 132.190; *Grant County Fiscal Court v. McGee*, 582 S.W.2d 69, 70 (Ky. Ct. App. 1979).

⁵ *Kenmont Coal Co. v. Perry County Bd. of Supervisors*, 91 S.W.2d 47, 48 (Ky. Ct. App. 1936).

⁶ **Use value** is based on a farm’s income capability and comparable sales that don’t have inflated purchase prices (e.g., because of good road access or productive soil). Ky. Rev. Stat. Ann. § 132.010.

⁷ *Grant County*, 582 S.W.2d at 70. Also, there shouldn’t be any “peculiar” circumstances – such as one party’s necessity to buy or sell the property. *Dep’t of Revenue v. Anaconda Am. Brass Co.*, 435 S.W.2d 65, 66-67 (Ky. 1968).

approach, the assessor analyzes things like the property's rental income potential and expenses. The **cost approach** involves adding the property's land value to the cost of improvements (e.g., buildings), minus depreciation.

Of these three approaches, the comparable sales method is considered most reliable, assuming there are actually comparable sales to consider.

Challenging Your Assessment – An Overview

If you disagree with your assessment, you can:

- Schedule a conference with your **Property Valuation Administrator (PVA)** before the end of your county's tax roll inspection period. At the meeting (in person or by phone), you'll present evidence to support what you think your assessment should be.

If you're not successful, you can appeal to the county **Board of Assessment Appeals (BAA)**.

- The **BAA** is a county board of 3 local residents with knowledge about real estate in the county. Usually they're appointed for 3-year terms and have lived in the county for at least 5 years.
- The deadline for appealing is one working day after the inspection period ends.

If you're unsatisfied with the BAA decision, you can appeal to the **Kentucky Board of Tax Appeals (KBTA)**.

- The **KBTA** is a state agency that hears tax appeals. It has 3 members appointed by the Governor and approved by the state Senate.
- The deadline for appealing is 30 days from the date the BAA decision was mailed to you.

You can appeal the KBTA decision to your county Circuit Court. The law doesn't require you to hire an attorney at any level, but you may wish to, especially if you appeal to the courts. (Appendix D has tips on how to find a Kentucky attorney.)

THE APPEALS PROCESS

If you have questions about the appeals process, you can contact:

- ~ Your Property Valuation Administrator (PVA);
 - ~ The state Office of Property Valuation;
 - ~ The Kentucky Board of Tax Appeals (KBTA).
- Appendix C has contact information.

Also check to see if your county has its own PVA website with appeal information.

I. Step 1: Finding out What Your Current Assessment Is⁸

There are two main ways to find out your assessment:

- Your PVA will mail notice to you whenever there's a change in your assessment from the previous year (sometime after January 1st).
- You can inspect the tax roll for your county during the "Tax Roll Inspection Period."
 - The tax roll has all of the assessments for the current year.
 - The inspection period is usually from the **1st Monday in May to the 3rd Monday in May**, including Saturday, but the schedule may vary if your county needs more time to do assessments.
 - To find out your county's inspection period:
 - Each county has to publish its inspection period schedule in a local newspaper of wide circulation.
 - Or, you can contact your county's PVA office.

Also check to see if your county has its own PVA website with appeal information.

See Appendix C for PVA contact information.

II. Step 2: Conference with the Property Valuation Administrator (PVA)⁹

Before you can appeal to the local Board of Assessment Appeals, you need to have a conference with your PVA (or PVA deputy).

- You need to contact your PVA and have the conference **before the end of your county's tax roll inspection period.**
 - You can schedule the conference earlier in the year if you receive notice of a new assessment before the tax roll inspection period begins.
- The Office of Property Valuation recommends meeting in person, but you can request a phone conference instead if an in-person meeting is too much trouble.

⁸ The sources for this section are: *Appeals Process, supra* note 1; Ky. Rev. Stat. Ann. §§ 132.450, 133.045.

⁹ The sources for this section are: *Appeals Process, supra* note 1; Ky. Rev. Stat. Ann. § 133.120; Jefferson County PVA, *Property Comparison Worksheet-Residential, available at* http://jeffersonpva.ky.gov/forms/property_comparison_worksheetV2.pdf.

- Materials from the Office of Property Valuation explain that most disagreements are settled at this level, either because:
 - The property owner gains a better understanding of his/her assessment, or
 - The PVA decides to reduce the assessment based on your documentation.¹⁰

At the Conference

- Your PVA will go over the laws about property tax assessments and appeals.
- Your PVA will explain how your assessment was determined and should show you any information used to assess your property.
- You will state your “declared value” (what your *requested* assessment is) and submit evidence to support it. It’s probably a good idea to present as much evidence as you can to increase your chances of a successful conference. Some examples of evidence that the Office of Property Valuation recommends are:
 - Sales or assessment data from comparable properties.
 - Examples of comparable characteristics are:
 - Location;
 - Size (lot and house square footage);
 - Age;
 - Type of construction;
 - Other improvements (pool, patio, etc.);
 - Date of sale.
 - To get information on the assessments and sale prices of other properties, you can check with your local PVA office. Some counties have PVA websites with this information, too. You can also check with local real estate agents and in local newspapers.
 - Recent appraisal.
 - Information on the cost of construction (original and additions/improvements).
 - Documentation of insured value.
 - Information on the asking price if recently offered for sale.

¹⁰ The state Department of Revenue fines PVAs for any compensation paid to them to make assessments that were later found to be unauthorized or excessive by the BAA, the KBTA, or a court. The PVA can appeal the fine. Ky Rev. Stat. Ann. § 132.620.

Two areas to consider as you prepare for the conference and the rest of your appeal are:

1) Specific information about your property that shows how its fair cash value has been decreased by a nearby factory farm. Appendix A has ideas for this type of information and a brief explanation of why the decision-makers in your appeal should consider it.

2) General information that shows nearby factory farms should be considered in property tax assessments. For instance, the examples in Appendix B show that factory farms can and have negatively impacted nearby property values. In some cases, local governments or courts ordered reductions in assessments. You can access some of the studies, articles, and cases at www.factoryfarmtaxprotest.org.

- There are requirements to follow if you want to pay someone to represent you at the conference. (They're listed in Section III.B below, "The Hearing.")
- The PVA will keep a written summary record of your conference and you can ask for a copy when it's over. You'll need this summary if you decide to appeal to the next level.

III. Step 3: Appeal to the Local Board of Assessment Appeals (BAA)¹¹

The BAA is a panel of three local residents with extensive knowledge about real estate in the county, generally appointed for three-year terms. Usually, they've lived in the county for at least 5 years.

- Even if you don't appeal at all, the BAA has the power to increase your assessment based on recommendations from certain officials (e.g., county judge executive, mayor, school superintendent). Then, if the BAA decides to increase your assessment, it has to give you notice and a chance to protest the increase at a hearing.

A. Filing the Appeal

- You can check with your County Clerk's office for an appeal form. (The statute also says that you can write a letter.) Appendix C has County Clerk contact information.
- The letter or appeal form should contain:
 - General information about your property;
 - Confirmation that you had a conference with your PVA (including a copy of the written summary of the conference);
 - Your opinion of your property's fair cash value and the reasons supporting it.
- The deadline for filing an appeal is **1 working day after the inspection period ends**, by close of business. (So, if the inspection period ends on the 3rd Monday in May, the deadline for filing a BAA appeal is the 3rd Tuesday in May.)

¹¹ The sources for this section are: *Appeals Process*, *supra* note 1; Ky. Rev. Stat. Ann. §§ 133.020, 133.030, 133.120, 133.125; *Dunaway v. DLX, Inc.*, 113 S.W.3d 632, 636 (Ky. Ct. App. 2002).

B. The Hearing

- The hearing is informal.
- You can represent yourself, or you can have an attorney or other representative represent you.
 - A compensated representative must be:
 - An attorney,
 - A certified public accountant,
 - A certified real estate appraiser,
 - A Kentucky-licensed real estate broker,
 - One of your employees, or
 - Anyone with a professional appraisal designation recognized by Kentucky's Department of Revenue.
 - The representative must have written authorization from you that explains the representation.
 - The representative must disclose any personal interest he/she has in the outcome of the appeal (e.g., a contingency fee arrangement, where the representative only gets paid if you win). But, attorneys don't have to disclose contingency fee arrangements.
 - Please check with your BAA for policies about non-compensated representatives.
- The BAA has to physically inspect your property if you or the PVA request it.
- The BAA can issue subpoenas requiring parties to submit certain evidence, and compel witnesses to appear.
- If you or your representative doesn't appear for a hearing, you won't be able to appeal to the next level - the Kentucky Board of Tax Appeals.

- The PVA will present information to support your given assessment.
- You have to present factual evidence to support your opinion of fair cash value.
 - If the PVA, Department of Revenue, or BAA asks you to provide reasonable information about your property's value and you don't, your appeal will be denied. (This rule doesn't apply to your conference with the PVA.)
 - Types of information you might be asked to provide are: the property's physical characteristics, insurance policies, cost of construction, real estate listings and contracts, and loans or mortgages.
- The BAA will only consider evidence that's submitted in the presence of both you (or your representative) and the PVA (or deputy).
- You have the right to make an audio recording of the hearing, and the County Clerk will keep a record of the proceeding that includes:
 - Name and owner of property;
 - Description and type of property;
 - The PVA's assessment;
 - The assessment change (if any) ordered by the BAA.
- The BAA will send you notice of its decision via certified mail.

See Appendices A and B for ideas about information to submit.

IV. Step 4: Appeal to the Kentucky Board of Tax Appeals (KBTA)¹²

If BAA denies your appeal, you can appeal to the KBTA. The KBTA is a state-level agency that hears appeals of revenue or tax decisions, such as those from the BAA. It has three members appointed by the Governor and approved by the state Senate.

- You have to appeal to the BAA before you can appeal to the KBTA.
- You can represent yourself or have a lawyer represent you. A non-lawyer can't represent you.¹³
 - However, the KBTA website indicates that a family member can represent you as long as you're at the hearing.
 - If you have an attorney who didn't file your original petition, then he/she needs to file a "notice of appearance" within 30 days of the petition.
- The PVA is the other party in your appeal.
 - But other people can intervene in the appeal sometimes (e.g., if the person could be negatively affected by the KBTA appeal).
- The KBTA might hold a pre-hearing conference in your appeal to discuss things like evidence, settlement, and stipulations (points on which you and the other side agree).
- If you don't participate as required in the hearing or other parts of your appeal (e.g., following the hearing officer's orders), you could get a default judgment against you or the KBTA could conduct the proceeding without you.
 - If you can't attend the hearing on the assigned date, you need to request a "continuance" (a delay) from the KBTA. It needs to be in writing and be filed before the hearing date.
- You shouldn't communicate with the KBTA about substantive issues (e.g., why you think your assessment is too high) unless you include the other parties. Otherwise, it's "ex parte" communication and it could negatively affect your appeal.
- Whenever you file a document or letter with the KBTA, you need to send a copy to the other side's attorney, and note on the document that you've done so. (Usually, the attorney for the PVA is the county attorney. See Appendix C for county attorney contact information.)

A. Filing the Appeal

- To file the appeal, you need to send **an original + 4 copies** of a letter to the KBTA explaining the reasons for your appeal.
 - The letter should be in writing, signed by you, and called "Petition of Appeal."

¹² The sources for this section are: *Appeals Process*, *supra* note 1; Ky. Rev. Stat. Ann. §§ 13B.030, 13B.050, 13B.060, 13B.070, 13B.080, 13B.090, 13B.100, 13B.120, 13B.150, 131.310, 131.315, 131.340, 131.355, 131.365, 133.120; 802 Ky. Admin. Regs. 1:010; *Crow Family Holdings Industrial v. Jefferson County PVA*, Order No. 18978, 2003 WL 22168948, *2 (Aug. 20, 2003); Kentucky Board of Tax Appeals, Frequently Asked Questions (FAQ), www.kbta.ky.gov/faq.htm; Kentucky Board of Tax Appeals, A Guide to Real Property Tax Assessment Appeal Hearings before the Kentucky Board of Tax Appeals (Guide to Appeal Hearings), www.kbta.ky.gov/hearingguide.htm; KBTA Email (Mar. 30, 2009).

¹³ *Kenoak Apts. v. Lyon County PVA*, No. K-18588, 2002 WL 1790183, *3 (KBTA May 10, 2002). Note that artificial entities like corporations have to have attorneys.

- Include **5 copies** of the BAA’s decision, too.
- The deadline for filing your letter is **within 30 days** from the date the BAA mailed notice of its decision to you. The KBTA must *receive* your letter by the deadline.
- You can deliver it in person or by certified mail, return receipt requested. Faxes and emails aren’t accepted.
- The delivery address is:

Kentucky Board of Tax Appeals
 128 Brighton Park Boulevard
 Frankfort, KY 40601

- Remember to send a copy to the other side’s attorney.

If you don’t follow these requirements, the KBTA might dismiss your appeal. If you made a mistake but filed on time, it might give you 15 days to make corrections.

B. The Hearing

1. Before the Hearing

- As you prepare for your hearing, remember that you have the burden to prove your case by a “preponderance of the evidence”¹⁴ (meaning, it’s more likely than not that you’re right).
- Some types of helpful evidence listed on the KBTA website are:
 - Description of the property (e.g., size, condition, type of buildings, improvements like a basement or garage, amount of mortgage¹⁵ or insurance).
 - Recent appraisal by an experienced appraiser. (You don’t have to have an appraisal. But, if you do, the appraiser has to appear at your hearing.)
 - Sales of comparable property.
 - The sales should be recent (within 1-2 years).
 - The properties should be similar to yours in size, condition, location, and types of improvements.
 - The sales should be arms length and voluntary (e.g., not between family members).
 - Recent purchase price.
 - Income from the property (e.g., rental income).
 - The evidence should reflect your property’s market value on the assessment date (January 1st).
- You’ll need to bring at least one copy of each piece of evidence (including photos) to the hearing, so that you can submit them into evidence. You’re allowed to use originals, but if you submit them, they won’t be returned to you.

¹⁴ Ky. Rev. Stat. Ann. § 13B.090.

¹⁵ But note there is a Kentucky case that casts doubt on the usefulness of mortgages as evidence in tax assessment proceedings. *Sears, Roebuck & Co. v. Boone County Bd. of Assessment Appeals*, 715 S.W.2d 888, 889-90 (Ky. Ct. App. 1986).

See Appendices A and B for other ideas about information to submit.

- The KBTA will send you at least 20 days notice of the time and place for the hearing.
 - The notice will have other information, including references to the rules that will apply.
 - The hearing might be in Frankfort, or the KBTA may travel to another part of the state for your hearing (so that you'll have “as little inconvenience and expense as practicable”¹⁶).
- At least 30 days before the hearing, you need to file certain documents with the KBTA (or hearing officer). (These instructions might be in a “pre-hearing order” if you get one from the KBTA).
 - A pre-hearing summary with:
 - A summary of your position on the facts that are in dispute;
 - A summary of your position on the law raised in appeal;
 - A written statement of undisputed facts (facts that parties agree on);
 - A list of the names, addresses, and phone numbers (if known) of your expected witnesses;
 - A copy of all the exhibits you intend to file.
 - Proposed factual findings and legal conclusions.
 - Proposed final order (if heard by the KBTA) or proposed recommended order (if heard by a hearing officer).
- You have the right to examine the other side's available evidence and list of expected witnesses 5 days before the hearing (the other side has the right to examine your evidence and witness list, too). You can also obtain copies for a fee.
- There are various provisions for other pre-hearing things that might come into play (Per Rules):
 - Discovery (exchanging evidence with the other party before the hearing);
 - Subpoenas (where the KBTA can require someone to testify);
 - Briefs (written arguments for your case with facts and law);
 - Motions (where you make a written request for something to the KBTA);
 - Summary disposition (where you file written documents requesting/arguing why the KBTA should decide the case in your favor before the proceeding is over).

2. At the Hearing

- The hearing is “de novo” – meaning:
 - The KBTA has to decide your appeal from scratch, not just review the BAA's decision, and;
 - Your case file with the KBTA includes only the documents provided to the KBTA during this appeal (not all the documents and records from your BAA appeal).

¹⁶ Ky. Rev. Stat. Ann. § 131.320.

- The full KBTA might hear your appeal, or it might be one Board member or a hearing officer.
- The hearings are formal and usually open to the public.
- The record of the hearing is a public record (absent some special circumstances). After the hearing, you can get a copy of the hearing transcript for a fee.
- Generally at hearings:
 - You present your case first to support your opinion of fair cash value (your testimony, testimony of witnesses, and evidence to support your case).
 - Then the other party (the PVA) can cross-examine (question) you and your witnesses.
 - The other party (the PVA) presents his/her case next to support your original assessment.
 - Then you can cross-examine (question) the PVA and his/her witnesses.
 - The KBTA/hearing officer might have questions, too.
 - Both sides can offer rebuttal evidence (evidence to contradict the evidence the other side presented).

3. After the Hearing

- The KBTA will send you notice of its decision in the mail, usually within about 3 months.
- If you've overpaid any taxes, you'll get a refund.

V. Step 5: Appeal to the Circuit Court & Beyond¹⁷

You can appeal the KBTA's decision to your county's Circuit Court, and from there to the Kentucky Court of Appeals.

The law doesn't require you to have an attorney to appeal to the Circuit Court. However, to ensure that you meet all of the Court's requirements and present your best case, you should seriously consider seeking legal counsel if you appeal the KBTA's decision to court.

Appendix D has tips on how to find an attorney.

Some basic things about the Circuit Court process:

- The deadline for filing your appeal is within **30 days** of the mailing or delivering of the KBTA's final order.
- There are requirements for filing the petition, including different people you need to deliver it to.
- The court (the judge) decides your case without a jury.
- The scope of what the court considers is usually confined to the record of the KBTA proceeding. So, it's not a new trial with new evidence.

¹⁷ The sources for this section are: *Appeals Process*, *supra* note 1; Ky. Rev. Stat. Ann. §§ 13B.140, 13B.150, 13B.160, 131.370.

- The court will decide things like whether the KBTA's decision is:
 - Unsupported by substantial evidence in the record;
 - Arbitrary and capricious, or;
 - Based on significant ex parte communication.

GLOSSARY

Assessed Value/Assessment

The value of your property for property tax purposes – a property’s “fair cash value.” (See below.)

Assessment Date

The date at which real property is assessed: January 1st.

Assessor

Usually, a local official who assesses real property for tax purposes. In Kentucky, the Property Valuation Administrator (PVA) is the assessor for most properties in the county.

Board of Assessment Appeals (BAA)

A county board that hears assessment appeals after Property Valuation Administrator (PVA) conferences. It’s comprised of 3 local residents with knowledge about real estate in the county. Usually they’re appointed for 3-year terms and have lived in the county for at least 5 years.

Comparable Sales Approach

Valuation technique that looks at the sale prices of similar properties to estimate a property’s market value.

Cost Approach

Valuation technique that adds the property’s land value to the cost of improvements (e.g., buildings), minus depreciation.

Fair Cash Value

The value at which most properties are assessed in Kentucky. It’s estimated as the price it would bring in a fair voluntary sale, where the buyer desires but is not compelled to buy it; and the seller desires but is not compelled to sell it. Sometimes called “market value.”

Income Approach

Valuation technique that analyzes things like the property’s rental income potential and expenses.

Kentucky Board of Tax Appeals (KBTA)

A state agency that hears tax appeals from the Board of Assessment Appeals (BAA). It has 3 members appointed by the Governor and approved by the state Senate.

Office of Property Valuation

A division of Kentucky’s Department of Revenue that oversees property valuation generally throughout the state.

Property Valuation Administrator (PVA)

A local official who assesses property and prepares assessment records for the county each year.

Real Property

Primarily, land and any improvements (e.g., buildings) on it.

Tax Rate

A rate that is applied to a property assessment to calculate property taxes. Kentucky has local and state tax rates.

Use Value

The value at which agricultural/horticultural properties can be assessed (as opposed to “fair cash value”). Use value is based on a farm’s income capability and comparable sales that don’t have inflated purchase prices (e.g., because of good road access or productive soil).

APPENDIX A – IDEAS FOR INFORMATION TO SUBMIT ABOUT YOUR PROPERTY

You can use the ideas in this appendix to help you prepare for your conference and hearings.

The ideas listed here are only examples. If a nearby factory farm impacts your property in a way that isn't listed, you could use information about that as well. Since you bear the burden of showing your given assessment is wrong, you should present as much information as you need to prove your case. Your information might include photographs, documents, test results, personal statements from you or others, etc.

Note: the decision-maker in your assessment appeal may give different levels of consideration to the different types of information you submit.

Physical Manifestations

Information about physical impacts of the factory farm, such as:

- Poor air quality caused by animal waste and/or feed storage.
- Poor water quality in wells or streams, or soil contamination caused by the factory farm.
- Bad odors caused by animal waste.
- Intrusive noise caused by the factory farm (e.g., heavy truck traffic).
- Insect swarms from the factory farm.
- Harmful dust from the factory farm.
- Eyesores caused by the factory farm (e.g., ugly manure lagoons, unsightly manure sprayfields, unattractive industrial buildings, etc.).
- Substances leaching from the factory farm (e.g., fecal matter, antibiotics, and hormones).
- Illnesses linked to the factory farm (e.g., a doctor's diagnosis of any illness you had that was caused or made worse by exposure to the factory farm).

Purchase Price

Documents showing the recent purchase price of your property (if it was less than your current assessment).

- You could include any proof that the seller offered a low sale price due to a nearby factory farm (e.g., if you negotiated a reduction in the purchase price of your property because of a factory farm, you could include the purchase price as well as a description of the factory farm's influence on the sale).

Remember that the sale should be fair and voluntary, and there shouldn't be any "peculiar" circumstances – such as one party's necessity to buy or sell the property.¹⁸

¹⁸ *Anaconda*, 435 S.W.2d at 67.

Recent Appraisal

The KBTA website lists an appraisal as helpful evidence. If you get an appraisal:

- It should be recent.¹⁹
- The appraiser should be experienced.²⁰ (In tax cases, the KBTA has noted that designation by the Appraisal Institute – “MAI” – is the “highest professional appraisal designation.”²¹)
- The methodology the appraiser uses should probably be peer-reviewed (e.g., published in a peer-reviewed appraisal publication).²² The three traditional approaches – comparable sales, cost, income – are examples of peer-reviewed methodologies.
- The appraiser has to be at the hearing to present the appraisal.²³

The appraisal can explain how your property’s fair cash value is negatively impacted by the factory farm.

Appendix D has information on how to find a Kentucky appraiser, including licensed appraisers.

Comparable Sales

Information showing that the sale prices of similar properties are less than your assessment. Where there are actually comparable sales, they’re a “reliable indicia of fair cash value.”²⁴

The KBTA website suggests:²⁵

- The sales should be recent (within 1-2 years).
- The properties should be similar to yours in size, condition, location, and types of improvements.
- The sales should be arms length and voluntary (e.g., not between family members).

You could include information on similar properties that are near factory farms (e.g., information showing that a similar property sold for less because it’s near a factory farm).

¹⁹ Guide to Appeal Hearings, *supra* note 12.

²⁰ *Id.*

²¹ *Wild Flavors, Inc. v. Kenton County PVA*, No. K-18049, 2001 WL 114940, *2 (KBTA Feb. 8, 2001); *Walmart Stores, Inc. v. Benge*, No. K-17471, 1999 WL 47605, *1 (KBTA Jan. 25, 1999).

²² *Bardstown Village Apts. Ltd. v. Nelson County PVA*, No. K-18970, 2003 WL 21877803 (KBTA July 28, 2003) (rejecting appraisal because appraiser’s methodology didn’t satisfy *Daubert* standards; methodology wasn’t subject to peer review and there weren’t any articles about it, appraiser didn’t explain potential error rates, etc.). *See also Wilhite v. Rockwell Intl. Corp.*, 83 S.W.3d 516, 519-20 (Ky. 2002) (in tort case seeking compensation for fair market value of properties allegedly affected by PCB contamination, holding that plaintiffs’ expert appraisal testimony was inadmissible because expert’s model had “no support in the literature,” had not been subjected to meaningful peer review, and had inadequate scientific basis).

²³ FAQ, *supra* note 12; *Balcar v. Gallatin County PVA*, No. K-20111, 2008 WL 4097803, *1-2 (KBTA Aug. 26, 2008).

²⁴ *Gess*, 534 S.W.2d at 249.

²⁵ Guide to Appeal Hearings, *supra* note 12.

Or, if the assessor calculated your assessment by comparing your property to other properties that are *not* near a factory farm, and didn't make an adjustment, you could offer information showing that your property is *not* similar to the other properties, because the other properties are not near a factory farm.

Proximity

Information about your property's proximity to a factory farm (e.g., a map showing the location of your property and the location of the factory farm).

Asking Price

Information about your asking price, if you recently offered your property for sale at a reduced price (lower than your assessment).

- This might include a copy of the written offer of sale, and an explanation of the factory farm's influence on the offer.

Marketability

- Information showing that your property hasn't sold or has taken longer to sell because of a nearby factory farm (e.g., you or a local realtor might explain that potential buyers raised concerns about the factory farm and were therefore reluctant to buy your property).
- Information about any of the negative impacts of the factory farm on your community, which could reduce the marketability of homes by making the community as a whole less desirable.
- Information showing that people would only consider buying your property at a discounted price because it is near a factory farm (e.g., a survey of locals or prospective buyers, or a realtor's statement).

Financing

Information showing that you've had difficulty obtaining financing, or have obtained less financing, because your property is near a factory farm.

Cost to Cure

Information about any costs you'd incur to reduce the harmful impacts of a nearby factory farm on your property. For example:

- The costs of cleaning up any soil contamination on your property caused by the factory farm;
- The cost of installing a filtration system to treat well water contaminated by factory farm pollution, etc.

Statements of Professionals

Examples of professional statements that factory farms devalue nearby properties. For example:

- A newspaper article reporting that a Kentucky assessor reduced property tax assessments because of a factory farm;
- A statement from a real estate agent that a nearby factory farm devalues your property;
- A statement from your local assessor that factory farms devalue nearby properties.

Assessments of Other Properties

*Note: This approach is not favored by the Kentucky Board of Tax Appeals, but the Office of Property Valuation brochure lists it as possible evidence for your conference with your PVA.*²⁶

- Information about the assessments of similar properties that *are* near factory farms. You could include this if your property is assessed at a higher value than similar properties near factory farms. You could include any information showing that the other properties were assessed lower because of the factory farm.
- Information about the assessments of similar properties that are *not* near factory farms. You could include this if your property was assessed at the same or higher value as similar properties that are *not* near factory farms. It tends to show that the factory farm wasn't taken into proper consideration in your assessment.

Stigma²⁷

Information showing that your property has stigma attached to it because of a nearby factory farm. This can be a broad category and might include:

- Information about the public's negative perceptions of properties near factory farms in general, or of your property in particular (e.g., a statement from a local citizen that she would expect a discounted price on your property because it's near a factory farm, even if there were no actual physical impacts from the factory farm).
- Information about any perceived risks or unknowns associated with your property.

²⁶ Guide to Appeal Hearings, *supra* note 12; FAQ, *supra* note 12; *Appeals Process*, *supra* note 1.

²⁷ But note that, in Kentucky, stigma cannot be a basis for recovery of damages unless there is or has been "some physical harm" to the property. *Mercer v. Rockwell Int'l Corp.*, 24 F. Supp. 2d 735, 744-45 (W.D. Ky. 1998) (in trespass and nuisance case, plaintiffs could not recover damages based on stigma unless they proved PCBs on their property were harmful). However, this rule is not likely to apply in the assessment context, where the only issue is what a property's market value is – not whether the property owner can recover damages for loss in market value. In fact, *Mercer* acknowledges implicitly that stigma can decrease a property's fair market value. *Id.* at 745 (explaining that one can "recover for decreased fair market value due to public's fear if there is an accompanying physical harm to the property," without questioning the decrease in value). See also *City of Louisville v. Munro*, 475 S.W.2d 479, 482 (Ky. 1971) (holding that plaintiffs could not recover under nuisance because they "proved no more than that the value of their property depreciated when [a nearby] site was selected for the zoo"). Further, sensory and transient effects can qualify as actual physical harm. See *id.* at 482 (describing a property "invaded by flies, rats and offensive odors" as suffering a "physical taking or injury" in condemnation case) (citation omitted); *Mercer*, 24 F. Supp. 2d at 745 n.6 (noting that Kentucky nuisance law does not require a "touching" of the land – e.g., noise is enough).

- Negative publicity about the factory farm could also be an indication that nearby properties such as yours suffer from stigma.

Why should the PVA, BAA, and KBTA consider this kind of information in my tax appeal?

Kentucky's Constitution provides that all property subject to taxation, except agricultural and horticultural lands, must be assessed at its "fair cash value."²⁸ As explained above, Kentucky courts tend to recognize the traditional property valuation approaches for determining fair cash value: purchase price, comparable sales, income, and cost.²⁹ They have also emphasized that the end result of an assessment – an accurate estimate of fair cash value – is more important than the method used to determine the assessment.³⁰ Additionally, factors that do not fit neatly into one controlling method – such as the income method - "necessarily enter into the value" of a property.³¹ Such factors include "original cost, location, cost and character of improvements, rental history, location as to future growth of the adjacent area, sales of adjacent property, sales of comparable property, type of building or property, etc."³²

Thus, there is ample room for a factory farm to enter into a neighboring property tax assessment. For instance, under the comparable sales approach, an adjustment for the factory farm would have to be made if the other properties were not really "comparable" (i.e, not next to a factory farm).³³ Under the cost approach, the factory farm could come into play as "external

²⁸ Ky. Const. §§ 172A, 174. See also *Helman*, 554 S.W.2d at 890-91 ("In a long line of cases . . . the Kentucky courts have held that: 'Regardless of the manner or method used by the Property Valuation Administrator or the decision of the Kentucky Board of Tax Appeals, the finding of valuation must be its fair cash value, estimated at the price it would bring in a fair voluntary sale.'") (citation omitted). Cf. *Revenue Cabinet v. Gillig*, 957 S.W.2d 206, 209 (Ky. 1997) (noting that the "accuracy of a private fee-type appraisal is not required in the valuation of real property for taxation purposes" and that "Kentucky courts have recognized in several cases that the level of accuracy achieved by a private fee appraiser in valuing a property cannot practically be achieved by the state tax assessor nor is such accuracy even required by [Kentucky's Constitution], which specifically provides that fair cash value will be 'estimated'").

²⁹ *Grant County*, 582 S.W.2d at 70; *Helman*, 554 S.W.2d at 891; *Barrett*, 817 S.W.2d at 442.

³⁰ See, e.g., *Jefferson County PVA v. Ben Schore Co.*, 736 S.W.2d 29, 30 (Ky. Ct. App. 1987) (citation omitted). In this assessment challenge case, the court noted that "an assessment cannot be held invalid merely because of the method employed in making it, so long as the method is fairly designed for the purpose of reaching, and reasonably tends to reach, an approximation of the fair voluntary sale price." Instead, the important question is "whether the evidence supports the conclusion of the BTA on the valuation of the taxpayer's property at a fair market value regardless of what method is employed by the PVA in making the assessment." (In this case, the court held the taxpayer had not met his burden to prove his assessment was incorrect. The taxpayer claimed the PVA should have considered the effect of a long-term lease on his property. The court decided it was inappropriate for the PVA to consider the lease because Kentucky law required assessments be conducted "without reference to a conflicting title, if any." *Id.* at 30-31.)

³¹ *Helman*, 554 S.W.2d at 891 (in property assessment challenge, finding for property owner because PVA appraiser did not consider enough factors, either under income approach or in general).

³² *Id.*

³³ See, e.g., *Kaplan v. Fayette County PVA*, No. K-20127, 2008 WL 4477948, *3-4 (KBTA Sept. 30, 2008) (finding for taxpayer, where taxpayer presented comparable sales with adjustments to account for differences, and PVA "used poor comparables which were very different from the subject property"); *Hart v. Fayette County PVA*, No. K-19140, 2004 WL 1305172 (KBTA Apr. 5, 2004) (similarities in "size, construction, and location" are important for comparable sales approach).

obsolescence,” which happens when factors outside a property negatively affect its value.³⁴ Or, the factory farm could be a factor that independently “necessarily enters into the value” of a property based on its location.

Additionally, there is a promising publication for factory farm purposes in the well-respected professional journal, *Appraisal Journal*.³⁵ The article (available at www.greenfieldadvisors.com/publications/conanimal.pdf) explains that a factory farm can devalue nearby properties.³⁶

The article outlines several factors that should be considered, including stigma; the type of subject property; the distance to the factory farm; physical manifestations; engineering/scientific testing; impacts on property use; marketability evidence, and; impacts on the highest and best use.³⁷ The influence of these factors can reduce a property’s market value by 50-90%.³⁸

- **Stigma** - any of the “unknowns and risks associated with ownership of the property.”³⁹ As other writers have noted, because stigma is based on perceived risks (“[b]ecause buyers are people, perceptions, and not necessarily facts and legal principles, form the basis of their opinions”⁴⁰), it may be difficult to quantify, but it should not be overlooked.⁴¹
- **Distance** - generally, the closer the factory farm, the greater the impact on property values.⁴²
- **Physical manifestations** - various impacts of factory farms, e.g., impaired water quality can reduce a neighboring property’s value;⁴³ hydrogen sulfide emissions from manure lagoons may sicken neighbors;⁴⁴ dust, odors, and flies carrying animal blood, feces, or antibiotic-resistant bacteria may also impair a neighboring property’s value.⁴⁵

³⁴ See Thomas P. Williams, *Categorizing External Obsolescence*, 64 *Appraisal J.* 148 (April 1996). External obsolescence is actually relevant to and should be considered in all three traditional approaches. *Id.* at 148, 153-54. It is a “key consideration” in appraisal work and the appraisal profession recognizes location, environmental, and economic influences as external obsolescence. *Id.* at 148, 153. Factory farms likely fall into the “environmental” category, which includes “noxious” or “inharmonious” surroundings such as a nearby rendering plant. *See id.* at 150.

³⁵ See footnote 22, *supra*, for the importance of having peer-reviewed and/or publicized appraisal methodologies.

³⁶ John A. Kilpatrick, *Concentrated Animal Feeding Operations and Proximate Property Values*, 39:3 *Appraisal J.* 301, 302 (2001), available at www.greenfieldadvisors.com/publications/conanimal.pdf.

³⁷ *Id.* at 304, 306.

³⁸ *Id.* at 306.

³⁹ *Id.* at 302.

⁴⁰ See Vincent D’Elia & Catherine M. Ward, *The Valuation of Contaminated Property*, 111 *Banking L.J.* 350, 359 (July-Aug 1994).

⁴¹ See Bill Mundy, *Stigma and Value*, 60:1 *Appraisal J.* 7 (Jan. 1992).

⁴² Kilpatrick, *supra* note 36, at 304-05 (citing University of Minnesota study).

⁴³ *Id.* at 304 (citing Kirshner & Moore study).

⁴⁴ *Id.* at 305 (describing illnesses near CAFOS in Minnesota).

⁴⁵ *Id.* at 305-06. See also Iowa State University & The University of Iowa Study Group, *Iowa Concentrated Animal Feeding Operations Air Quality Study: Final Report* 158 (2002), available at www.ehsr.uiowa.edu/CAFOfstudy/ (Chapter 7) (odor, dust, noise, and “general decline in the natural beauty of the area” from CAFOs can depress sales prices) (citations omitted).

- **Marketability evidence** - evidence about the length of time it takes to sell, or the unsalability of, a property.⁴⁶ For instance, as Kilpatrick reports, some rural homeowners in Michigan in the late 1990s were unable to sell their home next to a pork processing facility. Pending litigation, the pork processing company offered to compensate them for a 60% diminution in the market value of their home.⁴⁷
- **Impacts on highest and best use** – where the factory farm influences the use and enjoyment of your property.⁴⁸ This factor might include things like being unable to grill out, open windows, play in the yard, or hang clothes out to dry.

You can access the article at <http://www.greenfieldadvisors.com/publications/conanimal.pdf>, or from www.factoryfarmtaxprotest.org.

⁴⁶ See D’Elia & Ward, *supra* note 40, at 360 (“longer marketing period” and “inability to sell” illustrate perceptions of devaluation).

⁴⁷ Kilpatrick, *supra* note 36, at 306.

⁴⁸ *Id.* at 302.

APPENDIX B – EXAMPLES OF DEVALUED PROPERTIES

You can access some of these studies, articles, and cases at www.factoryfarmtaxprotest.org.

Selected Studies & Reports

In describing the economic costs of CAFOs to rural communities, the recent Union of Concerned Scientists report stated that “because property values are reduced near CAFOs, the residential tax base may suffer as well.”

~ Doug Gurian-Sherman, Union of Concerned Scientists, *CAFOs Uncovered: The Untold Costs of Confined Animal Feeding Operations*, at 61 (April 2008).

The recent Pew Commission report on industrial farm animal production described the various negative impacts that factory farm facilities have on the environment, public health, animal welfare, and rural communities. The report did not directly address declining property values, but did note the negative influence factory farms have on rural social capital and the rights of neighbors to enjoy their own properties.

~ Pew Commission on Industrial Farm Animal Production, *Putting Meat on the Table: Industrial Farm Animal Production in America*, at 40-49 (April 2008).

A technical report for the Pew Commission report discussed various CAFO studies and found that: “Industrialization of animal agriculture leads to the reduced enjoyment of property and the deterioration of the surrounding landscape, which are reflected in declining home values and lowering of property tax assessments. Recurrent strong odors, the degradation of water bodies, and increased populations of flies are among the problems caused by CAFOS that make it intolerable for neighbors and their guests to participate in normal outdoor recreational activities or normal social activities in and around their homes.”

~ Pew Commission on Industrial Farm Animal Production, *Community and Social Impacts of Concentrated Animal Feeding Operations*, at 31.

In Iowa, one 1996 study found that proximity to a hog CAFO decreased neighboring property values in the following order: 40% within ½ mile; 30% within 1 mile; 20% within 1.5 miles, and; 10% within 2 miles.

~ William J. Weida, *The CAFO: Implications for Rural Economies in the U.S.* 1 (Colo. College & GRACE Factory Farm Project 2004) (citing Padgett & Johnson).

Another Iowa study found that there may be a 1-10% reduction in property values of residences upwind of new CAFO facilities, and that the drop in value “helps explain opposition by rural residents to large-scale feeding operations.”

~ Joseph A. Herriges et al., *Living with Hogs in Iowa: The Impact of Livestock Facilities on Rural Residential Property Values* 19-20 (Iowa State Univ. Ctr. for Agric. Dev. Working Paper 03-WP 342 (Aug. 2003)).

A 1999 study in Missouri found that the average loss of land value within three miles of a CAFO was \$112/acre.

~ Mubarak Hamed et al., *The Impacts of Animal Feeding Operations on Rural Land Values* 2 (Cmty. Policy Analysis Ctr., Univ. of Mo., May 1999) (finding that “there is a relationship between proximity to a CAFO and the value of property”).

A Sierra Club study reported that county assessors in at least eight states lowered property taxes for neighbors of factory farms.

~ William J. Weida, *Nutrient Management Issues* (GRACE Factory Farm Project, Apr. 4, 2001) (citing Sierra Club, *Property Tax Reductions* (Mar. 13, 2000)).

A study in Berks County, Pennsylvania evaluated the impact of potential local disamenities on neighboring properties. It found that the impacts of CAFOs on neighboring property values did not vary significantly by species or by differences in the sizes of the operations.

~ Richard Ready & Charles Abdalla, *The Impact of Open Space and Potential Local Disamenities on Residential Rural Property Values in Berks County, Pennsylvania* i (Penn. State Univ., Staff Paper No. 363, June 2003).

A Putnam County, Missouri study found a \$58/acre loss of value for properties within 1.5 miles of a CAFO facility.

~ William J. Weida, *The Evidence for Property Devaluation Due to the Proximity to CAFOs* 6 (Col. College & GRACE Factory Farm Project, Jan. 21, 2002).

Three different North Carolina studies, described in a presentation at the University of Kentucky, found that proximity and animal density have significant, negative impacts on the market values of residential properties.

~ Michael Thomas et al., *A Comparison of Three Recent Hedonic Models of Hog Farm Discommodity in Coastal North Carolina: Evidence of Diseconomies of Scale and Brown Zones* (May 2003) (citing studies of Bruton, Ansine etl al., and Kim).

A 2008 University of Northern Iowa study analyzed house sales in Black Hawk County, Iowa to determine the effect of hog CAFOs on property values. It found “large adverse impacts suffered by houses that are very close (within 3 miles) to and directly downwind from a CAFO.”

~ H. Isakson & M. D. Ecker, *An Analysis of the Impact of Swine CAFOs on the Value of Nearby Houses* 19 (Univ. of N. Iowa Technical Report, July 23, 2008).

A 1996 newsletter from EPA’s National Center for Environmental Economics reported on an early North Carolina State University study that used hedonic analysis to make various findings on factory farms and their negative impacts on residential land values.

~ USEPA, National Center for Environmental Economics, *Effects of Hog Operations on Residential Property Values*, 3:12 Newsletter (Dec. 1996).

A recent white paper by the Institute of Science, Technology and Public Policy reported on the negative impacts hog CAFOs have in Iowa, including “marked[] and consistent[]” decreases in land values and quality of life in areas near CAFOs. The report noted a study finding that “[p]roximity to a CAFO can reduce the value of a home by 40%.”

~ Institute of Science, Technology and Public Policy, *Concentrated Animal Feeding Operations (CAFOs): Assessment of Impacts on Health, Local Economies, and the Environment with Suggested Alternatives* 3, 6 (post February 2007) (citing study of Park, Lee, and Seidl).

Selected Articles

This 2001 article in the *Appraisal Journal* explains how CAFOs can negatively impact proximate property values, and lists several factors that should be considered in valuing those properties.

~ John A. Kilpatrick, *Concentrated Animal Feeding Operations and Proximate Property Values*, 39:3 *Appraisal J.* 301 (2001).

A 2007 article in the *Agriculture and Human Values* journal evaluated studies on industrialized farming and community impacts from the 1930s forward. It reported predominantly detrimental effects, including a decline in real estate values for residences close to hog CAFOs. ~ Lobao & Stofferahn, *The Community Effects of Industrialized Farming: Social Science Research and Challenges to Corporate Farming Laws, Agric. & Human Values* (2007).

In January 2007, Indiana residents turned out to testify before the state legislature on a CAFO moratorium bill. One woman testified that a businessman was “driven to suicidal thoughts because he was unable to sell his home after six years because of the odor from a nearby CAFO.” Another testified that “[d]eclined property value because of CAFOs mean [sic] decreased revenue from property taxes, which means less money for our schools.”

~ Jondi Schmitt, *Hoosiers Voice CAFO Concerns: Proposed Bill Would Put Three-Year Moratorium on Start of Construction*, South Bend Tribune, Jan. 30, 2007.

The Indiana House passed a bill in February 2007 that would prohibit new CAFOs within 1 mile of cities, towns, schools, and health facilities. One representative who supported the bill said he “want[ed] the pork industry to grow” in Indiana, but that growth could happen “while having respect to our neighbors.” “CAFOs do decrease property values,” he said.

~ Niki Kelly, *General Assembly: House Restricts Feed Farms*, The Journal Gazette, Feb. 22, 2007.

A Michigan Land Use article reported that a tax tribunal reduced the assessments for properties adjacent to CAFOs. It ordered local officials to reduce the taxable values of at least five rural homes by 35% based on problems with stench from a hog livestock factory, and on “slim sale chances” for the homes.

~ Patty Cantrell, *Michigan Tax Tribunal Recognizes Hog Factory Stench* (Mich. Land Use Inst., Dec. 7, 1999).

Clark County, Illinois established assessment abatements for fifty residential homes around a hog CAFO in the following order: 30% reduction within ½ mile; 25% reduction within ¾ mile; 20% reduction within 1 mile; 15% reduction within 1 ¼ miles; 10% reduction with 1 ½ miles.

~ William J. Weida, *The Evidence for Property Devaluation Due to the Proximity to CAFOs* 6 (Col. College & GRACE Factory Farm Project, Jan. 21, 2002).

In Waseca County, Minnesota, a county assessor designed a “smell location chart” to determine reductions in values of properties near feedlots. Factors in the percentage of reduction allowed included the proximity to the feedlot, the number of animals, and the presence of a manure lagoon.

~ Douglas Clement, *Knee Deep in Feedlot Feuds*, FedGazette, July 2001.

A 2006 article in the *Journal of Ecological Anthropology* recognized the ill effects of factory farms on neighboring properties: “In addition to their negative effects on the local economy and tax base, large corporate operations are the source of environmental issues that threaten the property values of rural and urban residents. This strains the economic base and places higher burdens of taxation on remaining residents.”

~ Barbara J. Dilly, *Tax Policy and Swine Production in Iowa*, United States, 10 J. Ecological Anthropology 45, 48 (2006).

A Peoria, Illinois newspaper reported that county officials lowered property values for at least 20 people with homes within two miles of a large sow farm and its odor. The tax board decreased

assessments by 30% for neighbors with 1 ½ miles of the operation, and 10% for those within 2 miles of the facility.

~ *Board Smells Lower Land Values near Hog Farm*, The Journal Star, May 6, 1998, at A1.

An Iowa paper reported on the results of the University of Northern Iowa study mentioned above. One interviewee said that his neighbor had been offered \$1 million for his land before plans for a hog lot were announced, but that after the announcement, “the would-be buyer walked away.” “He lost almost \$1 million right there And it’s not necessarily smell. It’s psychological They don’t want anything to do with them (hog lots) if they see them.” Another interviewee, who had recently bought land in the area, said she “would not have bought the house and all the surrounding property . . . at above market value . . . if a CAFO was going to be built a mile away. . . . And to tell you the truth, I’ll sell my property at a huge loss to move away if they build these things.”

~ *UNI Study: Hog Lot Cuts up to 15% off Nearby Home Values*, Waterloo Courier, Mar. 12, 2007.

A 2006 Letter to the Editor in opposition to proposed legislation that would weaken Michigan’s environmental laws described the “severe pollution” that CAFOs cause. The author explained that the growing number of CAFOs in Michigan was “threatening our public health, our rural communities and the viability of Michigan’s 52,000 farms.” She also noted that “[t]he stench from CAFOs has led to reductions in property values of up to 70 percent by the Michigan Tax Tribunal for nearby residents no longer able to enjoy or sell their homes.”

~ Anne Woiwode Letter to the Editor, *Animal Sewage from Livestock Farms Threatens Communities*, Kalamazoo Gazette, May 15, 2006.

In February 1998, residents of Caribou, Maine petitioned the city council for a temporary ban on factory pig farms. Among concerns were “strong odor from waste, surface and ground water contamination and plummeting property values.”

~ Gloria Flannery, *Caribou Councilors Seek Ban on Piggery; Fears of Pollution, Odor Lead to Ordinance Proposal*, Bangor Daily News, Feb. 25, 1998.

In an article summarizing newspaper coverage of concerns about large-scale swine facilities (LSSF) in Illinois, a “distinct undercurrent” of claims against the facilities was that they were “difficult for communities.” Specifically, “[s]ources were concerned that LSSF were socially disruptive: they went against traditional community values, destroyed the community’s history, violated ethics of neighborliness, and created community conflict. In addition, they were concerned that the community would have to develop infrastructure capacity to handle the effects of LSSF, paying for social services, schools, and health care for migrant workers and cleaning up spills and abandoned lagoons. Those opposed to LSSF also maintained that the large-scale operations had no overall economic benefit for communities because they displaced more jobs than they created, decreased property values and made alternative industries, such as tourism, less viable.”

~ A.E. Reisner, *Newspaper Coverage of Controversies about Large-Scale Swine Facilities in Rural Communities in Illinois*, 83:11 J. Animal Sci. (Nov. 1, 2005).

Coverage of the 2007 Food and Family Farm Presidential Summit in Iowa noted that “many neighbors say the [CAFOs] stink up the air and foul the water, devastate their property values, and drive small farmers out of business.”

~ Jennifer Jacobs, *Candidates Tout Their Farm Credentials*, Des Moines Register, Nov. 11, 2007.

Selected Cases

In a 1997 Indiana Tax Court case, property owners asserted that a state board did not adequately consider the negative effects a proximate hog operation had on their neighborhood when assessing their property. To support their claim that odors from the operation impaired the enjoyment of their property, the plaintiffs presented two jars of air taken from their yard to the hearing officer. The Tax Court held that the plaintiffs met their burden of proving their assessment was incorrect based on the proximate hog operation's effect on the desirability of their neighborhood. Relevant evidence that the plaintiffs presented included the two jars of air "redolent with swine" (though unopened, the hearing officer conceded they would smell bad), and verbal testimony about how the odor impaired the enjoyment of their property (they were unable to play tennis, open windows, or hang clothes out).

~ *Corey v. State Bd. of Tax Comm'rs*, 674 N.E.2d 1062, 1063, 1065-66 (Ind. Tax. 1997) (reversing state board's assessment on these grounds).

In a case before Indiana's Court of Appeals that was basically a zoning challenge to a proposed CAFO, some people who lived near the proposed CAFO presented evidence that their property values would decline if the CAFO were built. They presented testimony by their Township Assessor, who said:

The first thing that has to happen if this hog operation goes in, is the neighborhood value will have to be lowered from a good to a fair or a poor [T]here's some houses like Flynns [sic], Bowmans and Jerry Marsh's, David Helt's there's some of them that the Sexton's house, there's two of them there that are pretty new houses, Steve Bowman's sister just built a new house up there. I wouldn't be surprised if they wouldn't drop 30 percent, I don't think it would be out of the question. So the property values will decrease in this area.

The Court held that the testimony was enough to show that the people near the proposed CAFO would "suffer a pecuniary loss" if the CAFO permit were granted.

~ *Sexton v. Jackson County Bd. of Zoning Appeals*, 884 N.E.2d 889, 893-94 (Ind. App. 2008).

In 2002, a Nebraska Court held that a tax commission should have considered the effect of a nearby factory farm on a taxpayer's property value. The taxpayer presented evidence from an appraiser who "considered that a potential buyer would take into account the odor produced by the hog farrowing facility," and adjusted the property's value downward for that and other reasons. The Court made several strong statements illustrating its conviction that factory farms impact neighboring property values:

In the context of negotiations between a willing buyer and seller to arrive at fair market value, the neighboring hog facility and the house's location would unquestionably affect the market value of Livingston's house. Any other conclusion would mean that two identical houses, one located next to the railroad switching yard and the other next to the country club golf course, have identical values – an obviously arbitrary and illogical conclusion that no reasonable person would reach. . . .

That many potential buyers would not look favorably upon the hog facility, and judge the home's value with reference thereto, is demonstrated by some well-known Nebraska cases in which homeowners have successfully sued hog facility owners for damages caused by interference with the use of their nearby homes. . . .

No reasonable fact finder could conclude that in the real estate marketplace, a potential buyer would not notice, and react economically, to having a large hog facility very nearby while living in a remote location.

~ *Livingston v. Jefferson County Bd. of Equalization*, 640 N.W.2d 426, 431, 437 (Neb. Ct. App. 2002).

In another Nebraska tax case, the state Supreme Court held that an assessor's valuation was "arbitrary and unreasonable" because it did not apply external/locational depreciation to a home that was near a cattle feedlot. The property owner provided testimony about problems with dust, trucks, and flies from the nearby feedlot. In addition, the well for the home was connected to the cattle-watering facility.

~ *Darnall Ranch, Inc. v. Banner County Bd. of Equalization*, 753 N.W.2d 819, 830-32 (Neb. 2008).

In a 1999 South Dakota case, the Court upheld the decision of a land commission to deny a permit for the siting of a hog confinement facility based on, among other things, devaluation of surrounding real estate.

~ *Coyote Flats, LLC v. Sanborn County Comm'n*, 596 N.W.2d 347, 352, 356 (S.D. 1999).

An appellate court in Illinois has recognized that factory farms can decrease neighboring property values. In *Nickels v. Burnett*, the Court upheld a preliminary injunction against building an 8,000-head hog CAFO based in part on "extensive evidence in the form of affidavits and scholarly articles authored by the expert affiants demonstrating that, if the hog facility were to begin operation, plaintiffs would experience substantially harmful health effects and a significant loss of value to their land." The Court found the "harms described were substantially certain to occur should the hog facility begin operations in its present proposed location."

The neighboring plaintiffs alleged that the facility would devalue their properties (among other things). The plaintiffs introduced the affidavit of a professional appraiser, who stated that neighboring property values would be reduced by 18-35%. They also presented affidavits from two doctors who concluded, respectively, that "years of downwind exposure to Hydrogen Sulfide even in low doses can cause permanent brain damage and . . . any exposure must be avoided;" and that "locating the proposed hog facility 3/4 of a mile or less away from homes is likely to cause medical and psychological symptoms to the people living in those homes." Another expert opined that "subjecting the Schmidt and Klein families (the families living closest to the site of the proposed hog operation), to the hog operation odors will significantly increase the likelihood that the two families will experience health problems and that it will cause significant detrimental effects on the quality of their lives." In his opinion, "subjecting the other 13 families, whose homes are located within 3/4 of a mile from the proposed hog operation, to the emissions generated by the proposed hog operation will increase their risk of health problems."

~ *Nickels v. Burnett*, 798 N.E.2d 817, 820, 826 (Ill. App. Ct. 2003); Brief of Appellees at 7-10.

In Pasco, Washington, an appraisal done for litigation purposes found an over 50% reduction in value of a family farm impacted by neighboring CAFO dust, flies, fecal matter, and odor. The CAFO settled the lawsuit by relocating the plaintiffs and buying their farm.

~ John A. Kilpatrick, *Concentrated Animal Feeding Operations and Proximate Property Values*, 39:3 Appraisal J. 301, 305 (2001).

In Michigan, a horse farm appealed its property tax assessment because it was located near a large scale pork processing facility. The horse farm got a 50% reduction based on airborne externalities and flies.

~ John A. Kilpatrick, *Concentrated Animal Feeding Operations and Proximate Property Values*, 39:3 Appraisal J. 301, 305 (2001).

In a 2002 Iowa nuisance case, the Court ordered a pork company to pay \$100,000 to homeowners when their home dropped \$50,000 in value after a nearby CAFO was built. The plaintiffs had alleged that the CAFO attracted bugs and harmed their physical and emotional health.

~ Associated Press, *Judge Awards Iowa Couple \$100,000 in Hog Lot Lawsuit*, Amarillo Globe-News, Jan. 12, 2002.

In 1998 in Cedar County, Nebraska, property owners received an assessment reduction based on a neighboring CAFO. On the protest form to the tax board, the property owners stated: "Our neighbor has built a hog confinement and lagoon across the road from our house. This same neighbor has runoff from his cattle yards in to the road ditch 100ft from our well. The nitrates in our water ha[ve] increased making it not safe to drink. We feel a valuation increase of \$35,340 is unfair." The board looked at the property and decided to assess a 25% locational depreciation.

~ Great Plains Environmental Law Center, Case Studies, Cedar County, Property Valuation Protest Form (1998).

In January 2002, in Calhoun County, Iowa, a jury awarded \$76,400 in damages to four property owners who claimed a 4,000-hog operation within a mile of their properties diminished their property values. In another Iowa county, a Court had recently awarded \$100,000 to other property owners for decreased property values from a nearby hog feeding operation.

~ Jerry Perkins, *Jury Sides against Hog-lot Firm: A Total of \$76,400 Will Go to Residents Near the Facility*, Jan. 26, 2002.

A 1998 newsblurb from Kansas reported that a jury awarded \$15,000 to retired farmers who live near a feedlot for diminished property values and loss of peace of mind.

~ *Across the USA: News from Every State*, USA Today, June 22, 1998.

APPENDIX C – LINKS TO HELPFUL ASSESSMENT INFORMATION

- General information on tax assessment and challenges

Office of Property Valuation
200 Fair Oaks Lane, Station 30
Frankfort, KY 40620
(502) 564-8338

<http://revenue.ky.gov/Property+Tax/> (general information)

<http://revenue.ky.gov/laws/protestandappeal.htm> (property tax appeals, scroll down)

Kentucky Board of Tax Appeals (KBTA)
128 Brighton Park Boulevard
Frankfort, KY 40601
(502) 573-4316

<http://www.kbta.ky.gov/faq.htm> (KBTA FAQs)

<http://www.kbta.ky.gov/hearingguide.htm> (guide to KBTA hearings)

- Contact information for county officials (PVA, County Clerk, etc.)

<http://revenue.ky.gov/taxpro/CountyInformation/default.htm> (all counties)

<http://revenue.ky.gov/NR/rdonlyres/A49D334B-21F9-43E5-9D64-9EBF57681D4F/0/pvadirectory201014.pdf> (PVA Directory)

APPENDIX D – OTHER RESOURCES

Information on Factory Farms

Resources and Reports

- *Putting Meat on the Table: Industrial Farm Animal Production in America*
www.ncifap.org (click next to “Full Report”)
An outstanding overview of the problems caused by factory farms. (Pew Commission on Industrial Farm Animal Production, 2008)
- *CAFOs Uncovered: The Untold Cost of Confined Animal Feeding Operations*
www.ucsusa.org/food_and_environment/sustainable_food/cafos-uncovered.html
Another useful overview of factory farm issues. (Union of Concerned Scientists, 2008)
- Agriculture & Public Health Gateway
<http://aphg.jhsph.edu>
A searchable, online database of reports, articles, and other resources related to agriculture and public health. Produced by the Center for a Livable Future at Johns Hopkins University.
- *Environmental Impacts of Animal Feeding Operations*
www.epa.gov/waterscience/guide/feedlots/envimpct.pdf
An overview of environmental impacts of factory farms. (U.S. EPA, 1998)
- *Concentrated Animal Feeding Operations: EPA Needs More Information and a Clearly Defined Strategy to Protect Air and Water Quality from Pollutants of Concern*
www.gao.gov/new.items/d08944.pdf?source=ra
(U.S. GAO, 2008)

Organizations

- Socially Responsible Agricultural Project
www.sraproject.org
SRA Project provides free assistance to communities struggling to protect themselves from factory farms.
- Waterkeeper
www.waterkeeper.org/ht/d/Contents/cids/275,1383/pid/201
- Food & Water Watch
www.foodandwaterwatch.org/food/factoryfarms
- Sierra Club
www.sierraclub.org/factoryfarms/

- Natural Resources Defense Council (NRDC)
www.nrdc.org/water/pollution/cesspools/cessinx.asp
- National Family Farm Coalition
www.nffc.net
- Center for a Livable Future
www.jhsph.edu/clf

How to Find an Appraiser

- Kentucky Real Estate Appraisers Board
<http://kreab.ky.gov/appraiserstatus/>
(list of appraisers with active licenses by city or county)
- American Society of Appraisers
www.appraisers.org/FindAnAppraiser/FindanAppraiser.aspx
Try searching in both Real Property/Ad Valorem and Real Property/Residential.
- Appraisal Institute
www.appraisalinstitute.org/search.asp
There are various search options on this page. You could do a geographical search under “Quick Search”, or could choose the “Advanced Search” option and choose “Real Estate Tax Valuation and Consulting” under the “Business Services” option.
- AppraiserUSA.com, Kentucky Real Estate Appraiser Directory
<http://appraiserusa.com/kentucky/index.htm>
- Local Yellow Pages
- Recommendations

How to Find an Attorney

- Kentucky Bar Association, Lawyer Locator
<http://www.kybar.org/Default.aspx?tabid=26>
Search by city, county, or name.
- American Bar Association, Consumers’ Guide to Legal Help
<http://www.abanet.org/legalservices/findlegalhelp/main.cfm?id=KY>
- Find a Lawyer, Lawyers.com
www.lawyers.com/Kentucky/browse-by-city.html
- Local Yellow Pages
- Recommendations

Appendix E - Factory Farm Impacts Fact Sheet

Socioeconomic Impacts

Factory farms decrease the quality of life in rural communities.

- Communities with factory farms have wider social and economic gaps than communities with small, locally-owned and operated farms. (Pew p. 42)
 - Factory farms affect the “size of the middle class, family income levels and poverty rates, quality of public schools, and strength of civil society organizations (such as churches and civic organizations).” (Pew p. 42)
 - Factory farms are related to greater income inequality between the affluent and the poor, and greater poverty in communities generally. (Stofferahn p. 18)
 - Residents in factory farm communities, where agribusiness influence is heavy, tend to have less control over local decisions. (Pew p. 42; Stofferahn p. 18)

- Factory farm odors impair the social life of communities. (Pew p. 42)
 - Nearby factory farms disrupt routines that “normally provide a sense of belonging and identity – backyard barbecues, church attendance, and visits with friends and family.” (Pew p. 42)
 - The factory farms create feelings of “violation, isolation, and infringement” in place of freedom and independence. (Pew p. 42)
 - Factory farm communities suffer a decline in community organizations, civic participation, and social life. (Stofferahn p. 18)
 - Factory farm communities tend to have fewer (or poorer-quality) public services and fewer churches. (Stofferahn p. 18)
 - In a North Carolina study of residents within two miles of a 6,000-hog factory farm with an open lagoon, more than half of the respondents were not able to open their windows or go outside in nice weather because of the stench. (Wing & Wolf p. 236)

- Factory farms impair rural “social capital.” (Pew p. 43)
 - Factory farms create rifts and conflict in communities, including threats from factory farms to neighbors. (Pew p. 43; Stofferahn p. 18)
 - Factory farm communities have higher levels of stress, socio-psychological problems, and teen pregnancies. (Pew p. 43; Stofferahn p. 18)
 - Neighbors of corporate-owned factory farms have more negative feelings about “trust, neighborliness, community division, networks of acquaintanceship, democratic values, and community involvement” than those living near independent farms. (Pew p. 43)
 - “Recurrent strong odors, the degradation of water bodies, and increased populations of flies are among the problems caused by CAFOS that make it intolerable for neighbors and their guests to participate in normal outdoor recreational activities or normal social activities in and around their homes.” (Pew Technical p. 31)

- A Duke University study in North Carolina found “significantly more tension, more depression, more anger, less vigor, more fatigue, and more confusion,” as well as more “total mood disturbance” among residents who lived near large swine factory farm odors as compared to control subjects. (Schiffman et al.)

Factory farms decrease the value of surrounding properties.

- Various factory farm studies have found that: “Industrialization of animal agriculture leads to the reduced enjoyment of property and the deterioration of the surrounding landscape, which are reflected in declining home values and lowering of property tax assessments.” (Pew p. 31)
- Factory farms devalue nearby properties to the extent the factory farms are seen as negative externalities by the marketplace. Factors like stigma, the type of affected property, the distance to the factory farm, physical impacts, engineering/scientific testing, impacts on property use, and marketability can reduce a property’s market value by 50-90%. (Kilpatrick pp. 301-02)
- See Appendix B for a long list of examples of properties devalued by factory farms.

Factory farms displace small farms.

- From 1982 to 1997, the number of small farms (less than 50 animal units) decreased between 23% and 28%. The number of factory farms with more than 1,000 animal units increased by 47%. (UCS p. 16)
- The number of CAFOs increased 234% from 1982 to 2002 (3,600 → almost 12,000). But the number of all farms raising animals decreased by 61% during the same time period. (GAO pp. 4, 63)

Factory farms hurt local economies.

- Factory farms have a lower “multiplier effect” than smaller farms. Rather than buying supplies and services from local businesses, they tend to buy from outside suppliers. (UCS p. 61)
- Factory farm communities tend to have less retail trade and fewer retail options. (Stofferahn p. 18)
- Factory farms are related to higher unemployment rates in the community. (Stofferahn p. 18)
- Because factory farms rely more on technology than labor, there are fewer decent jobs for local people. Instead, factory farm jobs tend to be low-paying and go to migrant workers who cannot find better jobs. (Pew p. 43)

- Factory farms reduce the local tax base but increase community expenses. For example, they take advantage of tax breaks but create higher road maintenance costs from their truck traffic. (UCS p. 61)
- Factory farms can reduce the residential tax base because they decrease the values of homes in the area. (UCS p. 61)

Factory farms create nation-wide economic burdens.

- Factory farms threaten free-market mechanisms because they control huge portions of the livestock industry. This happens where the four largest firms in an industry control more than 40 percent of the market. For broiler chickens, the four largest firms control 56% of the market; for beef, 83.5%; for hogs, 64%. (UCS pp. 19-20)
- Factory farms prosper through taxpayer subsidies. (UCS p. 29)
 - Farm bill subsidies for commodity grain crops have kept the price of animal feed low for factory farms. (UCS pp. 29-33)
 - CAFOs are major recipients of federal Environmental Quality Incentives Program (EQIP) funds, giving them a competitive advantage over smaller farms. (UCS pp. 37-40)
- Environmental contamination caused by CAFOs costs taxpayers billions of dollars to remediate. A “rough estimate” of the U.S. taxpayer cost to clean up soils under hog and dairy CAFOs is \$4.1 billion. (UCS p. 4)

Factory farms disproportionately affect poor or African American communities.

- In North Carolina and Mississippi, CAFOs are often sited in poor or African American communities. In North Carolina, there were 7.2 times more hog CAFOs in the highest poverty areas as compared to the lowest, and 5 times more in non-white population areas as compared to white. (Hodne p. 28)
- Negative impacts are intensified by reliance on well water and barriers to medical care. (Hodne p. 28)

Factory farms treat animals inhumanely, compromising our ethical values.

- Factory farm animals are raised indoors in small spaces (e.g., veal crates, pig gestation crates, chicken battery cages) that allow only minimal movement and do not allow them to behave naturally. (Pew p. 33)
- Factory farm animals are fed unnatural or manipulated diets leading to pain and discomfort. For example, beef cattle in feedlots are usually fed grain instead of the grass for which their digestive systems were designed, often leading to internal abscesses. Laying hens may have their feed restricted to encourage molting and egg laying. (Pew p. 33)

- Factory farm animals are physically altered without pain relief (e.g., tail docking in hogs, beak clipping in chickens, and horn removal in dairy cows). (Pew p. 33)

Environmental & Public Health Impacts

Factory farms contaminate ground and surface waters, creating environmental and public health problems.

- Factory farms generate about 500 million tons of manure per year. (EPA p. 7180)
- Manure and wastewater from factory farms contain pollutants like nutrients (e.g., nitrogen and phosphorus), organic matter, solids, odorous compounds, salts, trace elements (e.g., arsenic, lead, and aluminum), antibiotics, pesticides, hormones, and more than 150 pathogens harmful to human health. (EPA pp. 7235-36)
- Factory farm pollutants reach groundwater and surface waterways through runoff and erosion; spills and lagoon overflows; direct discharges to surface waters; leaching into soil and groundwater; volatilization and redeposition to the land; and airborne travel through spray irrigation systems and attachment to wind-borne dust. (EPA pp. 7236-37)
 - In Iowa, there were 329 documented manure spills from factory farms from 1992-2002. A 1999 Iowa study also found that 85% of lagoons and ponds sampled on factory farms had seepage rates at or above Iowa's limit. (Hodne pp. 10-12)
 - A Centers for Disease Control study of nine Iowa factory farms found that pollutants likely moved from lagoons through surrounding soil, and over and away from lands where manure was applied. Samples found chemical pollutants and pathogens, metals, bacteria, nitrates, and parasites around the factory farms, with earthen lagoons having the highest levels of chemical pollutants and pathogens. (Campagnolo pp. 3-5)
 - When contaminated water is disturbed, bacteria and other microbes are re-suspended back into the water column for weeks. A North Carolina study on lagoon spills and surface waters found high levels of fecal coliform even 61 days after a spill. (Mallin)
 - A Centers for Disease Control study found that applying manure within 100 feet of a well doubles the likelihood of elevated nitrate levels. The study compared samples from wells that had had manure applied within 100 feet of the wellheads within the past 5 years to samples where no manure was applied. (Domestic Wells Survey)
- Water quality problems are exacerbated when factory farms are clustered together geographically. (GAO pp. 20-21)
 - In the San Joaquin Valley in California, where limited water flows, pollution from clustered factory farms results in "long-term accumulation" of pollutants in water bodies. (GAO p. 22)

- Clusters of poultry operations on the Arkansas-Oklahoma border have impaired numerous surface waters in the region and also caused ground water concerns, according to EPA officials. (GAO p. 22)
- Excess nutrients, such as phosphorus and ammonia, lead to eutrophication in surface waters – causing fish kills, toxic algae blooms, red tides, hypoxia, shellfish poisoning, reduced biodiversity, and increased drinking water treatment costs. (EPA pp. 7235, 7238)
 - Nutrients from livestock and poultry operations in the Mississippi River Basin contribute to the largest hypoxic zone in US coastal waters (in the Gulf of Mexico). (EPA p. 7237)
 - CAFO manure also contributes to similar dead zones in the Chesapeake Bay and other important estuary regions along the East Coast. (UCS p. 4)
- Organic matter decreases oxygen levels in water bodies as it decomposes, contributing to fish kills and the loss of other aquatic species. (EPA p. 7235)
- Solids like manure, bedding, spilled feed, hair, and feathers increase turbidity in surface waters, which decreases light penetration and hinders beneficial plant growth. They also transport other pollutants and settle on the bottom of water bodies, destroying important aquatic habitat. (EPA p. 7235)
- Manure contains the six pathogens responsible for more than 90% of food and waterborne diseases in humans, including Salmonella, Listeria, E. coli, and Giardia. They can be transmitted directly from manure to surface water and infect humans through things like swimming and shellfish consumption. (EPA pp. 7235-36, 7238)
 - In Walkerton, Ontario, 1,300 cases of gastrointestinal problems occurred and 6 people died from an outbreak of E.coli in May, 2000. The Ontario Ministry of Health and Long-Term Care determined that the likely cause was manure runoff near a drinking water well. (Canada Report)
 - In Milwaukee in 1993, the pathogen Cryptosporidium parvum passed through a water-treatment plant and sickened 403,000 people and killing 54. The pathogen was linked in part to cattle runoff (and also slaughterhouse and human sewage). (Hodne p. 24)
 - At a New York county fair, over 700 people got sick and 2 people died from an E. coli outbreak linked to manure runoff and a septic system. (Hodne p. 24)
- Since 2002, at least 4 peer-reviewed or government studies have directly linked hormones from factory farms with negative effects and malformations in the reproductive systems of aquatic life, laboratory rats, or human cells. (GAO p. 24)
- Nitrogen in manure transforms easily into nitrate form and can cause methemoglobinemia in babies, spontaneous abortions, and increased stomach and esophageal cancers when present in drinking water. It is not removed by conventional water treatment systems and is especially risky for those using domestic wells. (EPA p. 7238)
 - In Indiana in 1996, spontaneous abortions in humans were linked to high nitrate levels in wells near factory farms. (CDC pp. 569-71)

- In 1998, factory farm wastes caused nitrate contamination in 34% of almost 1,600 tested wells near factory farms in North Carolina. 10% of the wells had nitrate levels at or exceeding the drinking water standard. (NC)
- Increased nitrate in well-water is also linked to central nervous system defects in infants whose mothers drank the water. (Hodne p. 23)

Factory farms degrade air quality, creating environmental and public health problems.

- Livestock and manure at factory farms emit ammonia, hydrogen sulfide, particulates, odors, pathogens, methane, and nitrous oxides into the air, contributing to respiratory disease and global warming. (UCS pp. 55-56)
 - Decomposing animal urine and feces release at least 160 different gases, including hydrogen sulfide, ammonia, carbon dioxide, methane, and carbon monoxide. (Pew p. 16)
 - Since 2002, at least 7 peer-reviewed or government studies have directly linked air pollutants from factory farms (e.g., dust, hydrogen sulfide, odor, ammonia) with respiratory inflammation, asthma, allergies, headaches, eye irritation, and nausea. (GAO p. 25)
 - Livestock operations account for about 18% of human-induced greenhouse gas emissions (more than transportation). (LEAD p. 112)
 - Livestock-related emissions cause about 9% of human-induced global carbon dioxide emissions. Deforestation related to livestock-production causes about 2.4 billion tons of carbon dioxide emissions per year. The burning of fossil fuels to produce nitrogen fertilizer for livestock feed produces 41 million tons of carbon dioxide emissions per year. (LEAD pp. 88, 91, 112)
 - The livestock sector is responsible for 65% of human-induced nitrous oxide emissions and 64% of ammonia emissions (mostly from manure). (LEAD pp. xxi, 114).
 - Emissions from lagoons and anaerobic digesters create a global warming potential of 62 for methane and 275 for nitrous oxide over 20 years (compared with 1 for carbon dioxide). (Pew p. 27)
- Residents living near factory farms have higher levels of some diseases, such as respiratory and gastrointestinal illness, and impaired neurobehavioral health. (USC p. 60; Pew p. 17)
 - Children, the elderly, and those with chronic heart or lung disease are particularly vulnerable. (Pew p. 17)
 - Four large epidemiological studies demonstrated “strong and consistent associations” between factory farm air pollution and asthma. (Pew p. 17)
 - Volatile organic compounds emitted from factory farms cause increased neurobehavioral problems in people living near the factory farms. These include more negative mood states like tension, depression, fatigue, and confusion, and neuropsychiatric abnormalities like impaired balance, hearing, and intellectual function. (Pew pp. 18-19)

- Hydrogen sulfide can cause “eye, nose, and throat irritation, diarrhea, hoarseness, sore throat, cough, chest tightness, nasal congestion, heart palpitations, shortness of breath, stress, mood alterations, sudden fatigue, headaches, nausea, sudden loss of consciousness, comas, seizures, and even death.” (Yale § 2.3.1)
- An eastern North Carolina study of several communities reported significantly more headaches, runny noses, sore throats, excessive coughing, diarrhea, and burning eyes for residents near a 6,000-hog factory farm than for other residents. (Wing & Wolf p. 237)
- There is “direct evidence of harm to humans from occupational exposures within CAFOs.” Harm includes asthma, sinusitis, chronic bronchitis, nose and throat irritation muscle aches, inflamed membranes, and progressive decline in lung function. (ISA/UI p. 6)
 - In studies, at least 25% of factory farm workers suffered from respiratory diseases like chronic bronchitis and occupational asthma. (UCS p. 60)
 - Factory farm workers also have increased levels of organic dust toxic syndrome. (Pew p. 16)
 - Factory farm workers and animals have died from asphyxia and respiratory arrest due to high hydrogen sulfide levels created by manure pit agitation. Those who survive hydrogen sulfide incidents often develop severe respiratory impairments or syndromes. (Pew p. 16; ISA/UI p. 6)
 - Hydrogen sulfide emissions are a leading cause of death in the workplace. (Yale § 2.3.1)

Factory farms contribute to antibiotic resistance.

- The overuse and misuse of antibiotics by factory farms creates antibiotic-resistant pathogens. Antibiotic-resistant pathogens cause diseases that are more difficult to treat and increase morbidity and mortality. (UCS p. 62-63)
 - More than 90% of *Staphylococcus aureus* bacteria isolates are resistant to penicillin, and the number of methicillin-resistant isolates rose from 2.4% to 29% between 1975 and 1991. Staph bacteria cause infections that can lead to septic shock and death. (Lieberman & Wootan)
- Antibiotic-resistant bacteria from factory farms reach humans through direct routes in food, water, air, and direct contact, or indirectly through increased resistance in the environmental pool of bacteria. (Pew p. 16)
 - In Illinois, tetracycline-resistant genes were found under swine CAFO lagoons and in groundwater up to 250 meters away. (Hodne p. 19)
 - A 2006 study found increased levels of airborne antibiotic-resistant bacteria inside and downwind of factory farms, with *Staphylococcus aureus* (MRSA) being the most common. (Gibbs et al. p. 1032)
- Up to 75% of antibiotics given to CAFO animals pass unchanged into animal waste to contaminate ground and surface waters. (Hodne p. 18)
 - In an Iowa study, all of the sampled swine waste lagoons had various antibiotics in them, and 31% of nearby water samples had antibiotics. (Hodne p. 19)
 - In Ohio, 67% of water samples taken near poultry CAFOs had antibiotics in them. (Hodne p. 19)

Factory farms deplete energy and water resources.

- Producing crops for animal feed places “enormous demand on water resources,” with 87% of freshwater use in the United States going to agriculture (mainly irrigation). (Pew p. 27)
- Factory farms use water to wash animals and flush manure and wastes from confinement areas. Many factory farmed animals also consume large amounts of water. A Missouri group estimated that an 80,000/year hog operation uses over 200,000 gallons of water/day – 73 million gallons/year. (NRDC)
- It takes 100,000 liters of water to produce 1 kilogram of grain-fed beef and 3,500 liters for a kilogram of chicken meat. In contrast, a kilogram of potatoes requires 500 liters of water; wheat, 900; rice, 1,912; and soybeans, 2,000. (Cornell)
- The ratio of fossil fuel inputs per unit of food energy produced for factory farms can reach 35:1. For other agricultural products combined, it averages 3:1. (Pew p. 29)
- Beef cattle production requires 54 units of energy inputs for 1 unit of protein output. (Cornell)

Factory farms are unsustainable and threaten food security.

- Factory farms rely on intensive, industrialized grain production that degrades soil, pollutes aquatic ecosystems, and contributes to global warming. (UCS p. 25)
- More than half of the two most widely grown crops in the United States (corn and soybeans) is fed to livestock, not people. (UCS p. 29)
- More than half of U.S. grain and almost 40% of world grain is fed to livestock rather than directly to humans. If all the grain in the U.S. were consumed by people instead, it could feed 800 million people. (Cornell)

Sources

- ~ Campagnolo et. al, *Report to the State of Iowa Dep't of Public Health on the Investigation of the Chemical and Microbial Constituents of Ground and Surface Water Proximal to Large-Scale Swine Operations* (Oct-Dec 1998) ("Campagnolo"), available at http://www.sec.nv.gov/cafo/tab_i.pdf.
- ~ *Waterborne Outbreak of Gastroenteritis Associated with a Contaminated Municipal Water Supply, Walkerton, Ontario, May-June 2000*, Vol. 26(20) *Canada Communicable Disease Report* (Oct. 15, 2000) ("Canada Report"), available at <http://wvlc.uwaterloo.ca/biology447/modules/module4/HealthCanadasummary.htm>.
- ~ Centers for Disease Control & Prevention, *A Survey of the Quality of Water Drawn from Domestic Wells in Nine Midwest States* (September 1998) ("Domestic Wells Survey"), available at <http://www.cdc.gov/healthywater/statistics/environmental/>.
- ~ Centers for Disease Control & Prevention, "Spontaneous Abortions Possibly Related to Ingestion of Nitrate-Contaminated Well Water-LaGrange County, Indiana 1991-1994," 45(26) *Morbidity and Mortality Weekly Report* 569 (July 5, 1996) ("CDC"), available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/00042839.htm>.
- ~ Chapin et al., Yale Environmental Protection Clinic, *Controlling Odor and Gaseous Emission Problems from Industrial Swine Facilities: A Handbook for All Interested Parties* (Spring 1998) ("Chapin"), available at http://www.kercenter.com/publications/Controlling_Odor.pdf.
- ~ Cornell University, "U.S. Could Feed 800 Million People with Grain that Livestock Eat, Cornell Ecologist Advises Animal Scientists; Future Water and Energy Shortages Predicted to Change Face of American Agriculture," *Science News* (Aug. 7, 1997 Press Release re: David Pimentel, Professor of Ecology at Cornell University College of Agriculture and Life Sciences) ("Cornell"), available at <http://www.news.cornell.edu/releases/aug97/livestock.hrs.html>.
- ~ Shawn G. Gibbs et al., "Isolation of Antibiotic-Resistant Bacteria from the Air Plume Downwind of a Swine Confined or Concentrated Animal Feeding Operation," Vol. 114(7) *Environmental Health Perspectives* (July 2006) ("Gibbs et al."), available at http://www.jhsph.edu/clf/PDF_Files/ARB_Downwind_Gibbs.pdf.
- ~ Doug Gurian-Sherman, Union of Concerned Scientists, *CAFOs Uncovered: The Untold Costs of Confined Animal Feeding Operations* (April 2008) ("UCS"), available at http://www.ucsusa.org/food_and_agriculture/science_and_impacts/impacts_industrial_agriculture/cafos-uncovered.html.
- ~ Carol J. Hodne, *Concentrating on Clean Water: The Challenge of Concentrated Animal Feeding Operations* (April 2005) ("Hodne"), available at <http://www.iowapolicyproject.org/2005docs/050406-cafo-fullx.pdf>.
- ~ Iowa State University/University of Iowa Study Group, *Iowa Concentrated Animal Feeding Operations Air Quality Study: Final Report* (Feb. 2002) ("ISA/UI"), available at http://www.public-health.uiowa.edu/ehsrc/CAFOfstudy/CAFO_final2-14.pdf.
- ~ John A. Kilpatrick, "Concentrated Animal Feeding Operations and Proximate Property Values," Vol. 39(3) *Appraisal Journal* 301 (2001) ("Kilpatrick"), available at <http://www.greenfieldadvisors.com/publications/conanimal.pdf>.
- ~ Patricia B. Lieberman & Margo G. Wootan, *Protecting the Crown Jewels of Medicine: A Strategic Plan to Preserve the Effectiveness of Antibiotics* (1998) ("Lieberman & Wootan"), available at <http://www.cspinet.org/reports/abiotic.htm>.
- ~ Livestock, Environment, and Development Initiative/Food and Agriculture Organization of the United Nations, *Livestock's Long Shadow: Environmental Issues and Options* (2006) ("LEAD"), available at <http://www.fao.org/docrep/010/a0701e/a0701e00.HTM>.

- ~ Michael A. Mallin, "Impacts of Industrial Animal Production on Rivers and Estuaries," Vol. 88(1) *American Scientist* 26 (Jan. 1, 2000) ("Mallin"), available at <http://www.americanscientist.org/issues/feature/impacts-of-industrial-animal-production-on-rivers-and-estuaries>.
- ~ Natural Resources Defense Council, *America's Animal Factories: How States Fail to Prevent Pollution from Livestock Waste*, Ch. 1 ("NRDC"), available at <http://devstaging.win.nrdcdev.org/water/pollution/factor/aafinx.asp>.
- ~ North Carolina Department of Health & Human Services, *Medical Evaluation and Risk Assessment: Contamination of Private Drinking Well Water by Nitrates* ("NC"), <http://www.epi.state.nc.us/epi/mera/iolocontamination.html>.
- ~ Pew Commission on Industrial Farm Animal Production, *Community and Social Impacts of Concentrated Animal Feeding Operations* ("Pew Technical"), available at <http://www.ncifap.org/reports/>.
- ~ Pew Commission on Industrial Farm Animal Production, *Putting Meat on the Table: Industrial Farm Animal Production in America* (April 2008) ("Pew"), available at <http://www.ncifap.org/>.
- ~ Susan Schiffman et al., "The Effect of Environmental Odors Emanating From Commercial Swine Operations on the Mood of Nearby Residents," Vol. 37(4) *Brain Research Bulletin* (1995) ("Schiffman et al."), available at <http://www.ncbi.nlm.nih.gov/pubmed/7620910>.
- ~ Curtis W. Stofferahn, *Industrialized Farming and Its Relationship to Community Well-Being: An Update of a 2000 Report by Linda Lobao* (Sept. 2006) ("Stofferahn"), available at <http://www.und.nodak.edu/org/ndrural/Lobao%20&%20Stofferahn.pdf>.
- ~ United States Environmental Protection Agency, *NPDES CAFO Regulations*, 68 Fed. Reg. 7176-01 (Feb. 12, 2003) ("EPA"), available at <http://www.gpoaccess.gov/fr/>.
- ~ United States Government Accountability Office, *Concentrated Animal Feeding Operations: EPA Needs More Information and a Clearly Defined Strategy to Protect Air and Water Quality from Pollutants of Concern* (Sept. 2008) ("GAO"), available at <http://www.gao.gov/new.items/d08944.pdf?source=ra>.
- ~ Steve Wing & Susanne Wolf, "Intensive Livestock Operations, Health, and Quality of Life among Eastern North Carolina Residents," Vol. 108(3) *Environmental Health Perspectives* 233 (March 2000) ("Wing & Wolf"), available at <http://www.ehponline.org/docs/2000/108p233-238wing/abstract.html>.