Description of document:	Animal and Plant Health Inspection Service (APHIS) Records regarding APHIS and National Veterinary Stockpile participation in and responses to requests for assistance with mass swine depopulation 2020-2021
Requested date:	25-July-2021
Release date:	07-January-2022
Posted date:	23-May-2022
Source of document:	Freedom of Information Act Request Animal and Plant Health Inspection Service Director, Freedom of Information and Privacy Act Staff 4700 River Road, Unit 50 Riverdale, MD 20737 Fax: 301-734-5941 USDA FOIA Public Access Website

USDA
United States Department of Agriculture

Marketing and Regulatory Programs

Animal and Plant Health Inspection Service

Legislative and Public Affairs

Freedom of Information

4700 River Road
Unit 50
Riverdale, MD
20737-1232

January 7, 2022

SENT VIA ELECTRONIC MAIL

Re: Final Response to FOIA Request No. 2021-APHIS-04927-F

This letter is the final response to your July 25, 2021, Freedom of Information Act (FOIA) request which was received in the U.S. Department of Agriculture (USDA), Animal and Plant Health Service (APHIS) on July 26, 2021. Your request was assigned FOIA tracking number 2021-APHIS-04927-F. Your FOIA request seeks:

"A copy of records regarding APHIS and National Veterinary Stockpile participation in and responses to requests for assistance with mass swine depopulation in five states (Iowa, Indiana, Kansas, Oklahoma and Missouri) that experienced supply chain disruptions due to Covid-19."

On July 27, 2021, our office reached out to you requesting a start and end date for a search for records. You responded on the same date, stating:

"Please limit this request to records during the time period April 1, 2020 through April 30, 2021."

Upon receipt, your request was forwarded to the Veteranian Service (VS) program to conduct a search of their files for records that are responsive to your FOIA request. Agency employees conducted a search of their electronic files and databases using key words that would most likely result in responsive records. As a result of their search, VS provided two hundred and seventy-six (276) pages of records.

APHIS must release all requested records which are not exempt under the FOIA. Therefore, the records at issue have been reviewed under the FOIA. After a review of the records, it has been determined that forty-three (43) pages will be released in part pursuant to FOIA Exemptions 5 and 6. The remaining two hundred and thirty-three (233) pages will be released in full.

The following information provides justifications and precedent for our withholding

of information under the applicable FOIA exemptions:

FOIA Exemption 5

Exemption 5 of the FOIA protects "interagency or intra-agency memorandums or letters which would not be available by law to a party other than an agency in litigation with the agency." *See 5 U.S.C. § 552 (b)(5).* The courts have construed this somewhat opaque language, with its sometimes-confusing threshold requirement, to "exempt those documents, and only those documents that are normally privileged in the civil discovery context." As a threshold matter, the responsive records must be inter-agency or intra-agency documents in order to be protected from disclosure under Exemption 5.

One privilege incorporated into Exemption 5 is the deliberative process privilege, which protects the quality of agency decision making. To qualify for protection, the information must be pre-decisional and deliberative. Three policy purposes constitute the basis for the deliberative process privilege: (1) to encourage open, frank discussions on matters of policy between subordinates and supervisors; (2) to protect against premature disclosure of proposed policies before they are finally adopted; and (3) to protect against public confusion that might result from disclosure of policies and rationales that do not ultimately serve as the basis for agency action.

Specifically, the information being withheld under this exemption consists of conference call numbers and codes. In addition, draft responses to media inquiries and discussion surrounding those inquiries; and discussion related to drafting a response to a petition for emergency rulemaking filed with USDA by various parties. The information is being withheld because release of the information would reveal the communication source used by the agency to engage in open, frank discussions on matters of policy between APHIS and other federal agency employees. Further, release of the information could result in public confusion of policies and rationales that do not reflect final agency action.

FOIA Exemption 6

Exemption 6 permits the government to withhold from "personnel and medical files and similar files" information about individuals when the disclosure of such information "would constitute a clearly unwarranted invasion of personal privacy." *See 5 U.S.C. § 552 (b)(6).* We have determined that these records meet the definition of "similar" files, because they contain information pertaining to individuals.

In order to determine whether a document may be withheld under Exemption 6, an agency must undertake a three-step analysis. First, the agency must determine whether a significant privacy interest would be compromised by the disclosure of

the record. Second, the agency must determine whether the release of the document would further the public interest by shedding light on the operations and activities of the Government. And third, the agency must balance the identified privacy interests against the public interest in disclosure. The purpose for which the request for information is made does not impact this balancing test because a release of information requested under the FOIA constitutes a release to the general public.

In this matter, we are withholding certain information from the records, specifically, personal cellphone numbers. We have determined that the individuals whose information is protected in the records have more than a *de minimis* privacy interest in this information because identifying their personal information, i.e. their cell phone numbers, could open them up to unwanted contact or communications.

Under Exemption 6, the only pertinent public interest is whether release of the information would shed light on the agency's activities and the agency's performance of its statutory duties. We determined that the release of the responsive information does not shed any light on APHIS activities. Furthermore, the protection against potential harm to the licensee far outweighs any public interest in revealing the personal information in these records. Because the harm to personal privacy is greater than any minimal public interest that may be served by disclosure, release of this personal information would constitute a clearly unwarranted invasion of the privacy of the individual. Therefore, the protected information is being withheld pursuant to FOIA exemption 6.

This completes APHIS's first partial response to your request. If you have any questions or concerns, you may contact Tameka Tilliman, the analyst who processed your request, at (301) 851-4033 or by email, at Tameka.L.Tilliman@aphis.usda.gov as well as Ms. Bethany Jones, our FOIA Public Liaison, at (301) 851-4100. Additionally, you may contact the Office of Government Information Service (OGIS) at the National Archives and Records Administration to inquire about the FOIA mediation services they offer. The contact information for OGIS is:

Office of Government Information Services
National Archives and Records Administration
8601 Adelphi Road – OGIS
College Park, MD 20740-6601
Email: ogis@nara.gov
Phone: (202) 741-5770
Toll Free: (877) 684-6448
Fax: (202) 741-5769

If you are not satisfied with this response, you may submit an administrative appeal. During the pandemic, our offices are closed. Instead of physically mailing your appeal, we ask that in the short term you submit your appeals

electronically by email to FOIA.Officer@usda.gov. Your appeal must be electronically transmitted within 90 days of the date of this final response. Please reference case number 2021-APHIS-04927-F and the phrase "FOIA APPEAL" in the subject line of your email. To assist the Administrator in reviewing your appeal, please provide specific reasons why you believe modification of this determination is warranted.

This completes APHIS's response to your request.

Sincerely,

CHRISTINE JONES

Digitally signed by CHRISTINE JONES
Date: 2022.01.07 13:30:48 -05'00'

for:
Tonya Woods
Director
Freedom of Information and Privacy Act
Legislative and Public Affairs

Enclosures (276 pages)

From:	Cole, Lyndsay M - APHIS
To:	APHIS-OA All; Nash, Douglas - APHIS
Cc:	McNally, Andrea C - APHIS; Curlett, Ed C - APHIS; Zimmers, Hallie - APHIS; Needham, Christopher M - APHIS; Johnson, Julian M - APHIS; APHIS-VS DA ALL
Subject:	COVID-19 media inquiry from Agri-Pulse
Date:	Tuesday, July 7, 2020 2:59:24 PM

Good afternoon,
We received a media call from Agri-Pulse asking about the impacts of COVID-19 on the swine industry and specifically about depopulation. He is looking for information on the current situation, APHIS' role and authority, and the assistance APHIS is providing to producers. We updated the previous statement that we used on the Livestock Coordination Center, but we wanted to be sure you had a chance to review it before we share it publicly. Please let us know if you have any concerns or changes to the draft statement below. Thanks!

Lyndsay Cole
Assistant Director, Public Affairs
USDA Animal and Plant Health Inspection Service
Office: (970) 494-7410
Cell: (301) 538-9213
Lyndsay.M.Cole@usda.gov

From:	Petersburg, Kevin L - APHIS
To:	Halstead, Steven L - APHIS; Dijab, Adis - APHIS; McKenna, Thomas S - APHIS; Healey, Burke L - APHIS
Subject:	FW: Iowa Pork Plant Status
Date:	Thursday, June 4, 2020 9:08:58 AM
Attachments:	Iowa Pork Plant Status.xlsx image002.jpg

The attached spreadsheet shows that Tyson at Storm Lake operated at 58% capacity yesterday.

Kevin Petersburg
AVIC, IA

From: Jamee Eggers [mailto:jeggers@iowapork.org]
Sent: Thursday, June 4, 2020 8:54 AM
To: Petersburg, Kevin L - APHIS <kevin.l.petersburg@usda.gov>
Subject: FW: Iowa Pork Plant Status

Jamee L. Eggers, M.Sc.
Producer Education Director
Iowa Pork Producers Association
1636 NW 114th St.
Clive, IA 50325
Office – (515) 225-7675
Mobile – (b) (6)
Email: jeggers@iowapork.org

From: Drew Mogler <dmogler@iowapork.org>
Sent: Thursday, June 4, 2020 8:54 AM
To: ann.garvey@idph.iowa.gov; Michael Naig <Michael.naig@iowaagriculture.gov>; Swanson, Jake <jake.swanson@iowa.gov>
Cc: Jeff Kaisand <Jeff.Kaisand@Iowaagriculture.gov>; Pruisner, Robin <Robin.Pruisner@Iowaagriculture.gov>; lschulz@iastate.edu; Jamee Eggers <jeggers@iowapork.org>
Subject: Iowa Pork Plant Status

All,

Attached is the pork plant status from *yesterday*. You'll see that Storm Lake is back up and running at reduced capacity and Prestage in Eagle Grove was down considerably. However, Prestage has indicated that this was due to mechanical issues and not worker absenteeism.

Best,

Drew

Drew Mogler
Public Policy Director
Office: (515) 225-7675
Direct line: (515) 985-7434
Mobile: (b) (6)

Company	City/Plant	Pre-COVID Head/Day	Percent of US	6/4/2020 Status	# of Pigs Short
JBS	Marshalltown, IA	21,000	4.10%	88%	2,520
Triumph/Seaboard	Sioux City, IA	20,400	4.00%	86%	2,856
JBS	Ottumwa, IA	20,000	3.90%	84%	3,200
Tyson	Waterloo, IA	19,500	3.80%	77%	4,485
Tyson	Storm Lake, IA	17,250	3.40%	58%	7,245
Smithfield	Denison, IA	10,450	2.10%	80%	2,090
Tyson	Col. Junction, IA	10,100	2.00%	99%	101
Prestage Foods	Eagle Grove, IA	10,000	2.00%	42%	5,800
Tyson	Perry, IA	8,250	1.60%	97%	248
Total:	**Capacity (pigs/day)**	**136,950**		**79%**	**28,545**

Date	Daily Status	# of Pigs Short
5/12/2020	**67%**	**45,036**
5/13/2020	**71%**	**40,320**
5/14/2020	**70%**	**40,850**
5/15/2020	**70%**	**40,850**
5/18/2020	**70%**	**39,422**
5/19/2020	**74%**	**35,006**

5/26/2020	75%	34,360
5/27/2020	73%	36,613
5/28/2020	78%	30,506
6/1/2020	73%	36,745
6/2/2020	75%	34,255
6/3/2020	79%	28,545

From:	Curlett, Ed C - APHIS
To:	APHIS-OA All
Cc:	APHIS-VS DA ALL; Jones, Bethany - APHIS; Fretz, Abbey - APHIS; Stepien, Mike W - APHIS; Hayden, Joelle R - APHIS; Cole, Lyndsay M - APHIS; Johnson, Julian M - APHIS
Subject:	FW: media question on healthy animal depops
Date:	Monday, July 27, 2020 1:50:00 PM

Good afternoon.
We have an inquiry from a reporter from DCreport.org asking about PFOS in foam used for poultry depops related to the processing plant slow down. Here are the questions and our proposed answer.

Questions:
How much of the foam that was used in depopulations of poultry during the pandemic contains PFAS? I had seen that 10 million hens had been killed. Is that number still accurate?

Answer:

(b) (5)(DPP)

Thank you,
Ed

ED CURLETT
DIRECTOR OF PUBLIC AFFAIRS, ANIMAL AND PLANT HEALTH INSPECTION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
Office: (301) 851-4052
CELL: (240) 401-7294

From: Shea, Kevin - APHIS
To: Shere, Jack A - APHIS
Cc: Davidson, Mark L - APHIS; Healey, Burke L - APHIS
Subject: FW: Petition for Emergency Rulemaking
Date: Tuesday, June 30, 2020 9:12:36 AM
Attachments: ATT00001.gif
2020-06-29 APHIS Petition_FINAL.pdf

Jack

(b) (5)(DPP)

Kevin

From: Alexis Andiman <aandiman@earthjustice.org>
Sent: Monday, June 29, 2020 9:32 AM
To: SM.OSEC.AGSEC.OES <SM.OSEC.AGSEC.OES@usda.gov>; Shea, Kevin - APHIS <kevin.a.shea@usda.gov>
Cc: aandiman@earthjustice.org; hconnor@biologicaldiversity.org; vbaron@nrdc.org; sliriano@earthjustice.org; Jones, Bethany - APHIS <bethany.x.jones@usda.gov>; Oubichon, Michon M - APHIS <michon.m.oubichon@usda.gov>; FONG, PHYLLIS <phyllis.fong@oig.usda.gov>; dina.barbour@oig.usda.gov
Subject: Petition for Emergency Rulemaking

Dear Secretary Purdue and Administrator Shea,

I write to submit the attached **petition for emergency rulemaking** to the Animal and Plant Health Inspection Service of the U.S. Department of Agriculture, on behalf of Center for Biological Diversity; Natural Resources Defense Council; Animal Legal Defense Fund; Association of Irritated Residents; Cape Fear River Watch; Catawba Riverkeeper Foundation; Center on Race, Poverty & the Environment; Coastal Carolina Riverwatch; Environmental Working Group; Johns Hopkins Center for a Livable Future; MountainTrue; Sound Rivers; and Waterkeeper Alliance. I will send the authorities on which the petition relies shortly.

Please do not hesitate to contact us if you have any questions or if there is anything you would like to discuss.

Thank you,
Alexis Andiman

Alexis Andiman
she/her/hers
Staff Attorney
Earthjustice Northeast Office
48 Wall Street, 19th Floor
New York, New York 10005
T: 212-845-7394 (direct)
F: 212-918-1556
earthjustice.org

BEFORE THE UNITED STATES DEPARTMENT OF AGRICULTURE, ANIMAL AND PLANT HEALTH INSPECTION SERVICE

PETITION FOR EMERGENCY RULEMAKING

CENTER FOR BIOLOGICAL DIVERSITY; NATURAL RESOURCES DEFENSE COUNCIL; ANIMAL LEGAL DEFENSE FUND; ASSOCIATION OF IRRITATED RESIDENTS; CAPE FEAR RIVER WATCH; CATAWBA RIVERKEEPER FOUNDATION; CENTER ON RACE, POVERTY & THE ENVIRIONMENT; COASTAL CAROLINA RIVERWATCH; ENVIRONMENTAL WORKING GROUP; JOHNS HOPKINS CENTER FOR A LIVABLE FUTURE; MOUNTAINTRUE; SOUND RIVERS; and **WATERKEEPER ALLIANCE**, *Petitioners*, *Filed With:* **SONNY PERDUE**, in his official capacity as Secretary of Agriculture; and **KEVIN SHEA**, in his official capacity as Administrator, Animal and Plant Health Inspection Service.	Docket No._____

Credit: Sound Rivers

I. INTRODUCTION

Pursuant to the right to petition the government provided in the First Amendment to the U.S. Constitution[1] and the Administrative Procedure Act,[2] the undersigned organizations (Petitioners) formally submit this petition to the Animal and Plant Health Inspection Service (APHIS or Agency) of the U.S. Department of Agriculture (USDA). Petitioners ask APHIS to take immediate action to protect people and the environment from dangerous pollution resulting from the mass killing and disposal of industrially-raised farm animals in connection with the COVID-19 pandemic. Specifically, as set forth below, Petitioners seek an interim final rule, effective until the resolution of the COVID-19 pandemic, prohibiting the two methods of carcass disposal that, APHIS admits, present the greatest risks to people and the environment: unlined burial and on-site incineration. In addition, Petitioners ask that APHIS create and publish an online database with information about federal assistance for carcass disposal.

Over the past several months, slaughterhouses have emerged as leading hot spots for the spread of COVID-19 infections. As thousands of workers have fallen ill, slaughterhouses have operated at reduced capacity or closed altogether, resulting in a backlog of millions of industrially-raised farm animals ready for slaughter. The meat industry has responded to this backlog by killing entire herds or flocks of animals through methods such as smothering, gassing, shooting, drug overdoses, blunt force trauma, and suffocation. Already, the poultry industry has killed an estimated 10 million hens,[3] and the pork industry has warned that more than 10 million pigs could be killed by September.[4] Collectively, the industry refers to this mass killing as "depopulation."[5]

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[1] *See* U.S. Const. Amend. I; *see also United Mine Workers v. Ill. State Bar Ass'n*, 389 U.S. 217, 222 (1967) (explaining that the right to "petition for a redress of grievances [is] among the most precious of the liberties safeguarded by the Bill of Rights").

[2] *See* 5 U.S.C. § 553(e).

[3] *See* Sophie Kevany, *Millions of U.S. Farm Animals to be Culled by Suffocation, Drowning, and Shooting*, The Guardian (May 19, 2020), https://www.theguardian.com/environment/2020/may/19/19/millions-of-us-farm-animals-to-be-culled-by-suffocation-drowning-and-shooting-coronavirus?fbclid=IwAR0l44gqUoLWzxVv-O5r1Uwm8sQAmWqQy8dFKaJTE1ikR8Y2vpgS0-VHhFc.

[4] *See* Audrey Conklin, *Coronavirus May Force Hog Farmers to Kill 10M Pigs by September*, Fox Business (May 17, 2020), https://www.foxbusiness.com/markets/farmers-euthanize-10-million-pigs-coronavirus; *see also* Letter from Nat'l Pork Producers Council, to Makan Delrahim, Assistant Att'y Gen. U.S. Dept. of Justice, Urgent COVID-19-Related Request for a Business Review Letter (May 8, 2020) [hereinafter "NPPC Letter"], https://www.justice.gov/opa/press-release/file/1276966/download.

[5] According to the American Veterinary Medical Association, "[t]he term depopulation refers to the rapid destruction of a population of animals in response to urgent circumstances with as much consideration given to the welfare of the animals as practicable." Am. Veterinary Med. Ass'n, *AVMA Guidelines for the Depopulation of Animals: 2019 Edition*, 4 (2019) [hereinafter "AVMA Guidelines"], https://www.avma.org/sites/default/files/resources/AVMA-Guidelines-for-the-Depopulation-of-

Responsible management of farm animal carcasses is essential to protect people and the environment. APHIS has established a National Incident Coordination Center (NICC) to assist the meat industry with depopulation and disposal, including by providing federal funds and other direct support.[6] However, APHIS currently allows the industry to engage in the very carcass disposal practices that the Agency "expect[s] to have the greatest impacts to the environment,"[7] and APHIS is providing assistance to the industry without ensuring that surrounding communities have access to the information they need to stay safe.

Petitioners are deeply concerned that unrestricted, undisclosed mass carcass disposal poses imminent and substantial threats to people and the environment. That this disposal is taking place in the midst of a preexisting global pandemic only heightens Petitioners' concerns, as does the growing body of evidence establishing that communities of color are suffering disproportionately as a result of COVID-19. Some of the carcass disposal practices that APHIS currently allows, such as on-site incineration by pyre, risk exacerbating this suffering by increasing air pollution, a factor linked to higher COVID-19 death rates.

The threats posed by depopulation and disposal will continue at least until the meat industry stops killing farm animals in connection with the COVID-19 pandemic, even if that killing outlasts the pandemic itself. In addition, Petitioners are concerned that these threats will reemerge and increase over the coming months and years. For example, the impending hurricane season is expected to be unusually active, and severe storms could cause unlined burial pits to flood. Hurricanes and other natural disasters also could kill additional animals, the carcasses of which would require disposal in or near the locations where disposal currently is taking place.

Petitioners therefore request that APHIS promptly publish an interim final rule to prohibit the disposal of farm animal carcasses by unlined burial and on-site incineration until the resolution of the COVID-19 pandemic. Petitioners also request that APHIS provide the public with certain critical information about federal assistance for mass carcass management. Not only will the requested rules help to prevent catastrophic harm to people and the environment, they also will provide people living near mass carcass disposal sites with the information they need to protect themselves, including by minimizing their risk of exposure to pollution that could increase their susceptibility to COVID-19. We urge APHIS to act without delay.

Animals.pdf. Petitioners have adopted this term for clarity and convenience, but do not endorse it as sufficient to capture the gravity of the activity so described.

[6] *See* U.S. Dept. Agric., *USDA APHIS Establishing Coordination Center to Assist Producers Affected by Meat Processing Plant Closures* (Apr. 24, 2020) [hereinafter "APHIS NICC Press Release"], https://www.aphis.usda.gov/aphis/newsroom/stakeholder-info/sa_by_date/sa-2020/sa-04/meat-processing-coordination-center.

[7] U.S. Dep't of Agric., *Carcass Management During a Mass Animal Health Emergency Final Programmatic Environmental Impact Statement—December 2015*, at vi (2015) [hereinafter "EIS"], https://www.aphis.usda.gov/stakeholders/downloads/2015/eis_carcass_management.pdf.

II. PETITIONERS

The **Center for Biological Diversity** (Center) is a nonprofit environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has more than 1.7 million members and online activists committed to the protection and restoration of endangered species and wild places. For 26 years, the Center has worked to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people and animals from toxic threats such as industrial agriculture.

The **Natural Resources Defense Council** (NRDC) is a nonprofit environmental membership organization that works to protect public health and the environment. NRDC has more than 375,000 members and 2 million online activists. NRDC has been committed to public health and public disclosure of pollution risks for fifty years. NRDC engages in research, advocacy, media, and litigation related to protecting public health and the environment.

The **Animal Legal Defense Fund** (ALDF) is a national nonprofit membership organization based in California with over 200,000 members and supporters nationwide. ALDF's mission is to protect the lives and advance the interests of animals through the legal system. Advocating for effective oversight and regulation of the animal agriculture industry across the United States is one of ALDF's central goals, which it achieves by filing lawsuits, administrative comments, and rulemaking petitions to increase legal protections for animals; by supporting strong animal protection legislation; and by fighting against legislation, like state "Ag Gag" laws, that is harmful to animals and communities surrounding concentrated animal feeding operations (CAFOs). Through these efforts, ALDF seeks to ensure transparency in the CAFO system, which is paramount to its ability to protect farmed animals and ALDF members from CAFOs' immensely harmful effects.

The **Association of Irritated Residents** (AIR) is a nonprofit, public interest organization based in California with members in Kern, Tulare, Kings, Fresno, and Stanislaus Counties. AIR formed in 2001 to advocate for clean air and environmental justice in the San Joaquin Valley.

Cape Fear River Watch (CFRW) is a grassroots, environmental, 501(c)(3) nonprofit started over twenty-five years ago by a group of volunteers committed to protecting and improving North Carolina's largest and most diverse river basin for future generations. Today we carry that commitment forward with a dedicated staff of scientists, educators, advocates, and activists, and a large number of members and volunteers. CFRW is home to the **Cape Fear Riverkeeper**.

The Catawba Riverkeeper Foundation is a 501(c)(3) nonprofit organization dedicated to protecting the lakes, rivers, and streams of the Catawba River basin. Founded in 1997 and currently supported by over 500 members, **Catawba Riverkeeper** has acted as an independent watchdog for our waterways for more than 20 years. The Foundation is headquartered in Charlotte, but serves the more than two million people in the 26 counties in the Carolinas that

make up the Catawba-Wateree watershed. Catawba Riverkeeper uses 3 main pillars—education, engagement, and protection—to work towards our vision of clean, plentiful water for all.

The Center on Race, Poverty & the Environment (CRPE) is a non-profit environmental justice organization. CRPE's mission is to achieve environmental justice and healthy sustainable communities through collective action and the law. Throughout our 30-year history, CRPE has worked with low income communities and communities of color to build community power, reduce pollution, and improve community health.

Coastal Carolina Riverwatch (CCRW) is a citizen-volunteer, grassroots organization dedicated to restoring and protecting the waters, land, and communities of eastern North Carolina. CCRW's mission is to accomplish this through strong advocacy, supporting enforcement of environmental laws, public education, and promotion of citizen ownership and responsibility. CCRW serves as an umbrella organization for Waterkeeper Alliance watersheds in the area, which currently include **Crystal Coast Waterkeeper** and **White Oak-New Riverkeeper Alliance**. CCRW holds Waterkeeper Alliance licenses for both of these organizations. CCRW advocates for clean water for all.

The **Environmental Working Group** (EWG) is a non-profit, non-partisan organization that works to empower people to live healthier lives in a healthier environment. For over twenty-five years, EWG's mission has been to educate and inspire people, businesses, and governments to make better decisions and to take action to protect public health and the environment. EWG has more than one million online activists dedicated to standing up for public health when government and industry will not.

The **Johns Hopkins Center for a Livable Future** (CLF) is based at the Bloomberg School of Public Health in Johns Hopkins University's Department of Environmental Health and Engineering. CLF does research, education and advocacy at the intersection of food production, public health and the environment. Since 1996, the Center has had a primary focus on the impact of large-scale animal operations on public health and the environment. A report, by the Pew Commission on Industrial Farm Animal Production, *Putting Meat on the Table: Industrial Farm Animal Production in the United States*, found that industrial food animal operations represent an unacceptable level of threat to public health and the environment and depress economic activity in the communities where those operations are located. CLF was the principal investigator for the Pew Commission, and growing concerns since the release of this report in 2008 motivated CLF to lead a moratorium resolution effort approved last year by the American Public Health Association to limit the expansion of existing operations or the establishment of new operations until public health concerns are addressed.

MountainTrue champions resilient forests, clean waters, and healthy communities. We are committed to keeping our mountain region a beautiful place to live, work, and play. MountainTrue has over 1,300 members and over 10,000 online activists. Our members protect our forests, clean up our rivers, plan vibrant and livable communities, and advocate for a sound

and sustainable future for all. MountainTrue is active in the Broad, French Broad, Green, Hiwassee, Little Tennessee, New and Watauga watersheds, and is home to the **Broad Riverkeeper**, **French Broad Riverkeeper**, **Green Riverkeeper**, and **Watauga Riverkeeper**.

Sound Rivers is an environmental nonprofit organization with 2,500 members that seeks to protect the Tar-Pamlico and Neuse River basins. These two river basins combined covers 23% of the state of North Carolina's landmass and is home to over 2 million people. Sound Rivers' three Riverkeepers—Jill Howell, the **Tar-Pamlico Riverkeeper**; Katy Hunt, the **Lower Neuse Riverkeeper**; and Matthew Starr, the **Upper Neuse Riverkeeper**—monitor the region's waterways, serving as scientific experts and educational resources to the communities. Through research, advocacy, education, and public engagement, Sound Rivers works towards fishable, swimmable, drinkable water for all.

Waterkeeper Alliance is a nonprofit, member supported, international environmental organization based in New York City. Waterkeeper Alliance unites more than 300 Waterkeeper Organizations and Affiliates that are on the frontlines of the global water crisis, patrolling and protecting more than 2.5 million square miles of rivers, lakes, and coastal waterways on 6 continents. Waterkeeper groups defend our fundamental human right to drinkable, fishable, and swimmable waters, and combine firsthand knowledge of their waterways with an unwavering commitment to the rights of their communities. Waterkeeper Alliance's Pure Farms, Pure Waters campaign calls attention to the destructive pollution practices of industrialized meat production, ensures compliance with environmental laws, and supports the traditional family farms that industrial practices endanger.

III. SPECIFIC REQUEST FOR AGENCY ACTION

1. Petitioners request that, within 7 business days from the date of submission of this petition (or by July 10, 2020), APHIS issue an emergency interim final rule, effective immediately, to:
    A. Prohibit the use of the following mass carcass management practices until the resolution of the mass animal health emergency arising from the COVID-19 pandemic: unlined burial and incineration through on-farm pyres or air curtain incinerators.
        i. "Mass carcass management practices" shall be understood to mean "[t]he discovery, collection, transportation, disposal and/or processing of 50 tons (100,000 pounds) or more of dead animals and body parts on a single premise (where livestock are housed or kept), as well as the subsequent cleanup and decontamination of affected sites."[8] According to the U.S. Environmental Protection Agency, 50 tons of carcasses is approximately

[8] EIS at I-9.

equivalent to 100 dead cows, 565 dead pigs, 25,000 dead chickens, or 5,000 dead turkeys.[9]

ii. "Mass animal health emergency" shall be understood to mean "[a] natural disaster . . . generating 50 tons of carcasses or more."[10]

B. Require APHIS to create and publish online an electronically searchable and sortable database with information about any assistance pertaining to mass carcass management provided by APHIS, including through the NICC, from March 13, 2020 until the resolution of the mass animal health emergency arising from the COVID-19 pandemic. The rule shall mandate that the information be published as quickly as possible or within one business day of receipt, whichever is earlier. The information provided in such database for each grant of assistance shall include, but is not limited to:

i. The owner of the animals;
ii. The number and species of animals depopulated;
iii. The date(s) of depopulation and disposal (and, if disposal occurred on multiple days, the number of animals disposed on each day);
iv. The depopulation method utilized;
v. The disposal method utilized;
vi. The disposal location, including the location of any incineration ash residues and/or final composted materials;
vii. A summary of the federal support provided, including any indemnification payments, subsidies, assets of the National Veterinary Stockpile, and/or other emergency assistance provided;
viii. Any monitoring, testing, or sampling protocol put in place to monitor releases of environmental contaminants from the disposal location.

2. In addition, Petitioners request that, within 18 months, APHIS make the mass carcass management database permanent by initiating a rulemaking to:

A. Require APHIS to create and publish online an electronically searchable and sortable database with information about any assistance pertaining to mass carcass management provided by APHIS in connection with any mass animal health emergency. The rule shall mandate that the information be published as quickly as possible or within one business day of receipt, whichever is earlier. The information provided in such database for each grant of assistance shall include, but is not limited to:

i. The owner of the animals;
ii. The number and species of animals depopulated;

[9] *See* EPA, *Exposure Assessment of Livestock Carcass Management Options During Natural Disasters*, at 7 (Feb. 2017) (Follow "URL/Downloads" hyperlink), https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NHSRC&TIMSType=&count=10000&dirEntryId=335655&searchAll=&showCriteria=2&simpleSearch=0.

[10] EIS at I-9.

iii. The date(s) of depopulation and disposal (and, if disposal occurred on multiple days, the number of animals disposed on each day);
iv. The depopulation method utilized;
v. The disposal method utilized;
vi. The disposal location, including the location of any incineration ash residues and/or final composted materials;
vii. A summary of the federal support provided, including any indemnification payments, subsidies, assets of the National Veterinary Stockpile, and/or other emergency assistance provided;
viii. Any monitoring, testing, or sampling protocol put in place to monitor releases of environmental contaminants from the disposal location.

IV. FACTUAL BACKGROUND

A. Slaughterhouses Have Become Coronavirus Hot Spots, Leading to a Backlog of Industrially-Raised Farm Animals.

Since early 2020, the COVID-19 pandemic has swept the globe. As of June 26, almost 9.5 million cases of COVID-19 had been confirmed worldwide, including 484,249 deaths.[11] In the United States, nearly 2.4 million people have been diagnosed with the virus, and more than 121,809 people have died.[12] COVID-19 remains a highly infectious disease with no known cure. Although the spread of coronavirus infections slowed in some places in late May, the crisis is not yet over. Infections recently spiked sharply across the South and West,[13] and the World Health Organization (WHO) has warned that the world is entering a "new and dangerous phase" of the COVID-19 pandemic.[14]

Slaughterhouses across the country have become coronavirus hot spots, and slaughterhouse workers are suffering disproportionately. As of June 26, at least 253 slaughterhouses had confirmed cases of COVID-19.[15] At least 28,303 slaughterhouse workers have tested positive for COVID-19, and 102 workers have died.[16] And these numbers are

[11] *See Coronavirus Dashboard*, WHO, https://covid19.who.int (last visited June 26, 2020).
[12] *See Cases of Coronavirus Disease (COVID-19) in the U.S.*, Ctrs. for Disease Control & Prevention, https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html (last visited June 26, 2020).
[13] Nathaniel Weixel, *Fauci Gives Congress COVID-19 Warning*, The Hill (June 23, 2020), https://thehill.com/policy/healthcare/504197-fauci-gives-congress-covid-19-warning?userid=436652.
[14] *See* Julie Bosman, *W.H.O. Warns of 'Dangerous Phase' of Pandemic as Outbreaks Widen*, N.Y. Times (June 19, 2020), https://www.nytimes.com/2020/06/19/us/coronavirus-new-dangerous-phase.html?action=click&module =Top%20Stories&pgtype=Homepage.
[15] *See* Leah Douglas, *Mapping Covid-19 Outbreaks in the Food System*, Food & Env't Reporting Network (Apr. 22, 2020, updated June 19, 2020), https://thefern.org/2020/04/mapping-covid-19-in-meat-and-food-processing-plants/.
[16] *Id*.

continuing to climb.[17] According to Tyson Foods, one of the only large U.S. meat producers that is voluntary disclosing information about coronavirus infections, 18% of the company's employees in Northwest Arkansas—nearly 700 people—had tested positive for the virus as of June 19.[18] More than one-third of the workers have tested positive at each of two Tyson slaughterhouses in Iowa and Indiana.[19] On June 21, China's General Administration of Customs announced that it was halting imports from a Tyson slaughterhouse in Arkansas following an outbreak of coronavirus cases at the facility.[20]

Federal slaughterhouse inspectors with USDA's Food Safety and Inspection Service (FSIS) also have become ill and died of COVID-19, as a result of exposure in slaughterhouses, shortages of personal protective equipment, and FSIS's early prohibitions against inspectors' use of face masks inside slaughterhouses.[21] (The prohibitions appear to have been in conflict with an FSIS directive requiring that FSIS "provid[e] employees with proper personal protective equipment . . . and remov[e] employees . . . from unsafe conditions as necessary for protection."[22]) As of May 5, 197 FSIS field employees were absent from work due to COVID-19

[17] *See* Rachel Axon et al., *Coronavirus Outbreaks Climb at U.S. Meatpacking Plants Despite Protections, Trump Order*, USA Today (June 6, 2020), https://www.usatoday.com/story/news/investigations/2020/06/06/meatpacking-plants-cantshake-covid-19-cases-despite-trump-order/3137400001/.

[18] *See Tyson Foods, Inc. Releases Covid-19 Test Results at Northwest Arkansas Facilities*, Tyson Foods, Inc. (June 19, 2020), https://www.tysonfoods.com/news/news-releases/2020/6/tyson-foods-inc-releases-covid-19-test-results-northwest-arkansas.

[19] *See* Eric Schlosser, *America's Slaughterhouses Aren't Just Killing Animals*, The Atlantic (May 12, 2020), https://www.theatlantic.com/ideas/archive/2020/05/essentials-meatpeacking-coronavirus/611437/.

[20] *See* Jason Slotkin, *China Suspends Poultry Imports from Tyson Foods Plant in Arkansas*, NPR (June 21, 2020), https://www.npr.org/sections/coronavirus-live-updates/2020/06/21/881408578/china-suspends-poultry-imports-from-tyson-foods-plant-in-arkansas.

[21] *See* Schlosser, *supra* note 19 (explaining that, "in the early days of the pandemic, [FSIS] not only failed to give protective equipment to its inspectors, but also prohibited them from wearing masks inside meatpacking plants—concerned that the wrong message might be sent about the risk of COVID-19. On April 9, the agency said that inspectors could wear masks on the job, if the meatpacking company that owned the plant gave them permission to do so. Inspectors were encouraged to find their own masks and promised a $50 reimbursement for 'the purchase of face coverings or materials to make face coverings.' One month later, after meatpacking plants had been widely criticized as hot spots for spreading COVID-19, the USDA finally began to provide masks to its inspectors").

[22] U.S. Dep't Agric., *FSIS Directive Basic Occupational Safety and Health Program* (2016), https://www.fsis.usda.gov/wps/wcm/connect/cfa047f5-f01c-49f2-80c7-63ee08dd914d/4791.1.pdf?MOD=AJPERES.

diagnoses, and another 120 were under self-quarantine due to exposure.[23] At least four inspectors infected with the virus have died.[24]

As slaughterhouse inspectors and workers have fallen ill, slaughterhouses have operated at reduced capacity or closed altogether, resulting in a backlog of millions of industrially-raised animals ready for slaughter.[25] This backlog is especially concerning because industrial farm animal production follows a "just-in-time" system,[26] under which slaughterhouses can process only animals of a certain target size. Once the animals grow larger than that target size, they no longer "fit within [the] equipment used on processing plant production lines" and cannot be processed in those plants.[27]

According to the Economic Research Service, as of mid-May, pork processing had decreased by at least 11%, beef by 21%, chicken by 2%, and turkey by 8.3%, as compared to production rates from the same period in 2019.[28] In fact, these decreases in processing volumes likely are more dramatic than they appear. Over the past few years, FSIS and the meat industry have implemented certain "efficiency" initiatives to speed up processing times—thereby increasing capacity—at pig and chicken slaughterhouses.[29] As a result of these efficiency

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[23] *See* Greg Cima, *Slaughter Delays Lead to Depopulation*, J. Am. Veterinary Med. Ass'n (June 15, 2020), https://www.avma.org/javma-news/2020-06-15/slaughter-delays-lead-depopulation; *see also* Mike Dorning, *Fourth USDA Inspector Dies From Virus Amid Meat Plant Outbreaks*, Bloomberg News (May 13, 2020), https://www.bloomberg.com/news/articles/2020-05-14/fourth-usda-inspector-dies-from-virus-amid-meat-plant-outbreaks.

[24] *See* Mike Dorning, *Fourth USDA Inspector Dies From Virus Amid Meat Plant Outbreaks*, Bloomberg News (May 13, 2020), https://www.bloomberg.com/news/articles/2020-05-14/fourth-usda-inspector-dies-from-virus-amid-meat-plant-outbreaks.

[25] *See, e.g.*, *Pandemic Disrupts Processing Capacity, Drives Slaughter Numbers Down*, Am. Farm Bureau Fed'n (Apr. 28, 2020), https://www.fb.org/market-intel/pandemic-disrupts-processing-capacity-drives-slaughter-numbers-down (identifying reporting that "at least 18 plants have been closed down due to issues with COVID-19 over the previous two months" and "estimate[ing] that at times over the previous few weeks, pork processing capacity has been reduced by as much as 20% and beef processing capacity has been reduced by as much as 10%"); Greg Cima, *Slaughter Delays Lead to Depopulation*, J. Am. Veterinary Med. Ass'n (June 15, 2020), https://www.avma.org/javma-news/2020-06-15/slaughter-delays-lead-depopulation (identifying reporting that, "[b]y May 8, at least 30 slaughter and processing plants had closed at some point because of COVID-19 outbreaks, affecting 45,000 workers and reducing pork slaughter capacity 40% and beef slaughter capacity 25%").

[26] *See* Letter from Kim Reynolds, Governor of Iowa, et al., to Vice President & Members of the Coronavirus Task Force (Apr. 27, 2020) https://www.grassley.senate.gov/sites/default/files/Iowa%20group-2020-covid-pork-letter-1.pdf; *see also* NPPC Letter at 4.

[27] NPPC Letter at 4.

[28] *See* Greg Cima, *Slaughter Delays Lead to Depopulation*, J. Am. Veterinary Med. Ass'n (June 15, 2020), https://www.avma.org/javma-news/2020-06-15/slaughter-delays-lead-depopulation

[29] *See* Modernization of Swine Slaughter Inspection; 84 Fed. Reg. 52,300 (Oct. 1, 2019), https://www.federalregister.gov/documents/2019/10/01/2019-20245/modernization-of-swine-slaughter-inspection; *see also* FSIS, *Criteria for Consideration of Waiver Requests from Young Chicken Slaughter*

initiatives, processing capacity in 2020 would have been expected to *exceed* processing capacity in 2019, and thus the present shortfalls likely are especially severe. Without more information about the disposal of farm animal carcasses, however, it is impossible to know how many animals have been killed as a result of these shortfalls.

The recent efficiency initiatives also contribute to a greater likelihood of additional slaughterhouse shutdowns. This is because increases in line-speeds, together with a reduction in the number of federal inspectors,[30] require workers to process animals in a shorter amount of time, making it more difficult to socially distance. Indeed, according to the Centers for Disease Control and Prevention (CDC), "[c]hanges in production practices (*e.g.*, line speed *reductions*) may be necessary to maintain appropriate distancing among employees." [31]

In April alone, FSIS approved 15 line-speed waiver requests from large poultry plants, allowing those plants to accelerate their processing lines by 25 percent.[32] More than half of those 15 plants have experienced COVID-19 outbreaks, with one plant reporting a COVID-19-related worker fatality and another closing shortly after receiving its waiver due to the rampant spread of the virus.[33] Coinciding with these changes, reports indicate that poultry plants with line-speed waivers are at least 10 times more likely than the industry as a whole to have COVID-19 cases among workers.[34]

In addition, FSIS continues to roll out its new inspection system for pig slaughterhouses, which—among other things—entirely removes line-speed caps and shifts some responsibilities from federal inspectors to plant employees. Petitioners would like to see USDA discontinue its

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Establishments to Operate at Line Speeds Up to 175 Birds Per Minute, FSIS Constituent Update (Feb. 23, 2018), https://www.fsis.usda.gov/wps/portal/fsis/newsroom/meetings/newsletters/constituent-updates/archive/2018/ConstUpdate022318; Petition To Permit Waivers of Maximum Line Speeds for Young Chicken Establishments Operating Under the New Poultry Inspection System; Criteria for Consideration of Waiver Requests for Young Chicken Establishments To Operate at Line Speeds of Up to 175 Birds per Minute, 83 Fed. Reg. 49,048 (Sept. 28, 2018), https://www.federalregister.gov/documents/2018/09/28/2018-21143/petition-to-permit-waivers-of-maximum-line-speeds-for-young-chicken-establishments-operating-under.

[30] *Id*.

[31] Memorandum from Michael Grant, CDC Nat'l Ins. for Occupational Safety & Health, et al., to Joshua Clayton, South Dakota Department of Health 7 (Apr. 22, 2020), https://covid.sd.gov/docs/smithfield_recs.pdf (emphasis added).

[32] *See* Nat'l Employment Law Project, *USDA Allows Poultry Plants to Raise Line Speeds, Exacerbating Risk of COVID-19 Outbreak and Injury*, 1 (2020), https://s27147.pcdn.co/wp-content/uploads/Policy-Brief-USDA-Poultry-Line-Speed-Increases-Exacerbate-COVID-19-Risk.pdf.

[33] *Id*.

[34] *See* Sky Chadde & Kyle Bagenstose, *USDA let Poultry Plants put Workers Close Together Even as They Got Sick From Coronavirus*, USA Today (Apr, 24, 2020), https://www.usatoday.com/story/news/2020/04/24/usda-let-poultry-plants-move-fastercrowd-lines-covid-coronavirus-spread-meat-packing-workers/3013615001/.

practice of increasing line-speeds and approving line-speed waiver requests,[35] but USDA has yet to do so. Especially when combined with ongoing worker illnesses resulting from the COVID-19 pandemic, increased line-speeds and line-speed waivers create a perfect storm, increasing the likelihood of additional shutdowns and delays.

Also increasing the likelihood of additional shutdowns and delays are the incentives and threats that the meat industry has employed to keep slaughterhouse workers on the job, despite risks of contracting and spreading coronavirus.[36] For instance, in early June, Tyson Foods reverted to its pre-coronavirus worker attendance policy,[37] under which workers can be penalized and even fired for missing work due to illness.[38] Incentives and threats that prevent sick workers from staying home can lead to additional outbreaks and slow-downs, putting workers and communities at greater risk.

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[35] *See* Letter from A Better Balance, et al., to Nancy Pelosi, et al., Speaker, U.S. H.R. (May 4, 2020), https://www.foodandwaterwatch.org/sites/default/files/20.05.04_21_groups_urge_congress_to_direct_usda_to_stop_higher-speed_slaughter.pdf (requesting that Congress implement a moratorium on the higher line-speed slaughter and processing of poultry, swine, and cattle).

[36] *See* Jonathan Dyal, et al., *COVID-19 Among Workers in Meat and Poultry Processing Facilities – 19 States, April 2020*, 69 Morbidity & Mortality Weekly Report 557, 557 (May 8, 2020), https://www.cdc.gov/mmwr/volumes/69/ wr/mm6918e3.htm ("Among workers, socioeconomic challenges might contribute to working while feeling ill, particularly if there are management practices such as bonuses that incentivize attendance."); *see also* Liam Niemeyer, *Coronavirus Concerns Rise as Ohio Valley Meatpacking Workers Fall Sick*, WV Public Broadcasting (Apr. 10, 2020), https://www.wvpublic.org/post/coronavirus-concerns-rise-ohio-valley-meatpacking-workers-fall-sick#stream/0 (reporting that some meat companies have offered bonuses tied to worker attendance); Polly Mosendz et al., *U.S. Meat Plants are Deadly as Ever, With No Incentive to Change*, Bloomberg Businessweek (June 18, 2020), https://www.bloomberg.com/news/features/2020-06-18/how-meat-plants-were-allowed-to-become-coronavirus-hot-spots (describing a COVID-19 outbreak at a JBS meatpacking plant in Cactus, Texas and reporting that "the CDC warned JBS on April 20 to stop offering inducements for workers to come in, but JBS ultimately didn't follow the agency's advice").

[37] *See* Deena Shanker & Jen Skerritt, *Tyson Reinstates Policy that Penalizes Absentee Workers*, Bloomberg (June 2, 2020), https://www.bloomberg.com/news/articles/2020-06-03/tyson-reinstates-policy-that-penalizes-absentee-workers; *see also* Jerald Brooks & Lakesha Bailey, *We're Feeding America, but We're Sacrificing Ourselves*, N.Y. Times (June 15, 2020), https://www.nytimes.com/2020/06/15/opinion/coronavirus-tyson-poultry.html?action=click&module=Opinion&pgtype=Homepage.

[38] *See* Polly Mosendz et al., *U.S. Meat Plants are Deadly as Ever, With No Incentive to Change*, Bloomberg Businessweek (June 18, 2020), https://www.bloomberg.com/news/features/2020-06-18/how-meat-plants-were-allowed-to-become-coronavirus-hot-spots (describing that "The nation may now be experiencing a second wave of the virus outbreak, with case counts mounting in Texas, Arizona, and other red states where meatpacking is more common. On June 5, JBS's Cactus location sent workers home with 10-pound boxes of chicken tenders. The state had 1,693 new COVID-19 cases that day").

B. The Meat Industry Has Responded to Problems at Slaughterhouses by Killing Millions of Farm Animals.

The animal agricultural industry is highly consolidated and vertically integrated. Currently, just four corporations control 85% of beef processing, three corporations control 63% of pig processing, and half of all chicken growers report they have just one or two buyers for their birds.[39] In addition to maintaining control over processing, major meat companies often own animals during all stages of production, and contract with livestock growers to raise those animals prior to slaughter.

Without prompt access to slaughterhouses, meat companies and livestock growers have found themselves faced with three choices: (1) hold animals on the industrial livestock operations where they are raised indefinitely, (2) identify alternate channels for slaughter, or (3) kill animals and dispose of their carcasses, even if they cannot be processed into food. The meat industry has explained that the first choice is unsatisfactory because animals may outgrow slaughter equipment and, in any case, the "just-in-time" system operates such that a new generation of farm animals is already waiting to take the existing generation's place.[40] According to the National Pork Producers Council (NPPC), the second choice, identifying alternate channels for slaughter, "isn't a solution to the supply bottleneck challenge faced by pork producers," in part because "local butchers and other alternative channels simply cannot absorb the number of hogs backed up."[41] Thus, meat companies and growers apparently have concluded that the majority of animals must be killed—or, in industry parlance, depopulated—even if they cannot be used for food.[42]

Meatpackers began raising alarm bells about the growing animal backlog as early as April.[43] On April 26, John Tyson, the chairman of Tyson Foods, took out full page ads in major

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[39] *See* U.S. Dept. of Agric., *Grain Inspection, Packers and Stockyards Administration, 2016 Annual Report: Packers and Stockyards Program* (2016), https://www.gipsa.usda.gov/psp/publication/ar/2016_psp_annual_report.pdf; *see also* Philip H. Howard, *Corporate Concentration in Global Meat Processing: The Role of Feed and Finance Subsidies*, in *Global Meat: Social and Environmental Consequences of the Expanding Meat Industry*, at 31 (2019); James M. MacDonald, *Technology, Organization, and Financial Performance in U.S. Broiler Production*, U.S. Dept. of Agric., (June 2014), https://www.ers.usda.gov/publications/pub-details/?pubid=43872.

[40] *See* Letter from Kim Reynolds, Governor of Iowa, et al., to Vice President & Members of the Coronavirus Task Force (Apr. 27, 2020) https://www.grassley.senate.gov/sites/default/files/Iowa%20group-2020-covid-pork-letter-1.pdf; *see also* NPPC Letter at 4.

[41] Lisa Held, *Struggling Farmers Are Selling Midwest Hogs Ad Hoc and Online*, Civil Eats (June 8, 2020), https://civileats.com/2020/06/08/struggling-farmers-are-selling-midwest-hogs-ad-hoc-and-online/.

[42] *See* Michael Corkery & David Yaffe-Bellany, *Meat Plant Closures Mean Pigs Are Gassed or Shot Instead*, N.Y. Times (May 14, 2020), https://www.nytimes.com/2020/05/14/business/coronavirus-farmers-killing-pigs.html.

[43] *See* Tom Polansek & P.J. Huffstutter, *Piglets Aborted, Chickens Gassed as Pandemic Slams Meat Sector*, Reuters (April 27, 2020) https://www.reuters.com/article/us-health-coronavirus-livestock-insight/piglets-aborted-chickens-gassed-as-pandemic-slams-meat-sector-idUSKCN2292YS (Anecdotally

newspapers including the New York Times, Washington Post, and Arkansas Democrat-Gazette, warning that "millions of animals – chickens, pigs and cattle – will be depopulated because of the closure of our processing facilities."[44] By late June, depopulation efforts were ongoing in leading agricultural states across the country, including Minnesota,[45] North Carolina, Iowa, and Colorado.[46] Poultry producers have already euthanized more than 10 million hens.[47] The pork industry has warned that it could euthanize more than 10 million pigs by September.[48] And, as explained above, coronavirus infections recently spiked across the South and West, indicating that the crisis is far from over.

C. APHIS Is Assisting the Meat Industry as it Depopulates Industrial Animal Feeding Operations and Disposes of Farm Animal Carcasses.

In April, APHIS established the NICC to "provide direct support to producers whose animals cannot move to market as a result of processing plant closures due to COVID-19."[49] Among other activities, the NICC is "advis[ing] and assist[ing] on depopulation and disposal methods" and "[d]eploy[ing] assets of [APHIS's] National Veterinary Stockpile (including captive bolt guns and cartridges, chutes and trailers, and personal protective equipment)."[50]

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explaining that even before closures were widespread, "packers are backed up every day, more and more").

[44] Nathan Borney, *Tyson Chairman Warns of 'Meat Shortages' as Industry Faces Scrutiny for Worker Safety During Coronavirus*, USA Today (Apr. 27, 2020), https://www.usatoday.com/story/money/2020/04/27/tyson-meat-shortages-coronavirus-covid-19/3034748001/.

[45] *See* Liz Crampton, *Farmers Still Plagued by Hog Backlog*, Politico (June 19, 2020), https://www.politico.com/newsletters/morning-agriculture/2020/06/19/farmers-still-plagued-by-hog-backlog-788665.

[46] *See, e.g.*, Tammy Grubb, *Coronavirus Outbreaks at Processors Force NC Farmers to Start killing 1.5M Chickens*, The News & Observer (May 23, 2020, last updated May 28, 2020) (North Carolina) https://www.newsobserver.com/news/business/article242944156.html; CNN Newsource, *2 Million Chickens Being Killed Because Processing Plants are Short-staffed*, The Denver Channel (Apr. 27, 2020) (Colorado), https://www.thedenverchannel.com/news/national/coronavirus/2-million-chickens-being-killed-because-processing-plants-are-short-staffed; Matthew Scully, *The Human Cost of 'Culling' Livestock and 'Depopulating' Farms*, Nat'l Rev. (May 7, 2020) (Iowa), https://www.nation/2020/05/coronavirus-pandemic-human-cost-of-culling-livestock-depopulating-farms/.

[47] *See* Sophie Kevany, *Millions of U.S. Farm Animals to be Culled by Suffocation, Drowning, and Shooting*, The Guardian (May 19, 2020), https://www.theguardian.com/environment/2020/may/19/19/millions-of-us-farm-animals-to-be-culled-by-suffocation-drowning-and-shooting-coronavirus?fbclid=IwAR0l44gqUoLWzxVv-O5r1Uwm8sQAmWqQy8dFKaJTE1ikR8Y2vpgS0-VHhFc

[48] *See* Audrey Conklin, *Coronavirus May Force Hog Farmers to Kill 10M Pigs by September*, Fox Business (May 17, 2020), https://www.foxbusiness.com/markets/farmers-euthanize-10-million-pigs-coronavirus; *see also* NPPC Letter at 3.

[49] APHIS NICC Press Release.

[50] *Id.*; *see also APHIS Livestock Coordination Center*, U.S. Dep't of Agric., https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/livestock-coordination-center/livestock-coordination-center (last visited June 10, 2020).

On May 8, NPPC wrote to the U.S. Department of Justice (DOJ) requesting a "Business Review Letter" to confirm that industry coordination in euthanizing and disposing of an estimated 700,000 hogs per week would not violate antitrust laws.[51] According to NPPC, approximately 44% of pork-production capacity was offline as of April 29.[52] NPPC determined that "a coordinated industry and governmental response is necessary to ethically and efficiently euthanize as few hogs as possible," in part because "hog farmers generally lack the knowledge, equipment, and facilities needed to humanely euthanize large numbers of animals, and then dispose of them in a manner that mitigates the environmental impact."[53] Thus, NPPC argued, "to ensure that animals are disposed of in an environmentally responsible manner, the NPPC, working *under the direction and supervision of the USDA* and state and local officials, must be prepared to provide clear and consistent guidance with regard to how producers should dispose of these animals."[54]

On May 15, DOJ responded to NPPC's request and indicated that DOJ does not currently intend to pursue antitrust enforcement actions against hog producers who are "'acting at [the NICC's] direction in the context of a clearly defined federal program' and in furtherance of that program."[55] DOJ indicated that the response was consistent with its general policy against "challeng[ing] conduct aimed at addressing COVID-19 if it is (i) 'compelled by an agreement with a federal agency or a clearly defined federal government policy' and (ii) 'supervised by a federal agency.'"[56] In applying this general policy to NPPC, DOJ relied on NPPC's representations that "most of [NPPC's planned] conduct will occur at the direction and under the supervision and coordination of the USDA—a government agency."[57]

D. Some Methods for Depopulation and Disposal Raise Serious Concerns for Animal Welfare, Public Health, and the Environment.

Meat industry representatives consider the depopulation and disposal of millions of animals nationwide to be "a grim necessity."[58] As APHIS has acknowledged, "[p]sychological

[51] NPPC Letter at 1,3.
[52] *Id*. at 3–4.
[53] *Id*. at 3, 4.
[54] *Id*. at 5 (emphasis added).
[55] Letter from the Honorable Makan Delrahim, Assistant Att'y General for Antitrust, U.S. Dep't of Justice, to Martin M. Toto, Att'y, White & Case LLP, at 4 (May 15, 2020), https://www.justice.gov/opa/press-release/file/1276971/download (citations omitted).
[56] *Id*. (citing Letter from the Honorable Makan Delrahim, Assistant Att'y General for Antitrust, U.S. Dep't of Justice, to Lori A. Schechter, McKesson Corp., et al., at 8 (Apr. 4, 2020), https://www.justice.gov/atr/page/file/1266511/download; Letter from the Honorable Makan Delrahim, Assistant Att'y General for Antitrust, U.S. Dep't of Justice, to John G. Chou, Exec. Vice President, AmerisourceBergen, at 8 (Apr. 20, 2020), https://www.justice.gov/atr/page/file/1269911/download.
[57] *Id*. at 1.
[58] Matthew Scully, *The Human Cost of 'Culling' Livestock and 'Depopulating' Farms*, Nat'l Rev. (May 7, 2020), https://www.nationalreview.com/2020/05/coronavirus-pandemic-human-cost-of-culling-livestock-depopulating-farms/.

hazards arise from the emotional reaction evoked by massive volumes of carcasses," among industry actors and neighbors alike.[59] In addition to these psychological risks—and the financial hardship that can result from the purposeless extermination of farm animals—depopulation and disposal can raise serious concerns for animal welfare, public health, and the environment. The risks associated with depopulation and disposal illustrate the importance of additional federal oversight and transparency.

Numerous methods for depopulation and disposal currently are available to the meat industry, and different methods have different implications for animal welfare, public health, and the environment.[60] As the National Pork Board explained during a presentation in April, the American Veterinary Medical Association's Guidelines for the Depopulation of Animals (AVMA Guidelines)[61] allow depopulation by gunshot, nonpenetrating captive bolt, penetrating captive bolt, electrocution, manual blunt force trauma, carbon dioxide, anesthetic overdose, ventilator shutdown, sodium nitrite, or use of injectable euthanasia agents.[62] Although some of these depopulation techniques are "preferred," while others are merely "permitted," the Guidelines do not designate *any* techniques as "not recommended" for hog depopulation.[63]

[59] EIS at 97.
[60] The AVMA Guidelines concede that "the emergency destruction of animals through depopulation techniques may not guarantee that the deaths the animals face are painless and distress free." AVMA Guidelines at 4.
[61] Both APHIS and the meat industry rely on the AVMA Guidelines. *See* USDA, "For Affected Producers," *APHIS Livestock Coordination Center*, U.S. Dep't of Agric., https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/livestock-coordination-center/livestock-coordination-center (last visited June 10, 2020) (directing livestock producers to the AVMA Guidelines, among other resources); *see also, e.g.*, *Pork Producer Webinar: Planning for Emergency Depopulation and Disposal*, Nat'l Pork Bd., (Apr. 26, 2020), https://www.pork.org/public-health/what-you-need-to-know-about-covid-19/pork-industry-covid-19-webinars/(incorporating information from the AVMA Guidelines).
[62] *See Pork Producer Webinar: Planning for Emergency Depopulation and Disposal*, Nat'l Pork Bd., (Apr. 26, 2020), https://www.pork.org/public-health/what-you-need-to-know-about-covid-19/pork-industry-covid-19-webinars/.
[63] *Id.; see also* AVMA Guidelines at 45.

Pork Producer Webinar: Planning for Emergency Depopulation and Disposal

Indeed, the AVMA Guidelines designate only a handful of depopulation techniques as not recommended for any category of industrial livestock,[64] and some techniques that the AVMA Guidelines designate as *preferred*—such as smothering hens with water-based foam—have been condemned as inhumane by other authorities.[65] The AVMA Guidelines do not forbid any depopulation techniques.

Once animals have been euthanized, the meat industry currently has a variety of options for carcass disposal. As the National Pork Board explained during its April presentation, these options include burial and on-site incineration.[66]

[64] *See* AVMA Guidelines at 36, 53, 54. Horses, aquatic animals, animals given outdoor access, or animals classified as "companion, lifestyle, or high-value" are not included in Petitioners' summary.
[65] *See* Sophie Kevany, *Millions of U.S. Farm Animals to be Culled by Suffocation, Drowning, and Shooting*, The Guardian (May 19, 2020), https://www.theguardian.com/environment/2020/may/19/19/millions-of-us.-farm-animals-to-be-culled-by-suffocation-drowning-and-shooting-coronavirus?fbclid=IwAR0l44gqUoLWzxVv-O5r1Uwm8sQAmWqQy8dFKaJTE1ikR8Y2vpgS0-VHhFc (explaining that, although "[w]ater-based foaming is categorised as the 'preferred method [for depopulating some birds] by the AVMA, . . . "[a] 2019 European Food Safety Authority journal report said it did not find water-based or firefighting foam acceptable because 'death due to drowning in fluids or suffocation by occlusion of the airways' is not seen as 'a humane method for killing animals, including poultry'").
[66] *See Pork Producer Webinar: Planning for Emergency Depopulation and Disposal*, Nat'l Pork Bd., (Apr. 26, 2020), https://www.pork.org/public-health/what-you-need-to-know-about-covid-19/pork-industry-covid-19-webinars/.

According to APHIS, burial and on-site incineration "have the greatest impacts to the environment" and, thus, "must only be used after carefully weighing risk factors."[67] For instance, APHIS has acknowledged that "[t]he burial of carcasses may impact the quality of surface and ground water resources," including drinking water, by leaching contaminants that migrate into water through the surrounding soil.[68] In addition, open-air burning releases "potentially high levels of air pollution, large amounts of potentially contaminated ash (dioxins, heavy metals), leachate, and unwanted heat."[69] Despite these risks, APHIS currently allows the industry to use unlined burial and on-site incineration for carcass disposal.

Not only do depopulation and disposal methods raise serious concerns for animal welfare, public health, and the environment *individually*, certain depopulation and disposal techniques pose additional risks when used *in combination*. For example, if animals are shot with lead bullets and then buried in unlined pits, lead can migrate into the soil and contaminate nearby water and plants, putting people and wildlife at risk.[70] Experts agree that there is no safe level of exposure to lead.[71]

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[67] EIS at vii.
[68] *Id.* at 5, 81.
[69] *Id.* at 44.
[70] *See, e.g.*, Ctr. for Biological Diversity, et al., *Petition to the Environmental Protection Agency to Ban Lead Shot, Bullets, and Fishing Sinkers Under the Toxic Substances Control Act*, at 8 (2010), https://www.biologicaldiversity.org/campaigns/get_the_lead_out/pdfs/Final_TSCA_lead_ban_petition_8-3-10.pdf.
[71] *See, e.g.*, American Academy of Pediatrics, *Lead Exposure in Children* (2016), https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/lead-exposure/Pages/Lead-Exposure-in-Children.aspx#:~:text=There%20is%20no%20safe%20level,Prevention%20recommends%20evaluation%20and%20intervention.

Similarly, depopulation through suffocation by foam poses serious threats to people and the environment, especially if the resulting animal carcasses are buried in unlined pits. Foam is a mixture of air, detergent or surfactant, and water.[72] Over time, foam breaks down, and its components can flow from farm animal depopulation sites into nearby water[73] and soil.[74] This contamination is especially troubling because some commonly used foams contain dangerous chemicals known as per- and polyfluoroalkyl substances (PFAS). [75] Once in the environment, PFAS spread quickly, resist degradation, and bioaccumulate in plants, animals, and humans.[76] Exposure to PFAS has been linked to cancer, elevated cholesterol, obesity, immune suppression, pre-eclampsia, impaired liver and kidney function, and endocrine disruption.[77] PFAS can be highly toxic even in small doses.[78] Senior CDC officials have warned that the presence and concentrations of PFAS chemicals in U.S. drinking water is "one of the most seminal public health challenges for the next decades."[79] But APHIS currently allows the meat industry to bury animals suffocated with foam in unlined pits, providing a direct pathway to the contamination of groundwater and, potentially, well water.

E. Extreme Weather Events Can Exacerbate the Harms of Irresponsible Carcass Disposal, while also Causing Additional Mortalities.

Like depopulation methods, extreme weather events can increase the risks associated with mass carcass disposal. And extreme weather events are becoming increasingly frequent and severe due to climate change.[80] Indeed, experts anticipate that the 2020 Atlantic hurricane

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[72] *See* Shailesh Gurung et al., *Depopulation of Caged Layer Hens with a Compressed Air Foam System*, 8 Animals 11 (2018).
[73] *See* Ctr. for Food Sec. & Pub. Health at Iowa State Uni., *Water Based-Foam Depopulation: For Poultry During Animal Health Emergencies* (2016), http://www.cfsph.iastate.edu/Emergency-Response/Just-in-Time/15-Euthanasia_Water-based-Foam-For-Poultry-Depopulation_HANDOUT.pdf.
[74] *See, i.e., Aqueous Film Forming Foam (AFFF)*, State of Alaska, Dep't of Envtl. Conservation, https://dec.alaska.gov/spar/csp/pfas/firefighting-foam/.
[75] *Id.*
[76] *See* Hearing on "Examining the Federal Response to the Risks Associated with Per- and Polyfluoroalkyl Substances (PFAS)" Before the S. Comm. on Env't & Pub. Works, 1 (2019) (Testimony of Linda S. Birnbaum, Director, Nat'l Inst. Envtl. Health Sci. & Nat'l Toxicology Program Nat'l Insts. Health), https://www.niehs.nih.gov/about/assets/docs/hearing_on_examining_the_federal_response_to_the_risks_associated_with_per_and_polyfluoroalkyl_substances_pfas_508.pdf.
[77] *See* U.S. Dep't of Health & Human Servs., Agency for Toxic Substances & Disease Registry, *Toxicological Profile for Perfluoroalkyls, Draft for Public Comment* (2018), https://www.atsdr.cdc.gov/toxprofiles/tp200.pdf
[78] *Id*.
[79] Pat Rizzuto et al., *CDC Sounds Alarm on Chemical Contamination in Drinking Water*, Bloomberg Law (Oct. 17, 2017), https://news.bloombergenvironment.com/environment-and-energy/cdc-sounds-alarm-on-chemical-contamination-in-drinking-water.
[80] *See* U.S. Global Change Research Program, *Fourth National Climate Assessment: Impacts, Risks, and Adaptation in the United States, Volume II* (2018), http://nca2018.globalchange.gov/downloads/NCA4_2018_FullReport.pdf; *see also* Gabriele Villarini & Gabriel Vecchi, *Projected Increases in North Atlantic Tropical Cyclone Intensity from CMIP5 Models*, 26

season, which extends from June 1 to November 30, will be unusually active, producing as many as 10 hurricanes, including 6 "major" hurricanes (category 3, 4, or 5)—that is, about twice as many extreme storms as the average season.[81] As hurricane season reaches its peak in the midst of the COVID-19 crisis, severe storms could flood areas in which recently depopulated animals have been buried, posing additional risks to people and the environment, while also killing and triggering the depopulation of additional animals whose carcasses will require disposal. Thus, the potential for extreme weather must be considered in determining appropriate methods for the disposal of farm animal carcasses.

During the past twenty years, North Carolina has endured at least four hurricanes that caused significant flooding and led to the deaths of many farm animals: Hurricane Floyd in 1999,[82] Hurricane Irene in 2011,[83] Hurricane Matthew in 2015,[84] and Hurricane Florence in 2018.[85] These storms have been catastrophic for neighboring communities and the environment. For instance, Hurricanes Florence and Matthew impaired water quality directly by flooding and breaching manure lagoons at animal feeding operations.[86] Hurricane Floyd "killed approximately 3 million poultry, 800 cattle, and 30,000 hogs in North Carolina."[87] Although APHIS has acknowledged that "[u]nlined burial and open-air burning of carcasses during a mass animal health emergency are expected to have the greatest impacts to the environment,"[88] the Agency also recognizes that "many people decide[] to bury the carcasses [resulting from hurricanes and

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J. Climate 3231 (2013); Enrico Scoccimarro et al., *Intense Precipitation Events Associated with Landfalling Tropical Cyclones in Response to a Warmer Climate and Increased CO2*, 27 J. Climate 4642 (2014); Donald Wuebbles et al., *CMIP5 Climate Model Analyses: Climate Extremes in the United States*, 95 Am. Meterological Soc'y J. 571 (2014); Brian A. Colle et al., *Historical Evaluation and Future Prediction of Eastern North American and Western Atlantic Extratropical Cyclones in the CMIP5 Models During the Cool Season*, 26 J. Climate 6882 (2013).

[81] Nat'l Oceanic and Atmospheric Admin., *Busy Atlantic Hurricane Season Predicted for 2020: Multiple Climate Factors Indicate Above-Normal Activity is Most Likely* (May 21, 2020), https://www.noaa.gov/media-release/busy-atlantic-hurricane-season-predicted-for-2020.

[82] *See Event Overview, Hurricane Floyd Storm Summary*, Nat'l Weather Serv., Nat'l Oceanic & Atmospheric Admin., https://www.weather.gov/mhx/Sep161999EventReview (last visited February 22, 2019).

[83] *See Event Overview, Hurricane Irene August 26-27, 2011*, Nat'l Weather Serv., Nat'l Oceanic & Atmospheric Admin., https://www.weather.gov/mhx/Aug272011EventReview (last visited February 22, 2019).

[84] *See Hurricane Matthew, October 8-9, 2016 Summary*, Nat'l Weather Serv., Nat'l Oceanic & Atmospheric Admin, https://www.weather.gov/mhx/MatthewSummary(last visited February 22, 2019).

[85] *See* Stacy R. Stewart & Robbie Berg, *National Hurricane Center Tropical Cyclone Report Hurricane Florence*, Nat'l Weather Serv., Nat'l Oceanic & Atmospheric Admin (2018), https://www.nhc.noaa.gov/data/tcr/AL062018_Florence.pdf .

[86] *See* Kendra Pierre-Louis, *Lagoons of Pig Waste Are Overflowing After Florence. Yes, That's as Nasty as It Sounds*, N.Y. Times (Sept. 19, 2018), https://www.nytimes.com/2018/09/19/climate/florence-hog-farms.html.

[87] EIS at 34.

[88] *Id*. at vi.

other natural disasters] in unlined pits or trenches."[89] Without additional oversight, there is no reason to suppose that the meat industry will behave differently this year, amidst the COVID-19 pandemic.

Like hurricanes, wildfires and droughts can compound the harms of inappropriate carcass disposal, while also causing additional mortalities. During wildfire events, farm animals can be killed by fire, smoke inhalation, burn infections, and heat stress; in addition, animals seriously injured by fires often are euthanized.[90] Previous wildfire seasons have led to significant farm animal losses: in 2017, devastating fires across the Great Plains killed about 2,500 cattle and 1,900 hogs in Texas, and injured or killed up to 80% of herds at ranches in Kansas.[91] In April 2018, wildfires in Oklahoma killed more than 1,600 cattle.[92] Fast-moving blazes caused by strong winds, which have characterized recent wildfire seasons, pose especially high risks for animal operations.[93] Travel restrictions related to the COVID-19 pandemic may limit emergency evacuation options, increasing the risk that wildfires will cause significant livestock mortalities. And experts already are predicting "above normal significant large fire potential[s]" until August of this year.[94] It is imperative that the meat industry prepare for the possibility that significant numbers of animals will die as a result of wildfires into account as it disposes of animal killed in connection with the COVID-19 pandemic.

V. ARGUMENTS IN SUPPORT OF REQUESTED ACTION

A. APHIS Has Authority to Adopt the Requested Rule.

Congress established USDA, in part, "to acquire and to diffuse among the people of the United States useful information on subjects connected with agriculture."[95] As an agency within USDA, APHIS works "to provide leadership in ensuring the health and care of animals and plants, improve agricultural productivity and competitiveness, and contribute to the national

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[89] *Id*. at 5.
[90] *See, i.e.*, Kay Ledbetter, *Wildfire Damage to Cattle may be More Than the Eye can See*, AgriLife Today (Apr. 19, 2011), https://texashelp.tamu.edu/wp-content/uploads/2016/02/Wildfire_damage_to_cattle_may_be_more_than_the_eye_can_see.pdf.
[91] *See* Greg Cima, *Wildfires Kill Cattle, Pigs: Thousands of Animals Dead, Ranches Devastated*, J. Am. Veterinary Med. Ass'n (Apr. 12, 2017), https://www.avma.org/javma-news/2017-05-01/wildfires-kill-cattle-pigs; *see also* Jack Healy, *Burying Their Cattle, Ranchers Call Wildfires 'Our Hurricane Katrina'*, N.Y. Times (Mar. 20, 2017), https://www.nytimes.com/2017/03/20/us/burying-their-cattle-ranchers-call-wildfires-our-hurricane-katrina.html.
[92] *See* Donald Stotts, *Cattle Operation Losses from Wildfires Exceed $26 million*, FarmProgress (May 8, 2018), https://www.farmprogress.com/livestock/cattle-operation-losses-wildfires-exceed-26-million.
[93] *See, i.e.*, Emma Bowman, *As California Wildfire Neared, A Family Raced to Save its Animals*, NPR (Nov.1, 2019), https://www.npr.org/2019/11/01/774773257/before-california-wildfire-devastates-farm-family-races-to-save-animals.
[94] *See* Nat'l Interagency Fire Ctr., *National Significant Wildland Fire Potential Outlook* (2020), https://www.predictiveservices.nifc.gov/outlooks/monthly_seasonal_outlook.pdf.
[95] 7 U.S.C. § 2201.

economy and the public health."[96] In pursuing this mission, APHIS "is committed . . . to promot[ing] and protect[ing] the integrity of the environment."[97]

The Animal Health Protection Act (AHPA) authorizes the Secretary of Agriculture (Secretary) to take remedial actions, including providing destruction and disposal services and compensation, with respect to any animal entering the country or moving through interstate commerce that "may carry, may have carried, or may have been affected with or exposed to any pest or disease of livestock."[98] The Secretary has delegated this authority under the AHPA to APHIS.[99] In carrying out its responsibilities under the APHA, APHIS may cooperate with other federal agencies, states, and Tribal nations.[100]

Under the AHPA, APHIS's authority is especially broad during "extraordinary emergenc[ies]."[101] APHIS has interpreted its authority to encompass carcass management related to *any* mass animal health emergency, including one arising from a natural disaster.[102] In December 2015, APHIS published a Final Programmatic Environmental Impact Statement (EIS) "analyz[ing] the environmental effects associated with various carcass management alternatives that could be implemented during a mass animal health emergency."[103] The purpose of this EIS was "to enhance emergency preparedness, and to allow for greater use of *improved* carcass management options in addition to the traditional methods of unlined burial and open-air burning during mass animal health emergencies."[104] In publishing this EIS, APHIS relied on its authority under the APHA.[105]

APHIS's existing regulations prescribe methods of livestock depopulation and disposal, and mandate record-keeping in a variety of circumstances. For instance, APHIS requires that certain diseased pigs "be disposed of by burial, incineration, or other disposal means authorized by state law . . . in the presence of an APHIS representative."[106] APHIS also requires that the

[96] Notice of Request for Extension of Approval of an Information Collection; Environmental Monitoring, 85 Fed. Reg. 31,135 (May 22, 2020).
[97] *Id*.
[98] 7 U.S.C. § 8306(a)(1)(B); *see id.* § 8306(d).
[99] 7 C.F.R. § 2.80(a)(37).
[100] 7 U.S.C. § 8310(a).
[101] *Id*. § 8306(b)(1).
[102] *See* EIS at 4; *see also id.* at 9 (asserting "APHIS'[s] authority to manage carcasses during a mass animal health emergency")
[103] *Id.* at v.
[104] *Id.* (emphasis added).
[105] *See id*. at 8.
[106] 9 C.F.R. § 51.6; *see also id*. § 56.5 (explaining that APHIS and its state-agency counterpart will determine appropriate methods of disposal for poultry killed in connection with efforts to control avian influenza, and appropriate methods of disposal may include "[b]urial, incineration, composting, or rendering").

disposal of certain diseased cattle be documented by a report or affidavit "that identifies the animals and describes their disposition . . . for information purposes only."[107]

On April 28, President Trump issued an Executive Order that directed USDA "to determine the proper . . . allocation of all the materials, services, and facilities necessary to ensure the continued supply of meat."[108] Around the same time, as explained above, APHIS established the NICC to "advise and assist on [farm animal] depopulation and disposal methods."[109] According to the Department of Justice, the "NICC will work with farmers and packers to facilitate hog depopulation," including by "tell[ing] those producers where they should take . . . hogs to be depopulated."[110]

APHIS's authority encompasses the requested rulemaking. A decision to restrict the most environmentally harmful carcass disposal practices is consistent with APHIS's commitment to promote and protect the integrity of the environment, its authority to manage animal health emergencies under the AHPA, its existing regulations prescribing certain disposal practices, and its stated intent to advise and assist with animal depopulation and disposal in the present instance. Similarly, a decision to provide the public with prompt notice about disposal is consistent with USDA's information-sharing mission and APHIS's existing regulations requiring record-keeping for information purposes.

Not only does APHIS have authority to enact the requested rules, the rules are consistent with the minimum federal supervision DOJ has identified as *necessary* to reduce the possibility that the meat industry's coordinated depopulation and disposal efforts will violate antitrust laws. (Of course, the requested rules would not and could not insulate the industry from antitrust liability for anticompetitive activities.) As explained above, a handful of powerful corporations dominate meat production worldwide. The consolidation of power in the industry has long raised concerns, including in the context of the COVID-19 pandemic.[111] DOJ has indicated that it does not *currently* intend to challenge certain actions related to hog depopulation and disposal because producers "will be acting at [the] direction [of the NICC] in the context of a clearly defined federal program' and in furtherance of that program," and "their actions will be 'at the direction

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[107] *Id*. § 50.19.
[108] Delegating Authority Under the Defense Production Act With Respect to Food Supply Chain Resources During the National Emergency Caused by the Outbreak of COVID-19, Exec. Order. No. 13,917, 85 Fed. Reg. 26,313, 26,314 (April 28, 2020).
[109] APHIS NICC Press Release.
[110] Letter from the Honorable Makan Delrahim, Assistant Att'y General for Antitrust, U.S. Dep't of Justice, to Martin M. Toto, Att'y, White & Case LLP, at 4 (May 15, 2020), https://www.justice.gov/opa/press-release/file/1276971/download.
[111] *See* Alex Gangitano, *Bipartisan Pair of Senators Request Antitrust Probe into Meatpacking Industry*, The Hill (Apr. 29, 2020), https://thehill.com/homenews/senate/495197-hawley-baldwin-request-antitrust-investigation-into-meatpacking-industry; *see also* David McLaughlin, *DOJ Subpoenas Meatpackers*, FarmProgress (June 5, 2020), https://www.farmprogress.com/business/doj-subpoenas-meatpackers.

and supervision of the USDA.'"[112] By enacting the requested rules, APHIS will provide supervision necessary to reduce violations of antitrust laws and associated harm to consumers, while also helping to protect people and the environment.

B. APHIS's Current Approach Creates an Urgent Need for the Requested Rule.

i. APHIS's failure to prohibit the most environmentally harmful carcass disposal practices puts low-wealth communities and communities of color at greater risk of adverse health impacts.

Adverse outcomes from COVID-19 disproportionately burden rural communities, low wealth communities, and communities of color. These same communities also experience higher exposures to air and water pollution per capita, and bear a higher burden of disease. APHIS's failure to prohibit the most environmentally harmful carcass disposal practices puts these communities at greater risk. The requested rules will benefit communities by immediately prohibiting the most harmful practices and ensuring that people living near carcass disposal locations have the information they need to protect themselves from additional adverse health impacts.

The people most burdened by environmental pollution are among those most vulnerable to COVID-19. People who live and work next to industrial facilities, for example, are more likely to suffer from chronic illnesses like diabetes and asthma.[113] Individuals with underlying health conditions like diabetes and asthma are at greater risk of serious illness or death from COVID-19.[114]

Like other industries, industrial animal agriculture is a significant source of air and water pollution. Animals at concentrated animal feeding operations (CAFOs) produce lots of pollution, much of it coming from the tremendous quantities of fecal waste they generate every day, which contains harmful substances. CAFOs are a source of many water pollutants such as pathogenic bacteria including *E. coli* and *Cryptosporidium*, nitrogen, and phosphorous.[115] People living near CAFOs are more likely to be exposed to infectious viral and bacterial agents. Concerning levels of antibiotic-resistant bacteria have been found in residential air samples downwind of

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[112] Letter from the Honorable Makan Delrahim, Assistant Att'y General for Antitrust, U.S. Dep't of Justice, to Martin M. Toto, Att'y, White & Case LLP, at 4 (May 15, 2020), https://www.justice.gov/opa/press-release/file/1276971/download.

[113] *See* Envtl. Justice Health All. et al., *Life at the Fenceline: Understanding Cumulative Health Hazards in Environmental Justice Communities* 2, 16–17 (2018), https://new.comingcleaninc.org/assets/media/documents/Life%20at%20the%20Fenceline%20-%20English%20-%20Public.pdf.

[114] *See* Roni Caryn Rabin, *Coronavirus Threatens Americans with Underlying Conditions*, N.Y. Times (Mar. 12, 2020), https://www.nytimes.com/2020/03/12/health/coronavirus-midlife-conditions.html.

[115] *See, e.g. Literature Review of Contaminants in Livestock and Poultry Manure and Implications for Water Quality*, EPA, EPA 820-R-13-002, 5 (July 2013) (listing the health impacts of these pollutants); Comptroller & Auditor General, *The 2001 Outbreak of Foot and Mouth Disease*, Nat'l Audit Office (2002), https://www.nao.org.uk/wp-content/uploads/2002/06/0102939.pdf.

CAFOs.[116] In one instance, researchers found nearly 140 strains of bacteria in air samples near a single CAFO, of which 121 strains were resistant to at least two different antibiotics.[117]

Air pollutants from CAFOs include ammonia (NH_3), hydrogen sulfide (H_2S), particulate matter ($PM_{2.5}$ and PM_{10}) and bacteria.[118] Exposure to these pollutants can induce respiratory problems and exacerbate pre-existing conditions, such as asthma.[119] Residents in communities near CAFOs suffer from odor-induced headaches, runny noses, sore throats, excessive coughing, nausea, burning eyes, and other symptoms associated with CAFO air pollution.[120] In addition, air pollution from CAFOs is "strongly correlated" with infant mortality.[121] Farmers and growers themselves often have a high incidence of respiratory related illnesses due to particulate matter,[122] and additional pollution, such as that generated by carcass incineration, are also harmful to their health.

The health threats from this pollution have become extremely acute during the COVID-19 pandemic. Preliminary studies from across the world have consistently found higher mortality rates from COVID-19 in areas with more air pollution.[123] A Harvard University study examining more than 3,000 counties in the US found that even "a small increase in long-term exposure to $PM_{2.5}$ leads to a large increase in the COVID-19 death rate."[124] Experts hypothesize that the inflammation caused by pollution-related respiratory conditions causes severe responses to

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[116] *See* Shawn G. Gibbs et al., *Airborne Antibiotic Resistant and Nonresistant Bacteria and Fungi Recovered from Two Swine Herd Confined Animal Feeding Operations*, 1 J. Occupational & Envtl. Hygiene 699 (2004).
[117] *See* Amy Chapin et al., *Airborne Multidrug-Resistant Bacteria Isolated from a Concentrated Swine Feeding Operation*, 113 Envtl. Health Persp. 137, 137-42 (2005).
[118] *See* Carrie Hribar, *Understanding Concentrated Animal Feeding Operations and Their Impact on Communities*, Nat'l Ass'n of Local Bds. of Health (2010), https://www.cdc.gov/nceh/ehs/docs/understanding_cafos_nalboh.pdf.
[119] *See* Steve Wing et al., *Air Pollution and Odor in Communities near Industrial Swine Operations*, 116 Envtl. Health Persp. 1362 (2008).
[120] *Id.*
[121] Stacy Sneeringer, *Does Animal Feeding Operation Pollution Hurt Public Health? A National Longitudinal Study of Health Externalities Identified by Geographic Shifts in Livestock Production*, 91 Am. J. of Agric. Econ. 124, 130 (2009).
[122] *See* Michael Greger & Gowri Koneswaran, *The Public Health Impacts of Concentrated Animal Feeding Operations on Local Communities*, 33 Family & Community Health 373 (2010), https://www.humanesociety.org/sites/default/files/docs/public-impacts-factory-farms-on-communities.pdf.
[123] *See* Alex Fox, *Air Pollution May Make COVID-19 Symptoms Worse*, Smithsonian Mag. (May 7, 2020), https://www.smithsonianmag.com/smart-news/lockdown-clears-skies-research-links-air-pollution-pandemics-death-toll-180974814/.
[124] Xiao Wu et al., *Exposure to Air Pollution and COVID-19 Mortality in the United States: A Nationwide Cross-sectional Study*, Harv. Uni. Dep't of Biostatistics (2020), https://projects.iq.harvard.edu/covid-pm.

COVID-19.[125] Importantly, beyond those direct disposal-related exposure pathways, research reveals that people living near industrial food animal production facilities often already have a baseline elevated risk for health conditions relevant to COVID-19 vulnerability.[126] One study of residents living near industrial hog operations in North Carolina, for example, found the residents to be at risk for several conditions that are known to be risk factors for severe COVID-19.[127] The study found that people living in close proximity to these facilities experience increased rates of death from diseases such as kidney disease, tuberculosis, and septicemia, even after controlling for socioeconomic and other factors such as smoking.[128] Even further, the same study established that African American and Indigenous residents are disproportionately represented in zip codes containing industrial hog operations.[129]

Pollution burdens such as increased exposure to air pollution are not shared evenly throughout the U.S. population. Studies show that low wealth communities and communities of color shoulder a greater pollution burden than wealthier or whiter communities.[130] Research suggests that this may be a contributing factor to the racial disparities playing out in COVID-19 infection and mortality rates, where historically marginalized communities of color are suffering disproportionately from the impacts of COVID-19. The death rates from COVID-19, for example, are disproportionately higher for African Americans nationwide then for other racial groups, with one analysis showing a national death rate nearly double what would be representative based on population share.[131] Hispanics/Latinos also make up a disproportionate percentage of total cases.[132]

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[125] *See* Alex Fox, *Air Pollution May Make COVID-19 Symptoms Worse*, Smithsonian Mag. (May 7, 2020), https://www.smithsonianmag.com/smart-news/lockdown-clears-skies-research-links-air-pollution-pandemics-death-toll-180974814/.
[126] *See Kidney Disease & COVID-19*, Nat'l Kidney Found., https://www.kidney.org/coronavirus/kidney-disease-covid-19#does-kidney-disease-put-me-higher-risk; *see also Q&A: Tuberculosis and COVID-19*, WHO (May 11, 2020), https://www.who.int/news-room/q-a-detail/tuberculosis-and-the-covid-19-pandemic; Marvin Zick, *Update: Can COVID-19 Cause Sepsis? Explaining the Relationship Between the Coronavirus Disease and Sepsis*, Global Sepsis All. (Apr. 7, 2020), https://www.global-sepsis-alliance.org/news/2020/4/7/update-can-covid-19-cause-sepsis-explaining-the-relationship-between-the-coronavirus-disease-and-sepsis-cvd-novel-coronavirus.
[127] *See* Julia Kravchenko et al., *Mortality and Health Outcomes in North Carolina Communities Located in Close Proximity to Hog Concentrated Animal Feeding Operations*, 79 N.C. Med. J. 278 (2018).
[128] *Id.*
[129] *Id.*
[130] *See* Hiroko Tabuchi, *In the Shadows of America's Smokestacks, Virus Is One More Deadly Risk*, N.Y. Times (May 17, 2020), https://www.nytimes.com/2020/05/17/climate/pollution-poverty-coronavirus.html, *see also* Ihab Mikati, *Disparities in Distribution of Particulate Matter Emission Sources by Race and Poverty*, 108 Am. J. Pub. Health 480 (2017).
[131] *See* Maria Godoy & Daniel Wood, *What Do Coronavirus Racial Disparities Look Like State By State?*, NPR (May 30, 2020), https://www.npr.org/sections/health-shots/2020/05/30/865413079/what-do-coronavirus-racial-disparities-look-like-state-by-state.
[132] *Id.*

Rural residents also face serious risks from the COVID-19 crisis. Rural areas face unique risks such as lower rates of employment in jobs where remote work is possible, more multi-generational households where those working outside the home can come into contact and spread the virus more easily to vulnerable members of the household, and reduced access to sick leave or adequate healthcare.[133] Indeed, while media attention largely has focused on the impact of COVID-19 in cities, the pandemic has spread rapidly throughout rural America where baseline health conditions are often lower than in other, more urban and sub-urban parts of the country.[134] There are also higher rates of smoking in rural areas,[135] and the population tends to be older,[136] both of which are contributing factors to more severe effects from COVID-19. Due to recent closures of hospitals and other essential services, rural areas are also experiencing reduced access to healthcare facilities.[137] Nearly two-thirds of rural hospitals do not have intensive care capabilities[138] and have dramatically fewer intensive care unit (ICU) beds and total number of beds overall.[139] Because of these limitations, many rural hospitals are ill-prepared to handle a large influx of high-need patients from a single outbreak, let alone several outbreaks in the area served by a single facility.

These risks are cumulative, and APHIS should ensure that the practices it allows do not exacerbate the risks faced by communities of color and lower wealth and rural communities or endanger their environment. In particular, because animals are typically killed and disposed of near their productions sites—often large industrial animal feeding operations or CAFOs—

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[133] *See* Eric Scigliano, *'It Really Is the Perfect Storm': Coronavirus Comes for Rural America*, Politico (Apr. 15, 2020), https://www.politico.com/news/magazine/2020/04/15/coronavirus-rural-america-covid-19-186031.

[134] *See* Ernest Moy, *Leading Causes of Death in Nonmetropolitan and Metropolitan Areas — United States, 1999–2014*, Ctrs. for Disease Control & Prevention, 66 Surveillance Summaries 1 (2017), https://www.cdc.gov/mmwr/volumes/66/ss/ss6601a1.htm; *see also About Rural Health*, Ctr. for Disease Control & Prevention, https://www.cdc.gov/ruralhealth/about.html.

[135] *Id.*

[136] *See* Amy Symens Smith & Edward Trevelyan, *The Older Population in Rural America: 2012-2016*, Population Division, U.S. Census Bureau (2019), https://www.census.gov/content/dam/Census/newsroom/press-kits/2019/paa/paa-poster-older-population.pdf.

[137] *See* Business Wire Press Release, *As Rural Hospital Closure Crisis Deepens, New Research from The Chartis Center for Rural Health Reveals Scope of Hospitals Vulnerable to Closure*, AP News (Feb. 11, 2020), https://apnews.com/1f74397423df4cddafdc8beae37c7627; *see also* The Chartis Ctr. for Rural Health, *The Rural Health Safety Net Under Pressure: Understanding the Potential Impact of COVID-19* (2020), https://www.chartis.com/resources/files/CCRH_Research_Update-Covid-19.pdf.

[138] *See* Noah Higgins-Dunn, *Small Towns and Rural Hospitals Brace for their Coronavirus Peak, Which Could be Weeks Away*, CNBC (May 3, 2020), https://www.cnbc.com/2020/05/03/small-towns-and-rural-hospitals-brace-for-their-coronavirus-peak-which-could-be-weeks-away.html.

[139] *See* The Chartis Ctr. for Rural Health, *The Rural Health Safety Net Under Pressure: Understanding the Potential Impact of COVID-19* (2020), https://www.chartis.com/resources/files/CCRH_Research_Update-Covid-19.pdf.

disposal generally takes place near to adjacent communities, and can pose substantial risks to those communities, as further discussed below.

Frontline public health workers are working overtime and facing enormous personal health risks; communities of color and low wealth communities, including communities neighboring industrial animal production operations like CAFOs are already disproportionately experiencing higher negative effects from COVID-19; and rural hospital closures combined with underlying population vulnerabilities such as a higher percentage of elderly residents has already put these communities at unimaginable risk. Mass disposal of farm animal mortalities, as overseen by APHIS, should not make these matters worse.

ii. Unlined burial poses serious risks to water quality and human health, especially in areas with high water tables and communities that predominantly rely on groundwater for their drinking water.

In addition to the preexisting health threats and vulnerabilities that rural communities, low wealth communities, and communities of color are already experiencing, including from COVID-19 itself, those same communities also now face health and safety risks due to mass depopulations of farm animal herds and flocks and disposal practices that currently allow for unlined mass burial events. As APHIS itself acknowledges, unlined burial is one of the most dangerous animal carcass disposal methods for human and environmental health (with the other being on-site incineration).[140] This is because of the significant threats burial poses to water quality and the safety of drinking water for surrounding communities—including because the burial of decaying animal carcasses produces and often leaches nitrate, ammonia, chloride, disease-causing agents, pharmaceuticals fed to the animals just before death,[141] and other pollutants into the soil, with these compounds eventually finding their way into groundwater with long-lasting impacts to the surrounding environment.[142] The risk of contaminated drinking water from animal carcass burial is of particular concern for rural communities, which disproportionately rely on groundwater as a drinking water source.[143]

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[140] *See* EIS at vii.

[141] *See* Petition for Emergency Rulemaking from Animal Legal Defense Fund, et al., to Commissioner, U.S. Food And Drug Admin., Requesting the Suspension of Use of Ractopamine, at 12 (June 3, 2020), https://www.biologicaldiversity.org/programs/environmental_health/pdfs/2020-06-03-Ractopamine-Suspension-Petition--ALDF-FACT-Center.pdf (discussing that on-site burial of dead carcasses in unlined trenches and pits poses significant risks to the environment and public health).

[142] *See* Hilda H. Hatzell, *Effects of Waste-disposal Practices on Ground-water Quality at Five Poultry (broiler) Farms in North-central Florida, 1992-93*, U.S. Dep't of the Interior, U.S. Geological Surv. (1995); *see also* Lee M. Myers et al., *Impact of Poultry Mortality pits on Farm Groundwater Quality*, Ga. Inst. of Tech. (1999); William F. Ritter & Anastasia E. M. Chirnside, *Impact of Dead Bird Disposal Pits on Ground-water Quality on the Delmarva Peninsula*, 53 *Bioresource Tech.* 105 (1995).

[143] *See Healthy Housing Reference Manual, Chapter 8: Rural Water Supplies and Water-Quality Issues*, Ctrs. for Disease Control & Prevention, https://www.cdc.gov/nceh/publications/books/housing/cha08.htm.

Burial sites may also lead to the spread of disease-causing agents from the buried carcasses. These may include anthrax and transmissible spongiform encephalopathy (TSE) agents, which are more likely to survive in the environment following burial of infected animals.[144] In field studies, burial of infected carcasses led to *Salmonella* contamination of surrounding soil within a week, and soil continued to test positive up to 15 weeks around the burial site.[145] In addition, because animal carcasses can carry antimicrobial-resistant pathogens from routine antibiotic use,[146] improper burial facilitates the movement of these pathogens into nearby communities and may lead to the further development of antibiotic-resistant bacteria.[147]

Impacts from mass burial sites are additionally compounded by environmental and public health risks of manure management at poultry, swine and cattle CAFOs. For instance, *E. coli* and *Cryptosporidium* contamination in ground and surface waters may be affected by both animal manure and by burial of carcasses.[148]

Areas with high water tables and sandy soils are at especially high risk of groundwater contamination, because these environments do not allow for the proper depth or cover of the burial pit, leading to leachates potentially entering drinking water sources. Extreme weather events such as hurricanes can raise the water table and increase risk of leachates entering surrounding soils and travelling through groundwater.[149] These risks are highly likely and relevant for current depopulation efforts as many CAFOs are located in coastal flood plains. Recent analysis of Hurricane Florence impacts estimates that at least 123 industrial hog operations and 40 poultry operations were located within 500 feet of the 100-year floodplain, and received 15+ inches of rain.[150] Burial practices at these operations are particularly likely to threaten the safety of drinking water sources for surrounding communities.

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[144] *See Carcass Disposal: A Comprehensive Executive Summary*, Rev. Nat'l Agric. Biosecurity Ctr. Consortium, USDA APHIS Cooperative Agreement Project Carcass Disposal Working Grp. (2004), http://www.newmoa.org/solidwaste/avian/CarcassDisposalExecutiveSummary.pdf.

[145] *See* R. H. Davies, & C. Wray, *Seasonal Variations in the Isolation of Salmonella Typhimurium, Salmonella enteritidis, Bacillus cereus and Clostridium Perfringens from Environmental Samples*, 43 J. Veterinary Med. 119 (1996).

[146] *See* Ellen K. Silbergeld et al., *Industrial Food Animal Production, Antimicrobial Resistance, and Human Health*, 29 Ann. Rev. Pub. Health 151 (2008).

[147] *See* Julia R. Barrett, *Airborne Bacteria in CAFOs: Transfer of Resistance from Animals to Humans*, 113 Envtl. Health Persp. A116 (2005); *see also* Mary J. Gilchrist, *The Potential Role of Concentrated Animal Feeding Operations in Infectious Disease Epidemics and Antibiotic Resistance*, 115 Envtl. Health Persp. 313, 313-16 (2006).

[148] *See* Ceri L. Gwyther et al., *The Environmental and Biosecurity Characteristics of Livestock Carcass Disposal Methods: A Review*, 31 Waste Mgmt. 767 (2011).

[149] *See* Ning Ling et al., *Physically Based Assessment of Hurricane Surge Threat Under Climate Change*, 2 Nature Climate Change 462; (2012): *see also* EPA, *Exposure Assessment of Livestock Carcass Management Options During Natural Disasters*, at 7 (Feb. 2017) (Follow "URL/Downloads" hyperlink), https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NHSRC&TIMSType=&count=10000&dirEntryId=335655&searchAll=&showCriteria=2&simpleSearch=0.

[150] *See* Alex Formuzis, *Map: Florence Drenched Thousands of North Carolina CAFOs and Animal Waste Pits, Analysis of Sites Hit by Storm Reveals Potential Release of Billions of Gallons of Manure and Urine*,

Even in well-drained soils, complete decay in burial trenches can take upwards of two years, thus exposing the surrounding environment to disease-causing agents and contaminants for extended periods of time.[151] Localized contamination may persist for a decade or more in wet soils with high seasonal water tables and slow groundwater flow.[152]

Burial is recognized by multiple state agricultural extension agencies as having "the greatest number of environmental, public health and safety considerations" out of all dead livestock disposal methods.[153] For example, Virginia's Department of Environmental Quality and Cooperative Extension consider on-site burial as the last recommended practice for "farmers/livestock owners who are not able to reuse, compost, or landfill their mortality per the hierarchy."[154] Burial is placed last on the hierarchy of controls for depopulation efforts for the prevention of disease transmission,[155] and is ranked as the worst option among depopulation methods in terms of its impact on pollution and contamination of soil and vegetation.[156] For catastrophic mortality that may warrant mass burial sites, North Carolina Department of Agriculture similarly ranks "below ground burial" and "above ground burial" as the least recommended on-site options.[157]

USDA's Foreign Animal Disease Preparedness and Response Plan rates on-site burial as the least suitable among carcass management technologies based on public health, biosecurity, a failure to inactivate pathogens, and environmental sustainability concerns.[158] While the USDA decision tool recognizes these limitations, it fails to categorically exclude on-site burial as a

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Evtl. Working Grp., https://www.ewg.org/release/map-florence-drenched-thousands-north-carolina-cafos-and-animal-waste-pits.

[151] *See* Qi Yuan et al., *Potential Water Quality Impacts Originating from Land Burial of Cattle Carcasses*, 456 – 457 Sci. of the Total Env't 246 (2013).

[152] *See* Rachel Freedman & Ron Fleming, *Water Quality Impacts of Burying Livestock Mortalities*, Presented to the Livestock Mortality Recycling Project Steering Committee, at 4 (2003), https://www.ridgetownc.com/research/documents/fleming_carcassburial.pdf.

[153] *See Livestock Mortalities And Disposal*, State Of Vt. Agency of Agric., Food & Markets, https://agriculture.vermont.gov/animal-health-0/livestock-mortalities-and-disposal; *see also* J. Craig Williams, *Livestock and Poultry Mortality Disposal in Pennsylvania*, Pennstate Extension (Updated Sept. 28, 2015), https://extension.psu.edu/livestock-and-poultry-mortality-disposal-in-pennsylvania.

[154] VirginaTech et al., *On Farm Mortality Disposal Options for Livestock Producers*, at 4 (2009), https://www.deq.virginia.gov/Portals/0/DEQ/Water/VirginiaPollutionAbatement/AGMortalityGuidance/On_Farm_Mortality_Disposal_Options_for_Livestock_Producers_Pub_2909-1412.pdf.

[155] *See* J. M. Scudamore et al., *Carcass Disposal: Lessons from Great Britain Following the Foot and Mouth Disease Outbreaks of 2001*, 21 Rev. Sci. Technique 775 (2002); *see also* Simon J. T. Pollard et al., *Exposure Assessment of Carcass Disposal Options in the Event of a Notifiable Exotic Animal Disease: Application to Avian Influenza Virus*, 42 Envtl. Sci. & Technology 3145 (2008).

[156] *See* Gwyther et al., *supra* note 148.

[157] *NCDA & CS Mass Animal Mortality Management Plan for Catastrophic Natural Disasters*, at 3 (2016), https://files.nc.gov/ncdeq/Environmental+Assistance+and+Customer+Service/Storm+Debris/NCDACS-Mass-Animal-Mortality-Management-Plan-Oct-2016.pdf.

[158] *See* U.S. Dep't Agric. et al., Emergency Carcass Management Desk Reference Guide, *FAD PReP Foreign Animal Disease Preparedness & Response Plan*, at 2-5 (2017), https://www.aphis.usda.gov/animal_health/carcass/docs/carcass-disposal-guide.pdf#page=12.

disposal management option due to potential counterbalancing rankings reflecting convenience. Additionally, despite recognizing these limitations and the availability of alternative technologies which are more protective of the environment, the USDA's carcass management decision cycle encourages users to consider on-site burial as an option if composting or open-air burning are not suitable.[159] Furthermore, specific guidance for on-site burial is inconsistent across state agencies, with varying degrees of protection against water contamination based on differing recommended burial depths and offsets from waterways.[160]

iii. On-site incineration negatively impacts water quality and public health.

While unlined burial practices have the most immediate and direct impacts on water quality, animal carcass incineration practices also negatively impact water quality through downstream effects. Emissions of particulate matter, dioxins, poly-aromatic hydrocarbons (PAHs), and metals from incineration may be deposited on soil leading to further contamination and contributing to eventual runoff. PAHs emitted from burning enter aquatic systems and are toxic to aquatic animals. Hydrocarbons used in fuel for open-air burning also further contribute to groundwater contamination. These groundwater contaminants from animal burning practices pose risks to drinking water quality, particularly for rural communities who rely on groundwater sources. Several of these contaminants, including PAHs and dioxins, include carcinogenic compounds and are associated with a wide array of negative human health impacts.

In addition to direct impacts to water quality from incineration and deposition, disposal of resulting ash can contribute an additional pulse of pathogens, heavy metals, dioxins and furans to soil and waterways. Dioxins, furans and heavy metals from the ash can enter the food system through grazing animals or through human consumption of contaminated crops that can absorb the heavy metals and other pollutants released by improperly disposed ash.[161] The large volumes of ash generated during mass depopulation efforts has made it challenging to accommodate proper disposal. For example, Virginia's Department of Environmental Quality reported 5000 tons of ash following incineration during the 2002 avian influenza outbreak.[162] In the UK, 120,000 tons of ash were disposed at landfills following the 2001 foot and mouth disease outbreak.[163]

In practice, pollutant concerns from depopulation may be in excess of those documented in the scientific literature due to inefficiencies in burning and the poorly-studied compounded

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[159] *Id.* at 2-7.
[160] EIS at A-9.
[161] *See* Gwyther et al., *supra* note 148.
[162] *See* Gary A. Flory et al., *Evaluation of Poultry Carcass Disposal Methods Used During an Avian Influenza Outbreak in Virginia in 2002*, Va. Dept' of Envtl. Quality & Va. Coop. Extension (2006), https://deq.virginia.gov/Portals/0/DEQ/Water/VirginiaPollutionAbatement/Evaluation_of_Poultry_Carcass_Disposal_Methods.pdf.; *see also Literature Review of Contaminants in Livestock and Poultry Manure and Implications for Water Quality*, EPA, EPA 820-R-13-002, at 5 (July 2013) (listing the health impacts of these pollutants).
[163] *See* Comptroller & Auditor General, *The 2001 Outbreak of Foot and Mouth Disease*, Nat'l Audit Office (2002), at 92, https://www.nao.org.uk/wp-content/uploads/2002/06/0102939.pdf.

impacts of multiple practices in the same area. For example, according to a report from the Virginia Department of Environmental Quality, due to challenges optimizing the number of carcasses incinerated at a given time during the avian influenza outbreak of 2002, there were issues with unintended decomposition and runoff of byproducts leading to contamination of waterways and algal growth. Thus, in addition to direct emissions of pollutants during burning, these practices also contributed to leachates contaminating waterways preceding incineration.

These problems may be exacerbated and compounded when burial and incineration co-occur in the same area. Neither incineration nor burial effectively deactivate prion diseases, suggesting that co-occurring practices can lead to accumulation of these disease agents. Both forms of disposal also contribute to nitrogen pollution, with the potential for deposition of N emissions from incineration compounding N in leachates from burial. Burial and burning similarly contribute to odor and air quality issues (carbon monoxide and nitrogen oxide emissions), which would compound with co-located practices.

iv. Unlined burial and on-site incineration threaten air quality, especially in areas with existing air quality issues.

Growing evidence indicates that high levels of air pollution are significantly exacerbating the conditions caused by the COVID-19 outbreak, and that long-term exposure to toxic air pollution is a large contributing factor to an increase in fatalities.[164] Furthermore, this pandemic is shining a light on the disproportionate and cumulative impacts pollution has on low wealth communities and communities of color, who are experiencing staggering rates of mortality from COVID-19. It is critical that APHIS do everything it can to ensure that farm animal mortality disposal practices do not further exacerbate these issues.

Animal carcass incineration practices including open-air burning and pyres, air curtain incineration, and fixed-facility incineration emit several toxic compounds, including carcinogens, and contribute to air and odor pollution. Each of these practices releases dioxins and furans, which are carcinogenic compounds associated with reproductive, developmental, and immune system problems, and which take several decades to decay.[165] These compounds can be inhaled in areas surrounding incineration or be consumed through contaminated water or food following their release during incineration.[166]

Incineration also emits polychlorinated biphenyls (PCBs) and PAHs which include compounds that are carcinogenic.[167] PCB exposure is associated with negative impacts on

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[164] *See* Xiao Wu et al., *Exposure to Air Pollution and COVID-19 Mortality in the United States: A Nationwide Cross-sectional Study*, Harv. Uni. Dep't of Biostatistics (2020), https://projects.iq.harvard.edu/covid-pm.
[165] *See Learn about Dioxin*, EPA, https://www.epa.gov/dioxin/learn-about-dioxin; *see also* EPA, Dioxins and Furans, https://archive.epa.gov/epawaste/hazard/wastemin/web/pdf/dioxfura.pdf.
[166] *Id.*
[167] *See* EPA, *Polycyclic Aromatic Hydrocarbons (PAHs)*, https://www.epa.gov/sites/pro

immune, reproductive and neurological system functions.[168] Similarly, long-term or chronic exposure to PAHs is associated with decreased immune function, cataracts, kidney and liver damage, respiratory problems, asthma-like symptoms, and lung function abnormalities.[169] Furthermore, PAH emissions undergo atmospheric reactions leading to the production of secondary compounds which can be more detrimental to human health than the original compounds.[170] These reactions are accelerated under high temperature and sunlight, making it particularly important to consider the full lifecycle of impacts of incineration emissions as current depopulation efforts continue through the summer.

Spikes in PAH emissions have been observed following emergency animal mortality events.[171] Due to their contribution to breathing problems and decreased lung function,[172] PAH and particulate matter emissions from burning may be of particular concern in the midst of the COVID-19 pandemic.

In addition to emissions of toxic compounds with direct human health impacts, animal carcass burning also negatively impacts environmental health. Nitrogen oxides from incineration contribute to greenhouse gas concentrations and generate smog and acid rain, with cascading impacts on environmental health.

Incineration is also a significant source of particulate matter emissions, with open-air burning through pyres producing approximately 3 pounds of particulate per pig, according to the National Pork Board.[173] In addition to the direct human health implications of particulate matter, which include heart attacks, premature death in people with lung disease, aggravated asthma,

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duction/files/2014-03/documents/pahs_factsheet_cdc_2013.pdf; *see also Polycyclic Aromatic Hydrocarbons (PAHs)*, Tox Town, https://toxtown.nlm.nih.gov/chemicals-and-contaminants/polycyclic-aromatic-hydrocarbons-pahs; *Polychlorinated Biphenyls (PCBs)*, *Learn about Polychlorinated Biphenyls (PCBs)*, EPA, https://www.epa.gov/pcbs/learn-about-polychlorinated-biphenyls-pcbs#healtheffects.

[168] *Id.*

[169] *See* Hussein I. Abdel-Shafya & Mona S. M. Mansourb, *A Review on Polycyclic Aromatic Hydrocarbons: Source, Environmental Impact, Effect On Human Health and Remediation*, 25 Egyptian J. Petroleum 107 (2016); Albino Barraza-Villarreal et al., *Lung Function, Airway Inflammation, and Polycyclic Aromatic Hydrocarbons Exposure in Mexican Schoolchildren*, 56 J. Occupational Envtl. Med. 415 (2015).

[170] *See* K. Nikolaou et al., *Sources and Chemical Reactivity Of Polynuclear Aromatic Hydrocarbons in the Atmosphere — A Critical Review*, 32 Sci. of the Total Env't 103 (1984).

[171] *See* Shui-Jen Chen, *Emission of Polycyclic Aromatic Hydrocarbons From Animal Carcass Incinerators*, 313 Sci. of the Total Env't 61 (2003).

[172] *See* EPA, *Health and Environmental Effects of Particulate Matter*, https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm (last visited June 28,2020); *see also*, EPA, *Polycyclic Aromatic Hydrocarbons Factsheet*, https://www.epa.gov/north-birmingham-project/polycyclic-aromatic-hydrocarbons-pahs-fact-sheet (last visited June 28,2020).

[173] *Pork Producer Webinar: Planning for Emergency Depopulation and Disposal*, Nat'l Pork Bd., (Apr. 26, 2020), https://www.pork.org/public-health/what-you-need-to-know-about-covid-19/pork-industry-covid-19-webinars/.

decreased lung function, and increased respiratory ailments,[174] particulate matter emissions can also contribute to haze. Rates of particulate matter emissions, as well as the release of metals, sulphur dioxide, and organic gases produced through burning, are not controlled during open-air burning, and are only partially mitigated under more controlled forms of incineration such as fixed-facility incineration.

Incineration activities also contribute to odor pollution. For example, air curtain incinerators operated by USDA used to dispose of livestock in Virginia during a 2002 avian influenza outbreak elicited odor complaints from residents according to a report by the Virginia Department of Environmental Quality.[175] These concerns would be expected to be exacerbated with open-air burning.

While incineration practices, and especially on-site practices such as open-air burning through pyres and air curtain incinerators, have the most immediate and direct impacts on air quality, other depopulation methods may also contribute to air pollution. Unlined burial of carcasses release gases associated with anaerobic decomposition, such as carbon dioxide, carbon monoxide, nitrogen oxides, sulfur dioxide, hydrogen chloride and fluoride, and methane.[176] These gases can build up and result in a rupture of the covering materials used during carcass disposal procedures.[177]

C. APHIS Must Make Information about Carcass Disposal Publicly Available to Ensure Government Accountability.

Government accountability is necessary for maintaining properly functioning democratic government, which relies on public trust and is vital to the functioning of a democratic society. Public access to information, especially about health and safety, in turn, is essential to achieving public trust and accountability. The requested rules will help to ensure government accountability while also protecting people and the environment and advancing USDA and APHIS's own goals.

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[174] *See Particulate Matter (PM) Pollution, Health and Environmental Effects of Particulate Matter (PM),* EPA, https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm (last visited June 25, 2020).

[175] *See* Gary A. Flory et al., *Evaluation of Poultry Carcass Disposal Methods Used During an Avian Influenza Outbreak in Virginia in 2002,* Va. Dept' of Envtl. Quality & Va. Coop. Extension (2006), https://deq.virginia.gov/Portals/0/DEQ/Water/VirginiaPollutionAbatement/Evaluation_of_Poultry_Carcass_Disposal_Methods.pdf.

[176] *See* Bernard A. Engel et al., *Carcass Disposal: A Comprehensive Review, Chapter 14: Evaluating Environmental Impacts*, at 6 (2004), https://krex.k-state.edu/dspace/bitstream/handle/2097/662/Chapter14.pdf?sequence=4#:~:text=Around%20and%20under%20the%20burial,may%20also%20contain%20biological%20agents.&text=For%20instance%2C%20open%20burning%20of,severe%20consequences%20on%20air%20quality; *see also* Qi Yuan et al., *Methane and Carbon Dioxide Production From Simulated Anaerobic Degradation of Cattle Carcasses*, 32 Waste Mgmt. 939 (2012).

[177] *Id.*

USDA's Office of Inspector General (USDA OIG) recently reiterated the importance of government accountability in the context of the COVID-19 pandemic.[178] Specifically, in a June 2020 report identifying the top pandemic-related challenges facing USDA, USDA OIG concluded that "USDA [n]eeds to [i]mprove [a]ccountability and [o]versight of its [p]rograms," in part by producing records that are accurate, timely, and of good quality.[179] USDA OIG also concluded that "USDA [n]eeds to [s]trengthen [p]rogram [p]erformance and [p]erformance [m]easures," because "[d]esigning, developing, and implementing programs that reliably achieve their intended results has been a recurring challenge for [USDA]."[180] The requested rules will help USDA improve accountability and strengthen performance, by ensuring that APHIS prohibits the most dangerous methods of carcass disposal and provides people with the information they need to stay safe. Thus, the requested rules are consistent with USDA's internal goals for performance during the COVID-19 pandemic.

Maintaining meaningful government accountability is also crucial to protecting environmental health. Here, Petitioners are requesting that APHIS provide information related to the environmental implications of mass carcass disposal practices throughout the U.S. on an emergency basis as the COVID-19 crisis unfolds, and also to make this type of information available on a permanent basis for other emergency events in the future. APHIS's role in assisting these mass carcass disposal practices and formalization of its long-held coordination role on behalf of the federal government through the NICC make the agency's role as a hub for information an essential part of protecting environmental health through providing information to the public. APHIS is uniquely positioned to collect and provide the information around these practices that is needed to instruct current activities, protect environmental health from preventable pollution, and to inform future agency responses to emergency situations.

Government accountability is necessary to protect public health. Similar to the case of environmental health, the government is uniquely equipped to assess threats to public health and to assist the public in becoming aware of and responding to these threats. The duties of the Secretary of Agriculture include "improv[ing] the quality of life for people living in the rural and nonmetropolitan regions of the Nation."[181] The quality of life of residents of rural regions, as well as all members of the public at large, relies on the protections the government is supposed to provide, such as monitoring of industry activities and enforcement of regulations. APHIS's mission has expanded over time to include "protection of public health and safety as well as natural resources," which indicates that protection of the public health is not only relevant but

[178] *See* U.S. Dep't Agric. Office of Inspector Gen., *USDA Management Challenges for Pandemic-Related Responsibilities* (2020), https://www.usda.gov/oig/webdocs/Pandemic-Related_MC.pdf.
[179] *Id*. at 1.
[180] *Id*. at 2.
[181] 7 U.S.C. § 2204(a).

pertinent to APHIS's operations.[182] The public should be able to hold APHIS accountable to ensure that APHIS is providing these protections.

Government accountability, especially through providing vital information, in efforts to protect the public from air, water, and waste pollution is particularly important to protect low wealth communities and communities of color, who are disproportionately impacted by these health hazards. Those communities deserve the same protection from harm as everyone else, but regardless, without the information Petitioners request made public, there is no way for the public to take protective actions to protect themselves. For example, people may choose to filter or test water wells located near burial sites, or those with respiratory conditions may take protective measures to avoid additional exposures from incineration. Other methods of euthanization carry other environmental health risks, and without information about the practices and disposal (as requested) the public is left unaware and unprotected. Even if APHIS takes the requested actions and bans the use federal funds for the identified actions, there are sites where animals have already been buried or harms have otherwise already been set in motion. In addition, the onset of flood, hurricane, and wildfire season underscore the need for a permanent rule to inform the public of the possible cumulative impacts of multiple events.

Finally, in addition to the direct benefits of transparency to informing agency action and supporting choices that benefit environmental health, studies show that additional oversight by agencies leads to more thoughtful behavior by potential polluters and reduces the amount of pollution being released.[183] If the government is not accountable for dutifully carrying out its policies, environmental health is likely to be harmed.

D. There is Good Cause to Publish the Requested Interim Final Rule Promptly, Concurrently with Public Notice and Comment, and to Make that Rule Effective Immediately.

Petitioners request that APHIS publish the requested interim final rule within 7 days, concurrently with public notice and comment, and make that rule effective immediately. APHIS has the authority to waive comment altogether; however, in the present situation, it is in the public interest to accept comment without delaying action. An agency may waive notice and comment "when the agency for good cause finds (and incorporates the finding and a brief statement of reasons therefor in the rules issued) that notice and public procedure thereon are

[182] U.S. Dep't of Agric., *About APHIS* (June 2, 2020), https://www.aphis.usda.gov/aphis/banner/aboutaphis.

[183] *See* Louis W. Nadeau, *EPA Effectiveness at Reducing the Duration of Plant-Level Noncompliance*, 34 J. Envtl. Econ. & Mgmt. 54 (1997); *see also* James Alm & Jay Shimshack, *Environmental Enforcement and Compliance: Lessons from Pollution, Safety, and Tax Settings*, 10 Founds. & Trends in Microeconomics 209 (2014); Wayne B. Gray & Jay P. Shimshack, *The Effectiveness of Environmental Monitoring and Enforcement: A Review of the Empirical Evidence*, 5 Rev. of Envtl. Econ. & Pol'y 3 (2011); Jay P. Shimshack, *The Economics of Environmental Monitoring and Enforcement*, 6 Ann. Rev. Res. Econ. 339 (2014).

impracticable, unnecessary, or contrary to the public interest."[184] The good cause exception "excuses notice and comment in emergency situations, where delay could result in serious harm."[185] Notice and comment is "impractical" in those situations "when an agency finds that due and timely execution of its functions would be impeded by the notice otherwise required," such as when a rule "must be put in place immediately."[186]

There is good cause to waive notice and comment here. APHIS's decision to advise and assist with the widespread depopulation and disposal of farm animals, without prohibiting the most dangerous methods of disposal or providing people with the information they need to stay safe, risks increasing the spread of disease and causing significant environmental pollution in the midst of a pandemic.[187] In addition, this decision has immediate consequences for public health. The disposal of farm animal carcasses is ongoing and the associated harm likely is unfolding in real time. Given the urgent need to prevent additional harm and to provide members of the public with notice of the risks they face, it is impracticable to delay publishing the requested interim final rule while soliciting comment.

Instead, APHIS should solicit public comment at the same time as it publishes the requested interim final rule and, if necessary, amend the rule as appropriate in response to comment. Providing advance notice and comment serves an important purpose, but given the extraordinary circumstances here, delaying issuance of the rule would be harmful. Public comment may generate additional suggestions that APHIS can incorporate into an amended rule to better protect people and the environment from the risks of pollution and disease. APHIS also has good cause to make this rule effective immediately upon publication.[188] Because of the "just-in-time" system in which the meat industry operates, and the industry's perceived immediate need to depopulate animals, this rule must become effective without dely.

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[184] 5 U.S.C. § 553(b)(B).

[185] *Chamber of Commerce v. SEC*, 443 F.3d 890, 908 (D.C. Cir. 2006) (citations omitted); *see also Riverbend Farms, Inc. v. Madigan*, 958 F.2d 1479, 1484 & n.2 (9th Cir. 1992) ("Emergencies, though not the only situations constituting good cause, are the most common").

[186] *Util. Solid Waste Activities Grp. v. EPA*, 236 F.3d 749, 754 (D.C. Cir. 2001) (quoting U.S. Dep't of Justice, *Attorney General's Manual on the Administrative Procedure Act* 30–31 (1947)); *see also Nat'l Nutritional Foods Ass'n v. Kennedy*, 572 F.2d 377, 385 (2d Cir. 1978).

[187] *See Schneider v. Chertoff*, 450 F.3d 944, 949 & n.4 (9th Cir. 2006) (observing that the court "do[es] not doubt the necessity of immediate implementation" of a rule serving an "immediate public health need").

[188] *See* 5 U.S.C. § 553(d)(3). While the standards for good cause under section 553(b) and 553(d) are not identical, *see also Am. Fed'n of Gov't Emp., AFL-CIO v. Block*, 655 F.2d 1153, 1156 (D.C. Cir. 1981), they are related inquiries. *See also U.S. v. Gavrilovic*, 551 F.2d 1099, 1104 (8th Cir. 1977) (surveying the APA's legislative history and finding "[l]egitimate grounds" for an immediate effective date to include "urgency of conditions coupled with demonstrated and unavoidable limitations of time," and that an agency's primary consideration is the "convenience or necessity of the people affected") (citations and internal quotation marks omitted); *see also Schneider*, 450 F.3d at 949 & n.4.

This request is reasonable and achievable; agencies have demonstrated the ability to respond to the COVID-19 crisis with emergency rules. For example, on April 22, EPA published an interim final rule amending air emission monitoring quality assurance requirements for facilities unable to meet normal requirements during the pandemic.[189] That rule requires that facilities report to EPA information related to environmental practices, and it commits EPA to making the information it collects available publicly.[190] A similarly prompt response is appropriate here.

Petitioners request that APHIS respond to this Petition promptly. As 5 U.S.C. § 555(b) provides: "With due regard for the convenience and necessity of the parties or their representatives and within a reasonable time, each agency shall proceed to conclude a matter presented to it."[191] The requested interim final rule would impose a trivial burden or inconvenience on regulated entities. The rule is necessary in response to APHIS's open invitation to companies to depopulate and dispose of farm animal carcasses without clear instructions about how to navigate the confusing patchwork of federal and state guidance to best protect people and the environment. And the requested rule is straightforward and uncomplicated. Under the circumstances, 7 days is a reasonable amount of time for APHIS to resolve this Petition.

VI. CONCLUSION

APHIS's current approach to overseeing the depopulation and disposal of farm animals puts people and the environment at risk. APHIS acknowledges that unlined burial and on-site incineration pose significant threats to people and the environment. APHIS also acknowledges that the meat industry often defaults to these disposal practices during emergencies. However, APHIS has done nothing to prevent the industry from disposing of animals through unlined burial or on-site incineration during the COVID-19 pandemic, even as the industry kills tens of millions of animals. Neither has APHIS taken any action to ensure that people living near carcass disposal locations have the information they need to protect themselves, now and in the future. These failures put all people in jeopardy, especially those living in overburdened communities already at high risk from COVID-19. As the government agency that has assumed responsibility for managing animal carcasses during emergencies, APHIS can and must do better. Petitioners urge APHIS to enact the requested rules without delay.

[189] *See* Continuous Emission Monitoring; Quality-Assurance Requirements During the COVID-19 National Emergency, 85 Fed. Reg. 22,362-01 (Apr. 22, 2020), https://www.govinfo.gov/content/pkg/FR-2020-04-22/pdf/FR-2020-04-22.pdf.
[190] *Id.* at 22,371.
[191] 5 U.S.C. § 555(b).

DATED: June 29, 2020

Respectfully Submitted,

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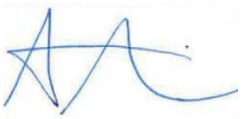

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Submitted on behalf of:

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Tom Frantz
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Brandon Jones
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Catawba Riverkeeper Foundation

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Center on Race, Poverty & the Environment

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Sound Rivers

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Lower Neuse Riverkeeper
Sound Rivers

Matthew Starr
Upper Neuse Riverkeeper
Sound Rivers

Will Hendrick
Senior Attorney & Manager, North Carolina Pure Farms, Pure Waters Campaign
Waterkeeper Alliance

CC: Honorable Phyllis K. Fong, Inspector General, USDA
Bethany Jones, Deputy Administrator, Legislative and Public Affairs, APHIS
Michon Oubichon, Director, Office of Civil Rights, Diversity, and Inclusion, APHIS

ENCLOSURES

From:	Zakarka, Christine A - APHIS
To:	Healey, Burke L - APHIS
Cc:	Kaczmarski, Benjamin J - APHIS; Nelson, Elizabeth E - APHIS
Subject:	FW: Petition for Emergency Rulemaking
Date:	Monday, June 29, 2020 1:16:33 PM
Attachments:	ATT00001.gif 2020-06-29 APHIS Petition_FINAL.pdf

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Hi Burke, Ben Kaczmarski will be the point person on my staff. Who should he work with?

From: Shea, Kevin - APHIS
Sent: Monday, June 29, 2020 9:44 AM
To: APHIS-OA <APHISOA@usda.gov>; Healey, Burke L - APHIS <burke.l.healey@usda.gov>; Zakarka, Christine A - APHIS <christine.a.zakarka@usda.gov>
Cc: Jones, Bethany - APHIS <bethany.x.jones@usda.gov>; Oubichon, Michon M - APHIS <michon.m.oubichon@usda.gov>
Subject: FW: Petition for Emergency Rulemaking
PPD: Please work with VS to draft a response.

From: Alexis Andiman <aandiman@earthjustice.org>
Sent: Monday, June 29, 2020 9:32 AM
To: SM.OSEC.AGSEC.OES <SM.OSEC.AGSEC.OES@usda.gov>; Shea, Kevin - APHIS <kevin.a.shea@usda.gov>
Cc: aandiman@earthjustice.org; hconnor@biologicaldiversity.org; vbaron@nrdc.org; sliriano@earthjustice.org; Jones, Bethany - APHIS <bethany.x.jones@usda.gov>; Oubichon, Michon M - APHIS <michon.m.oubichon@usda.gov>; FONG, PHYLLIS <phyllis.fong@oig.usda.gov>; dina.barbour@oig.usda.gov
Subject: Petition for Emergency Rulemaking

Dear Secretary Purdue and Administrator Shea,
I write to submit the attached **petition for emergency rulemaking** to the Animal and Plant Health Inspection Service of the U.S. Department of Agriculture, on behalf of Center for Biological Diversity; Natural Resources Defense Council; Animal Legal Defense Fund; Association of Irritated Residents; Cape Fear River Watch; Catawba Riverkeeper Foundation; Center on Race, Poverty & the Environment; Coastal Carolina Riverwatch; Environmental Working Group; Johns Hopkins Center for a Livable Future; MountainTrue; Sound Rivers; and Waterkeeper Alliance. I will send the authorities on which the petition relies shortly.
Please do not hesitate to contact us if you have any questions or if there is anything you would like to discuss.
Thank you,
Alexis Andiman

Alexis Andiman
she/her/hers
Staff Attorney
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BEFORE THE UNITED STATES DEPARTMENT OF AGRICULTURE, ANIMAL AND PLANT HEALTH INSPECTION SERVICE

PETITION FOR EMERGENCY RULEMAKING

CENTER FOR BIOLOGICAL DIVERSITY; NATURAL RESOURCES DEFENSE COUNCIL; ANIMAL LEGAL DEFENSE FUND; ASSOCIATION OF IRRITATED RESIDENTS; CAPE FEAR RIVER WATCH; CATAWBA RIVERKEEPER FOUNDATION; CENTER ON RACE, POVERTY & THE ENVIRIONMENT; COASTAL CAROLINA RIVERWATCH; ENVIRONMENTAL WORKING GROUP; JOHNS HOPKINS CENTER FOR A LIVABLE FUTURE; MOUNTAINTRUE; SOUND RIVERS; and **WATERKEEPER ALLIANCE**, *Petitioners*, *Filed With:* **SONNY PERDUE**, in his official capacity as Secretary of Agriculture; and **KEVIN SHEA**, in his official capacity as Administrator, Animal and Plant Health Inspection Service.	Docket No._____

Credit: Sound Rivers

I. INTRODUCTION

Pursuant to the right to petition the government provided in the First Amendment to the U.S. Constitution[1] and the Administrative Procedure Act,[2] the undersigned organizations (Petitioners) formally submit this petition to the Animal and Plant Health Inspection Service (APHIS or Agency) of the U.S. Department of Agriculture (USDA). Petitioners ask APHIS to take immediate action to protect people and the environment from dangerous pollution resulting from the mass killing and disposal of industrially-raised farm animals in connection with the COVID-19 pandemic. Specifically, as set forth below, Petitioners seek an interim final rule, effective until the resolution of the COVID-19 pandemic, prohibiting the two methods of carcass disposal that, APHIS admits, present the greatest risks to people and the environment: unlined burial and on-site incineration. In addition, Petitioners ask that APHIS create and publish an online database with information about federal assistance for carcass disposal.

Over the past several months, slaughterhouses have emerged as leading hot spots for the spread of COVID-19 infections. As thousands of workers have fallen ill, slaughterhouses have operated at reduced capacity or closed altogether, resulting in a backlog of millions of industrially-raised farm animals ready for slaughter. The meat industry has responded to this backlog by killing entire herds or flocks of animals through methods such as smothering, gassing, shooting, drug overdoses, blunt force trauma, and suffocation. Already, the poultry industry has killed an estimated 10 million hens,[3] and the pork industry has warned that more than 10 million pigs could be killed by September.[4] Collectively, the industry refers to this mass killing as "depopulation."[5]

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[1] *See* U.S. Const. Amend. I; *see also United Mine Workers v. Ill. State Bar Ass'n*, 389 U.S. 217, 222 (1967) (explaining that the right to "petition for a redress of grievances [is] among the most precious of the liberties safeguarded by the Bill of Rights").

[2] *See* 5 U.S.C. § 553(e).

[3] *See* Sophie Kevany, *Millions of U.S. Farm Animals to be Culled by Suffocation, Drowning, and Shooting*, The Guardian (May 19, 2020), https://www.theguardian.com/environment/2020/may/19/19/millions-of-us-farm-animals-to-be-culled-by-suffocation-drowning-and-shooting-coronavirus?fbclid=IwAR0l44gqUoLWzxVv-O5r1Uwm8sQAmWqQy8dFKaJTE1ikR8Y2vpgS0-VHhFc.

[4] *See* Audrey Conklin, *Coronavirus May Force Hog Farmers to Kill 10M Pigs by September*, Fox Business (May 17, 2020), https://www.foxbusiness.com/markets/farmers-euthanize-10-million-pigs-coronavirus; *see also* Letter from Nat'l Pork Producers Council, to Makan Delrahim, Assistant Att'y Gen. U.S. Dept. of Justice, Urgent COVID-19-Related Request for a Business Review Letter (May 8, 2020) [hereinafter "NPPC Letter"], https://www.justice.gov/opa/press-release/file/1276966/download.

[5] According to the American Veterinary Medical Association, "[t]he term depopulation refers to the rapid destruction of a population of animals in response to urgent circumstances with as much consideration given to the welfare of the animals as practicable." Am. Veterinary Med. Ass'n, *AVMA Guidelines for the Depopulation of Animals: 2019 Edition*, 4 (2019) [hereinafter "AVMA Guidelines"], https://www.avma.org/sites/default/files/resources/AVMA-Guidelines-for-the-Depopulation-of-

Responsible management of farm animal carcasses is essential to protect people and the environment. APHIS has established a National Incident Coordination Center (NICC) to assist the meat industry with depopulation and disposal, including by providing federal funds and other direct support.[6] However, APHIS currently allows the industry to engage in the very carcass disposal practices that the Agency "expect[s] to have the greatest impacts to the environment,"[7] and APHIS is providing assistance to the industry without ensuring that surrounding communities have access to the information they need to stay safe.

Petitioners are deeply concerned that unrestricted, undisclosed mass carcass disposal poses imminent and substantial threats to people and the environment. That this disposal is taking place in the midst of a preexisting global pandemic only heightens Petitioners' concerns, as does the growing body of evidence establishing that communities of color are suffering disproportionately as a result of COVID-19. Some of the carcass disposal practices that APHIS currently allows, such as on-site incineration by pyre, risk exacerbating this suffering by increasing air pollution, a factor linked to higher COVID-19 death rates.

The threats posed by depopulation and disposal will continue at least until the meat industry stops killing farm animals in connection with the COVID-19 pandemic, even if that killing outlasts the pandemic itself. In addition, Petitioners are concerned that these threats will reemerge and increase over the coming months and years. For example, the impending hurricane season is expected to be unusually active, and severe storms could cause unlined burial pits to flood. Hurricanes and other natural disasters also could kill additional animals, the carcasses of which would require disposal in or near the locations where disposal currently is taking place.

Petitioners therefore request that APHIS promptly publish an interim final rule to prohibit the disposal of farm animal carcasses by unlined burial and on-site incineration until the resolution of the COVID-19 pandemic. Petitioners also request that APHIS provide the public with certain critical information about federal assistance for mass carcass management. Not only will the requested rules help to prevent catastrophic harm to people and the environment, they also will provide people living near mass carcass disposal sites with the information they need to protect themselves, including by minimizing their risk of exposure to pollution that could increase their susceptibility to COVID-19. We urge APHIS to act without delay.

Animals.pdf. Petitioners have adopted this term for clarity and convenience, but do not endorse it as sufficient to capture the gravity of the activity so described.

[6] *See* U.S. Dept. Agric., *USDA APHIS Establishing Coordination Center to Assist Producers Affected by Meat Processing Plant Closures* (Apr. 24, 2020) [hereinafter "APHIS NICC Press Release"], https://www.aphis.usda.gov/aphis/newsroom/stakeholder-info/sa_by_date/sa-2020/sa-04/meat-processing-coordination-center.

[7] U.S. Dep't of Agric., *Carcass Management During a Mass Animal Health Emergency Final Programmatic Environmental Impact Statement—December 2015*, at vi (2015) [hereinafter "EIS"], https://www.aphis.usda.gov/stakeholders/downloads/2015/eis_carcass_management.pdf.

II. PETITIONERS

The **Center for Biological Diversity** (Center) is a nonprofit environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has more than 1.7 million members and online activists committed to the protection and restoration of endangered species and wild places. For 26 years, the Center has worked to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people and animals from toxic threats such as industrial agriculture.

The **Natural Resources Defense Council** (NRDC) is a nonprofit environmental membership organization that works to protect public health and the environment. NRDC has more than 375,000 members and 2 million online activists. NRDC has been committed to public health and public disclosure of pollution risks for fifty years. NRDC engages in research, advocacy, media, and litigation related to protecting public health and the environment.

The **Animal Legal Defense Fund** (ALDF) is a national nonprofit membership organization based in California with over 200,000 members and supporters nationwide. ALDF's mission is to protect the lives and advance the interests of animals through the legal system. Advocating for effective oversight and regulation of the animal agriculture industry across the United States is one of ALDF's central goals, which it achieves by filing lawsuits, administrative comments, and rulemaking petitions to increase legal protections for animals; by supporting strong animal protection legislation; and by fighting against legislation, like state "Ag Gag" laws, that is harmful to animals and communities surrounding concentrated animal feeding operations (CAFOs). Through these efforts, ALDF seeks to ensure transparency in the CAFO system, which is paramount to its ability to protect farmed animals and ALDF members from CAFOs' immensely harmful effects.

The **Association of Irritated Residents** (AIR) is a nonprofit, public interest organization based in California with members in Kern, Tulare, Kings, Fresno, and Stanislaus Counties. AIR formed in 2001 to advocate for clean air and environmental justice in the San Joaquin Valley.

Cape Fear River Watch (CFRW) is a grassroots, environmental, 501(c)(3) nonprofit started over twenty-five years ago by a group of volunteers committed to protecting and improving North Carolina's largest and most diverse river basin for future generations. Today we carry that commitment forward with a dedicated staff of scientists, educators, advocates, and activists, and a large number of members and volunteers. CFRW is home to the **Cape Fear Riverkeeper**.

The Catawba Riverkeeper Foundation is a 501(c)(3) nonprofit organization dedicated to protecting the lakes, rivers, and streams of the Catawba River basin. Founded in 1997 and currently supported by over 500 members, **Catawba Riverkeeper** has acted as an independent watchdog for our waterways for more than 20 years. The Foundation is headquartered in Charlotte, but serves the more than two million people in the 26 counties in the Carolinas that

make up the Catawba-Wateree watershed. Catawba Riverkeeper uses 3 main pillars—education, engagement, and protection—to work towards our vision of clean, plentiful water for all.

The Center on Race, Poverty & the Environment (CRPE) is a non-profit environmental justice organization. CRPE's mission is to achieve environmental justice and healthy sustainable communities through collective action and the law. Throughout our 30-year history, CRPE has worked with low income communities and communities of color to build community power, reduce pollution, and improve community health.

Coastal Carolina Riverwatch (CCRW) is a citizen-volunteer, grassroots organization dedicated to restoring and protecting the waters, land, and communities of eastern North Carolina. CCRW's mission is to accomplish this through strong advocacy, supporting enforcement of environmental laws, public education, and promotion of citizen ownership and responsibility. CCRW serves as an umbrella organization for Waterkeeper Alliance watersheds in the area, which currently include **Crystal Coast Waterkeeper** and **White Oak-New Riverkeeper Alliance**. CCRW holds Waterkeeper Alliance licenses for both of these organizations. CCRW advocates for clean water for all.

The **Environmental Working Group** (EWG) is a non-profit, non-partisan organization that works to empower people to live healthier lives in a healthier environment. For over twenty-five years, EWG's mission has been to educate and inspire people, businesses, and governments to make better decisions and to take action to protect public health and the environment. EWG has more than one million online activists dedicated to standing up for public health when government and industry will not.

The **Johns Hopkins Center for a Livable Future** (CLF) is based at the Bloomberg School of Public Health in Johns Hopkins University's Department of Environmental Health and Engineering. CLF does research, education and advocacy at the intersection of food production, public health and the environment. Since 1996, the Center has had a primary focus on the impact of large-scale animal operations on public health and the environment. A report, by the Pew Commission on Industrial Farm Animal Production, *Putting Meat on the Table: Industrial Farm Animal Production in the United States*, found that industrial food animal operations represent an unacceptable level of threat to public health and the environment and depress economic activity in the communities where those operations are located. CLF was the principal investigator for the Pew Commission, and growing concerns since the release of this report in 2008 motivated CLF to lead a moratorium resolution effort approved last year by the American Public Health Association to limit the expansion of existing operations or the establishment of new operations until public health concerns are addressed.

MountainTrue champions resilient forests, clean waters, and healthy communities. We are committed to keeping our mountain region a beautiful place to live, work, and play. MountainTrue has over 1,300 members and over 10,000 online activists. Our members protect our forests, clean up our rivers, plan vibrant and livable communities, and advocate for a sound

and sustainable future for all. MountainTrue is active in the Broad, French Broad, Green, Hiwassee, Little Tennessee, New and Watauga watersheds, and is home to the **Broad Riverkeeper**, **French Broad Riverkeeper**, **Green Riverkeeper**, and **Watauga Riverkeeper**.

Sound Rivers is an environmental nonprofit organization with 2,500 members that seeks to protect the Tar-Pamlico and Neuse River basins. These two river basins combined covers 23% of the state of North Carolina's landmass and is home to over 2 million people. Sound Rivers' three Riverkeepers—Jill Howell, the **Tar-Pamlico Riverkeeper**; Katy Hunt, the **Lower Neuse Riverkeeper**; and Matthew Starr, the **Upper Neuse Riverkeeper**—monitor the region's waterways, serving as scientific experts and educational resources to the communities. Through research, advocacy, education, and public engagement, Sound Rivers works towards fishable, swimmable, drinkable water for all.

Waterkeeper Alliance is a nonprofit, member supported, international environmental organization based in New York City. Waterkeeper Alliance unites more than 300 Waterkeeper Organizations and Affiliates that are on the frontlines of the global water crisis, patrolling and protecting more than 2.5 million square miles of rivers, lakes, and coastal waterways on 6 continents. Waterkeeper groups defend our fundamental human right to drinkable, fishable, and swimmable waters, and combine firsthand knowledge of their waterways with an unwavering commitment to the rights of their communities. Waterkeeper Alliance's Pure Farms, Pure Waters campaign calls attention to the destructive pollution practices of industrialized meat production, ensures compliance with environmental laws, and supports the traditional family farms that industrial practices endanger.

III. SPECIFIC REQUEST FOR AGENCY ACTION

1. Petitioners request that, within 7 business days from the date of submission of this petition (or by July 10, 2020), APHIS issue an emergency interim final rule, effective immediately, to:
    A. Prohibit the use of the following mass carcass management practices until the resolution of the mass animal health emergency arising from the COVID-19 pandemic: unlined burial and incineration through on-farm pyres or air curtain incinerators.
        i. "Mass carcass management practices" shall be understood to mean "[t]he discovery, collection, transportation, disposal and/or processing of 50 tons (100,000 pounds) or more of dead animals and body parts on a single premise (where livestock are housed or kept), as well as the subsequent cleanup and decontamination of affected sites."[8] According to the U.S. Environmental Protection Agency, 50 tons of carcasses is approximately

[8] EIS at I-9.

equivalent to 100 dead cows, 565 dead pigs, 25,000 dead chickens, or 5,000 dead turkeys.[9]

ii. "Mass animal health emergency" shall be understood to mean "[a] natural disaster . . . generating 50 tons of carcasses or more."[10]

B. Require APHIS to create and publish online an electronically searchable and sortable database with information about any assistance pertaining to mass carcass management provided by APHIS, including through the NICC, from March 13, 2020 until the resolution of the mass animal health emergency arising from the COVID-19 pandemic. The rule shall mandate that the information be published as quickly as possible or within one business day of receipt, whichever is earlier. The information provided in such database for each grant of assistance shall include, but is not limited to:

i. The owner of the animals;
ii. The number and species of animals depopulated;
iii. The date(s) of depopulation and disposal (and, if disposal occurred on multiple days, the number of animals disposed on each day);
iv. The depopulation method utilized;
v. The disposal method utilized;
vi. The disposal location, including the location of any incineration ash residues and/or final composted materials;
vii. A summary of the federal support provided, including any indemnification payments, subsidies, assets of the National Veterinary Stockpile, and/or other emergency assistance provided;
viii. Any monitoring, testing, or sampling protocol put in place to monitor releases of environmental contaminants from the disposal location.

2. In addition, Petitioners request that, within 18 months, APHIS make the mass carcass management database permanent by initiating a rulemaking to:

A. Require APHIS to create and publish online an electronically searchable and sortable database with information about any assistance pertaining to mass carcass management provided by APHIS in connection with any mass animal health emergency. The rule shall mandate that the information be published as quickly as possible or within one business day of receipt, whichever is earlier. The information provided in such database for each grant of assistance shall include, but is not limited to:

i. The owner of the animals;
ii. The number and species of animals depopulated;

[9] *See* EPA, *Exposure Assessment of Livestock Carcass Management Options During Natural Disasters*, at 7 (Feb. 2017) (Follow "URL/Downloads" hyperlink), https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NHSRC&TIMSType=&count=10000&dirEntryId=335655&searchAll=&showCriteria=2&simpleSearch=0.

[10] EIS at I-9.

iii. The date(s) of depopulation and disposal (and, if disposal occurred on multiple days, the number of animals disposed on each day);
iv. The depopulation method utilized;
v. The disposal method utilized;
vi. The disposal location, including the location of any incineration ash residues and/or final composted materials;
vii. A summary of the federal support provided, including any indemnification payments, subsidies, assets of the National Veterinary Stockpile, and/or other emergency assistance provided;
viii. Any monitoring, testing, or sampling protocol put in place to monitor releases of environmental contaminants from the disposal location.

IV. FACTUAL BACKGROUND

A. Slaughterhouses Have Become Coronavirus Hot Spots, Leading to a Backlog of Industrially-Raised Farm Animals.

Since early 2020, the COVID-19 pandemic has swept the globe. As of June 26, almost 9.5 million cases of COVID-19 had been confirmed worldwide, including 484,249 deaths.[11] In the United States, nearly 2.4 million people have been diagnosed with the virus, and more than 121,809 people have died.[12] COVID-19 remains a highly infectious disease with no known cure. Although the spread of coronavirus infections slowed in some places in late May, the crisis is not yet over. Infections recently spiked sharply across the South and West,[13] and the World Health Organization (WHO) has warned that the world is entering a "new and dangerous phase" of the COVID-19 pandemic.[14]

Slaughterhouses across the country have become coronavirus hot spots, and slaughterhouse workers are suffering disproportionately. As of June 26, at least 253 slaughterhouses had confirmed cases of COVID-19.[15] At least 28,303 slaughterhouse workers have tested positive for COVID-19, and 102 workers have died.[16] And these numbers are

[11] *See Coronavirus Dashboard*, WHO, https://covid19.who.int (last visited June 26, 2020).
[12] *See Cases of Coronavirus Disease (COVID-19) in the U.S.*, Ctrs. for Disease Control & Prevention, https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html (last visited June 26, 2020).
[13] Nathaniel Weixel, *Fauci Gives Congress COVID-19 Warning*, The Hill (June 23, 2020), https://thehill.com/policy/healthcare/504197-fauci-gives-congress-covid-19-warning?userid=436652.
[14] *See* Julie Bosman, *W.H.O. Warns of 'Dangerous Phase' of Pandemic as Outbreaks Widen*, N.Y. Times (June 19, 2020), https://www.nytimes.com/2020/06/19/us/coronavirus-new-dangerous-phase.html?action=click&module =Top%20Stories&pgtype=Homepage.
[15] *See* Leah Douglas, *Mapping Covid-19 Outbreaks in the Food System*, Food & Env't Reporting Network (Apr. 22, 2020, updated June 19, 2020), https://thefern.org/2020/04/mapping-covid-19-in-meat-and-food-processing-plants/.
[16] *Id*.

continuing to climb.[17] According to Tyson Foods, one of the only large U.S. meat producers that is voluntary disclosing information about coronavirus infections, 18% of the company's employees in Northwest Arkansas—nearly 700 people—had tested positive for the virus as of June 19.[18] More than one-third of the workers have tested positive at each of two Tyson slaughterhouses in Iowa and Indiana.[19] On June 21, China's General Administration of Customs announced that it was halting imports from a Tyson slaughterhouse in Arkansas following an outbreak of coronavirus cases at the facility.[20]

Federal slaughterhouse inspectors with USDA's Food Safety and Inspection Service (FSIS) also have become ill and died of COVID-19, as a result of exposure in slaughterhouses, shortages of personal protective equipment, and FSIS's early prohibitions against inspectors' use of face masks inside slaughterhouses.[21] (The prohibitions appear to have been in conflict with an FSIS directive requiring that FSIS "provid[e] employees with proper personal protective equipment . . . and remov[e] employees . . . from unsafe conditions as necessary for protection."[22]) As of May 5, 197 FSIS field employees were absent from work due to COVID-19

[17] *See* Rachel Axon et al., *Coronavirus Outbreaks Climb at U.S. Meatpacking Plants Despite Protections, Trump Order*, USA Today (June 6, 2020), https://www.usatoday.com/story/news/investigations/2020/06/06/meatpacking-plants-cantshake-covid-19-cases-despite-trump-order/3137400001/.

[18] *See Tyson Foods, Inc. Releases Covid-19 Test Results at Northwest Arkansas Facilities*, Tyson Foods, Inc. (June 19, 2020), https://www.tysonfoods.com/news/news-releases/2020/6/tyson-foods-inc-releases-covid-19-test-results-northwest-arkansas.

[19] *See* Eric Schlosser, *America's Slaughterhouses Aren't Just Killing Animals*, The Atlantic (May 12, 2020), https://www.theatlantic.com/ideas/archive/2020/05/essentials-meatpeacking-coronavirus/611437/.

[20] *See* Jason Slotkin, *China Suspends Poultry Imports from Tyson Foods Plant in Arkansas*, NPR (June 21, 2020), https://www.npr.org/sections/coronavirus-live-updates/2020/06/21/881408578/china-suspends-poultry-imports-from-tyson-foods-plant-in-arkansas.

[21] *See* Schlosser, *supra* note 19 (explaining that, "in the early days of the pandemic, [FSIS] not only failed to give protective equipment to its inspectors, but also prohibited them from wearing masks inside meatpacking plants—concerned that the wrong message might be sent about the risk of COVID-19. On April 9, the agency said that inspectors could wear masks on the job, if the meatpacking company that owned the plant gave them permission to do so. Inspectors were encouraged to find their own masks and promised a $50 reimbursement for 'the purchase of face coverings or materials to make face coverings.' One month later, after meatpacking plants had been widely criticized as hot spots for spreading COVID-19, the USDA finally began to provide masks to its inspectors").

[22] U.S. Dep't Agric., *FSIS Directive Basic Occupational Safety and Health Program* (2016), https://www.fsis.usda.gov/wps/wcm/connect/cfa047f5-f01c-49f2-80c7-63ee08dd914d/4791.1.pdf?MOD=AJPERES.

diagnoses, and another 120 were under self-quarantine due to exposure.[23] At least four inspectors infected with the virus have died.[24]

As slaughterhouse inspectors and workers have fallen ill, slaughterhouses have operated at reduced capacity or closed altogether, resulting in a backlog of millions of industrially-raised animals ready for slaughter.[25] This backlog is especially concerning because industrial farm animal production follows a "just-in-time" system,[26] under which slaughterhouses can process only animals of a certain target size. Once the animals grow larger than that target size, they no longer "fit within [the] equipment used on processing plant production lines" and cannot be processed in those plants.[27]

According to the Economic Research Service, as of mid-May, pork processing had decreased by at least 11%, beef by 21%, chicken by 2%, and turkey by 8.3%, as compared to production rates from the same period in 2019.[28] In fact, these decreases in processing volumes likely are more dramatic than they appear. Over the past few years, FSIS and the meat industry have implemented certain "efficiency" initiatives to speed up processing times—thereby increasing capacity—at pig and chicken slaughterhouses.[29] As a result of these efficiency

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[23] *See* Greg Cima, *Slaughter Delays Lead to Depopulation*, J. Am. Veterinary Med. Ass'n (June 15, 2020), https://www.avma.org/javma-news/2020-06-15/slaughter-delays-lead-depopulation; *see also* Mike Dorning, *Fourth USDA Inspector Dies From Virus Amid Meat Plant Outbreaks*, Bloomberg News (May 13, 2020), https://www.bloomberg.com/news/articles/2020-05-14/fourth-usda-inspector-dies-from-virus-amid-meat-plant-outbreaks.

[24] *See* Mike Dorning, *Fourth USDA Inspector Dies From Virus Amid Meat Plant Outbreaks*, Bloomberg News (May 13, 2020), https://www.bloomberg.com/news/articles/2020-05-14/fourth-usda-inspector-dies-from-virus-amid-meat-plant-outbreaks.

[25] *See, e.g.*, *Pandemic Disrupts Processing Capacity, Drives Slaughter Numbers Down*, Am. Farm Bureau Fed'n (Apr. 28, 2020), https://www.fb.org/market-intel/pandemic-disrupts-processing-capacity-drives-slaughter-numbers-down (identifying reporting that "at least 18 plants have been closed down due to issues with COVID-19 over the previous two months" and "estimate[ing] that at times over the previous few weeks, pork processing capacity has been reduced by as much as 20% and beef processing capacity has been reduced by as much as 10%"); Greg Cima, *Slaughter Delays Lead to Depopulation*, J. Am. Veterinary Med. Ass'n (June 15, 2020), https://www.avma.org/javma-news/2020-06-15/slaughter-delays-lead-depopulation (identifying reporting that, "[b]y May 8, at least 30 slaughter and processing plants had closed at some point because of COVID-19 outbreaks, affecting 45,000 workers and reducing pork slaughter capacity 40% and beef slaughter capacity 25%").

[26] *See* Letter from Kim Reynolds, Governor of Iowa, et al., to Vice President & Members of the Coronavirus Task Force (Apr. 27, 2020) https://www.grassley.senate.gov/sites/default/files/Iowa%20group-2020-covid-pork-letter-1.pdf; *see also* NPPC Letter at 4.

[27] NPPC Letter at 4.

[28] *See* Greg Cima, *Slaughter Delays Lead to Depopulation*, J. Am. Veterinary Med. Ass'n (June 15, 2020), https://www.avma.org/javma-news/2020-06-15/slaughter-delays-lead-depopulation

[29] *See* Modernization of Swine Slaughter Inspection; 84 Fed. Reg. 52,300 (Oct. 1, 2019), https://www.federalregister.gov/documents/2019/10/01/2019-20245/modernization-of-swine-slaughter-inspection; *see also* FSIS, *Criteria for Consideration of Waiver Requests from Young Chicken Slaughter*

initiatives, processing capacity in 2020 would have been expected to *exceed* processing capacity in 2019, and thus the present shortfalls likely are especially severe. Without more information about the disposal of farm animal carcasses, however, it is impossible to know how many animals have been killed as a result of these shortfalls.

The recent efficiency initiatives also contribute to a greater likelihood of additional slaughterhouse shutdowns. This is because increases in line-speeds, together with a reduction in the number of federal inspectors,[30] require workers to process animals in a shorter amount of time, making it more difficult to socially distance. Indeed, according to the Centers for Disease Control and Prevention (CDC), "[c]hanges in production practices (*e.g.*, line speed *reductions*) may be necessary to maintain appropriate distancing among employees." [31]

In April alone, FSIS approved 15 line-speed waiver requests from large poultry plants, allowing those plants to accelerate their processing lines by 25 percent.[32] More than half of those 15 plants have experienced COVID-19 outbreaks, with one plant reporting a COVID-19-related worker fatality and another closing shortly after receiving its waiver due to the rampant spread of the virus.[33] Coinciding with these changes, reports indicate that poultry plants with line-speed waivers are at least 10 times more likely than the industry as a whole to have COVID-19 cases among workers.[34]

In addition, FSIS continues to roll out its new inspection system for pig slaughterhouses, which—among other things—entirely removes line-speed caps and shifts some responsibilities from federal inspectors to plant employees. Petitioners would like to see USDA discontinue its

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Establishments to Operate at Line Speeds Up to 175 Birds Per Minute, FSIS Constituent Update (Feb. 23, 2018), https://www.fsis.usda.gov/wps/portal/fsis/newsroom/meetings/newsletters/constituent-updates/archive/2018/ConstUpdate022318; Petition To Permit Waivers of Maximum Line Speeds for Young Chicken Establishments Operating Under the New Poultry Inspection System; Criteria for Consideration of Waiver Requests for Young Chicken Establishments To Operate at Line Speeds of Up to 175 Birds per Minute, 83 Fed. Reg. 49,048 (Sept. 28, 2018), https://www.federalregister.gov/documents/2018/09/28/2018-21143/petition-to-permit-waivers-of-maximum-line-speeds-for-young-chicken-establishments-operating-under.

[30] *Id*.

[31] Memorandum from Michael Grant, CDC Nat'l Ins. for Occupational Safety & Health, et al., to Joshua Clayton, South Dakota Department of Health 7 (Apr. 22, 2020), https://covid.sd.gov/docs/smithfield_recs.pdf (emphasis added).

[32] *See* Nat'l Employment Law Project, *USDA Allows Poultry Plants to Raise Line Speeds, Exacerbating Risk of COVID-19 Outbreak and Injury*, 1 (2020), https://s27147.pcdn.co/wp-content/uploads/Policy-Brief-USDA-Poultry-Line-Speed-Increases-Exacerbate-COVID-19-Risk.pdf.

[33] *Id*.

[34] *See* Sky Chadde & Kyle Bagenstose, *USDA let Poultry Plants put Workers Close Together Even as They Got Sick From Coronavirus*, USA Today (Apr, 24, 2020), https://www.usatoday.com/story/news/2020/04/24/usda-let-poultry-plants-move-fastercrowd-lines-covid-coronavirus-spread-meat-packing-workers/3013615001/.

practice of increasing line-speeds and approving line-speed waiver requests,[35] but USDA has yet to do so. Especially when combined with ongoing worker illnesses resulting from the COVID-19 pandemic, increased line-speeds and line-speed waivers create a perfect storm, increasing the likelihood of additional shutdowns and delays.

Also increasing the likelihood of additional shutdowns and delays are the incentives and threats that the meat industry has employed to keep slaughterhouse workers on the job, despite risks of contracting and spreading coronavirus.[36] For instance, in early June, Tyson Foods reverted to its pre-coronavirus worker attendance policy,[37] under which workers can be penalized and even fired for missing work due to illness.[38] Incentives and threats that prevent sick workers from staying home can lead to additional outbreaks and slow-downs, putting workers and communities at greater risk.

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[35] *See* Letter from A Better Balance, et al., to Nancy Pelosi, et al., Speaker, U.S. H.R. (May 4, 2020), https://www.foodandwaterwatch.org/sites/default/files/20.05.04_21_groups_urge_congress_to_direct_usda_to_stop_higher-speed_slaughter.pdf (requesting that Congress implement a moratorium on the higher line-speed slaughter and processing of poultry, swine, and cattle).

[36] *See* Jonathan Dyal, et al., *COVID-19 Among Workers in Meat and Poultry Processing Facilities – 19 States, April 2020*, 69 Morbidity & Mortality Weekly Report 557, 557 (May 8, 2020), https://www.cdc.gov/mmwr/volumes/69/ wr/mm6918e3.htm ("Among workers, socioeconomic challenges might contribute to working while feeling ill, particularly if there are management practices such as bonuses that incentivize attendance."); *see also* Liam Niemeyer, *Coronavirus Concerns Rise as Ohio Valley Meatpacking Workers Fall Sick*, WV Public Broadcasting (Apr. 10, 2020), https://www.wvpublic.org/post/coronavirus-concerns-rise-ohio-valley-meatpacking-workers-fall-sick#stream/0 (reporting that some meat companies have offered bonuses tied to worker attendance); Polly Mosendz et al., *U.S. Meat Plants are Deadly as Ever, With No Incentive to Change*, Bloomberg Businessweek (June 18, 2020), https://www.bloomberg.com/news/features/2020-06-18/how-meat-plants-were-allowed-to-become-coronavirus-hot-spots (describing a COVID-19 outbreak at a JBS meatpacking plant in Cactus, Texas and reporting that "the CDC warned JBS on April 20 to stop offering inducements for workers to come in, but JBS ultimately didn't follow the agency's advice").

[37] *See* Deena Shanker & Jen Skerritt, *Tyson Reinstates Policy that Penalizes Absentee Workers*, Bloomberg (June 2, 2020), https://www.bloomberg.com/news/articles/2020-06-03/tyson-reinstates-policy-that-penalizes-absentee-workers; *see also* Jerald Brooks & Lakesha Bailey, *We're Feeding America, but We're Sacrificing Ourselves*, N.Y. Times (June 15, 2020), https://www.nytimes.com/2020/06/15/opinion/coronavirus-tyson-poultry.html?action=click&module=Opinion&pgtype=Homepage.

[38] *See* Polly Mosendz et al., *U.S. Meat Plants are Deadly as Ever, With No Incentive to Change*, Bloomberg Businessweek (June 18, 2020), https://www.bloomberg.com/news/features/2020-06-18/how-meat-plants-were-allowed-to-become-coronavirus-hot-spots (describing that "The nation may now be experiencing a second wave of the virus outbreak, with case counts mounting in Texas, Arizona, and other red states where meatpacking is more common. On June 5, JBS's Cactus location sent workers home with 10-pound boxes of chicken tenders. The state had 1,693 new COVID-19 cases that day").

B. The Meat Industry Has Responded to Problems at Slaughterhouses by Killing Millions of Farm Animals.

The animal agricultural industry is highly consolidated and vertically integrated. Currently, just four corporations control 85% of beef processing, three corporations control 63% of pig processing, and half of all chicken growers report they have just one or two buyers for their birds.[39] In addition to maintaining control over processing, major meat companies often own animals during all stages of production, and contract with livestock growers to raise those animals prior to slaughter.

Without prompt access to slaughterhouses, meat companies and livestock growers have found themselves faced with three choices: (1) hold animals on the industrial livestock operations where they are raised indefinitely, (2) identify alternate channels for slaughter, or (3) kill animals and dispose of their carcasses, even if they cannot be processed into food. The meat industry has explained that the first choice is unsatisfactory because animals may outgrow slaughter equipment and, in any case, the "just-in-time" system operates such that a new generation of farm animals is already waiting to take the existing generation's place.[40] According to the National Pork Producers Council (NPPC), the second choice, identifying alternate channels for slaughter, "isn't a solution to the supply bottleneck challenge faced by pork producers," in part because "local butchers and other alternative channels simply cannot absorb the number of hogs backed up."[41] Thus, meat companies and growers apparently have concluded that the majority of animals must be killed—or, in industry parlance, depopulated—even if they cannot be used for food.[42]

Meatpackers began raising alarm bells about the growing animal backlog as early as April.[43] On April 26, John Tyson, the chairman of Tyson Foods, took out full page ads in major

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[39] *See* U.S. Dept. of Agric., *Grain Inspection, Packers and Stockyards Administration, 2016 Annual Report: Packers and Stockyards Program* (2016), https://www.gipsa.usda.gov/psp/publication/ar/2016_psp_annual_report.pdf; *see also* Philip H. Howard, *Corporate Concentration in Global Meat Processing: The Role of Feed and Finance Subsidies*, in *Global Meat: Social and Environmental Consequences of the Expanding Meat Industry*, at 31 (2019); James M. MacDonald, *Technology, Organization, and Financial Performance in U.S. Broiler Production*, U.S. Dept. of Agric., (June 2014), https://www.ers.usda.gov/publications/pub-details/?pubid=43872.

[40] *See* Letter from Kim Reynolds, Governor of Iowa, et al., to Vice President & Members of the Coronavirus Task Force (Apr. 27, 2020) https://www.grassley.senate.gov/sites/default/files/Iowa%20group-2020-covid-pork-letter-1.pdf; *see also* NPPC Letter at 4.

[41] Lisa Held, *Struggling Farmers Are Selling Midwest Hogs Ad Hoc and Online*, Civil Eats (June 8, 2020), https://civileats.com/2020/06/08/struggling-farmers-are-selling-midwest-hogs-ad-hoc-and-online/.

[42] *See* Michael Corkery & David Yaffe-Bellany, *Meat Plant Closures Mean Pigs Are Gassed or Shot Instead*, N.Y. Times (May 14, 2020), https://www.nytimes.com/2020/05/14/business/coronavirus-farmers-killing-pigs.html.

[43] *See* Tom Polansek & P.J. Huffstutter, *Piglets Aborted, Chickens Gassed as Pandemic Slams Meat Sector*, Reuters (April 27, 2020) https://www.reuters.com/article/us-health-coronavirus-livestock-insight/piglets-aborted-chickens-gassed-as-pandemic-slams-meat-sector-idUSKCN2292YS (Anecdotally

newspapers including the New York Times, Washington Post, and Arkansas Democrat-Gazette, warning that "millions of animals – chickens, pigs and cattle – will be depopulated because of the closure of our processing facilities."[44] By late June, depopulation efforts were ongoing in leading agricultural states across the country, including Minnesota,[45] North Carolina, Iowa, and Colorado.[46] Poultry producers have already euthanized more than 10 million hens.[47] The pork industry has warned that it could euthanize more than 10 million pigs by September.[48] And, as explained above, coronavirus infections recently spiked across the South and West, indicating that the crisis is far from over.

C. APHIS Is Assisting the Meat Industry as it Depopulates Industrial Animal Feeding Operations and Disposes of Farm Animal Carcasses.

In April, APHIS established the NICC to "provide direct support to producers whose animals cannot move to market as a result of processing plant closures due to COVID-19."[49] Among other activities, the NICC is "advis[ing] and assist[ing] on depopulation and disposal methods" and "[d]eploy[ing] assets of [APHIS's] National Veterinary Stockpile (including captive bolt guns and cartridges, chutes and trailers, and personal protective equipment)."[50]

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explaining that even before closures were widespread, "packers are backed up every day, more and more").

[44] Nathan Borney, *Tyson Chairman Warns of 'Meat Shortages' as Industry Faces Scrutiny for Worker Safety During Coronavirus*, USA Today (Apr. 27, 2020), https://www.usatoday.com/story/money/2020/04/27/tyson-meat-shortages-coronavirus-covid-19/3034748001/.

[45] *See* Liz Crampton, *Farmers Still Plagued by Hog Backlog*, Politico (June 19, 2020), https://www.politico.com/newsletters/morning-agriculture/2020/06/19/farmers-still-plagued-by-hog-backlog-788665.

[46] *See, e.g.*, Tammy Grubb, *Coronavirus Outbreaks at Processors Force NC Farmers to Start killing 1.5M Chickens*, The News & Observer (May 23, 2020, last updated May 28, 2020) (North Carolina) https://www.newsobserver.com/news/business/article242944156.html; CNN Newsource, *2 Million Chickens Being Killed Because Processing Plants are Short-staffed*, The Denver Channel (Apr. 27, 2020) (Colorado), https://www.thedenverchannel.com/news/national/coronavirus/2-million-chickens-being-killed-because-processing-plants-are-short-staffed; Matthew Scully, *The Human Cost of 'Culling' Livestock and 'Depopulating' Farms*, Nat'l Rev. (May 7, 2020) (Iowa), https://www.nation/2020/05/coronavirus-pandemic-human-cost-of-culling-livestock-depopulating-farms/.

[47] *See* Sophie Kevany, *Millions of U.S. Farm Animals to be Culled by Suffocation, Drowning, and Shooting*, The Guardian (May 19, 2020), https://www.theguardian.com/environment/2020/may/19/19/millions-of-us-farm-animals-to-be-culled-by-suffocation-drowning-and-shooting-coronavirus?fbclid=IwAR0l44gqUoLWzxVv-O5r1Uwm8sQAmWqQy8dFKaJTE1ikR8Y2vpgS0-VHhFc

[48] *See* Audrey Conklin, *Coronavirus May Force Hog Farmers to Kill 10M Pigs by September*, Fox Business (May 17, 2020), https://www.foxbusiness.com/markets/farmers-euthanize-10-million-pigs-coronavirus; *see also* NPPC Letter at 3.

[49] APHIS NICC Press Release.

[50] *Id.*; *see also APHIS Livestock Coordination Center*, U.S. Dep't of Agric., https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/livestock-coordination-center/livestock-coordination-center (last visited June 10, 2020).

On May 8, NPPC wrote to the U.S. Department of Justice (DOJ) requesting a "Business Review Letter" to confirm that industry coordination in euthanizing and disposing of an estimated 700,000 hogs per week would not violate antitrust laws.[51] According to NPPC, approximately 44% of pork-production capacity was offline as of April 29.[52] NPPC determined that "a coordinated industry and governmental response is necessary to ethically and efficiently euthanize as few hogs as possible," in part because "hog farmers generally lack the knowledge, equipment, and facilities needed to humanely euthanize large numbers of animals, and then dispose of them in a manner that mitigates the environmental impact."[53] Thus, NPPC argued, "to ensure that animals are disposed of in an environmentally responsible manner, the NPPC, working *under the direction and supervision of the USDA* and state and local officials, must be prepared to provide clear and consistent guidance with regard to how producers should dispose of these animals."[54]

On May 15, DOJ responded to NPPC's request and indicated that DOJ does not currently intend to pursue antitrust enforcement actions against hog producers who are "'acting at [the NICC's] direction in the context of a clearly defined federal program' and in furtherance of that program."[55] DOJ indicated that the response was consistent with its general policy against "challeng[ing] conduct aimed at addressing COVID-19 if it is (i) 'compelled by an agreement with a federal agency or a clearly defined federal government policy' and (ii) 'supervised by a federal agency.'"[56] In applying this general policy to NPPC, DOJ relied on NPPC's representations that "most of [NPPC's planned] conduct will occur at the direction and under the supervision and coordination of the USDA—a government agency."[57]

D. Some Methods for Depopulation and Disposal Raise Serious Concerns for Animal Welfare, Public Health, and the Environment.

Meat industry representatives consider the depopulation and disposal of millions of animals nationwide to be "a grim necessity."[58] As APHIS has acknowledged, "[p]sychological

[51] NPPC Letter at 1,3.
[52] *Id*. at 3–4.
[53] *Id*. at 3, 4.
[54] *Id*. at 5 (emphasis added).
[55] Letter from the Honorable Makan Delrahim, Assistant Att'y General for Antitrust, U.S. Dep't of Justice, to Martin M. Toto, Att'y, White & Case LLP, at 4 (May 15, 2020), https://www.justice.gov/opa/press-release/file/1276971/download (citations omitted).
[56] *Id*. (citing Letter from the Honorable Makan Delrahim, Assistant Att'y General for Antitrust, U.S. Dep't of Justice, to Lori A. Schechter, McKesson Corp., et al., at 8 (Apr. 4, 2020), https://www.justice.gov/atr/page/file/1266511/download; Letter from the Honorable Makan Delrahim, Assistant Att'y General for Antitrust, U.S. Dep't of Justice, to John G. Chou, Exec. Vice President, AmerisourceBergen, at 8 (Apr. 20, 2020), https://www.justice.gov/atr/page/file/1269911/download.
[57] *Id*. at 1.
[58] Matthew Scully, *The Human Cost of 'Culling' Livestock and 'Depopulating' Farms*, Nat'l Rev. (May 7, 2020), https://www.nationalreview.com/2020/05/coronavirus-pandemic-human-cost-of-culling-livestock-depopulating-farms/.

hazards arise from the emotional reaction evoked by massive volumes of carcasses," among industry actors and neighbors alike.[59] In addition to these psychological risks—and the financial hardship that can result from the purposeless extermination of farm animals—depopulation and disposal can raise serious concerns for animal welfare, public health, and the environment. The risks associated with depopulation and disposal illustrate the importance of additional federal oversight and transparency.

Numerous methods for depopulation and disposal currently are available to the meat industry, and different methods have different implications for animal welfare, public health, and the environment.[60] As the National Pork Board explained during a presentation in April, the American Veterinary Medical Association's Guidelines for the Depopulation of Animals (AVMA Guidelines)[61] allow depopulation by gunshot, nonpenetrating captive bolt, penetrating captive bolt, electrocution, manual blunt force trauma, carbon dioxide, anesthetic overdose, ventilator shutdown, sodium nitrite, or use of injectable euthanasia agents.[62] Although some of these depopulation techniques are "preferred," while others are merely "permitted," the Guidelines do not designate *any* techniques as "not recommended" for hog depopulation.[63]

[59] EIS at 97.
[60] The AVMA Guidelines concede that "the emergency destruction of animals through depopulation techniques may not guarantee that the deaths the animals face are painless and distress free." AVMA Guidelines at 4.
[61] Both APHIS and the meat industry rely on the AVMA Guidelines. *See* USDA, "For Affected Producers," *APHIS Livestock Coordination Center*, U.S. Dep't of Agric., https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/livestock-coordination-center/livestock-coordination-center (last visited June 10, 2020) (directing livestock producers to the AVMA Guidelines, among other resources); *see also, e.g.*, *Pork Producer Webinar: Planning for Emergency Depopulation and Disposal*, Nat'l Pork Bd., (Apr. 26, 2020), https://www.pork.org/public-health/what-you-need-to-know-about-covid-19/pork-industry-covid-19-webinars/(incorporating information from the AVMA Guidelines).
[62] *See Pork Producer Webinar: Planning for Emergency Depopulation and Disposal*, Nat'l Pork Bd., (Apr. 26, 2020), https://www.pork.org/public-health/what-you-need-to-know-about-covid-19/pork-industry-covid-19-webinars/.
[63] *Id.; see also* AVMA Guidelines at 45.

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Indeed, the AVMA Guidelines designate only a handful of depopulation techniques as not recommended for any category of industrial livestock,[64] and some techniques that the AVMA Guidelines designate as *preferred*—such as smothering hens with water-based foam—have been condemned as inhumane by other authorities.[65] The AVMA Guidelines do not forbid any depopulation techniques.

Once animals have been euthanized, the meat industry currently has a variety of options for carcass disposal. As the National Pork Board explained during its April presentation, these options include burial and on-site incineration.[66]

[64] *See* AVMA Guidelines at 36, 53, 54. Horses, aquatic animals, animals given outdoor access, or animals classified as "companion, lifestyle, or high-value" are not included in Petitioners' summary.
[65] *See* Sophie Kevany, *Millions of U.S. Farm Animals to be Culled by Suffocation, Drowning, and Shooting*, The Guardian (May 19, 2020), https://www.theguardian.com/environment/2020/may/19/19/millions-of-us.-farm-animals-to-be-culled-by-suffocation-drowning-and-shooting-coronavirus?fbclid=IwAR0l44gqUoLWzxVv-O5r1Uwm8sQAmWqQy8dFKaJTE1ikR8Y2vpgS0-VHhFc (explaining that, although "[w]ater-based foaming is categorised as the 'preferred method [for depopulating some birds] by the AVMA, . . . "[a] 2019 European Food Safety Authority journal report said it did not find water-based or firefighting foam acceptable because 'death due to drowning in fluids or suffocation by occlusion of the airways' is not seen as 'a humane method for killing animals, including poultry'").
[66] *See Pork Producer Webinar: Planning for Emergency Depopulation and Disposal*, Nat'l Pork Bd., (Apr. 26, 2020), https://www.pork.org/public-health/what-you-need-to-know-about-covid-19/pork-industry-covid-19-webinars/.

According to APHIS, burial and on-site incineration "have the greatest impacts to the environment" and, thus, "must only be used after carefully weighing risk factors."[67] For instance, APHIS has acknowledged that "[t]he burial of carcasses may impact the quality of surface and ground water resources," including drinking water, by leaching contaminants that migrate into water through the surrounding soil.[68] In addition, open-air burning releases "potentially high levels of air pollution, large amounts of potentially contaminated ash (dioxins, heavy metals), leachate, and unwanted heat."[69] Despite these risks, APHIS currently allows the industry to use unlined burial and on-site incineration for carcass disposal.

Not only do depopulation and disposal methods raise serious concerns for animal welfare, public health, and the environment *individually*, certain depopulation and disposal techniques pose additional risks when used *in combination*. For example, if animals are shot with lead bullets and then buried in unlined pits, lead can migrate into the soil and contaminate nearby water and plants, putting people and wildlife at risk.[70] Experts agree that there is no safe level of exposure to lead.[71]

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[67] EIS at vii.
[68] *Id.* at 5, 81.
[69] *Id.* at 44.
[70] *See, e.g.*, Ctr. for Biological Diversity, et al., *Petition to the Environmental Protection Agency to Ban Lead Shot, Bullets, and Fishing Sinkers Under the Toxic Substances Control Act*, at 8 (2010), https://www.biologicaldiversity.org/campaigns/get_the_lead_out/pdfs/Final_TSCA_lead_ban_petition_8-3-10.pdf.
[71] *See, e.g.*, American Academy of Pediatrics, *Lead Exposure in Children* (2016), https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/lead-exposure/Pages/Lead-Exposure-in-Children.aspx#:~:text=There%20is%20no%20safe%20level,Prevention%20recommends%20evaluation%20and%20intervention.

Similarly, depopulation through suffocation by foam poses serious threats to people and the environment, especially if the resulting animal carcasses are buried in unlined pits. Foam is a mixture of air, detergent or surfactant, and water.[72] Over time, foam breaks down, and its components can flow from farm animal depopulation sites into nearby water[73] and soil.[74] This contamination is especially troubling because some commonly used foams contain dangerous chemicals known as per- and polyfluoroalkyl substances (PFAS). [75] Once in the environment, PFAS spread quickly, resist degradation, and bioaccumulate in plants, animals, and humans.[76] Exposure to PFAS has been linked to cancer, elevated cholesterol, obesity, immune suppression, pre-eclampsia, impaired liver and kidney function, and endocrine disruption.[77] PFAS can be highly toxic even in small doses.[78] Senior CDC officials have warned that the presence and concentrations of PFAS chemicals in U.S. drinking water is "one of the most seminal public health challenges for the next decades."[79] But APHIS currently allows the meat industry to bury animals suffocated with foam in unlined pits, providing a direct pathway to the contamination of groundwater and, potentially, well water.

E. Extreme Weather Events Can Exacerbate the Harms of Irresponsible Carcass Disposal, while also Causing Additional Mortalities.

Like depopulation methods, extreme weather events can increase the risks associated with mass carcass disposal. And extreme weather events are becoming increasingly frequent and severe due to climate change.[80] Indeed, experts anticipate that the 2020 Atlantic hurricane

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[72] *See* Shailesh Gurung et al., *Depopulation of Caged Layer Hens with a Compressed Air Foam System*, 8 Animals 11 (2018).
[73] *See* Ctr. for Food Sec. & Pub. Health at Iowa State Uni., *Water Based-Foam Depopulation: For Poultry During Animal Health Emergencies* (2016), http://www.cfsph.iastate.edu/Emergency-Response/Just-in-Time/15-Euthanasia_Water-based-Foam-For-Poultry-Depopulation_HANDOUT.pdf.
[74] *See, i.e., Aqueous Film Forming Foam (AFFF)*, State of Alaska, Dep't of Envtl. Conservation, https://dec.alaska.gov/spar/csp/pfas/firefighting-foam/.
[75] *Id.*
[76] *See* Hearing on "Examining the Federal Response to the Risks Associated with Per- and Polyfluoroalkyl Substances (PFAS)" Before the S. Comm. on Env't & Pub. Works, 1 (2019) (Testimony of Linda S. Birnbaum, Director, Nat'l Inst. Envtl. Health Sci. & Nat'l Toxicology Program Nat'l Insts. Health), https://www.niehs.nih.gov/about/assets/docs/hearing_on_examining_the_federal_response_to_the_risks_associated_with_per_and_polyfluoroalkyl_substances_pfas_508.pdf.
[77] *See* U.S. Dep't of Health & Human Servs., Agency for Toxic Substances & Disease Registry, *Toxicological Profile for Perfluoroalkyls, Draft for Public Comment* (2018), https://www.atsdr.cdc.gov/toxprofiles/tp200.pdf
[78] *Id*.
[79] Pat Rizzuto et al., *CDC Sounds Alarm on Chemical Contamination in Drinking Water*, Bloomberg Law (Oct. 17, 2017), https://news.bloombergenvironment.com/environment-and-energy/cdc-sounds-alarm-on-chemical-contamination-in-drinking-water.
[80] *See* U.S. Global Change Research Program, *Fourth National Climate Assessment: Impacts, Risks, and Adaptation in the United States, Volume II* (2018), http://nca2018.globalchange.gov/downloads/NCA4_2018_FullReport.pdf; *see also* Gabriele Villarini & Gabriel Vecchi, *Projected Increases in North Atlantic Tropical Cyclone Intensity from CMIP5 Models*, 26

season, which extends from June 1 to November 30, will be unusually active, producing as many as 10 hurricanes, including 6 "major" hurricanes (category 3, 4, or 5)—that is, about twice as many extreme storms as the average season.[81] As hurricane season reaches its peak in the midst of the COVID-19 crisis, severe storms could flood areas in which recently depopulated animals have been buried, posing additional risks to people and the environment, while also killing and triggering the depopulation of additional animals whose carcasses will require disposal. Thus, the potential for extreme weather must be considered in determining appropriate methods for the disposal of farm animal carcasses.

During the past twenty years, North Carolina has endured at least four hurricanes that caused significant flooding and led to the deaths of many farm animals: Hurricane Floyd in 1999,[82] Hurricane Irene in 2011,[83] Hurricane Matthew in 2015,[84] and Hurricane Florence in 2018.[85] These storms have been catastrophic for neighboring communities and the environment. For instance, Hurricanes Florence and Matthew impaired water quality directly by flooding and breaching manure lagoons at animal feeding operations.[86] Hurricane Floyd "killed approximately 3 million poultry, 800 cattle, and 30,000 hogs in North Carolina."[87] Although APHIS has acknowledged that "[u]nlined burial and open-air burning of carcasses during a mass animal health emergency are expected to have the greatest impacts to the environment,"[88] the Agency also recognizes that "many people decide[] to bury the carcasses [resulting from hurricanes and

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J. Climate 3231 (2013); Enrico Scoccimarro et al., *Intense Precipitation Events Associated with Landfalling Tropical Cyclones in Response to a Warmer Climate and Increased CO2*, 27 J. Climate 4642 (2014); Donald Wuebbles et al., *CMIP5 Climate Model Analyses: Climate Extremes in the United States*, 95 Am. Meterological Soc'y J. 571 (2014); Brian A. Colle et al., *Historical Evaluation and Future Prediction of Eastern North American and Western Atlantic Extratropical Cyclones in the CMIP5 Models During the Cool Season*, 26 J. Climate 6882 (2013).

[81] Nat'l Oceanic and Atmospheric Admin., *Busy Atlantic Hurricane Season Predicted for 2020: Multiple Climate Factors Indicate Above-Normal Activity is Most Likely* (May 21, 2020), https://www.noaa.gov/media-release/busy-atlantic-hurricane-season-predicted-for-2020.

[82] *See Event Overview, Hurricane Floyd Storm Summary*, Nat'l Weather Serv., Nat'l Oceanic & Atmospheric Admin., https://www.weather.gov/mhx/Sep161999EventReview (last visited February 22, 2019).

[83] *See Event Overview, Hurricane Irene August 26-27, 2011*, Nat'l Weather Serv., Nat'l Oceanic & Atmospheric Admin., https://www.weather.gov/mhx/Aug272011EventReview (last visited February 22, 2019).

[84] *See Hurricane Matthew, October 8-9, 2016 Summary*, Nat'l Weather Serv., Nat'l Oceanic & Atmospheric Admin, https://www.weather.gov/mhx/MatthewSummary(last visited February 22, 2019).

[85] *See* Stacy R. Stewart & Robbie Berg, *National Hurricane Center Tropical Cyclone Report Hurricane Florence*, Nat'l Weather Serv., Nat'l Oceanic & Atmospheric Admin (2018), https://www.nhc.noaa.gov/data/tcr/AL062018_Florence.pdf .

[86] *See* Kendra Pierre-Louis, *Lagoons of Pig Waste Are Overflowing After Florence. Yes, That's as Nasty as It Sounds*, N.Y. Times (Sept. 19, 2018), https://www.nytimes.com/2018/09/19/climate/florence-hog-farms.html.

[87] EIS at 34.

[88] *Id*. at vi.

other natural disasters] in unlined pits or trenches."[89] Without additional oversight, there is no reason to suppose that the meat industry will behave differently this year, amidst the COVID-19 pandemic.

Like hurricanes, wildfires and droughts can compound the harms of inappropriate carcass disposal, while also causing additional mortalities. During wildfire events, farm animals can be killed by fire, smoke inhalation, burn infections, and heat stress; in addition, animals seriously injured by fires often are euthanized.[90] Previous wildfire seasons have led to significant farm animal losses: in 2017, devastating fires across the Great Plains killed about 2,500 cattle and 1,900 hogs in Texas, and injured or killed up to 80% of herds at ranches in Kansas.[91] In April 2018, wildfires in Oklahoma killed more than 1,600 cattle.[92] Fast-moving blazes caused by strong winds, which have characterized recent wildfire seasons, pose especially high risks for animal operations.[93] Travel restrictions related to the COVID-19 pandemic may limit emergency evacuation options, increasing the risk that wildfires will cause significant livestock mortalities. And experts already are predicting "above normal significant large fire potential[s]" until August of this year.[94] It is imperative that the meat industry prepare for the possibility that significant numbers of animals will die as a result of wildfires into account as it disposes of animal killed in connection with the COVID-19 pandemic.

V. ARGUMENTS IN SUPPORT OF REQUESTED ACTION

A. APHIS Has Authority to Adopt the Requested Rule.

Congress established USDA, in part, "to acquire and to diffuse among the people of the United States useful information on subjects connected with agriculture."[95] As an agency within USDA, APHIS works "to provide leadership in ensuring the health and care of animals and plants, improve agricultural productivity and competitiveness, and contribute to the national

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[89] *Id*. at 5.
[90] *See, i.e.*, Kay Ledbetter, *Wildfire Damage to Cattle may be More Than the Eye can See*, AgriLife Today (Apr. 19, 2011), https://texashelp.tamu.edu/wp-content/uploads/2016/02/Wildfire_damage_to_cattle_may_be_more_than_the_eye_can_see.pdf.
[91] *See* Greg Cima, *Wildfires Kill Cattle, Pigs: Thousands of Animals Dead, Ranches Devastated*, J. Am. Veterinary Med. Ass'n (Apr. 12, 2017), https://www.avma.org/javma-news/2017-05-01/wildfires-kill-cattle-pigs; *see also* Jack Healy, *Burying Their Cattle, Ranchers Call Wildfires 'Our Hurricane Katrina'*, N.Y. Times (Mar. 20, 2017), https://www.nytimes.com/2017/03/20/us/burying-their-cattle-ranchers-call-wildfires-our-hurricane-katrina.html.
[92] *See* Donald Stotts, *Cattle Operation Losses from Wildfires Exceed $26 million*, FarmProgress (May 8, 2018), https://www.farmprogress.com/livestock/cattle-operation-losses-wildfires-exceed-26-million.
[93] *See, i.e.*, Emma Bowman, *As California Wildfire Neared, A Family Raced to Save its Animals*, NPR (Nov.1, 2019), https://www.npr.org/2019/11/01/774773257/before-california-wildfire-devastates-farm-family-races-to-save-animals.
[94] *See* Nat'l Interagency Fire Ctr., *National Significant Wildland Fire Potential Outlook* (2020), https://www.predictiveservices.nifc.gov/outlooks/monthly_seasonal_outlook.pdf.
[95] 7 U.S.C. § 2201.

economy and the public health."[96] In pursuing this mission, APHIS "is committed . . . to promot[ing] and protect[ing] the integrity of the environment."[97]

The Animal Health Protection Act (AHPA) authorizes the Secretary of Agriculture (Secretary) to take remedial actions, including providing destruction and disposal services and compensation, with respect to any animal entering the country or moving through interstate commerce that "may carry, may have carried, or may have been affected with or exposed to any pest or disease of livestock."[98] The Secretary has delegated this authority under the AHPA to APHIS.[99] In carrying out its responsibilities under the APHA, APHIS may cooperate with other federal agencies, states, and Tribal nations.[100]

Under the AHPA, APHIS's authority is especially broad during "extraordinary emergenc[ies]."[101] APHIS has interpreted its authority to encompass carcass management related to *any* mass animal health emergency, including one arising from a natural disaster.[102] In December 2015, APHIS published a Final Programmatic Environmental Impact Statement (EIS) "analyz[ing] the environmental effects associated with various carcass management alternatives that could be implemented during a mass animal health emergency."[103] The purpose of this EIS was "to enhance emergency preparedness, and to allow for greater use of *improved* carcass management options in addition to the traditional methods of unlined burial and open-air burning during mass animal health emergencies."[104] In publishing this EIS, APHIS relied on its authority under the APHA.[105]

APHIS's existing regulations prescribe methods of livestock depopulation and disposal, and mandate record-keeping in a variety of circumstances. For instance, APHIS requires that certain diseased pigs "be disposed of by burial, incineration, or other disposal means authorized by state law . . . in the presence of an APHIS representative."[106] APHIS also requires that the

[96] Notice of Request for Extension of Approval of an Information Collection; Environmental Monitoring, 85 Fed. Reg. 31,135 (May 22, 2020).
[97] *Id*.
[98] 7 U.S.C. § 8306(a)(1)(B); *see id.* § 8306(d).
[99] 7 C.F.R. § 2.80(a)(37).
[100] 7 U.S.C. § 8310(a).
[101] *Id*. § 8306(b)(1).
[102] *See* EIS at 4; *see also id.* at 9 (asserting "APHIS'[s] authority to manage carcasses during a mass animal health emergency")
[103] *Id.* at v.
[104] *Id.* (emphasis added).
[105] *See id*. at 8.
[106] 9 C.F.R. § 51.6; *see also id*. § 56.5 (explaining that APHIS and its state-agency counterpart will determine appropriate methods of disposal for poultry killed in connection with efforts to control avian influenza, and appropriate methods of disposal may include "[b]urial, incineration, composting, or rendering").

disposal of certain diseased cattle be documented by a report or affidavit "that identifies the animals and describes their disposition . . . for information purposes only."[107]

On April 28, President Trump issued an Executive Order that directed USDA "to determine the proper . . . allocation of all the materials, services, and facilities necessary to ensure the continued supply of meat."[108] Around the same time, as explained above, APHIS established the NICC to "advise and assist on [farm animal] depopulation and disposal methods."[109] According to the Department of Justice, the "NICC will work with farmers and packers to facilitate hog depopulation," including by "tell[ing] those producers where they should take . . . hogs to be depopulated."[110]

APHIS's authority encompasses the requested rulemaking. A decision to restrict the most environmentally harmful carcass disposal practices is consistent with APHIS's commitment to promote and protect the integrity of the environment, its authority to manage animal health emergencies under the AHPA, its existing regulations prescribing certain disposal practices, and its stated intent to advise and assist with animal depopulation and disposal in the present instance. Similarly, a decision to provide the public with prompt notice about disposal is consistent with USDA's information-sharing mission and APHIS's existing regulations requiring record-keeping for information purposes.

Not only does APHIS have authority to enact the requested rules, the rules are consistent with the minimum federal supervision DOJ has identified as *necessary* to reduce the possibility that the meat industry's coordinated depopulation and disposal efforts will violate antitrust laws. (Of course, the requested rules would not and could not insulate the industry from antitrust liability for anticompetitive activities.) As explained above, a handful of powerful corporations dominate meat production worldwide. The consolidation of power in the industry has long raised concerns, including in the context of the COVID-19 pandemic.[111] DOJ has indicated that it does not *currently* intend to challenge certain actions related to hog depopulation and disposal because producers "will be acting at [the] direction [of the NICC] in the context of a clearly defined federal program' and in furtherance of that program," and "their actions will be 'at the direction

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[107] *Id*. § 50.19.
[108] Delegating Authority Under the Defense Production Act With Respect to Food Supply Chain Resources During the National Emergency Caused by the Outbreak of COVID-19, Exec. Order. No. 13,917, 85 Fed. Reg. 26,313, 26,314 (April 28, 2020).
[109] APHIS NICC Press Release.
[110] Letter from the Honorable Makan Delrahim, Assistant Att'y General for Antitrust, U.S. Dep't of Justice, to Martin M. Toto, Att'y, White & Case LLP, at 4 (May 15, 2020), https://www.justice.gov/opa/press-release/file/1276971/download.
[111] *See* Alex Gangitano, *Bipartisan Pair of Senators Request Antitrust Probe into Meatpacking Industry*, The Hill (Apr. 29, 2020), https://thehill.com/homenews/senate/495197-hawley-baldwin-request-antitrust-investigation-into-meatpacking-industry; *see also* David McLaughlin, *DOJ Subpoenas Meatpackers*, FarmProgress (June 5, 2020), https://www.farmprogress.com/business/doj-subpoenas-meatpackers.

and supervision of the USDA.'"[112] By enacting the requested rules, APHIS will provide supervision necessary to reduce violations of antitrust laws and associated harm to consumers, while also helping to protect people and the environment.

B. APHIS's Current Approach Creates an Urgent Need for the Requested Rule.

i. APHIS's failure to prohibit the most environmentally harmful carcass disposal practices puts low-wealth communities and communities of color at greater risk of adverse health impacts.

Adverse outcomes from COVID-19 disproportionately burden rural communities, low wealth communities, and communities of color. These same communities also experience higher exposures to air and water pollution per capita, and bear a higher burden of disease. APHIS's failure to prohibit the most environmentally harmful carcass disposal practices puts these communities at greater risk. The requested rules will benefit communities by immediately prohibiting the most harmful practices and ensuring that people living near carcass disposal locations have the information they need to protect themselves from additional adverse health impacts.

The people most burdened by environmental pollution are among those most vulnerable to COVID-19. People who live and work next to industrial facilities, for example, are more likely to suffer from chronic illnesses like diabetes and asthma.[113] Individuals with underlying health conditions like diabetes and asthma are at greater risk of serious illness or death from COVID-19.[114]

Like other industries, industrial animal agriculture is a significant source of air and water pollution. Animals at concentrated animal feeding operations (CAFOs) produce lots of pollution, much of it coming from the tremendous quantities of fecal waste they generate every day, which contains harmful substances. CAFOs are a source of many water pollutants such as pathogenic bacteria including *E. coli* and *Cryptosporidium*, nitrogen, and phosphorous.[115] People living near CAFOs are more likely to be exposed to infectious viral and bacterial agents. Concerning levels of antibiotic-resistant bacteria have been found in residential air samples downwind of

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[112] Letter from the Honorable Makan Delrahim, Assistant Att'y General for Antitrust, U.S. Dep't of Justice, to Martin M. Toto, Att'y, White & Case LLP, at 4 (May 15, 2020), https://www.justice.gov/opa/press-release/file/1276971/download.

[113] *See* Envtl. Justice Health All. et al., *Life at the Fenceline: Understanding Cumulative Health Hazards in Environmental Justice Communities* 2, 16–17 (2018), https://new.comingcleaninc.org/assets/media/documents/Life%20at%20the%20Fenceline%20-%20English%20-%20Public.pdf.

[114] *See* Roni Caryn Rabin, *Coronavirus Threatens Americans with Underlying Conditions*, N.Y. Times (Mar. 12, 2020), https://www.nytimes.com/2020/03/12/health/coronavirus-midlife-conditions.html.

[115] *See, e.g. Literature Review of Contaminants in Livestock and Poultry Manure and Implications for Water Quality*, EPA, EPA 820-R-13-002, 5 (July 2013) (listing the health impacts of these pollutants); Comptroller & Auditor General, *The 2001 Outbreak of Foot and Mouth Disease*, Nat'l Audit Office (2002), https://www.nao.org.uk/wp-content/uploads/2002/06/0102939.pdf.

CAFOs.[116] In one instance, researchers found nearly 140 strains of bacteria in air samples near a single CAFO, of which 121 strains were resistant to at least two different antibiotics.[117]

Air pollutants from CAFOs include ammonia (NH_3), hydrogen sulfide (H_2S), particulate matter ($PM_{2.5}$ and PM_{10}) and bacteria.[118] Exposure to these pollutants can induce respiratory problems and exacerbate pre-existing conditions, such as asthma.[119] Residents in communities near CAFOs suffer from odor-induced headaches, runny noses, sore throats, excessive coughing, nausea, burning eyes, and other symptoms associated with CAFO air pollution.[120] In addition, air pollution from CAFOs is "strongly correlated" with infant mortality.[121] Farmers and growers themselves often have a high incidence of respiratory related illnesses due to particulate matter,[122] and additional pollution, such as that generated by carcass incineration, are also harmful to their health.

The health threats from this pollution have become extremely acute during the COVID-19 pandemic. Preliminary studies from across the world have consistently found higher mortality rates from COVID-19 in areas with more air pollution.[123] A Harvard University study examining more than 3,000 counties in the US found that even "a small increase in long-term exposure to $PM_{2.5}$ leads to a large increase in the COVID-19 death rate."[124] Experts hypothesize that the inflammation caused by pollution-related respiratory conditions causes severe responses to

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[116] *See* Shawn G. Gibbs et al., *Airborne Antibiotic Resistant and Nonresistant Bacteria and Fungi Recovered from Two Swine Herd Confined Animal Feeding Operations*, 1 J. Occupational & Envtl. Hygiene 699 (2004).
[117] *See* Amy Chapin et al., *Airborne Multidrug-Resistant Bacteria Isolated from a Concentrated Swine Feeding Operation*, 113 Envtl. Health Persp. 137, 137-42 (2005).
[118] *See* Carrie Hribar, *Understanding Concentrated Animal Feeding Operations and Their Impact on Communities*, Nat'l Ass'n of Local Bds. of Health (2010), https://www.cdc.gov/nceh/ehs/docs/understanding_cafos_nalboh.pdf.
[119] *See* Steve Wing et al., *Air Pollution and Odor in Communities near Industrial Swine Operations*, 116 Envtl. Health Persp. 1362 (2008).
[120] *Id.*
[121] Stacy Sneeringer, *Does Animal Feeding Operation Pollution Hurt Public Health? A National Longitudinal Study of Health Externalities Identified by Geographic Shifts in Livestock Production*, 91 Am. J. of Agric. Econ. 124, 130 (2009).
[122] *See* Michael Greger & Gowri Koneswaran, *The Public Health Impacts of Concentrated Animal Feeding Operations on Local Communities*, 33 Family & Community Health 373 (2010), https://www.humanesociety.org/sites/default/files/docs/public-impacts-factory-farms-on-communities.pdf.
[123] *See* Alex Fox, *Air Pollution May Make COVID-19 Symptoms Worse*, Smithsonian Mag. (May 7, 2020), https://www.smithsonianmag.com/smart-news/lockdown-clears-skies-research-links-air-pollution-pandemics-death-toll-180974814/.
[124] Xiao Wu et al., *Exposure to Air Pollution and COVID-19 Mortality in the United States: A Nationwide Cross-sectional Study*, Harv. Uni. Dep't of Biostatistics (2020), https://projects.iq.harvard.edu/covid-pm.

COVID-19.[125] Importantly, beyond those direct disposal-related exposure pathways, research reveals that people living near industrial food animal production facilities often already have a baseline elevated risk for health conditions relevant to COVID-19 vulnerability.[126] One study of residents living near industrial hog operations in North Carolina, for example, found the residents to be at risk for several conditions that are known to be risk factors for severe COVID-19.[127] The study found that people living in close proximity to these facilities experience increased rates of death from diseases such as kidney disease, tuberculosis, and septicemia, even after controlling for socioeconomic and other factors such as smoking.[128] Even further, the same study established that African American and Indigenous residents are disproportionately represented in zip codes containing industrial hog operations.[129]

Pollution burdens such as increased exposure to air pollution are not shared evenly throughout the U.S. population. Studies show that low wealth communities and communities of color shoulder a greater pollution burden than wealthier or whiter communities.[130] Research suggests that this may be a contributing factor to the racial disparities playing out in COVID-19 infection and mortality rates, where historically marginalized communities of color are suffering disproportionately from the impacts of COVID-19. The death rates from COVID-19, for example, are disproportionately higher for African Americans nationwide then for other racial groups, with one analysis showing a national death rate nearly double what would be representative based on population share.[131] Hispanics/Latinos also make up a disproportionate percentage of total cases.[132]

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[125] *See* Alex Fox, *Air Pollution May Make COVID-19 Symptoms Worse*, Smithsonian Mag. (May 7, 2020), https://www.smithsonianmag.com/smart-news/lockdown-clears-skies-research-links-air-pollution-pandemics-death-toll-180974814/.
[126] *See Kidney Disease & COVID-19*, Nat'l Kidney Found., https://www.kidney.org/coronavirus/kidney-disease-covid-19#does-kidney-disease-put-me-higher-risk; *see also Q&A: Tuberculosis and COVID-19*, WHO (May 11, 2020), https://www.who.int/news-room/q-a-detail/tuberculosis-and-the-covid-19-pandemic; Marvin Zick, *Update: Can COVID-19 Cause Sepsis? Explaining the Relationship Between the Coronavirus Disease and Sepsis*, Global Sepsis All. (Apr. 7, 2020), https://www.global-sepsis-alliance.org/news/2020/4/7/update-can-covid-19-cause-sepsis-explaining-the-relationship-between-the-coronavirus-disease-and-sepsis-cvd-novel-coronavirus.
[127] *See* Julia Kravchenko et al., *Mortality and Health Outcomes in North Carolina Communities Located in Close Proximity to Hog Concentrated Animal Feeding Operations*, 79 N.C. Med. J. 278 (2018).
[128] *Id.*
[129] *Id.*
[130] *See* Hiroko Tabuchi, *In the Shadows of America's Smokestacks, Virus Is One More Deadly Risk*, N.Y. Times (May 17, 2020), https://www.nytimes.com/2020/05/17/climate/pollution-poverty-coronavirus.html, *see also* Ihab Mikati, *Disparities in Distribution of Particulate Matter Emission Sources by Race and Poverty*, 108 Am. J. Pub. Health 480 (2017).
[131] *See* Maria Godoy & Daniel Wood, *What Do Coronavirus Racial Disparities Look Like State By State?*, NPR (May 30, 2020), https://www.npr.org/sections/health-shots/2020/05/30/865413079/what-do-coronavirus-racial-disparities-look-like-state-by-state.
[132] *Id.*

Rural residents also face serious risks from the COVID-19 crisis. Rural areas face unique risks such as lower rates of employment in jobs where remote work is possible, more multi-generational households where those working outside the home can come into contact and spread the virus more easily to vulnerable members of the household, and reduced access to sick leave or adequate healthcare.[133] Indeed, while media attention largely has focused on the impact of COVID-19 in cities, the pandemic has spread rapidly throughout rural America where baseline health conditions are often lower than in other, more urban and sub-urban parts of the country.[134] There are also higher rates of smoking in rural areas,[135] and the population tends to be older,[136] both of which are contributing factors to more severe effects from COVID-19. Due to recent closures of hospitals and other essential services, rural areas are also experiencing reduced access to healthcare facilities.[137] Nearly two-thirds of rural hospitals do not have intensive care capabilities[138] and have dramatically fewer intensive care unit (ICU) beds and total number of beds overall.[139] Because of these limitations, many rural hospitals are ill-prepared to handle a large influx of high-need patients from a single outbreak, let alone several outbreaks in the area served by a single facility.

These risks are cumulative, and APHIS should ensure that the practices it allows do not exacerbate the risks faced by communities of color and lower wealth and rural communities or endanger their environment. In particular, because animals are typically killed and disposed of near their productions sites—often large industrial animal feeding operations or CAFOs—

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[133] *See* Eric Scigliano, *'It Really Is the Perfect Storm': Coronavirus Comes for Rural America*, Politico (Apr. 15, 2020), https://www.politico.com/news/magazine/2020/04/15/coronavirus-rural-america-covid-19-186031.

[134] *See* Ernest Moy, *Leading Causes of Death in Nonmetropolitan and Metropolitan Areas — United States, 1999–2014*, Ctrs. for Disease Control & Prevention, 66 Surveillance Summaries 1 (2017), https://www.cdc.gov/mmwr/volumes/66/ss/ss6601a1.htm; *see also About Rural Health*, Ctr. for Disease Control & Prevention, https://www.cdc.gov/ruralhealth/about.html.

[135] *Id.*

[136] *See* Amy Symens Smith & Edward Trevelyan, *The Older Population in Rural America: 2012-2016*, Population Division, U.S. Census Bureau (2019), https://www.census.gov/content/dam/Census/newsroom/press-kits/2019/paa/paa-poster-older-population.pdf.

[137] *See* Business Wire Press Release, *As Rural Hospital Closure Crisis Deepens, New Research from The Chartis Center for Rural Health Reveals Scope of Hospitals Vulnerable to Closure*, AP News (Feb. 11, 2020), https://apnews.com/1f74397423df4cddafdc8beae37c7627; *see also* The Chartis Ctr. for Rural Health, *The Rural Health Safety Net Under Pressure: Understanding the Potential Impact of COVID-19* (2020), https://www.chartis.com/resources/files/CCRH_Research_Update-Covid-19.pdf.

[138] *See* Noah Higgins-Dunn, *Small Towns and Rural Hospitals Brace for their Coronavirus Peak, Which Could be Weeks Away*, CNBC (May 3, 2020), https://www.cnbc.com/2020/05/03/small-towns-and-rural-hospitals-brace-for-their-coronavirus-peak-which-could-be-weeks-away.html.

[139] *See* The Chartis Ctr. for Rural Health, *The Rural Health Safety Net Under Pressure: Understanding the Potential Impact of COVID-19* (2020), https://www.chartis.com/resources/files/CCRH_Research_Update-Covid-19.pdf.

disposal generally takes place near to adjacent communities, and can pose substantial risks to those communities, as further discussed below.

Frontline public health workers are working overtime and facing enormous personal health risks; communities of color and low wealth communities, including communities neighboring industrial animal production operations like CAFOs are already disproportionately experiencing higher negative effects from COVID-19; and rural hospital closures combined with underlying population vulnerabilities such as a higher percentage of elderly residents has already put these communities at unimaginable risk. Mass disposal of farm animal mortalities, as overseen by APHIS, should not make these matters worse.

ii. Unlined burial poses serious risks to water quality and human health, especially in areas with high water tables and communities that predominantly rely on groundwater for their drinking water.

In addition to the preexisting health threats and vulnerabilities that rural communities, low wealth communities, and communities of color are already experiencing, including from COVID-19 itself, those same communities also now face health and safety risks due to mass depopulations of farm animal herds and flocks and disposal practices that currently allow for unlined mass burial events. As APHIS itself acknowledges, unlined burial is one of the most dangerous animal carcass disposal methods for human and environmental health (with the other being on-site incineration).[140] This is because of the significant threats burial poses to water quality and the safety of drinking water for surrounding communities—including because the burial of decaying animal carcasses produces and often leaches nitrate, ammonia, chloride, disease-causing agents, pharmaceuticals fed to the animals just before death,[141] and other pollutants into the soil, with these compounds eventually finding their way into groundwater with long-lasting impacts to the surrounding environment.[142] The risk of contaminated drinking water from animal carcass burial is of particular concern for rural communities, which disproportionately rely on groundwater as a drinking water source.[143]

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[140] *See* EIS at vii.

[141] *See* Petition for Emergency Rulemaking from Animal Legal Defense Fund, et al., to Commissioner, U.S. Food And Drug Admin., Requesting the Suspension of Use of Ractopamine, at 12 (June 3, 2020), https://www.biologicaldiversity.org/programs/environmental_health/pdfs/2020-06-03-Ractopamine-Suspension-Petition--ALDF-FACT-Center.pdf (discussing that on-site burial of dead carcasses in unlined trenches and pits poses significant risks to the environment and public health).

[142] *See* Hilda H. Hatzell, *Effects of Waste-disposal Practices on Ground-water Quality at Five Poultry (broiler) Farms in North-central Florida, 1992-93*, U.S. Dep't of the Interior, U.S. Geological Surv. (1995); *see also* Lee M. Myers et al., *Impact of Poultry Mortality pits on Farm Groundwater Quality*, Ga. Inst. of Tech. (1999); William F. Ritter & Anastasia E. M. Chirnside, *Impact of Dead Bird Disposal Pits on Ground-water Quality on the Delmarva Peninsula*, 53 *Bioresource Tech.* 105 (1995).

[143] *See Healthy Housing Reference Manual, Chapter 8: Rural Water Supplies and Water-Quality Issues*, Ctrs. for Disease Control & Prevention, https://www.cdc.gov/nceh/publications/books/housing/cha08.htm.

Burial sites may also lead to the spread of disease-causing agents from the buried carcasses. These may include anthrax and transmissible spongiform encephalopathy (TSE) agents, which are more likely to survive in the environment following burial of infected animals.[144] In field studies, burial of infected carcasses led to *Salmonella* contamination of surrounding soil within a week, and soil continued to test positive up to 15 weeks around the burial site.[145] In addition, because animal carcasses can carry antimicrobial-resistant pathogens from routine antibiotic use,[146] improper burial facilitates the movement of these pathogens into nearby communities and may lead to the further development of antibiotic-resistant bacteria.[147]

Impacts from mass burial sites are additionally compounded by environmental and public health risks of manure management at poultry, swine and cattle CAFOs. For instance, *E. coli* and *Cryptosporidium* contamination in ground and surface waters may be affected by both animal manure and by burial of carcasses.[148]

Areas with high water tables and sandy soils are at especially high risk of groundwater contamination, because these environments do not allow for the proper depth or cover of the burial pit, leading to leachates potentially entering drinking water sources. Extreme weather events such as hurricanes can raise the water table and increase risk of leachates entering surrounding soils and travelling through groundwater.[149] These risks are highly likely and relevant for current depopulation efforts as many CAFOs are located in coastal flood plains. Recent analysis of Hurricane Florence impacts estimates that at least 123 industrial hog operations and 40 poultry operations were located within 500 feet of the 100-year floodplain, and received 15+ inches of rain.[150] Burial practices at these operations are particularly likely to threaten the safety of drinking water sources for surrounding communities.

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[144] *See Carcass Disposal: A Comprehensive Executive Summary*, Rev. Nat'l Agric. Biosecurity Ctr. Consortium, USDA APHIS Cooperative Agreement Project Carcass Disposal Working Grp. (2004), http://www.newmoa.org/solidwaste/avian/CarcassDisposalExecutiveSummary.pdf.

[145] *See* R. H. Davies, & C. Wray, *Seasonal Variations in the Isolation of Salmonella Typhimurium, Salmonella enteritidis, Bacillus cereus and Clostridium Perfringens from Environmental Samples*, 43 J. Veterinary Med. 119 (1996).

[146] *See* Ellen K. Silbergeld et al., *Industrial Food Animal Production, Antimicrobial Resistance, and Human Health*, 29 Ann. Rev. Pub. Health 151 (2008).

[147] *See* Julia R. Barrett, *Airborne Bacteria in CAFOs: Transfer of Resistance from Animals to Humans*, 113 Envtl. Health Persp. A116 (2005); *see also* Mary J. Gilchrist, *The Potential Role of Concentrated Animal Feeding Operations in Infectious Disease Epidemics and Antibiotic Resistance*, 115 Envtl. Health Persp. 313, 313-16 (2006).

[148] *See* Ceri L. Gwyther et al., *The Environmental and Biosecurity Characteristics of Livestock Carcass Disposal Methods: A Review*, 31 Waste Mgmt. 767 (2011).

[149] *See* Ning Ling et al., *Physically Based Assessment of Hurricane Surge Threat Under Climate Change*, 2 Nature Climate Change 462; (2012): *see also* EPA, *Exposure Assessment of Livestock Carcass Management Options During Natural Disasters*, at 7 (Feb. 2017) (Follow "URL/Downloads" hyperlink), https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NHSRC&TIMSType=&count=10000&dirEntryId=335655&searchAll=&showCriteria=2&simpleSearch=0.

[150] *See* Alex Formuzis, *Map: Florence Drenched Thousands of North Carolina CAFOs and Animal Waste Pits, Analysis of Sites Hit by Storm Reveals Potential Release of Billions of Gallons of Manure and Urine*,

Even in well-drained soils, complete decay in burial trenches can take upwards of two years, thus exposing the surrounding environment to disease-causing agents and contaminants for extended periods of time.[151] Localized contamination may persist for a decade or more in wet soils with high seasonal water tables and slow groundwater flow.[152]

Burial is recognized by multiple state agricultural extension agencies as having "the greatest number of environmental, public health and safety considerations" out of all dead livestock disposal methods.[153] For example, Virginia's Department of Environmental Quality and Cooperative Extension consider on-site burial as the last recommended practice for "farmers/livestock owners who are not able to reuse, compost, or landfill their mortality per the hierarchy."[154] Burial is placed last on the hierarchy of controls for depopulation efforts for the prevention of disease transmission,[155] and is ranked as the worst option among depopulation methods in terms of its impact on pollution and contamination of soil and vegetation.[156] For catastrophic mortality that may warrant mass burial sites, North Carolina Department of Agriculture similarly ranks "below ground burial" and "above ground burial" as the least recommended on-site options.[157]

USDA's Foreign Animal Disease Preparedness and Response Plan rates on-site burial as the least suitable among carcass management technologies based on public health, biosecurity, a failure to inactivate pathogens, and environmental sustainability concerns.[158] While the USDA decision tool recognizes these limitations, it fails to categorically exclude on-site burial as a

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Evtl. Working Grp., https://www.ewg.org/release/map-florence-drenched-thousands-north-carolina-cafos-and-animal-waste-pits.

[151] *See* Qi Yuan et al., *Potential Water Quality Impacts Originating from Land Burial of Cattle Carcasses*, 456 – 457 Sci. of the Total Env't 246 (2013).

[152] *See* Rachel Freedman & Ron Fleming, *Water Quality Impacts of Burying Livestock Mortalities*, Presented to the Livestock Mortality Recycling Project Steering Committee, at 4 (2003), https://www.ridgetownc.com/research/documents/fleming_carcassburial.pdf.

[153] *See Livestock Mortalities And Disposal*, State Of Vt. Agency of Agric., Food & Markets, https://agriculture.vermont.gov/animal-health-0/livestock-mortalities-and-disposal; *see also* J. Craig Williams, *Livestock and Poultry Mortality Disposal in Pennsylvania*, Pennstate Extension (Updated Sept. 28, 2015), https://extension.psu.edu/livestock-and-poultry-mortality-disposal-in-pennsylvania.

[154] VirginaTech et al., *On Farm Mortality Disposal Options for Livestock Producers*, at 4 (2009), https://www.deq.virginia.gov/Portals/0/DEQ/Water/VirginiaPollutionAbatement/AGMortalityGuidance/On_Farm_Mortality_Disposal_Options_for_Livestock_Producers_Pub_2909-1412.pdf.

[155] *See* J. M. Scudamore et al., *Carcass Disposal: Lessons from Great Britain Following the Foot and Mouth Disease Outbreaks of 2001*, 21 Rev. Sci. Technique 775 (2002); *see also* Simon J. T. Pollard et al., *Exposure Assessment of Carcass Disposal Options in the Event of a Notifiable Exotic Animal Disease: Application to Avian Influenza Virus*, 42 Envtl. Sci. & Technology 3145 (2008).

[156] *See* Gwyther et al., *supra* note 148.

[157] *NCDA & CS Mass Animal Mortality Management Plan for Catastrophic Natural Disasters*, at 3 (2016), https://files.nc.gov/ncdeq/Environmental+Assistance+and+Customer+Service/Storm+Debris/NCDACS-Mass-Animal-Mortality-Management-Plan-Oct-2016.pdf.

[158] *See* U.S. Dep't Agric. et al., Emergency Carcass Management Desk Reference Guide, *FAD PReP Foreign Animal Disease Preparedness & Response Plan*, at 2-5 (2017), https://www.aphis.usda.gov/animal_health/carcass/docs/carcass-disposal-guide.pdf#page=12.

disposal management option due to potential counterbalancing rankings reflecting convenience. Additionally, despite recognizing these limitations and the availability of alternative technologies which are more protective of the environment, the USDA's carcass management decision cycle encourages users to consider on-site burial as an option if composting or open-air burning are not suitable.[159] Furthermore, specific guidance for on-site burial is inconsistent across state agencies, with varying degrees of protection against water contamination based on differing recommended burial depths and offsets from waterways.[160]

iii. On-site incineration negatively impacts water quality and public health.

While unlined burial practices have the most immediate and direct impacts on water quality, animal carcass incineration practices also negatively impact water quality through downstream effects. Emissions of particulate matter, dioxins, poly-aromatic hydrocarbons (PAHs), and metals from incineration may be deposited on soil leading to further contamination and contributing to eventual runoff. PAHs emitted from burning enter aquatic systems and are toxic to aquatic animals. Hydrocarbons used in fuel for open-air burning also further contribute to groundwater contamination. These groundwater contaminants from animal burning practices pose risks to drinking water quality, particularly for rural communities who rely on groundwater sources. Several of these contaminants, including PAHs and dioxins, include carcinogenic compounds and are associated with a wide array of negative human health impacts.

In addition to direct impacts to water quality from incineration and deposition, disposal of resulting ash can contribute an additional pulse of pathogens, heavy metals, dioxins and furans to soil and waterways. Dioxins, furans and heavy metals from the ash can enter the food system through grazing animals or through human consumption of contaminated crops that can absorb the heavy metals and other pollutants released by improperly disposed ash.[161] The large volumes of ash generated during mass depopulation efforts has made it challenging to accommodate proper disposal. For example, Virginia's Department of Environmental Quality reported 5000 tons of ash following incineration during the 2002 avian influenza outbreak.[162] In the UK, 120,000 tons of ash were disposed at landfills following the 2001 foot and mouth disease outbreak.[163]

In practice, pollutant concerns from depopulation may be in excess of those documented in the scientific literature due to inefficiencies in burning and the poorly-studied compounded

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[159] *Id.* at 2-7.
[160] EIS at A-9.
[161] *See* Gwyther et al., *supra* note 148.
[162] *See* Gary A. Flory et al., *Evaluation of Poultry Carcass Disposal Methods Used During an Avian Influenza Outbreak in Virginia in 2002*, Va. Dept' of Envtl. Quality & Va. Coop. Extension (2006), https://deq.virginia.gov/Portals/0/DEQ/Water/VirginiaPollutionAbatement/Evaluation_of_Poultry_Carcass_Disposal_Methods.pdf.; *see also Literature Review of Contaminants in Livestock and Poultry Manure and Implications for Water Quality*, EPA, EPA 820-R-13-002, at 5 (July 2013) (listing the health impacts of these pollutants).
[163] *See* Comptroller & Auditor General, *The 2001 Outbreak of Foot and Mouth Disease*, Nat'l Audit Office (2002), at 92, https://www.nao.org.uk/wp-content/uploads/2002/06/0102939.pdf.

impacts of multiple practices in the same area. For example, according to a report from the Virginia Department of Environmental Quality, due to challenges optimizing the number of carcasses incinerated at a given time during the avian influenza outbreak of 2002, there were issues with unintended decomposition and runoff of byproducts leading to contamination of waterways and algal growth. Thus, in addition to direct emissions of pollutants during burning, these practices also contributed to leachates contaminating waterways preceding incineration.

These problems may be exacerbated and compounded when burial and incineration co-occur in the same area. Neither incineration nor burial effectively deactivate prion diseases, suggesting that co-occurring practices can lead to accumulation of these disease agents. Both forms of disposal also contribute to nitrogen pollution, with the potential for deposition of N emissions from incineration compounding N in leachates from burial. Burial and burning similarly contribute to odor and air quality issues (carbon monoxide and nitrogen oxide emissions), which would compound with co-located practices.

iv. Unlined burial and on-site incineration threaten air quality, especially in areas with existing air quality issues.

Growing evidence indicates that high levels of air pollution are significantly exacerbating the conditions caused by the COVID-19 outbreak, and that long-term exposure to toxic air pollution is a large contributing factor to an increase in fatalities.[164] Furthermore, this pandemic is shining a light on the disproportionate and cumulative impacts pollution has on low wealth communities and communities of color, who are experiencing staggering rates of mortality from COVID-19. It is critical that APHIS do everything it can to ensure that farm animal mortality disposal practices do not further exacerbate these issues.

Animal carcass incineration practices including open-air burning and pyres, air curtain incineration, and fixed-facility incineration emit several toxic compounds, including carcinogens, and contribute to air and odor pollution. Each of these practices releases dioxins and furans, which are carcinogenic compounds associated with reproductive, developmental, and immune system problems, and which take several decades to decay.[165] These compounds can be inhaled in areas surrounding incineration or be consumed through contaminated water or food following their release during incineration.[166]

Incineration also emits polychlorinated biphenyls (PCBs) and PAHs which include compounds that are carcinogenic.[167] PCB exposure is associated with negative impacts on

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[164] *See* Xiao Wu et al., *Exposure to Air Pollution and COVID-19 Mortality in the United States: A Nationwide Cross-sectional Study*, Harv. Uni. Dep't of Biostatistics (2020), https://projects.iq.harvard.edu/covid-pm.
[165] *See Learn about Dioxin*, EPA, https://www.epa.gov/dioxin/learn-about-dioxin; *see also* EPA, Dioxins and Furans, https://archive.epa.gov/epawaste/hazard/wastemin/web/pdf/dioxfura.pdf.
[166] *Id.*
[167] *See* EPA, *Polycyclic Aromatic Hydrocarbons (PAHs)*, https://www.epa.gov/sites/pro

immune, reproductive and neurological system functions.[168] Similarly, long-term or chronic exposure to PAHs is associated with decreased immune function, cataracts, kidney and liver damage, respiratory problems, asthma-like symptoms, and lung function abnormalities.[169] Furthermore, PAH emissions undergo atmospheric reactions leading to the production of secondary compounds which can be more detrimental to human health than the original compounds.[170] These reactions are accelerated under high temperature and sunlight, making it particularly important to consider the full lifecycle of impacts of incineration emissions as current depopulation efforts continue through the summer.

Spikes in PAH emissions have been observed following emergency animal mortality events.[171] Due to their contribution to breathing problems and decreased lung function,[172] PAH and particulate matter emissions from burning may be of particular concern in the midst of the COVID-19 pandemic.

In addition to emissions of toxic compounds with direct human health impacts, animal carcass burning also negatively impacts environmental health. Nitrogen oxides from incineration contribute to greenhouse gas concentrations and generate smog and acid rain, with cascading impacts on environmental health.

Incineration is also a significant source of particulate matter emissions, with open-air burning through pyres producing approximately 3 pounds of particulate per pig, according to the National Pork Board.[173] In addition to the direct human health implications of particulate matter, which include heart attacks, premature death in people with lung disease, aggravated asthma,

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duction/files/2014-03/documents/pahs_factsheet_cdc_2013.pdf; *see also Polycyclic Aromatic Hydrocarbons (PAHs)*, Tox Town, https://toxtown.nlm.nih.gov/chemicals-and-contaminants/polycyclic-aromatic-hydrocarbons-pahs; *Polychlorinated Biphenyls (PCBs)*, *Learn about Polychlorinated Biphenyls (PCBs)*, EPA, https://www.epa.gov/pcbs/learn-about-polychlorinated-biphenyls-pcbs#healtheffects.

[168] *Id.*

[169] *See* Hussein I. Abdel-Shafya & Mona S. M. Mansourb, *A Review on Polycyclic Aromatic Hydrocarbons: Source, Environmental Impact, Effect On Human Health and Remediation*, 25 Egyptian J. Petroleum 107 (2016); Albino Barraza-Villarreal et al., *Lung Function, Airway Inflammation, and Polycyclic Aromatic Hydrocarbons Exposure in Mexican Schoolchildren*, 56 J. Occupational Envtl. Med. 415 (2015).

[170] *See* K. Nikolaou et al., *Sources and Chemical Reactivity Of Polynuclear Aromatic Hydrocarbons in the Atmosphere — A Critical Review*, 32 Sci. of the Total Env't 103 (1984).

[171] *See* Shui-Jen Chen, *Emission of Polycyclic Aromatic Hydrocarbons From Animal Carcass Incinerators*, 313 Sci. of the Total Env't 61 (2003).

[172] *See* EPA, *Health and Environmental Effects of Particulate Matter*, https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm (last visited June 28,2020); *see also*, EPA, *Polycyclic Aromatic Hydrocarbons Factsheet*, https://www.epa.gov/north-birmingham-project/polycyclic-aromatic-hydrocarbons-pahs-fact-sheet (last visited June 28,2020).

[173] *Pork Producer Webinar: Planning for Emergency Depopulation and Disposal*, Nat'l Pork Bd., (Apr. 26, 2020), https://www.pork.org/public-health/what-you-need-to-know-about-covid-19/pork-industry-covid-19-webinars/.

decreased lung function, and increased respiratory ailments,[174] particulate matter emissions can also contribute to haze. Rates of particulate matter emissions, as well as the release of metals, sulphur dioxide, and organic gases produced through burning, are not controlled during open-air burning, and are only partially mitigated under more controlled forms of incineration such as fixed-facility incineration.

Incineration activities also contribute to odor pollution. For example, air curtain incinerators operated by USDA used to dispose of livestock in Virginia during a 2002 avian influenza outbreak elicited odor complaints from residents according to a report by the Virginia Department of Environmental Quality.[175] These concerns would be expected to be exacerbated with open-air burning.

While incineration practices, and especially on-site practices such as open-air burning through pyres and air curtain incinerators, have the most immediate and direct impacts on air quality, other depopulation methods may also contribute to air pollution. Unlined burial of carcasses release gases associated with anaerobic decomposition, such as carbon dioxide, carbon monoxide, nitrogen oxides, sulfur dioxide, hydrogen chloride and fluoride, and methane.[176] These gases can build up and result in a rupture of the covering materials used during carcass disposal procedures.[177]

C. APHIS Must Make Information about Carcass Disposal Publicly Available to Ensure Government Accountability.

Government accountability is necessary for maintaining properly functioning democratic government, which relies on public trust and is vital to the functioning of a democratic society. Public access to information, especially about health and safety, in turn, is essential to achieving public trust and accountability. The requested rules will help to ensure government accountability while also protecting people and the environment and advancing USDA and APHIS's own goals.

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[174] *See Particulate Matter (PM) Pollution, Health and Environmental Effects of Particulate Matter (PM),* EPA, https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm (last visited June 25, 2020).

[175] *See* Gary A. Flory et al., *Evaluation of Poultry Carcass Disposal Methods Used During an Avian Influenza Outbreak in Virginia in 2002,* Va. Dept' of Envtl. Quality & Va. Coop. Extension (2006), https://deq.virginia.gov/Portals/0/DEQ/Water/VirginiaPollutionAbatement/Evaluation_of_Poultry_Carcass_Disposal_Methods.pdf.

[176] *See* Bernard A. Engel et al., *Carcass Disposal: A Comprehensive Review, Chapter 14: Evaluating Environmental Impacts*, at 6 (2004), https://krex.k-state.edu/dspace/bitstream/handle/2097/662/Chapter14.pdf?sequence=4#:~:text=Around%20and%20under%20the%20burial,may%20also%20contain%20biological%20agents.&text=For%20instance%2C%20open%20burning%20of,severe%20consequences%20on%20air%20quality; *see also* Qi Yuan et al., *Methane and Carbon Dioxide Production From Simulated Anaerobic Degradation of Cattle Carcasses*, 32 Waste Mgmt. 939 (2012).

[177] *Id.*

USDA's Office of Inspector General (USDA OIG) recently reiterated the importance of government accountability in the context of the COVID-19 pandemic.[178] Specifically, in a June 2020 report identifying the top pandemic-related challenges facing USDA, USDA OIG concluded that "USDA [n]eeds to [i]mprove [a]ccountability and [o]versight of its [p]rograms," in part by producing records that are accurate, timely, and of good quality.[179] USDA OIG also concluded that "USDA [n]eeds to [s]trengthen [p]rogram [p]erformance and [p]erformance [m]easures," because "[d]esigning, developing, and implementing programs that reliably achieve their intended results has been a recurring challenge for [USDA]."[180] The requested rules will help USDA improve accountability and strengthen performance, by ensuring that APHIS prohibits the most dangerous methods of carcass disposal and provides people with the information they need to stay safe. Thus, the requested rules are consistent with USDA's internal goals for performance during the COVID-19 pandemic.

Maintaining meaningful government accountability is also crucial to protecting environmental health. Here, Petitioners are requesting that APHIS provide information related to the environmental implications of mass carcass disposal practices throughout the U.S. on an emergency basis as the COVID-19 crisis unfolds, and also to make this type of information available on a permanent basis for other emergency events in the future. APHIS's role in assisting these mass carcass disposal practices and formalization of its long-held coordination role on behalf of the federal government through the NICC make the agency's role as a hub for information an essential part of protecting environmental health through providing information to the public. APHIS is uniquely positioned to collect and provide the information around these practices that is needed to instruct current activities, protect environmental health from preventable pollution, and to inform future agency responses to emergency situations.

Government accountability is necessary to protect public health. Similar to the case of environmental health, the government is uniquely equipped to assess threats to public health and to assist the public in becoming aware of and responding to these threats. The duties of the Secretary of Agriculture include "improv[ing] the quality of life for people living in the rural and nonmetropolitan regions of the Nation."[181] The quality of life of residents of rural regions, as well as all members of the public at large, relies on the protections the government is supposed to provide, such as monitoring of industry activities and enforcement of regulations. APHIS's mission has expanded over time to include "protection of public health and safety as well as natural resources," which indicates that protection of the public health is not only relevant but

[178] *See* U.S. Dep't Agric. Office of Inspector Gen., *USDA Management Challenges for Pandemic-Related Responsibilities* (2020), https://www.usda.gov/oig/webdocs/Pandemic-Related_MC.pdf.
[179] *Id*. at 1.
[180] *Id*. at 2.
[181] 7 U.S.C. § 2204(a).

pertinent to APHIS's operations.[182] The public should be able to hold APHIS accountable to ensure that APHIS is providing these protections.

Government accountability, especially through providing vital information, in efforts to protect the public from air, water, and waste pollution is particularly important to protect low wealth communities and communities of color, who are disproportionately impacted by these health hazards. Those communities deserve the same protection from harm as everyone else, but regardless, without the information Petitioners request made public, there is no way for the public to take protective actions to protect themselves. For example, people may choose to filter or test water wells located near burial sites, or those with respiratory conditions may take protective measures to avoid additional exposures from incineration. Other methods of euthanization carry other environmental health risks, and without information about the practices and disposal (as requested) the public is left unaware and unprotected. Even if APHIS takes the requested actions and bans the use federal funds for the identified actions, there are sites where animals have already been buried or harms have otherwise already been set in motion. In addition, the onset of flood, hurricane, and wildfire season underscore the need for a permanent rule to inform the public of the possible cumulative impacts of multiple events.

Finally, in addition to the direct benefits of transparency to informing agency action and supporting choices that benefit environmental health, studies show that additional oversight by agencies leads to more thoughtful behavior by potential polluters and reduces the amount of pollution being released.[183] If the government is not accountable for dutifully carrying out its policies, environmental health is likely to be harmed.

D. There is Good Cause to Publish the Requested Interim Final Rule Promptly, Concurrently with Public Notice and Comment, and to Make that Rule Effective Immediately.

Petitioners request that APHIS publish the requested interim final rule within 7 days, concurrently with public notice and comment, and make that rule effective immediately. APHIS has the authority to waive comment altogether; however, in the present situation, it is in the public interest to accept comment without delaying action. An agency may waive notice and comment "when the agency for good cause finds (and incorporates the finding and a brief statement of reasons therefor in the rules issued) that notice and public procedure thereon are

[182] U.S. Dep't of Agric., *About APHIS* (June 2, 2020), https://www.aphis.usda.gov/aphis/banner/aboutaphis.

[183] *See* Louis W. Nadeau, *EPA Effectiveness at Reducing the Duration of Plant-Level Noncompliance*, 34 J. Envtl. Econ. & Mgmt. 54 (1997); *see also* James Alm & Jay Shimshack, *Environmental Enforcement and Compliance: Lessons from Pollution, Safety, and Tax Settings*, 10 Founds. & Trends in Microeconomics 209 (2014); Wayne B. Gray & Jay P. Shimshack, *The Effectiveness of Environmental Monitoring and Enforcement: A Review of the Empirical Evidence*, 5 Rev. of Envtl. Econ. & Pol'y 3 (2011); Jay P. Shimshack, *The Economics of Environmental Monitoring and Enforcement*, 6 Ann. Rev. Res. Econ. 339 (2014).

impracticable, unnecessary, or contrary to the public interest."[184] The good cause exception "excuses notice and comment in emergency situations, where delay could result in serious harm."[185] Notice and comment is "impractical" in those situations "when an agency finds that due and timely execution of its functions would be impeded by the notice otherwise required," such as when a rule "must be put in place immediately."[186]

There is good cause to waive notice and comment here. APHIS's decision to advise and assist with the widespread depopulation and disposal of farm animals, without prohibiting the most dangerous methods of disposal or providing people with the information they need to stay safe, risks increasing the spread of disease and causing significant environmental pollution in the midst of a pandemic.[187] In addition, this decision has immediate consequences for public health. The disposal of farm animal carcasses is ongoing and the associated harm likely is unfolding in real time. Given the urgent need to prevent additional harm and to provide members of the public with notice of the risks they face, it is impracticable to delay publishing the requested interim final rule while soliciting comment.

Instead, APHIS should solicit public comment at the same time as it publishes the requested interim final rule and, if necessary, amend the rule as appropriate in response to comment. Providing advance notice and comment serves an important purpose, but given the extraordinary circumstances here, delaying issuance of the rule would be harmful. Public comment may generate additional suggestions that APHIS can incorporate into an amended rule to better protect people and the environment from the risks of pollution and disease. APHIS also has good cause to make this rule effective immediately upon publication.[188] Because of the "just-in-time" system in which the meat industry operates, and the industry's perceived immediate need to depopulate animals, this rule must become effective without dely.

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[184] 5 U.S.C. § 553(b)(B).

[185] *Chamber of Commerce v. SEC*, 443 F.3d 890, 908 (D.C. Cir. 2006) (citations omitted); *see also Riverbend Farms, Inc. v. Madigan*, 958 F.2d 1479, 1484 & n.2 (9th Cir. 1992) ("Emergencies, though not the only situations constituting good cause, are the most common").

[186] *Util. Solid Waste Activities Grp. v. EPA*, 236 F.3d 749, 754 (D.C. Cir. 2001) (quoting U.S. Dep't of Justice, *Attorney General's Manual on the Administrative Procedure Act* 30–31 (1947)); *see also Nat'l Nutritional Foods Ass'n v. Kennedy*, 572 F.2d 377, 385 (2d Cir. 1978).

[187] *See Schneider v. Chertoff*, 450 F.3d 944, 949 & n.4 (9th Cir. 2006) (observing that the court "do[es] not doubt the necessity of immediate implementation" of a rule serving an "immediate public health need").

[188] *See* 5 U.S.C. § 553(d)(3). While the standards for good cause under section 553(b) and 553(d) are not identical, *see also Am. Fed'n of Gov't Emp., AFL-CIO v. Block*, 655 F.2d 1153, 1156 (D.C. Cir. 1981), they are related inquiries. *See also U.S. v. Gavrilovic*, 551 F.2d 1099, 1104 (8th Cir. 1977) (surveying the APA's legislative history and finding "[l]egitimate grounds" for an immediate effective date to include "urgency of conditions coupled with demonstrated and unavoidable limitations of time," and that an agency's primary consideration is the "convenience or necessity of the people affected") (citations and internal quotation marks omitted); *see also Schneider*, 450 F.3d at 949 & n.4.

This request is reasonable and achievable; agencies have demonstrated the ability to respond to the COVID-19 crisis with emergency rules. For example, on April 22, EPA published an interim final rule amending air emission monitoring quality assurance requirements for facilities unable to meet normal requirements during the pandemic.[189] That rule requires that facilities report to EPA information related to environmental practices, and it commits EPA to making the information it collects available publicly.[190] A similarly prompt response is appropriate here.

Petitioners request that APHIS respond to this Petition promptly. As 5 U.S.C. § 555(b) provides: "With due regard for the convenience and necessity of the parties or their representatives and within a reasonable time, each agency shall proceed to conclude a matter presented to it."[191] The requested interim final rule would impose a trivial burden or inconvenience on regulated entities. The rule is necessary in response to APHIS's open invitation to companies to depopulate and dispose of farm animal carcasses without clear instructions about how to navigate the confusing patchwork of federal and state guidance to best protect people and the environment. And the requested rule is straightforward and uncomplicated. Under the circumstances, 7 days is a reasonable amount of time for APHIS to resolve this Petition.

VI. CONCLUSION

APHIS's current approach to overseeing the depopulation and disposal of farm animals puts people and the environment at risk. APHIS acknowledges that unlined burial and on-site incineration pose significant threats to people and the environment. APHIS also acknowledges that the meat industry often defaults to these disposal practices during emergencies. However, APHIS has done nothing to prevent the industry from disposing of animals through unlined burial or on-site incineration during the COVID-19 pandemic, even as the industry kills tens of millions of animals. Neither has APHIS taken any action to ensure that people living near carcass disposal locations have the information they need to protect themselves, now and in the future. These failures put all people in jeopardy, especially those living in overburdened communities already at high risk from COVID-19. As the government agency that has assumed responsibility for managing animal carcasses during emergencies, APHIS can and must do better. Petitioners urge APHIS to enact the requested rules without delay.

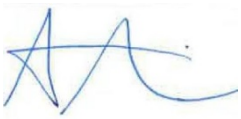
[189] *See* Continuous Emission Monitoring; Quality-Assurance Requirements During the COVID-19 National Emergency, 85 Fed. Reg. 22,362-01 (Apr. 22, 2020), https://www.govinfo.gov/content/pkg/FR-2020-04-22/pdf/FR-2020-04-22.pdf.
[190] *Id.* at 22,371.
[191] 5 U.S.C. § 555(b).

DATED: June 29, 2020

Respectfully Submitted,

Hannah Connor
Senior Attorney
Environmental Health Program
Center *for* Biological Diversity
hconnor@biologicaldiversity.org

Valerie Baron
Senior Attorney & Director, Animal Agriculture
Healthy People & Thriving Communities
Natural Resources Defense Council
vbaron@nrdc.org



Alexis Andiman
Staff Attorney
Sustainable Food & Farming Program
Earthjustice
aandiman@earthjustice.org

Submitted on behalf of:

Cristina Stella
Senior Staff Attorney
Animal Legal Defense Fund

Tom Frantz
President
Association of Irritated Residents

Kemp Burdette
Cape Fear Riverkeeper
Cape Fear River Watch

Brandon Jones
Catawba Riverkeeper
Catawba Riverkeeper Foundation

Caroline Farrell
Executive Director
Center on Race, Poverty & the Environment

Larry Baldwin
Crystal Coast Waterkeeper
Coastal Carolina Riverwatch

Advocacy Director
White Oak-New Riverkeeper Alliance

Caroline Leary
General Counsel
Environmental Working Group

Robert Martin
Director, Food System Policy
Johns Hopkins Center for a Livable Future

David Caldwell
Broad Riverkeeper
MountainTrue

Hartwell Carson
French Broad Riverkeeper
MountainTrue

Andy Hill
Watauga Riverkeeper
MountainTrue

Gray Jernigan
Southern Regional Director & Green Riverkeeper
MountainTrue

Jill Howell
Tar-Pamlico Riverkeeper
Sound Rivers

Katy Hunt
Lower Neuse Riverkeeper
Sound Rivers

Matthew Starr
Upper Neuse Riverkeeper
Sound Rivers

Will Hendrick
Senior Attorney & Manager, North Carolina Pure Farms, Pure Waters Campaign
Waterkeeper Alliance

CC: Honorable Phyllis K. Fong, Inspector General, USDA
Bethany Jones, Deputy Administrator, Legislative and Public Affairs, APHIS
Michon Oubichon, Director, Office of Civil Rights, Diversity, and Inclusion, APHIS

ENCLOSURES

From:	Zack, Jonathan T - APHIS
To:	Shere, Jack A - APHIS; Healey, Burke L - APHIS; APHIS-VS DA Assistants; Bucknall, Janet L - APHIS; Kohler, Dennis - APHIS
Cc:	Rushin, Gerald L - APHIS; Miller, Lori P - APHIS; White, Rodney A - APHIS; Hans, Thomas R - APHIS; Brown, Lisa A - APHIS; Fritts, Patricia R - APHIS; McKenna, Thomas S - APHIS; Dijab, Adis - APHIS; Tomlinson, Sarah M - APHIS; Naugle, Alecia L - APHIS
Subject:	FW: Sodium Nitrite use - Statement from FDA
Date:	Thursday, June 18, 2020 7:22:28 AM

All,
Below is the statement from FDA regarding the use of sodium nitrite for swine depopulation.
The FDA statement needs to be read in its entirety but an important FDA policy statement is cut and pasted immediately below:

- Swine depopulated with sodium nitrite do not enter the human or animal food supply, including through the edible rendering process. We do not object to rendering for non-food use (such as biodiesel or other industrial ingredients) as long as no rendered material enters the human or animal food supply.

FDA understands APHIS – Dr. Shere - will be passing this information on to state animal health officials and others. But first things first, APHIS personnel involved in COVID-19 issues need to receive and understand the information from FDA.
Jon

Jon Zack, DVM
Director National Preparedness and Incident Coordination (NPIC)
USDA APHIS Veterinary Services
4700 River Rd, Unit 42
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301-851-3460 desk
240-252-8074 mobile
http://www.aphis.usda.gov/fadprep

From: Nelson, Eric [mailto:Eric.Nelson@fda.hhs.gov]
Sent: Wednesday, June 17, 2020 5:00 PM
To: Shere, Jack A - APHIS <jack.a.shere@usda.gov>
Cc: Zack, Jonathan T - APHIS <jonathan.t.zack@usda.gov>; Schell, Timothy <Timothy.Schell@fda.hhs.gov>; Burnsteel, Cindy <Cindy.Burnsteel@fda.hhs.gov>; Lucia, Matthew <Matthew.Lucia@fda.hhs.gov>
Subject: Sodium Nitrite use

Dr. Shere,
We are aware of the impact COVID-19 has had on the swine processing industry, as well as the ancillary impact on swine producers' ability to ship hogs for slaughter, thus creating a need for depopulation. We understand that these depopulation activities are being monitored by APHIS/VS and the swine industry is testing the use of encapsulated sodium nitrite as a depopulation agent.
CVM has regulatory responsibility for animal drugs as well as animal food. Sodium nitrite intended for depopulation of swine is considered a drug under section 201(g)(1)(C) of the Federal Food, Drug and Cosmetic Act (FD&C Act), as it is intended to affect the structure or

function of the body of swine by causing death, and a new animal drug under section 201(v) of the FD&C Act.

We have limited information about the use of sodium nitrite for depopulation and its safety and effectiveness has not been established. We also have limited information regarding the likelihood of the presence of unsafe residues in the tissues of swine administered this drug. For the duration of the public health emergency declared by Department of Health and Human Services Secretary Alex Azar on January 31, 2020, or until further notice by CVM, whichever occurs first, CVM will not object to the use of sodium nitrite to depopulate production swine, provided the following conditions are met:

- Swine depopulated with sodium nitrite do not enter the human or animal food supply, including through the edible rendering process. We do not object to rendering for non-food use (such as biodiesel or other industrial ingredients) as long as no rendered material enters the human or animal food supply.
- Disposal of remains, including rendered materials, must be in conformance with federal, state and local environmental regulations.
- Sodium nitrite is presented in a concentration and form that ensures ingestion at a level that results in a toxic dose and death within an acceptable time frame (i.e., 1-3 hours).
- If sodium nitrate is mixed with or further processed into animal food, the equipment used is of suitable design and construction to ensure uniform distribution and concentration of sodium nitrate and adequate clean-out procedures are used to prevent unsafe contamination of other animal food.

Please note that our current position is the result of the unusual circumstances that have arisen due to the COVID-19 pandemic. We may reevaluate this position if we become aware of any changes in the potential risks posed or for other reasons, we determine are appropriate. If you have any questions or need further assistance, please contact me, Eric Nelson at 240-402-5642 or eric.nelson@fda.hhs.gov.

Eric M Nelson
Director of Compliance
FDA/Center for Veterinary Medicine (HFV-230)
7519 Standish Place
Rockville, MD 20855-2773
office: (240) 402-5642
fax: (240) 276-9241
e-mail: Eric.Nelson@fda.hhs.gov

From:	Petersburg, Kevin L - APHIS
To:	Halstead, Steven L - APHIS; Dijab, Adis - APHIS; McKenna, Thomas S - APHIS; Healey, Burke L - APHIS
Subject:	Fwd: Iowa Pork Plant Status
Date:	Monday, June 8, 2020 12:44:30 PM
Attachments:	image001.jpg Iowa Pork Plant Status.xlsx

FYI, the status of Iowa Pork Plants is attached.

Kevin Petersburg
AVIC, IA
Get Outlook for iOS

From: Jamee Eggers <jeggers@iowapork.org>

Sent: Monday, June 8, 2020 12:39:01 PM

To: Petersburg, Kevin L - APHIS <kevin.l.petersburg@usda.gov>

Subject: FW: Iowa Pork Plant Status

Jamee L. Eggers, M.Sc.

Producer Education Director

Iowa Pork Producers Association

1636 NW 114th St.

Clive, IA 50325

Office – (515) 225-7675

Mobile – (b) (6)

Email: jeggers@iowapork.org

From: Drew Mogler <dmogler@iowapork.org>

Sent: Monday, June 8, 2020 12:37 PM

To: ann.garvey@idph.iowa.gov; Michael Naig <Michael.naig@iowaagriculture.gov>; Swanson, Jake <jake.swanson@iowa.gov>

Cc: Jamee Eggers <jeggers@iowapork.org>; lschulz@iastate.edu; Pruisner, Robin <Robin.Pruisner@Iowaagriculture.gov>; Jeff Kaisand <Jeff.Kaisand@Iowaagriculture.gov>

Subject: Iowa Pork Plant Status

All,

Attached is the plant status for last week Friday.

Best,

Drew

Drew Mogler

Public Policy Director

Office: (515) 225-7675

Direct line: (515) 985-7434

Mobile: (b) (6)

Company	City/Plant	Pre-COVID Head/Day	Percent of US	6/4/2020 Status	# of Pigs Short
JBS	Marshalltown, IA	21,000	4.10%	88%	2,520
Triumph/Seaboard	Sioux City, IA	20,400	4.00%	86%	2,856
JBS	Ottumwa, IA	20,000	3.90%	84%	3,200
Tyson	Waterloo, IA	19,500	3.80%	77%	4,485
Tyson	Storm Lake, IA	17,250	3.40%	58%	7,245
Smithfield	Denison, IA	10,450	2.10%	80%	2,090
Tyson	Col. Junction, IA	10,100	2.00%	99%	101
Prestage Foods	Eagle Grove, IA	10,000	2.00%	42%	5,800
Tyson	Perry, IA	8,250	1.60%	97%	248
Total:	**Capacity (pigs/day)**	**136,950**		**79%**	**28,545**

Date	Daily Status	# of Pigs Short
5/12/2020	**67%**	**45,036**
5/13/2020	**71%**	**40,320**
5/14/2020	**70%**	**40,850**
5/15/2020	**70%**	**40,850**
5/18/2020	**70%**	**39,422**
5/19/2020	**74%**	**35,006**

5/26/2020	75%	34,360
5/27/2020	73%	36,613
5/28/2020	78%	30,506
6/1/2020	73%	36,745
6/2/2020	75%	34,255
6/3/2020	79%	28,545

From: Petersburg, Kevin L - APHIS
To: Halstead, Steven L - APHIS; Dijab, Adis - APHIS; McKenna, Thomas S - APHIS; Healey, Burke L - APHIS
Subject: Link to an article about test results at Tyson Storm Lake Plant
Date: Thursday, June 4, 2020 6:03:38 AM

---

https://www.porkbusiness.com/article/tyson-foods-releases-results-covid-19-testing-storm-lake-plant

From: Hayden, Joelle R - APHIS
To: APHIS-VS DA ALL
Cc: Jones, Bethany - APHIS; Zimmers, Hallie - APHIS; Bond, Suzanne M - APHIS; Curlett, Ed C - APHIS
Subject: media response for review - COVID response/NVS
Date: Thursday, June 11, 2020 1:31:30 PM
Attachments: image001.png
image002.png
image003.png
image004.png
image005.png
image006.png

Good afternoon,

We received an request from an individual writing for the St. Louis Post-Dispatch, with a deadline of tomorrow afternoon. He was seeking information related to our NICC and the NVS resources we're providing, with a list of several questions. He also specifically asked what resources, if any, have been provided to Missouri. This is a separate (and much more involved) request from the one we sent up yesterday.

Here is the response we worked with staff to develop. Please let us know if you have any concerns.

Thank you,

Joelle

Joelle R. Hayden
Public Affairs Specialist

USDA APHIS
4700 River Road, Unit 51
Riverdale, MD 20737
301-851-4040
301-734-5205 (fax)
joelle.r.hayden@usda.gov

Stay Connected with APHIS:

From:	Zack, Jonathan T - APHIS
To:	"Burnsteel, Cindy"
Cc:	Shere, Jack A - APHIS; Healey, Burke L - APHIS; APHIS-VS DA Executive Team; Tomlinson, Sarah M - APHIS; Naugle, Alecia L - APHIS; White, Rodney A - APHIS; Rushin, Gerald L - APHIS; Fritts, Patricia R - APHIS; Fisher, Sharon S - APHIS; Porter-Spalding, Barbara A - APHIS; Holmstrom, Lindsey K - APHIS
Subject:	RE: Petition for Emergency Rulemaking from ALDF and
Date:	Thursday, July 16, 2020 6:38:45 AM
Attachments:	image002.jpg

Good Morning Cindy,
Thank you for your message.
Regarding decreased swine slaughter capacity due to COVID-19 pandemic, USDA APHIS is not tracking or documenting the premises or number of swine depopulated on farm since this activity was determined to be outside the scope of USDA APHIS regulatory authority.
To my knowledge USDA APHIS did not provide any information on ractopamine to the public or other groups.
Regarding the status of slaughter establishments open or closed or idle capacity USDA APHIS did not track this information with any APHIS database or other reporting. it is my understanding USDA FSIS tracks open or closed status of slaughter establishments. USDA APHIS received summarized information on the status of swine slaughter capacity from University of Minnesota Food Protection and Defense Institute.
Please let us know if you need other information or need to discuss.
Jon

Jon Zack, DVM
Director National Preparedness and Incident Coordination (NPIC)
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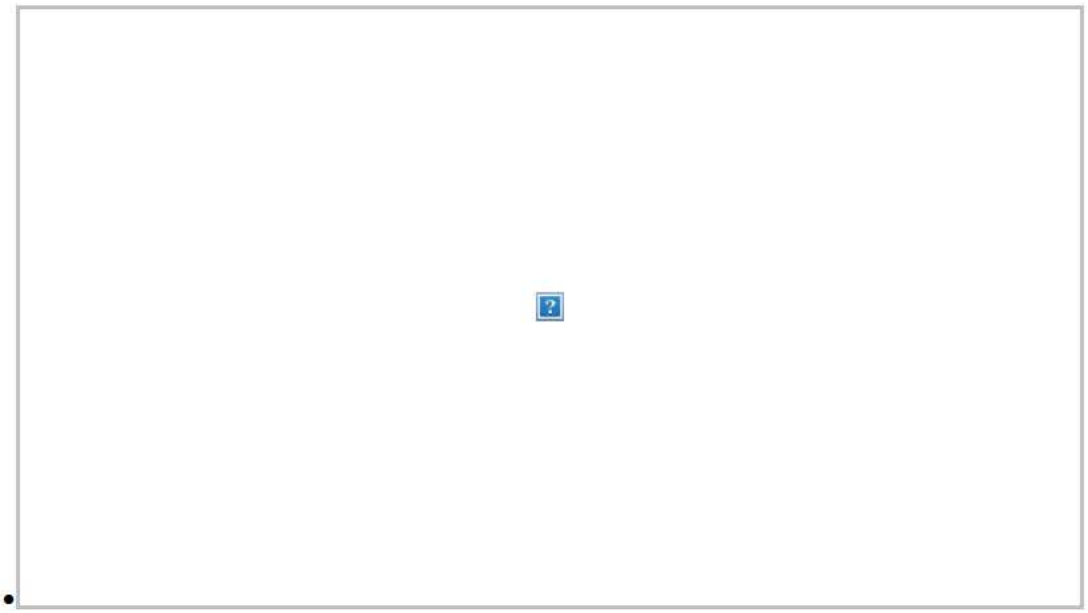
From: Burnsteel, Cindy [mailto:Cindy.Burnsteel@fda.hhs.gov]
Sent: Thursday, July 16, 2020 6:53 AM
To: Zack, Jonathan T - APHIS <jonathan.t.zack@usda.gov>
Cc: Burnsteel, Cindy <Cindy.Burnsteel@fda.hhs.gov>
Subject: RE: Petition for Emergency Rulemaking from ALDF and

Jonathan,
I hope you are doing well. I have a few questions for you related to the petition referenced above and attached here. From page 3 of their letter:

> In a nutshell, because producers administer pigs and cows ractopamine at levels that cause them to rapidly deteriorate both physically and behaviorally, the additional time spent on the drugs waiting at CAFOs results in significant suffering and impairments that will increase the likelihood of them suffering at CAFOs and being mistreated during handling on their way to slaughter. The slaughterhouse slowdowns and bottlenecks will increase the incidence and ways in which the animals' bodies tear, crack, and fall apart. The cows and pigs will also receive more ractopamine than in the usual course of business, which will result in increased drug residues in cow and pig products entering the food supply. Pigs and cows who are killed on the CAFO or somewhere during transportation without making it to slaughter at the slaughterhouse are often disposed of in mass graves or by other means on-site, thereby increasing the risk that ractopamine residues will contaminate local water and other environmental media.

We are looking for any public information that you may have or could refer me to that speaks to:

- the numbers of animals (cattle and pigs, though I did not hear any reports on cattle) euthanized/depopulated "on farm";
- any public information that you are aware of that provided information to farmers/ranchers on the use of ractopamine during the pandemic
- the number of plants closed (by day or week). I did see a slide from OFPR, but I have not found that info for other days on their website.



We are also reaching out to the pharmaceutical companies that own the product, National Cattleman's, National Pork Producers, and our environmental team to respond to this petition.
My schedule today is hectic so I thought I would start with an email, but I am happy to make time to speak by phone if that would be helpful/prefered.
Thank you in advance for any information you can provide.
Cindy

Cindy L. Burnsteel, DVM
Deputy Director for Drugs and Devices
Office of Surveillance and Compliance
Center for Veterinary Medicine
Food and Drug Administration
7519 Standish Place
Rockville, MD 20855
PHONE: (240) 402-0817
FAX: (240) 276-8350
Cindy.burnsteel@fda.hhs.gov

From:	Healey, Burke L - APHIS
To:	Kaczmarski, Benjamin J - APHIS; Zakarka, Christine A - APHIS
Cc:	Nelson, Elizabeth E - APHIS; Naugle, Alecia L - APHIS; Tomlinson, Sarah M - APHIS; APHIS-VS DA ALL
Subject:	RE: Petition for Emergency Rulemaking
Date:	Tuesday, June 30, 2020 2:00:00 PM

Ben, we have confirmed none of the captive bolts were used in any depopulations.

Burke L. Healey, DVM
Deputy Administrator
APHIS Veterinary Services (VS)

1400 Independence Ave, 318-E
Washington, DC 20250
p: 202-799-7146
burke.l.healey@usda.gov

From: Healey, Burke L - APHIS
Sent: Tuesday, June 30, 2020 1:46 PM
To: Kaczmarski, Benjamin J - APHIS <benjamin.j.kaczmarski@usda.gov>; Zakarka, Christine A - APHIS <christine.a.zakarka@usda.gov>
Cc: Nelson, Elizabeth E - APHIS <elizabeth.e.nelson@usda.gov>; Naugle, Alecia L - APHIS <alecia.l.naugle@usda.gov>; Tomlinson, Sarah M - APHIS <sarah.m.tomlinson@usda.gov>; APHIS-VS DA ALL <APHIS-VSDA@usda.gov>
Subject: RE: Petition for Emergency Rulemaking

Ben,
This looks and reads fine to me.
I was able to confirm while we did proactively distribute captive bolt guns to MN, IA, KS and IN. We have confirmed they were not used in IN, KS or IA. We have not confirmed their use or lack of use in MN.
Thanks for the opportunity to review.
Burke

Burke L. Healey, DVM
Deputy Administrator
APHIS Veterinary Services (VS)

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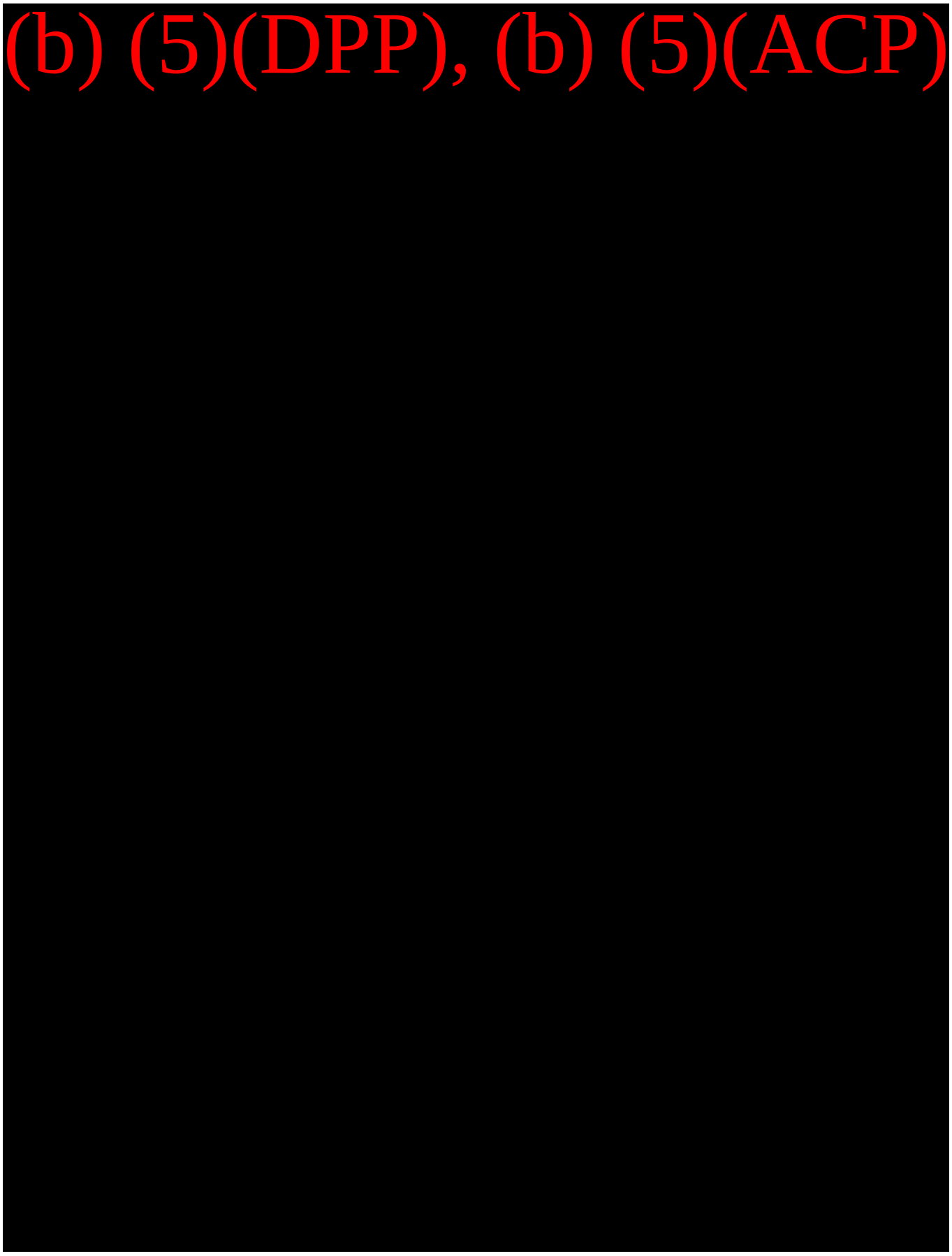
p: 202-799-7146
burke.l.healey@usda.gov

From: Kaczmarski, Benjamin J - APHIS <benjamin.j.kaczmarski@usda.gov>
Sent: Tuesday, June 30, 2020 1:40 PM
To: Healey, Burke L - APHIS <burke.l.healey@usda.gov>; Zakarka, Christine A - APHIS <christine.a.zakarka@usda.gov>
Cc: Nelson, Elizabeth E - APHIS <elizabeth.e.nelson@usda.gov>; Naugle, Alecia L - APHIS <alecia.l.naugle@usda.gov>; Tomlinson, Sarah M - APHIS <sarah.m.tomlinson@usda.gov>; APHIS-VS DA ALL <APHIS-VSDA@usda.gov>
Subject: RE: Petition for Emergency Rulemaking

Hi Burke,

I have drafted and cleared the following response within PPD. (b) (5)(DPP), (b) (5)(ACP) [redacted]

Ben



From: Healey, Burke L - APHIS <burke.l.healey@usda.gov>

Sent: Tuesday, June 30, 2020 11:54 AM
To: Kaczmarski, Benjamin J - APHIS <benjamin.j.kaczmarski@usda.gov>; Zakarka, Christine A - APHIS <christine.a.zakarka@usda.gov>
Cc: Nelson, Elizabeth E - APHIS <elizabeth.e.nelson@usda.gov>; Naugle, Alecia L - APHIS <alecia.l.naugle@usda.gov>; Tomlinson, Sarah M - APHIS <sarah.m.tomlinson@usda.gov>; APHIS-VSDA ALL <APHIS-VSDA@usda.gov>
Subject: RE: Petition for Emergency Rulemaking

We did make them available and sent some of the local offices. I don't think any of those were used but let me verify.

Burke L. Healey, DVM
Deputy Administrator
APHIS Veterinary Services (VS)

1400 Independence Ave, 318-E
Washington, DC 20250
p: 202-799-7146
burke.l.healey@usda.gov

From: Kaczmarski, Benjamin J - APHIS <benjamin.j.kaczmarski@usda.gov>
Sent: Tuesday, June 30, 2020 9:50 AM
To: Healey, Burke L - APHIS <burke.l.healey@usda.gov>; Zakarka, Christine A - APHIS <christine.a.zakarka@usda.gov>
Cc: Nelson, Elizabeth E - APHIS <elizabeth.e.nelson@usda.gov>; Naugle, Alecia L - APHIS <alecia.l.naugle@usda.gov>; Tomlinson, Sarah M - APHIS <sarah.m.tomlinson@usda.gov>; APHIS-VSDA ALL <APHIS-VSDA@usda.gov>
Subject: RE: Petition for Emergency Rulemaking

Hi Burke,

Quick follow-up and we'll (hopefully) put this to bed: (b) (5)(DPP) [redacted]

Ben

From: Healey, Burke L - APHIS <burke.l.healey@usda.gov>
Sent: Monday, June 29, 2020 4:44 PM
To: Kaczmarski, Benjamin J - APHIS <benjamin.j.kaczmarski@usda.gov>; Zakarka, Christine A - APHIS <christine.a.zakarka@usda.gov>
Cc: Nelson, Elizabeth E - APHIS <elizabeth.e.nelson@usda.gov>; Naugle, Alecia L - APHIS <alecia.l.naugle@usda.gov>; Tomlinson, Sarah M - APHIS <sarah.m.tomlinson@usda.gov>; APHIS-VSDA ALL <APHIS-VSDA@usda.gov>
Subject: RE: Petition for Emergency Rulemaking

Thanks Ben. Yes, we don't have any jurisdiction over the disposal. We do provide guidance and share best practices, typically to the local authorities, but ultimately the producers are to follow the direction of the local authorities.

Burke L. Healey, DVM
Deputy Administrator
APHIS Veterinary Services (VS)

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p: 202-799-7146
burke.l.healey@usda.gov

From: Kaczmarski, Benjamin J - APHIS <benjamin.j.kaczmarski@usda.gov>
Sent: Monday, June 29, 2020 2:39 PM
To: Healey, Burke L - APHIS <burke.l.healey@usda.gov>; Zakarka, Christine A - APHIS <christine.a.zakarka@usda.gov>
Cc: Nelson, Elizabeth E - APHIS <elizabeth.e.nelson@usda.gov>; Naugle, Alecia L - APHIS <alecia.l.naugle@usda.gov>; Tomlinson, Sarah M - APHIS <sarah.m.tomlinson@usda.gov>; APHIS-VS DA ALL <APHIS-VSDA@usda.gov>
Subject: RE: Petition for Emergency Rulemaking

Burke,

Thanks. (b) (5)(DPP) [redacted]

Ben

From: Healey, Burke L - APHIS <burke.l.healey@usda.gov>
Sent: Monday, June 29, 2020 4:24 PM
To: Zakarka, Christine A - APHIS <christine.a.zakarka@usda.gov>
Cc: Kaczmarski, Benjamin J - APHIS <benjamin.j.kaczmarski@usda.gov>; Nelson, Elizabeth E - APHIS <elizabeth.e.nelson@usda.gov>; Naugle, Alecia L - APHIS <alecia.l.naugle@usda.gov>; Tomlinson, Sarah M - APHIS <sarah.m.tomlinson@usda.gov>; APHIS-VS DA ALL <APHIS-VSDA@usda.gov>
Subject: RE: Petition for Emergency Rulemaking

I believe Jon Zack has he most solid information. Of course Jack Shere was the lead on all this so I thought OA might have him take the lead.
Jon may need to refer to Lori Miller who is our environmental and burial specialist.

Long an d the short of it we provided contacts and the producers followed local state regulations on burial. Disposal on farm is a locally handled issue not one VS has any say in.

Burke L. Healey, DVM
Deputy Administrator
APHIS Veterinary Services (VS)

1400 Independence Ave, 318-E
Washington, DC 20250
p: 202-799-7146
burke.l.healey@usda.gov

From: Zakarka, Christine A - APHIS <christine.a.zakarka@usda.gov>
Sent: Monday, June 29, 2020 1:16 PM
To: Healey, Burke L - APHIS <burke.l.healey@usda.gov>
Cc: Kaczmarski, Benjamin J - APHIS <benjamin.j.kaczmarski@usda.gov>; Nelson, Elizabeth E - APHIS <elizabeth.e.nelson@usda.gov>
Subject: FW: Petition for Emergency Rulemaking

Hi Burke, Ben Kaczmarski will be the point person on my staff. Who should he work with?

From: Shea, Kevin - APHIS
Sent: Monday, June 29, 2020 9:44 AM
To: APHIS-OA <APHISOA@usda.gov>; Healey, Burke L - APHIS <burke.l.healey@usda.gov>; Zakarka, Christine A - APHIS <christine.a.zakarka@usda.gov>
Cc: Jones, Bethany - APHIS <bethany.x.jones@usda.gov>; Oubichon, Michon M - APHIS <michon.m.oubichon@usda.gov>
Subject: FW: Petition for Emergency Rulemaking

PPD: Please work with VS to draft a response.

From: Alexis Andiman <aandiman@earthjustice.org>
Sent: Monday, June 29, 2020 9:32 AM
To: SM.OSEC.AGSEC.OES <SM.OSEC.AGSEC.OES@usda.gov>; Shea, Kevin - APHIS <kevin.a.shea@usda.gov>
Cc: aandiman@earthjustice.org; hconnor@biologicaldiversity.org; vbaron@nrdc.org; sliriano@earthjustice.org; Jones, Bethany - APHIS <bethany.x.jones@usda.gov>; Oubichon, Michon M - APHIS <michon.m.oubichon@usda.gov>; FONG, PHYLLIS <phyllis.fong@oig.usda.gov>; dina.barbour@oig.usda.gov
Subject: Petition for Emergency Rulemaking

Dear Secretary Purdue and Administrator Shea,

I write to submit the attached **petition for emergency rulemaking** to the Animal and Plant Health Inspection Service of the U.S. Department of Agriculture, on behalf of Center for Biological Diversity; Natural Resources Defense Council; Animal Legal Defense Fund; Association of Irritated Residents; Cape Fear River Watch; Catawba Riverkeeper Foundation; Center on Race, Poverty & the Environment; Coastal Carolina Riverwatch; Environmental Working Group; Johns Hopkins Center for a Livable Future; MountainTrue; Sound Rivers; and Waterkeeper Alliance. I will send the authorities on which the petition relies shortly.

Please do not hesitate to contact us if you have any questions or if there is anything you would like to discuss.

Thank you,
Alexis Andiman

Alexis Andiman
she/her/hers
Staff Attorney
Earthjustice Northeast Office
48 Wall Street, 19th Floor
New York, New York 10005
T: 212-845-7394 (direct)
F: 212-918-1556
earthjustice.org

From:	Healey, Burke W - APHIS
To:	Healey, Burke L - APHIS
Cc:	Levesque, Ashley - APHIS; Duong, Nhu-Phuong - APHIS
Subject:	RE: Petition for Emergency Rulemaking
Date:	Tuesday, June 30, 2020 1:58:13 PM
Attachments:	image001.jpg image002.gif

MN replied that their devices have NOT been used either. The MN devices are stored with a State contractor. IA updated that the devices there are stored with Iowa Dept of Ag and remained unused. Just in case this was specific to NC/SC, there have been no federal resources used for depops in either of those states regarding COVID. All resources came from the state or contractors. APHIS has acted only in an advisory capacity in those states.

Burke W Healey, MPH

Dep. Chief of Staff
APHIS VS Field Operations
burke.w.healey@usda.gov
970-632-0319 (m) | 301-436-3102 (o)

From: Healey, Burke L - APHIS
Sent: Tuesday, June 30, 2020 15:46
To: Healey, Burke W - APHIS <burke.w.healey@usda.gov>
Cc: Levesque, Ashley - APHIS <ashley.levesque@usda.gov>; Duong, Nhu-Phuong - APHIS <phuongnhu.duong@usda.gov>
Subject: RE: Petition for Emergency Rulemaking

Thank you!

Burke L. Healey, DVM
Deputy Administrator
APHIS Veterinary Services (VS)

1400 Independence Ave, 318-E
Washington, DC 20250
p: 202-799-7146
burke.l.healey@usda.gov

From: Healey, Burke W - APHIS <burke.w.healey@usda.gov>
Sent: Tuesday, June 30, 2020 1:08 PM
To: Healey, Burke L - APHIS <burke.l.healey@usda.gov>
Cc: Levesque, Ashley - APHIS <ashley.levesque@usda.gov>; Duong, Nhu-Phuong - APHIS <phuongnhu.duong@usda.gov>
Subject: RE: Petition for Emergency Rulemaking

Per Rodney on the captive bolt
Iowa – Not been used. POC: Kevin Petersburg – secured in his office.
Kansas – Not been used. POC: Rick Tanner. Secured in his office.
Indiana – Not been used. POC: Angela Hines. Remain in secured storage
MN- Stephan verifying whether they have been used. Stephan may know who has possession as well. POC: Stephan Schaefbauer.
He cc'd the AVICs in his reply so I am waiting to hear from MN and I will let you know if any of the other AVIC correct him on whether the devices have been used in their states since Rodney was last updated.

Burke W Healey, MPH

Dep. Chief of Staff
APHIS VS Field Operations
burke.w.healey@usda.gov
970-632-0319 (m) | 301-436-3102 (o)

From: Healey, Burke L - APHIS
Sent: Tuesday, June 30, 2020 14:03
To: Healey, Burke W - APHIS <burke.w.healey@usda.gov>
Cc: Levesque, Ashley - APHIS <ashley.levesque@usda.gov>; Duong, Nhu-Phuong - APHIS <phuongnhu.duong@usda.gov>
Subject: FW: Petition for Emergency Rulemaking

The question is related to the captive bolts we distributed to the mid west for swine depopulation.
We dd send them but we need to determine if they were actually used by state, federal or producers. I think the only states who received them were MO, IA and Mn. But I can't be certain. Rodney is working the request so he can help you with more details.
thanks

Burke L. Healey, DVM
Deputy Administrator
APHIS Veterinary Services (VS)

1400 Independence Ave, 318-E
Washington, DC 20250
p: 202-799-7146
burke.l.healey@usda.gov

From: Levesque, Ashley - APHIS <ashley.levesque@usda.gov>
Sent: Tuesday, June 30, 2020 11:43 AM
To: Healey, Burke L - APHIS <burke.l.healey@usda.gov>
Cc: Duong, Nhu-Phuong - APHIS <phuongnhu.duong@usda.gov>
Subject: FW: Petition for Emergency Rulemaking

Doc – did you see Burkie's email below? I'm hoping you can give him some more details.

Ashley Levesque
Acting Assistant Deputy Administrator
Veterinary Services
USDA – Animal Plant Health Inspection Service
1400 Independence Ave, SW, 320-E Whitten
Washington, DC 20250
Office: 202-799-7151
Cell: 202-868-3777
Ashley.Levesque@usda.gov

From: McKenna, Thomas S - APHIS <thomas.s.mckenna@usda.gov>
Sent: Tuesday, June 30, 2020 12:27 PM
To: Healey, Burke W - APHIS <burke.w.healey@usda.gov>; Levesque, Ashley - APHIS <ashley.levesque@usda.gov>; Jandegian, Caitlin - APHIS <caitlin.jandegian@usda.gov>
Cc: Dijab, Adis - APHIS <adis.dijab@usda.gov>; Healey, Burke L - APHIS <burke.l.healey@usda.gov>; Duong, Nhu-Phuong - APHIS <phuongnhu.duong@usda.gov>
Subject: RE: Petition for Emergency Rulemaking

I believe (b) (5)(DPP) [redacted]

Thanks,
Tom

Tom McKenna, DVM, PhD
Acting Associate Deputy Administrator, Field Operations Services
USDA, APHIS, Veterinary Services
4A-03J
4700 River Road
Riverdale, MD 20737
thomas.s.mckenna@usda.gov
301-851-2051 (Office)
508-887-3421 (Cell)

From: Healey, Burke W - APHIS
Sent: Tuesday, June 30, 2020 12:20 PM
To: Levesque, Ashley - APHIS <ashley.levesque@usda.gov>; Jandegian, Caitlin - APHIS <caitlin.jandegian@usda.gov>
Cc: Dijab, Adis - APHIS <adis.dijab@usda.gov>; McKenna, Thomas S - APHIS <thomas.s.mckenna@usda.gov>; Healey, Burke L - APHIS <burke.l.healey@usda.gov>; Duong, Nhu-Phuong - APHIS <phuongnhu.duong@usda.gov>
Subject: RE: Petition for Emergency Rulemaking

Thanks Ashley, we will work on this. Can you give us some background here? (b) (5)(DPP) [redacted].

If you can address those two questions above, we will get back to you asap.
Thank you ma'am,

Burke W Healey, MPH
Dep. Chief of Staff
APHIS VS Field Operations
burke.w.healey@usda.gov
970-632-0319 (m) | 301-436-3102 (o)

From: Levesque, Ashley - APHIS
Sent: Tuesday, June 30, 2020 12:03
To: Healey, Burke W - APHIS <burke.w.healey@usda.gov>; Jandegian, Caitlin - APHIS <caitlin.jandegian@usda.gov>
Cc: Dijab, Adis - APHIS <adis.dijab@usda.gov>; McKenna, Thomas S - APHIS

<thomas.s.mckenna@usda.gov>; Healey, Burke L - APHIS <burke.l.healey@usda.gov>; Duong, Nhu-Phuong - APHIS <phuongnhu.duong@usda.gov>

Subject: FW: Petition for Emergency Rulemaking

Hey Burke / Caitlin –
Can you get us the answers to the questions below please?
Thank you!

Ashley Levesque
Acting Assistant Deputy Administrator
Veterinary Services
USDA – Animal Plant Health Inspection Service
1400 Independence Ave, SW, 320-E Whitten
Washington, DC 20250
Office: 202-799-7151
Cell: 202-868-3777
Ashley.Levesque@usda.gov

From: Healey, Burke L - APHIS <burke.l.healey@usda.gov>

Sent: Tuesday, June 30, 2020 11:54 AM

To: Kaczmarski, Benjamin J - APHIS <benjamin.j.kaczmarski@usda.gov>; Zakarka, Christine A - APHIS <christine.a.zakarka@usda.gov>

Cc: Nelson, Elizabeth E - APHIS <elizabeth.e.nelson@usda.gov>; Naugle, Alecia L - APHIS <alecia.l.naugle@usda.gov>; Tomlinson, Sarah M - APHIS <sarah.m.tomlinson@usda.gov>; APHIS-VS DA ALL <APHIS-VSDA@usda.gov>

Subject: RE: Petition for Emergency Rulemaking

We did make them available and sent some of the local offices. I don't think any of those were used but let me verify.

Burke L. Healey, DVM
Deputy Administrator
APHIS Veterinary Services (VS)

1400 Independence Ave, 318-E
Washington, DC 20250
p: 202-799-7146
burke.l.healey@usda.gov

From: Kaczmarski, Benjamin J - APHIS <benjamin.j.kaczmarski@usda.gov>

Sent: Tuesday, June 30, 2020 9:50 AM

To: Healey, Burke L - APHIS <burke.l.healey@usda.gov>; Zakarka, Christine A - APHIS <christine.a.zakarka@usda.gov>

Cc: Nelson, Elizabeth E - APHIS <elizabeth.e.nelson@usda.gov>; Naugle, Alecia L - APHIS <alecia.l.naugle@usda.gov>; Tomlinson, Sarah M - APHIS <sarah.m.tomlinson@usda.gov>; APHIS-VS DA ALL <APHIS-VSDA@usda.gov>

Subject: RE: Petition for Emergency Rulemaking

Hi Burke,

Quick follow-up and we'll (hopefully) put this to bed: The petition mentions VS providing bolt guns and other destruction methods to producers. Is that true, and if so, could you quantify the degree of support provided?

Ben

From: Healey, Burke L - APHIS <burke.l.healey@usda.gov>

Sent: Monday, June 29, 2020 4:44 PM
To: Kaczmarski, Benjamin J - APHIS <benjamin.j.kaczmarski@usda.gov>; Zakarka, Christine A - APHIS <christine.a.zakarka@usda.gov>
Cc: Nelson, Elizabeth E - APHIS <elizabeth.e.nelson@usda.gov>; Naugle, Alecia L - APHIS <alecia.l.naugle@usda.gov>; Tomlinson, Sarah M - APHIS <sarah.m.tomlinson@usda.gov>; APHIS-VS DA ALL <APHIS-VSDA@usda.gov>
Subject: RE: Petition for Emergency Rulemaking

Thanks Ben. Yes, we don't have any jurisdiction over the disposal. We do provide guidance and share best practices, typically to the local authorities, but ultimately the producers are to follow the direction of the local authorities.

Burke L. Healey, DVM
Deputy Administrator
APHIS Veterinary Services (VS)

1400 Independence Ave, 318-E
Washington, DC 20250
p: 202-799-7146
burke.l.healey@usda.gov

From: Kaczmarski, Benjamin J - APHIS <benjamin.j.kaczmarski@usda.gov>
Sent: Monday, June 29, 2020 2:39 PM
To: Healey, Burke L - APHIS <burke.l.healey@usda.gov>; Zakarka, Christine A - APHIS <christine.a.zakarka@usda.gov>
Cc: Nelson, Elizabeth E - APHIS <elizabeth.e.nelson@usda.gov>; Naugle, Alecia L - APHIS <alecia.l.naugle@usda.gov>; Tomlinson, Sarah M - APHIS <sarah.m.tomlinson@usda.gov>; APHIS-VS DA ALL <APHIS-VSDA@usda.gov>
Subject: RE: Petition for Emergency Rulemaking

Burke,

Thanks. (b) (5)(DPP) [redacted].

Ben

From: Healey, Burke L - APHIS <burke.l.healey@usda.gov>
Sent: Monday, June 29, 2020 4:24 PM
To: Zakarka, Christine A - APHIS <christine.a.zakarka@usda.gov>
Cc: Kaczmarski, Benjamin J - APHIS <benjamin.j.kaczmarski@usda.gov>; Nelson, Elizabeth E - APHIS <elizabeth.e.nelson@usda.gov>; Naugle, Alecia L - APHIS <alecia.l.naugle@usda.gov>; Tomlinson, Sarah M - APHIS <sarah.m.tomlinson@usda.gov>; APHIS-VS DA ALL <APHIS-VSDA@usda.gov>
Subject: RE: Petition for Emergency Rulemaking

I believe Jon Zack has he most solid information. Of course Jack Shere was the lead on all this so I thought OA might have him take the lead.
Jon may need to refer to Lori Miller who is our environmental and burial specialist.

Long an d the short of it we provided contacts and the producers followed local state regulations on burial. Disposal on farm is a locally handled issue not one VS has any say in.

Burke L. Healey, DVM
Deputy Administrator
APHIS Veterinary Services (VS)

1400 Independence Ave, 318-E
Washington, DC 20250
p: 202-799-7146

burke.l.healey@usda.gov

From: Zakarka, Christine A - APHIS <christine.a.zakarka@usda.gov>
Sent: Monday, June 29, 2020 1:16 PM
To: Healey, Burke L - APHIS <burke.l.healey@usda.gov>
Cc: Kaczmarski, Benjamin J - APHIS <benjamin.j.kaczmarski@usda.gov>; Nelson, Elizabeth E - APHIS <elizabeth.e.nelson@usda.gov>
Subject: FW: Petition for Emergency Rulemaking

Hi Burke, Ben Kaczmarski will be the point person on my staff. Who should he work with?

From: Shea, Kevin - APHIS
Sent: Monday, June 29, 2020 9:44 AM
To: APHIS-OA <APHISOA@usda.gov>; Healey, Burke L - APHIS <burke.l.healey@usda.gov>; Zakarka, Christine A - APHIS <christine.a.zakarka@usda.gov>
Cc: Jones, Bethany - APHIS <bethany.x.jones@usda.gov>; Oubichon, Michon M - APHIS <michon.m.oubichon@usda.gov>
Subject: FW: Petition for Emergency Rulemaking

PPD: Please work with VS to draft a response.

From: Alexis Andiman <aandiman@earthjustice.org>
Sent: Monday, June 29, 2020 9:32 AM
To: SM.OSEC.AGSEC.OES <SM.OSEC.AGSEC.OES@usda.gov>; Shea, Kevin - APHIS <kevin.a.shea@usda.gov>
Cc: aandiman@earthjustice.org; hconnor@biologicaldiversity.org; vbaron@nrdc.org; sliriano@earthjustice.org; Jones, Bethany - APHIS <bethany.x.jones@usda.gov>; Oubichon, Michon M - APHIS <michon.m.oubichon@usda.gov>; FONG, PHYLLIS <phyllis.fong@oig.usda.gov>; dina.barbour@oig.usda.gov
Subject: Petition for Emergency Rulemaking

Dear Secretary Purdue and Administrator Shea,

I write to submit the attached **petition for emergency rulemaking** to the Animal and Plant Health Inspection Service of the U.S. Department of Agriculture, on behalf of Center for Biological Diversity; Natural Resources Defense Council; Animal Legal Defense Fund; Association of Irritated Residents; Cape Fear River Watch; Catawba Riverkeeper Foundation; Center on Race, Poverty & the Environment; Coastal Carolina Riverwatch; Environmental Working Group; Johns Hopkins Center for a Livable Future; MountainTrue; Sound Rivers; and Waterkeeper Alliance. I will send the authorities on which the petition relies shortly.

Please do not hesitate to contact us if you have any questions or if there is anything you would like to discuss.

Thank you,
Alexis Andiman

Alexis Andiman
she/her/hers
Staff Attorney
Earthjustice Northeast Office
48 Wall Street, 19th Floor
New York, New York 10005
T: 212-845-7394 (direct)
F: 212-918-1556

earthjustice.org

From:	Davidson, Mark L - APHIS
To:	Cole, Lyndsay M - APHIS; APHIS-OA All; APHIS-VS DA ALL
Cc:	Jones, Bethany - APHIS; McNally, Andrea C - APHIS; Curlett, Ed C - APHIS; Needham, Christopher M - APHIS; Johnson, Julian M - APHIS; Hayden, Joelle R - APHIS; Stepien, Mike W - APHIS
Subject:	RE: Rush media call on petition filed this morning
Date:	Monday, June 29, 2020 1:46:11 PM

Your approach is fine.
Mark

From: Cole, Lyndsay M - APHIS <lyndsay.m.cole@usda.gov>
Sent: Monday, June 29, 2020 3:41 PM
To: APHIS-OA All <OA.All@usda.gov>; APHIS-VS DA ALL <APHIS-VSDA@usda.gov>
Cc: Jones, Bethany - APHIS <bethany.x.jones@usda.gov>; McNally, Andrea C - APHIS <andrea.c.mcnally@usda.gov>; Curlett, Ed C - APHIS <ed.c.curlett@usda.gov>; Needham, Christopher M - APHIS <christopher.m.needham@usda.gov>; Johnson, Julian M - APHIS <Julian.Johnson@usda.gov>; Hayden, Joelle R - APHIS <joelle.r.hayden@usda.gov>; Stepien, Mike W - APHIS <mike.stepien@usda.gov>
Subject: Rush media call on petition filed this morning
Good afternoon,
APHIS received a rush media call from the Guardian, asking about the petition to ban unlined burials/on-site incineration that was filed this morning by several groups (press release below). Her deadline is immediately. (b) (5)(DPP) [redacted]
Thank you!
Lyndsay Cole
Assistant Director, Public Affairs
USDA Animal and Plant Health Inspection Service
Office: (970) 494-7410
Cell: (301) 538-9213
Lyndsay.M.Cole@usda.gov

For Immediate Release, June 29, 2020

Contact: Hannah Connor, Center for Biological Diversity, (202) 681-1676, hconnor@biologicaldiversity.org
Maria Michalos, NRDC, (631) 848-1588, mmichalos@nrdc.org
Nydia Gutierrez, Earthjustice, (202) 302-7531, ngutierrez@earthjustice.org

U.S. Department of Agriculture Petitioned to Ban Mass Burial, On-Site Incineration of Factory-Farmed Animals During Pandemic

Legal Action Calls for Creation of Public, Online Database to Track Mass Killing, Disposal Locations

WASHINGTON— Conservation, environmental-justice and public-health groups filed a legal petition today calling for the U.S. Department of Agriculture to ban dangerous on-

site incineration and unlined burial of millions of industrially raised farm animals killed during the COVID-19 emergency.

The legal action seeks to compel the USDA's Animal and Plant Health Inspection Service to protect communities and the environment from dangerous pollution resulting from under-regulated and poorly monitored animal disposal during the pandemic. The petition was prompted by the meat industry's rush to kill millions of animals that cannot be processed into food following slaughterhouse closures and slowdowns due to the spread of coronavirus.

The petition was filed by Earthjustice, NRDC (Natural Resources Defense Council) and the Center for Biological Diversity on behalf of 14 organizations. Petitioners also urge the USDA to create a publicly accessible, online database that tracks federal assistance for mass carcass disposal and provides people living near carcass-disposal locations with the information they need to protect themselves from pollution.

"It's horrific that when slaughterhouses temporarily cut production, industrial farming operations simply kill and discard millions of pigs and chickens," said Hannah Connor, an attorney at the Center for Biological Diversity. "There are real risks to people here, as well as the environment, from the disposal of these animals. Burying or burning animals on this scale pollutes our air and threatens rural water supplies."

The USDA has acknowledged that burial in unlined pits and on-site incineration pose significant threats to air and water quality and to the safety of surrounding communities. Mass burial can contaminate the surrounding environment with pollutants, including nitrates, ammonia and chloride, as well as disease-causing agents and pharmaceuticals fed to the animals just before death. Burning animal carcasses releases air pollution and potentially contaminated ash.

"The way industrial operations are discarding millions of dead animals in the midst of this health crisis shocks the conscience," said Valerie Baron, a senior attorney at NRDC (Natural Resources Defense Council). "These disposal methods are among the most dangerous for human health and severely threaten drinking water safety — yet there's zero transparency when it comes to where these mass burials or incinerations happen. With hurricane, flood and fire seasons exacerbating the dangers of these unfettered operations, it's even more urgent for the USDA to step up and take action to protect people, instead of Big Ag."

Since the COVID-19 pandemic was declared a public-health emergency in March 2020, slaughterhouses have faced chronic labor shortages and other supply-chain disruptions, leading to reduced slaughter capacity. The meat industry has responded to this reduced capacity by killing millions of industrially raised farm animals that are ready for slaughter but cannot be economically processed into food.

An estimated 10 million hens have already been killed, and more than 10 million pigs could be killed by September. Similar mass "depopulation" approaches are being utilized in other animal-production sectors.

“The USDA is already assisting with the disposal of animal carcasses during the COVID-19 pandemic,” said Alexis Andiman, an attorney with Earthjustice. “We’re sympathetic to livestock producers, but the big corporations that control this industry can afford to do better. It’s up to the USDA to make sure that taxpayer dollars protect communities and the environment instead of putting vulnerable people at greater risk.”

Banning on-site incineration is especially vital given growing evidence that particulate air pollution worsens COVID-19 outbreaks and contributes to increased COVID-19 deaths. On-site incineration of pig carcasses generates approximately three pounds of particulate air pollution per animal, compounding the potential health risks faced especially by communities of color, which are disproportionately harmed by both air pollution and COVID-19.

Other groups joining the petition include: Animal Legal Defense Fund, Association of Irritated Residents, Cape Fear River Water, Catawba Riverkeeper Foundation, Center on Race, Poverty & the Environment, Coastal Carolina Riverwatch, Environmental Working Group, Johns Hopkins Center for a Livable Future, MountainTrue, Sound Rivers and Waterkeeper Alliance.

A separate petition, filed earlier this month, requests that the Food and Drug Administration suspend uses of the dangerous pharmaceutical ractopamine in farm animals during the pandemic.

From:	Pruitt, Michael R - APHIS
To:	McKenna, Thomas S - APHIS; Zack, Jonathan T - APHIS; Shere, Jack A - APHIS; White, Rodney A - APHIS; Healey, Burke L - APHIS
Subject:	Sit Rep
Date:	Tuesday, June 9, 2020 5:07:12 PM
Attachments:	VS_COVID 2020_IMAT SitRep004_20200609 signed MRP.pdf

---

Gentlemen,

See the latest Sit Rep attached for your review and awareness.

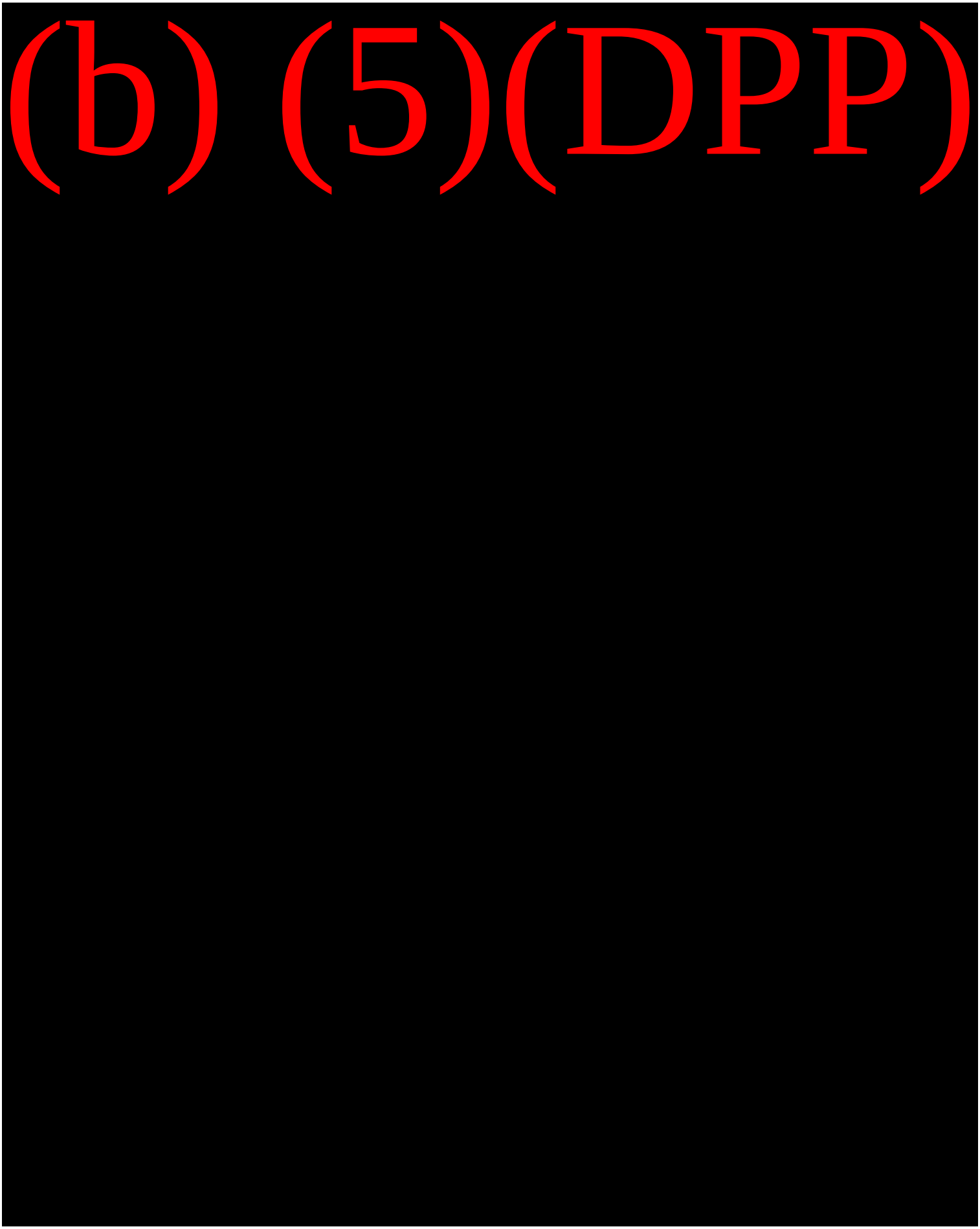
Michael R. Pruitt, DVM
USDA APHIS VS
AVIC Field Operations Texas
903 San Jacinto Blvd., Room 220
Austin, Texas 78701
(512)383-2435 (Office)
(512) 916-5197 (Fax)
(512) 516- 5778 (Cell)

VS_COVID_2020 IMAT Swine Support Situation Report

FOR OFFICIAL USE ONLY

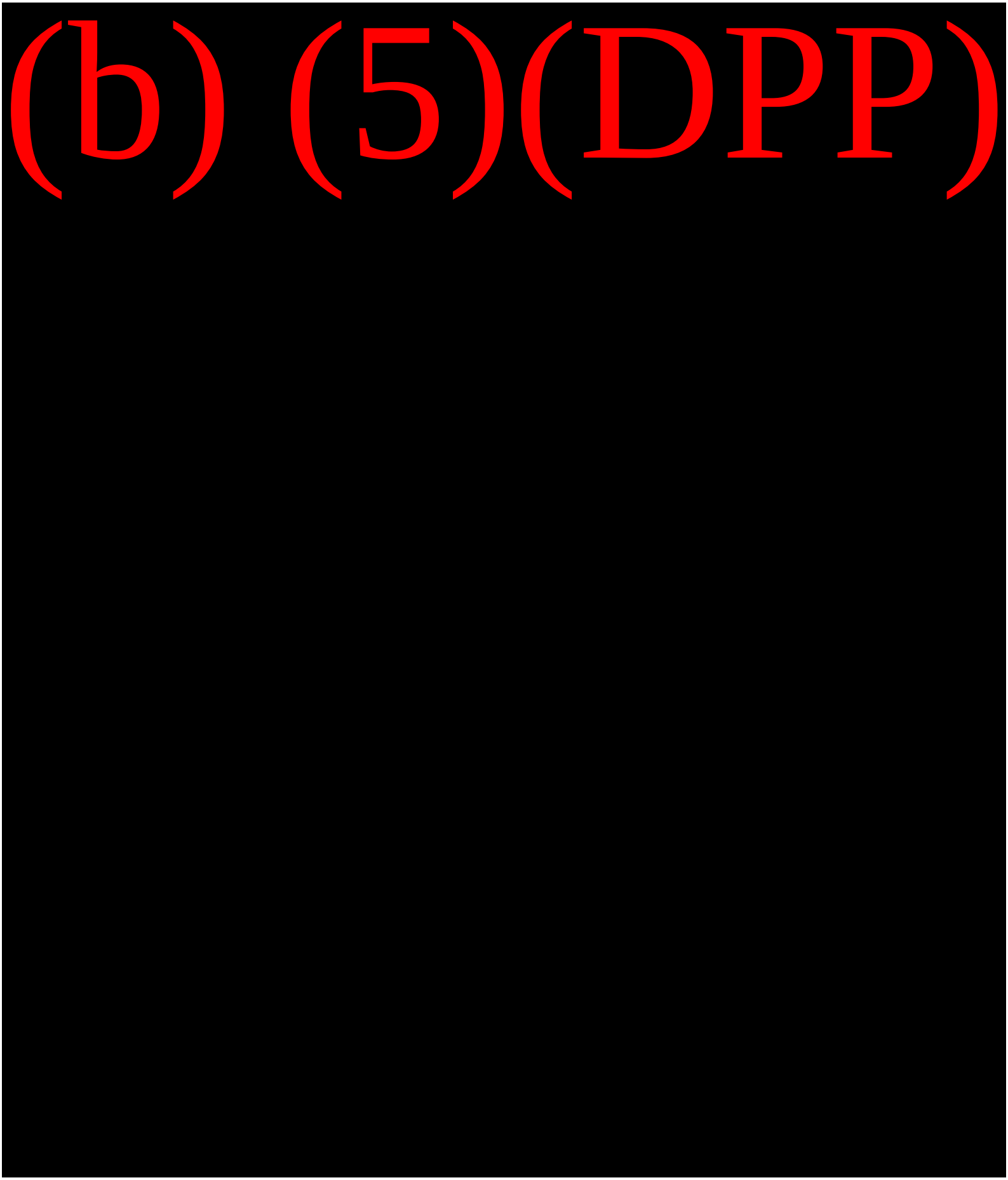
USDA APHIS Veterinary Services

(b) (5)(DPP)


(b) (5)(DPP)


(b) (5)(DPP)


(b) (5)(DPP)


(b) (5)(DPP)

From:	McKenna, Thomas S - APHIS
To:	Healey, Burke L - APHIS
Cc:	Dijab, Adis - APHIS; Oleck, Renee S - APHIS; APHIS-VS FiOps ADA Assistants
Subject:	State "Asks" from VS
Date:	Thursday, June 4, 2020 6:43:45 AM
Attachments:	Copy of cost estimates associated with submitted 213rr Wish List Less NVS approved contract item.xlsx

Hi Burke,

The attached spreadsheet captures the list of items that states have submitted 213s for. The total cost is $2.3M, but if you take out a couple of big ticket items ($2.1M), it is not too much. The big ticket items are:

- OK: a grinder at $400K
- KS: Grinder at 1.28M, CO2 Chamber at $333K, and a trailer at $125K.

A lot of the other stuff is NVS type of equipment and supplies.

Sorry this took so long to gather. I was having a hard time making my request for info clear.

Tom

Tom McKenna, DVM, PhD
Acting Associate Deputy Administrator, Field Operations Services
USDA, APHIS, Veterinary Services
4A-03J
4700 River Road
Riverdale, MD 20737
thomas.s.mckenna@usda.gov
301-851-2051 (Office)
508-887-3421 (Cell)

From: Pruitt, Michael R - APHIS
Sent: Wednesday, June 03, 2020 12:57 PM
To: McKenna, Thomas S - APHIS <thomas.s.mckenna@usda.gov>
Subject: RE: SWAG

Tom,

(b) (5)(DPP) [redacted] See the corrected wish list attached less the procurement/ CA items.

Michael R. Pruitt, DVM
USDA APHIS VS
AVIC Field Operations Texas
903 San Jacinto Blvd., Room 220
Austin, Texas 78701
(512)383-2435 (Office)
(512) 916-5197 (Fax)
(512) 516- 5778 (Cell)

From: McKenna, Thomas S - APHIS
Sent: Wednesday, June 3, 2020 11:25 AM
To: Pruitt, Michael R - APHIS <mike.r.pruitt@usda.gov>
Subject: RE: SWAG

Can you send me the wish list with the NVS requests broken out from the cooperative agreement requests?

Tom McKenna, DVM, PhD
Acting Associate Deputy Administrator, Field Operations Services
USDA, APHIS, Veterinary Services
4A-03J
4700 River Road
Riverdale, MD 20737
thomas.s.mckenna@usda.gov
301-851-2051 (Office)
508-887-3421 (Cell)

From: Pruitt, Michael R - APHIS
Sent: Wednesday, June 03, 2020 12:24 PM
To: McKenna, Thomas S - APHIS <thomas.s.mckenna@usda.gov>
Subject: RE: SWAG

Man, I am glad you asked! The spread sheet you attached contains equipment that was deployed, including the shipment dates so these items have be delivered to the states. All of these items have been confirmed as shipped and received now.

The “wish list” spreadsheet contained those items requested but not filled by NVS. One item, the horizontal grinder being funded by Jack’s NVS pot, was contained on the wish list as a request by OK but not immediately filled.

Let me know if this further muddies the water!

Michael R. Pruitt, DVM
USDA APHIS VS
AVIC Field Operations Texas
903 San Jacinto Blvd., Room 220
Austin, Texas 78701
(512)383-2435 (Office)
(512) 916-5197 (Fax)
(512) 516- 5778 (Cell)

From: McKenna, Thomas S - APHIS
Sent: Wednesday, June 3, 2020 9:18 AM
To: Pruitt, Michael R - APHIS <mike.r.pruitt@usda.gov>
Subject: FW: SWAG

Sorry to come back to you one more time on this, but before I respond to Burke I want to make sure I understand everything.

(b) (5)(DPP) .

Tom
Tom McKenna, DVM, PhD
Acting Associate Deputy Administrator, Field Operations Services
USDA, APHIS, Veterinary Services
4A-03J
4700 River Road
Riverdale, MD 20737
thomas.s.mckenna@usda.gov
301-851-2051 (Office)
508-887-3421 (Cell)

From: Pruitt, Michael R - APHIS
Sent: Tuesday, June 02, 2020 2:37 PM
To: McKenna, Thomas S - APHIS <thomas.s.mckenna@usda.gov>
Subject: SWAG

Tom,

The attached spread sheet is the best estimate of items requested but not filled. Some items are listed in the catalogue but were procured or borrowed elsewhere by the states. The captive bolt guns and cartridges for IN are listed here as not shipped but were and should have arrived at the IN BOAH, per Angela Hines.

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From: Petersburg, Kevin L - APHIS
To: Halstead, Steven L - APHIS; Dijab, Adis - APHIS; McKenna, Thomas S - APHIS; Healey, Burke L - APHIS
Subject: Tyson Storm Lake Plant
Date: Thursday, June 4, 2020 5:43:51 AM

The television news reported last night that the Tyson Storm Lake Plant resumed partial operations late yesterday. I don't have any details regarding what capacity they are operating at.
Kevin Petersburg
AVIC, IA

From: Curlett, Ed C - APHIS

To: Zack, Jonathan T - APHIS; APHIS-VS SP NPIC All; Shere, Jack A - APHIS; Healey, Burke L - APHIS; McKenna, Thomas S - APHIS; Dijab, Adis - APHIS; Tomlinson, Sarah M - APHIS; Sifford, Rosemary B - APHIS; Link, Donald B - APHIS; Bucknall, Janet L - APHIS; Kohler, Dennis - APHIS; Clapper, Andrew T - APHIS; Marks, David R - APHIS; Paulson, John D - APHIS; Romines, Janean - APHIS; Vercauteren, Kurt C - APHIS; Begier, Michael J - APHIS; Cole, Lyndsay M - APHIS; Stepien, Mike W - APHIS; Huddleston, Alan R - APHIS; Humphrey, Nicki L - APHIS; Petersburg, Kevin L - APHIS; Schaefbauer, Stephan L - APHIS; Halstead, Steven L - APHIS; Skorupski, Susan - APHIS; Southall, Robert E - APHIS; Kunde, Paul W - APHIS; Ray, Jean S - APHIS; Tesar, Lynn A - APHIS; Barber, David A - APHIS; Ruman, Anna M - APHIS; Corcoran, Robyn S - APHIS; Hines, Angela Y - APHIS; Haug, Gregory M - APHIS; Custer, Koren M - APHIS; Remick, Mark A - APHIS; White, Rodney A - APHIS; Hans, Thomas R - APHIS; Brown, Lisa A - APHIS; O"Brien, Bethany J - APHIS; Rushin, Gerald L - APHIS; Miller, Lori P - APHIS; Ahola, Sara C - APHIS; McAlpin, Tyler H - APHIS; Days-Austin, Rosalynn C - APHIS; Wortham, Jimmy W - APHIS; Deener, Eugene - APHIS; Angel, Kenneth L - APHIS; Brewer, Becky L - APHIS; Gosch, Terry L - APHIS; Pruitt, Michael R - APHIS; Tanner, Rick J - APHIS; Beckett, Donald L Jr. - APHIS; Beutelschies, Scott A - APHIS; De Carolis, Robert A - APHIS; Eldridge, Leonard E - APHIS; Gaborick, Cynthia M - APHIS; Rawson, Larry C - APHIS; Sciglibaglio, Paul - APHIS; Bolton, Shawn M - APHIS; Cantor, Fredric L - APHIS; Dodds, Lewis E - APHIS; Febach, Marianne B - APHIS; Hall, Lee R - APHIS; Hoffman, Jeffrey A - APHIS; Hough, Kellie A - APHIS; Kerschen, Robert P - APHIS; Loerzel, Suzan M - APHIS; McCartney, Sean P - APHIS; Moyeno, Noelia - APHIS; Stephens, Melburn G - APHIS; Johnson, Kamina K - APHIS; Serach, Michael J - APHIS; Clark, Terry W - APHIS; Mlakar, Joseph A - APHIS; Spencer, Denise - APHIS; Miknis, Robert A - APHIS; Lenoch, Julianna B - APHIS; Erdman, Morgan K - APHIS

Cc: Fritts, Patricia R - APHIS; Glosson, Ashley S - APHIS; King, Lecresha A - APHIS; Jandegian, Caitlin - APHIS; Phillips, Shelly J - APHIS; Porter-Spalding, Barbara A - APHIS; Bourgeois, Fred G - APHIS; Perry, Carla R - APHIS; Meade, Barry J - APHIS; Myers, Lee M - APHIS; Krause, Keary M - APHIS; Soltero, Fred V - APHIS; Kornreich, Michael A - APHIS; Keough, Bradley A - APHIS; Johnson, Todd E - APHIS; Johnson, Kammy R - APHIS; Herriott, Donald E - APHIS; Young, Cristopher A - APHIS; Hasel, Hallie S - APHIS; Lalande, Brian A - APHIS; Righter, Daniel - APHIS; Cole, Leslie E - APHIS; Degeyter, Curt M - APHIS; Rai, Lilajit K - APHIS; Wilmot, Delwin D - APHIS; Hennessey, Morgan J - APHIS; Sullivan, Christine - APHIS; Wines, Gayle A - APHIS; Warrick, Melissa A - APHIS; Norden, Dianne K - APHIS; Bigelow, Troy T - APHIS; Healey, Burke W - APHIS; Welsch, Anna - APHIS; Birnbaum, Nathan G - APHIS; Rooney, Jane A - APHIS; Mccoy, Todd - OHS, Washington, DC; DiMarco, Anthony V - APHIS

Subject: USDA announcement June 9 on meatpacking facilities

Date: Wednesday, June 10, 2020 6:42:03 AM

FYI

America's Meatpacking Facilities Operating More Than 95% of Capacity Compared to 2019

Facilities Practicing Safe Reopening to Ensure a Stable Food Supply

(**Washington, D.C., June 9, 2020**) – U.S. Secretary of Agriculture Sonny Perdue today applauded the safe reopening of critical infrastructure meatpacking facilities across the United States. As of this morning, across the cattle, swine, and broiler sectors, processing facilities are operating more than 95% of their average capacity compared to this time last year. In fact, beef facilities are operating at 98%, pork facilities are operating at 95%, and poultry facilities are operating at 98% of their capacity compared to the same time last year. America's meatpacking facilities are safely resuming operations following President Trump's Executive Order directing the facilities to implement the Centers for Disease Control and Prevention (CDC) and the Department of Labor's Occupational Safety and Health Administration (OSHA) guidelines specifically created for the meat and poultry sector response to the COVID-19 pandemic. The U.S. Department of Agriculture (USDA) in conjunction with the CDC, OSHA, and state and local health officials have been working around the clock to ensure a safe and stable supply of protein is available for American consumers all while keeping employees safe.

“President Trump took decisive action to ensure America’s meatpacking facilities reopen in a safe way to ensure America’s producers and ranchers will be able to bring their product to market,” said Secretary Perdue. “I want to thank the patriotic and heroic meatpacking facility workers, the companies, and the local authorities for quickly getting their operations back up and running, and for providing a great meat selection once again to the millions of Americans who depend on them for food."

Background:

CDC and OSHA have issued guidance for plants to implement to mitigate the spread of COVID-19 and ensure employee safety while maintaining operations. USDA will continue to work with the CDC, OSHA, and state and local officials to keep these critical facilities open while maintaining worker safety.

###

Ed Curlett

Director of Public Affairs, Animal and Plant Health Inspection Service

United States department of agriculture

Office: (301) 851-4052

Cell: (240) 401-7294

COVID-19

APHIS Lessons Learned

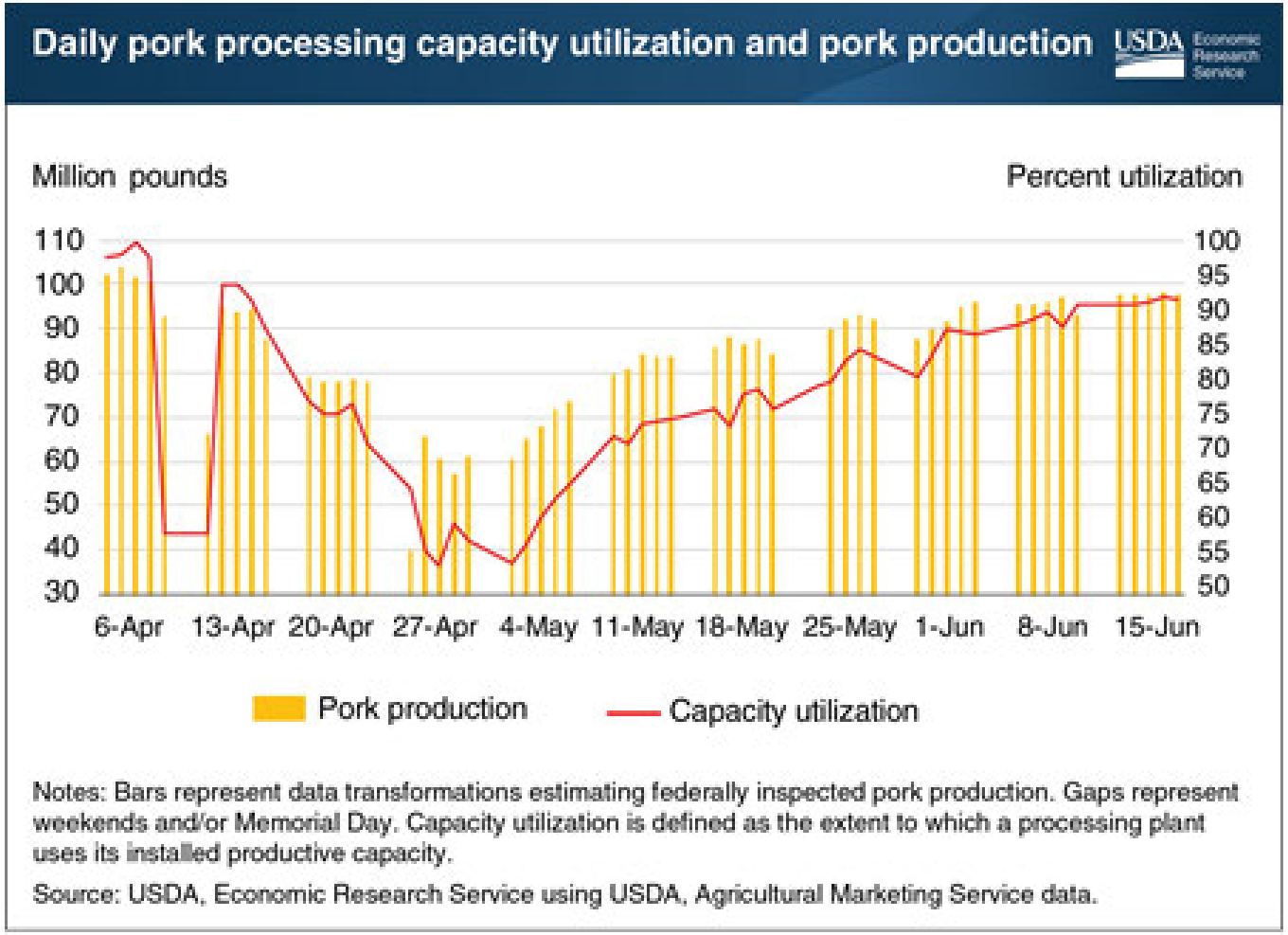
Swine processing disruption and ASF planning

Jack Shere

USDA APHIS

September 4, 2020

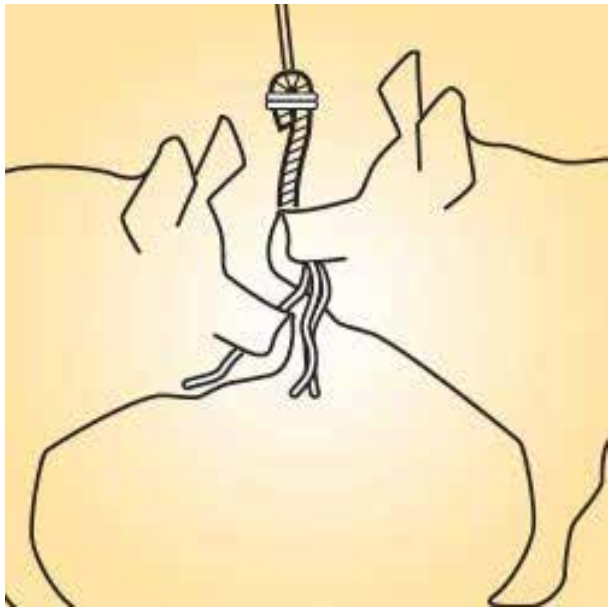
Introduction



Pre-COVID ASF planning – FY 2019

USDA-APHIS

11/18: African swine fever policy exercise
2/19: ASF planning exercise
4/19: Spring Fever tabletop exercise
9/19: SFEAR functional exercise



Swine Fever Exercise for Agriculture Response (SFEAR)

Pre-COVID ASF planning

USDA

Announces ASF Action Plan (3/6/2020)

- Declare Extraordinary Emergency
- Implement National Movement Standstill, 72-hr
- Work with States and AVMA on depopulation methods
- Aid producers with disposal methods
- Develop flat-rate for virus elimination

USDA

16 States

16 States

- State working group for African swine fever (ASF) planning
- Core for larger COVID-19 working group developed in April

Federal role in COVID-19 working group

Limited mission space for issue at hand; federal CARES funds directed to States

Executive Branch
DPA 4/2/2020

USDA
APHIS

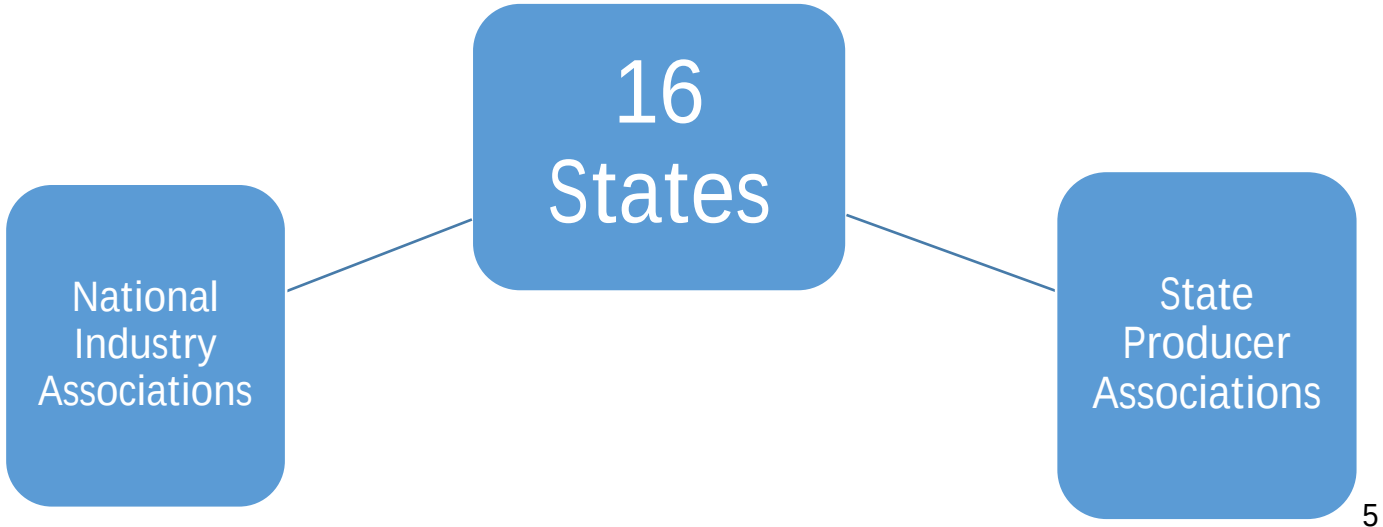
APHIS Authorities

- Animal Health Protection Act (AHPA)

  Requires presence of pest or disease of livestock

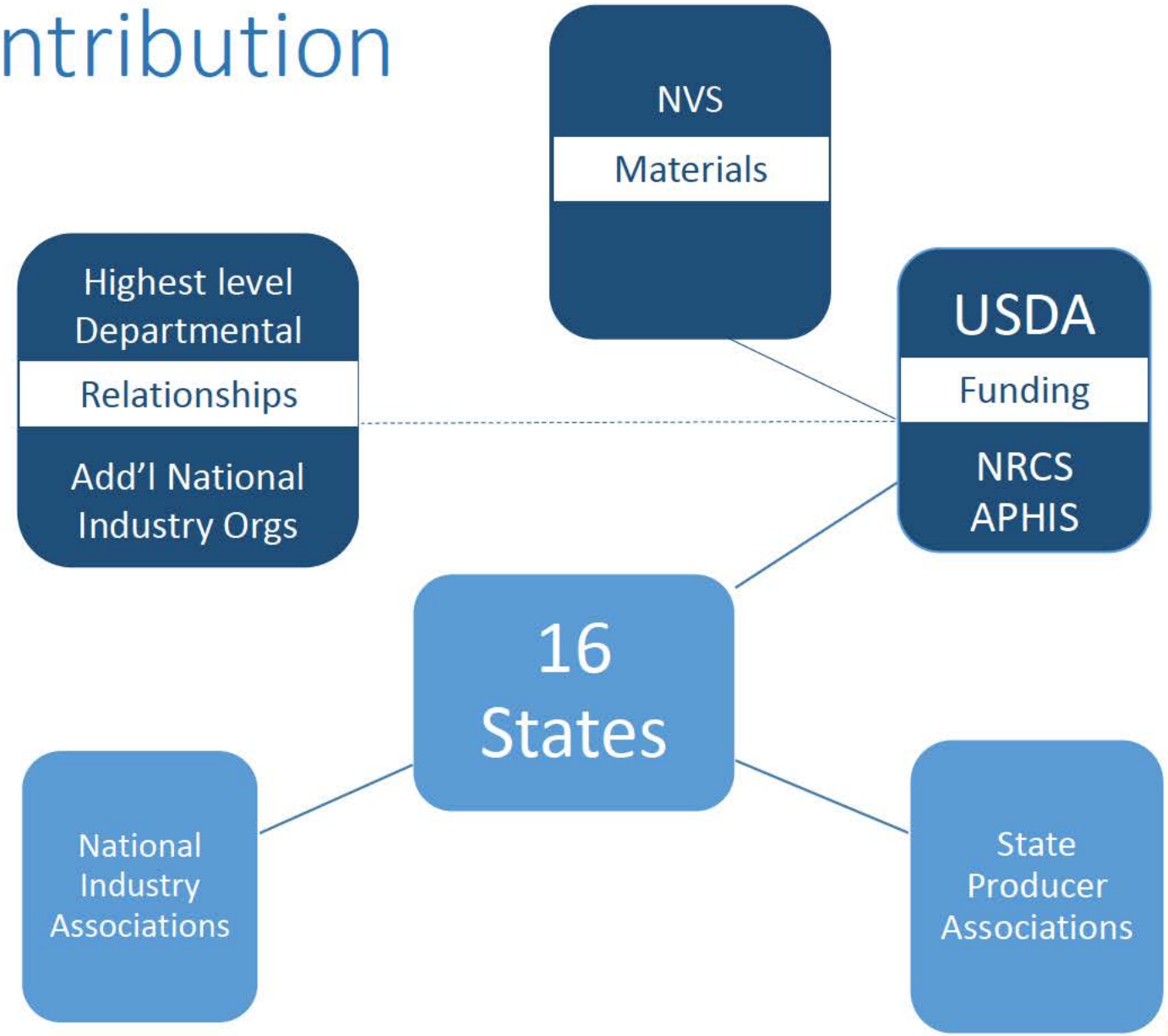
- Animal Welfare Act

  Enforcement statute for minimum standards of care



USDA's contribution

- Relationships
- Funding
- Materials



Industry
State Government
Federal Government

Relationships

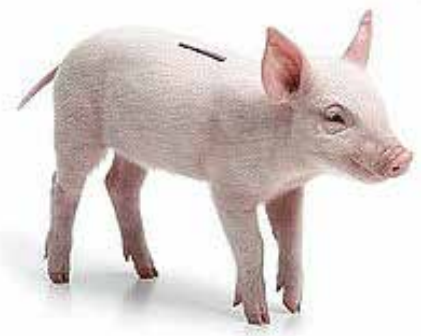
Internal interagency discussions

- Natural Resources Conservation Service (NRCS)
- Department of Homeland Security (DHS)
- Federal Emergency Management Agency (FEMA)
- USDA Office of the Chief Economist (OCE)
- Food Safety Inspection Service (FSIS)
- Environmental Protection Agency (EPA)
- Farm Service Agency (FSA)
- Food and Drug Administration (FDA)
- Centers for Disease Control and Prevention (CDC)

Connections made

- National Incident Coordination Center established May 2020
- Depopulation and disposal options
  - North American Rendering Association
  - APHIS technical assistance
  - EPA
- Funding options
  - NRCS
  - ESF-#11
  - FEMA
- Other issues
  - Anti-trust
  - CO_2 Supply

Funding



Funding sources identified

- NRCS Environmental Quality Incentives Program (EQIP)

  financial and technical assistance to livestock and poultry producers for animal mortality disposal resulting from impacts of the COVID-19 pandemic

- APHIS—emergency preparedness discretionary funds
  - *$1.825 million to the NVS to contract for the purchase of a Horizontal Grinder and Mobile Inert Gas Depopulation System(s)*
  - *$422,161 in cooperative agreement funding to MN and IA*
- Farm Bill
  - *COVID lessons learned influenced 2020 priorities: depopulation and disposal methods, biosecurity*
  - *Additional $5 million made available for projects in 2020, for total of $10 million to applicants*
  - *Open period ends September 14, 2020*

Funding sources explored

- Indemnity
  - *Requires a link to an animal health pest or disease per AHPA*
- Commodity Credit Corporation (CCC) funding
  - *Must meet domestic program requirements, so under AHPA requires a link to an animal health pest or disease*
- FSA Emergency Assistance

  LIP: Livestock Indemnity Program

  ELAP: Emergency Assistance for Livestock, Honey Bees, and Farm-raised Fish Program

  - *Each requires an eligible loss condition (animal disease, various adverse weather event, wild animal attack)*
- Federal Emergency Management Agency
  - *ESF-#11 worked as liaison between State and FEMA to explore funding availability and prep applications*
  - *Ultimately deemed not in scope of their mission*

Materials

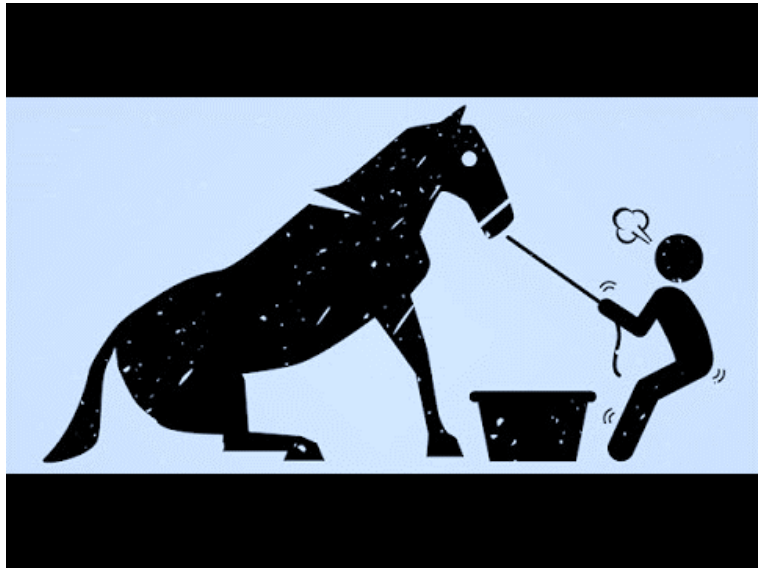
National Veterinary Stockpile (NVS)

- NVS annual budget: $4.66 million*
- Material/supplies acquired
  - Personal protective equipment
  - Poultry depopulation: CO_2 carts, TEDs, etc.
  - Livestock handling equipment
  - Captive bolt
  - Whole house CO_2
  - Classical swine fever vaccine
  - Mobile refrigeration units
- Services acquired
  - All-hazard response contractors for labor and transport (eg, Clean Harbors, Garner)
  - Emergency transportation; charter planes

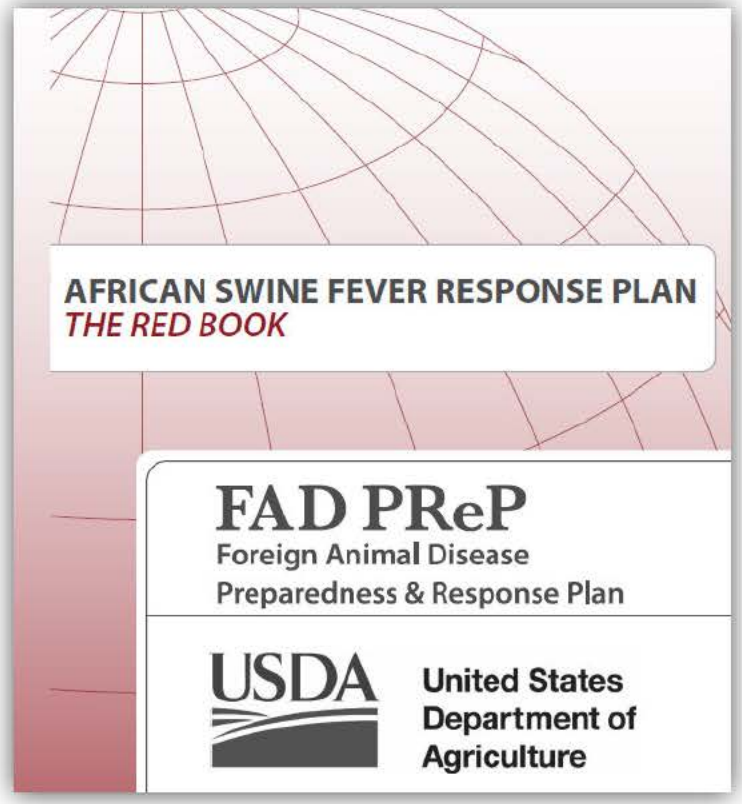
*Allocation in 2020, includes carryover funds, for equipment, personnel, storage/staging costs, maintenance, tags

NVS investment challenges

- Stockpile built with consideration to imminent threats
- Equipment
  - Often custom; not off-the-shelf or mass-produced
  - R&D needed, must meet AVMA guidelines, uncertain ROI
  - Poultry foaming equipment maintenance, technological advances
  - Swine electrocution unit investigation
- Services investigated
  - Large animal handling
    - Sources sought, but no applicants
  - CO_2 sourcing
    - In process, no national contract yet

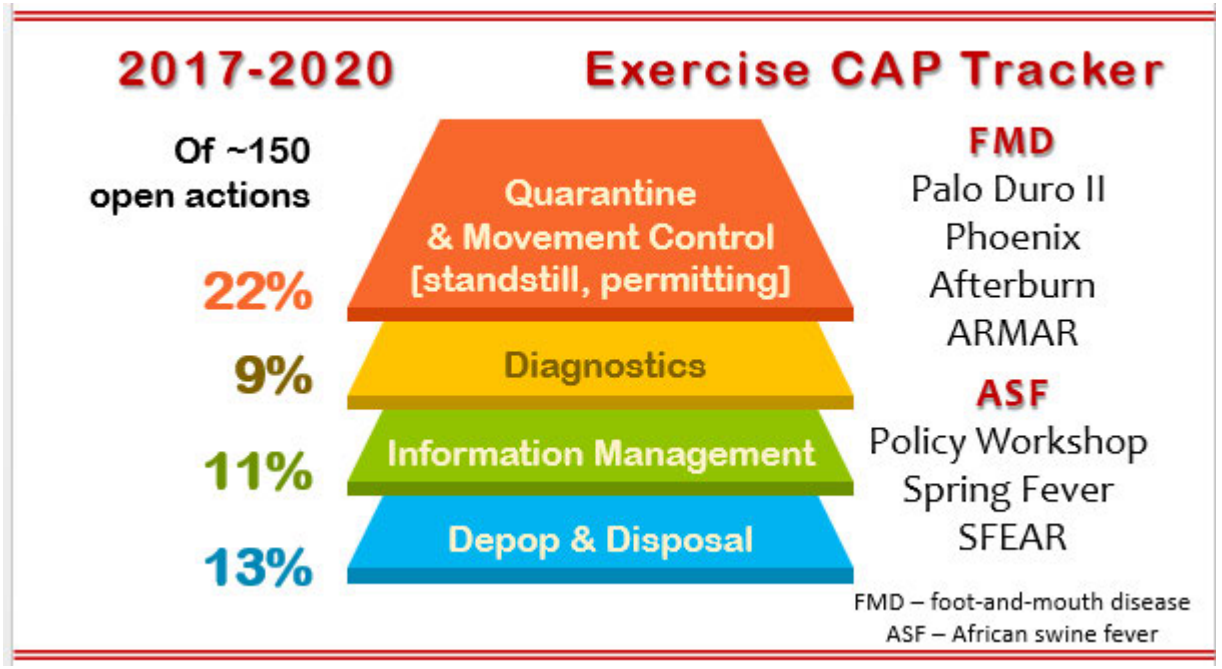


ASF Planning



APHIS preparedness and planning

- 2014-2015 highly pathogenic avian influenza revealed the complexities of responding to large-scale animal agriculture
- Recent exercises highlighted gaps, including large animal depopulation and disposal, movement & permitting, diagnostics, and information management



APHIS ASF-specific planning

- Certain gaps can only be addressed by USDA-APHIS, as the country's veterinary health authority
  - Indemnity determination
  - Test validation
  - Laboratory information management systems
  - Trading partner agreements: CFIA, SAGARPA
  - Bi-lateral zoning and compartmentalization work
  - Flat-rate reimbursement for and confirmation of virus elimination
  - Surveillance planning

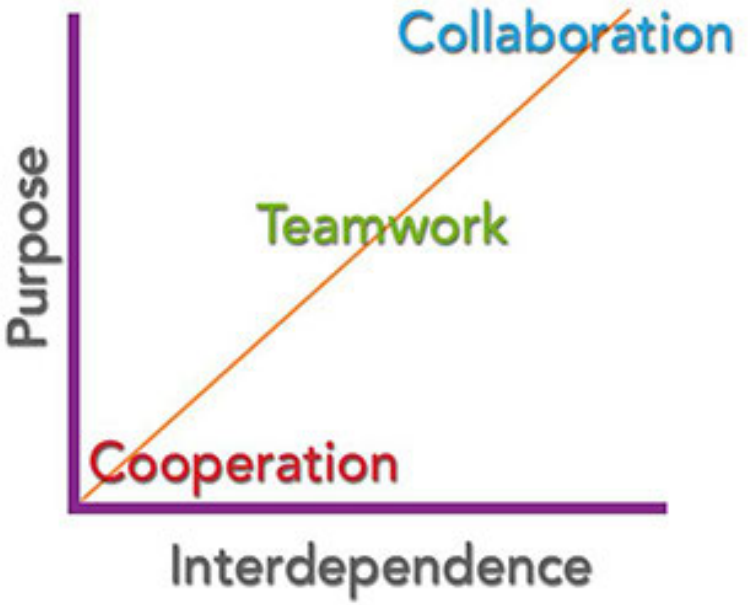
Public-private preparedness

- Other entities can address other gaps
  - Farm-level: biosecurity, herd plans, local disposal options
  - Large producer-level: advance premises upload into EMRS; fund R&D on depopulation equipment
  - Industry/academia: research on depopulation, disposal, virus elimination

- Farm Bill funding can assist!

APHIS priorities

- Communication
- Collaboration
- Progress
  - Surveillance
  - Diagnostic testing capacity and options
  - Maximizing effectiveness of a 72-hour movement standstill
  - Depopulation standards and methods
  - IT strategies for data management



Thank you!

Jack Shere

jack.a.shere@usda.gov

USDA APHIS

From: Fisher, Sharon S - APHIS
To: APHIS-VS SP NPIC All
Subject: FW: Back to You-Rendering & Swine Depopulation
Date: Thursday, April 23, 2020 5:10:42 PM
Attachments: image001.jpg
image002.png
image005.png

Here's some good info on renderer capability, fyi.

From: Shere, Jack A - APHIS
Sent: Thursday, April 23, 2020 4:47 PM
To: Miller, Lori P - APHIS <lori.p.miller@usda.gov>; Healey, Burke W - APHIS <burke.w.healey@usda.gov>; Zack, Jonathan T - APHIS <jonathan.t.zack@usda.gov>
Subject: FW: Back to You-Rendering & Swine Depopulation
FYI

Jack A. Shere DVM, PhD
APHIS Associate Administrator (EPRS)
USDA, APHIS,
4700 River Road
Room 5D-06s.1
Riverdale Maryland 20737
Office (301)-851-2579

From: Nancy Foster <NancyFoster@nara.org>
Sent: Tuesday, April 21, 2020 7:02 PM
To: Shere, Jack A - APHIS <jack.a.shere@usda.gov>
Cc: David Meeker <dmeeker@nara.org>
Subject: Back to You-Rendering & Swine Depopulation
Dear Dr. Shere,
Thank you for talking with David and me today. We're glad to respond to your request for more information. Our emails are above and our cell numbers are at the end of this email.
The North American Renderers Association would be pleased to assist USDA deal with possible depopulation of healthy swine herds because of serious market disruptions. Several of our renderers were recently contacted by USDA and state vets about their ability to render hogs if pork producers want to depopulate animals due to packing plant closings in the upper Midwest. We are consolidating here what we have learned from them.
Renderers are willing to assist with this disposal, depending upon the volume involved. Most "independent" (non packer-owned) renderers can increase their daily intake volume by 10 to 30%. If their rendering plants are idle because they are dedicated to servicing slaughter plants now closed, they could commit their total capacity to this for a while. Rendering plants owned by packers ("packer-renders") are co-located with their company's packing plant and process the company's animal by-products. Consequently, if the packing house is closed, so is their rendering plant.
Renderers cannot accept animals euthanized with chemical agents, such as pentobarbital. FDA does not permit the presence of barbiturates in finished rendered products.
We have spoken to several rendering companies with multiple plants across the Midwest that could help with this effort, and additional renderers would likely help in additional states if needed.

We know of independent rendering plants in Iowa, Minnesota, Wisconsin, Nebraska, Illinois, Missouri, and Kansas that can help with swine disposal. Specifics regarding volume, costs, and logistics would have to be negotiated with the rendering companies that own the plants. We believe this is doable and we can provide the contacts of the correct people when/if needed.

Renderers derive value every day from the meat animal by-products they process. The costs of operating rendering plants are paid by the value received for their finished products, but sometimes also by service fees depending on costs of logistics and commodity markets.

There are several factors that could impact the value of depopulated pigs in the rendering system:

- **Method of euthanizing** – drugs cannot be used. Captive bolt, gunshot, and CO2 are acceptable.
- **Whether ante- and post-mortem inspection could be performed**—many pet food manufacturers require this for their animal protein meal and animal fat ingredients. Pet food is a high value market for renderers so they would prefer to have the option to sell the finished products to pet food manufacturers. This would be in addition to their other traditional markets (livestock feed, oleochemical uses - such as ingredients for tires, industrial cleaners/lubricants/glues, personal care products - and biodiesel production although fuel use is down due to COVID-19).
- **Whether blood can be collected separately** - animal blood is processed into spray dried blood and blood plasma used for baby pig starter and other rations.
- **Whether hair can be removed** - rendered product quality is higher without indigestible hog hair but animals with hair can also be rendered.
- **Freshness of carcasses**—rendering quickly after death improves finished rendered product quality.
- **Volumes**—large volumes could cause surplus conditions decreasing commodity prices.
- **Logistics**—distance carcasses need to be transported, and by whom.

The alternatives of composting, burning, or otherwise disposing of such animals can be difficult, time-consuming, and wastes the animal. These disposal methods can also pose environmental challenges. Rendering would recycle depopulated animals back into the supply chain as animal protein and fat for livestock and pet food ingredients. Animal fats are also used to make soap, which is critical for sanitation as part of COVID-19 control. Rendering would greatly reduce the sheer mass of depopulated animals since rendering evaporates large volumes of water from animals during the cooking process at extremely high temperatures.

Thank you for considering our input. Please consider us a resource to assist you and others at USDA if needed.

Best regards,

Nancy and David

(Nancy Cell – (b) (6)
(David Cell –
Nancy Foster
President & CEO| North American Renderers Association
500 Montgomery St., Suite 310 | Alexandria, VA 22314 | www.nara.org

“Reclaiming Resources, Sustainably”

From: Nancy Foster

Sent: Monday, April 20, 2020 7:07 PM
To: Jack.A.Shere@aphis.usda.gov
Subject: Rendering & Swine Depopulation-Upper Midwest

Dear Dr. Shere,

We've worked with you and your staff on rendering's role in diseased animal disposal during a potential foreign animal disease outbreak. Several of our renderers were recently contacted by USDA and state vets about their ability to render hogs if pork producers want to depopulate animals due to packing plant closings in the upper Midwest.

Renderers are willing to assist with this disposal, depending upon the volume involved. The alternative of composting, burning or otherwise disposing of such animals can be difficult, time-consuming, and wastes the animal. These disposal methods can also pose environmental challenges. Rendering would recycle depopulated animals back into the supply chain as animal protein and fat for livestock and pet food ingredients. Animal fats are also used to make soap, which is critical for sanitation as part of COVID-19 control. Rendering would greatly reduce the sheer mass of depopulated animals since rendering evaporates large volumes of water from animals during the cooking process at extremely high temperatures.

Renderers would not support use of chemical agents, such as pentobarbital, for euthanasia and renderers would not accept such treated animals at their plants due to contamination concerns. FDA does not permit the presence of barbiturates in rendered products.

Thank you for considering rendering as part of the solution, if needed. My colleague David Meeker, at our association also reached out to Lori Miller on your staff this afternoon.

Thank you,

Nancy
(cell-(b) (6)
Nancy Foster
President & CEO| North American Renderers Association
500 Montgomery St., Suite 310 | Alexandria, VA 22314 | www.nara.org

"Reclaiming Resources, Sustainably"

From:	Fisher, Sharon S - APHIS
To:	APHIS-VS SP NPIC All
Subject:	FW: Deliverables on Euthanasia
Date:	Friday, April 24, 2020 2:49:15 PM
Attachments:	mrp us briefing COVID 19 impacts slaughter facilities Final Draft 4-24-20 v3.docx American Animal Agriculture is facing an unprecedented challenge caused by the closing of meat processing plants in several States.docx image001.png image003.jpg image002.png
Importance:	High

This is draft, not for discussion outside our group. fyi

From: Healey, Burke L - APHIS
Sent: Friday, April 24, 2020 1:59 PM
To: Zack, Jonathan T - APHIS <jonathan.t.zack@usda.gov>
Cc: APHIS-VS DA Executive Team <APHIS-VSExecutiveTeam@usda.gov>
Subject: FW: Deliverables on Euthanasia
Importance: High

FYI

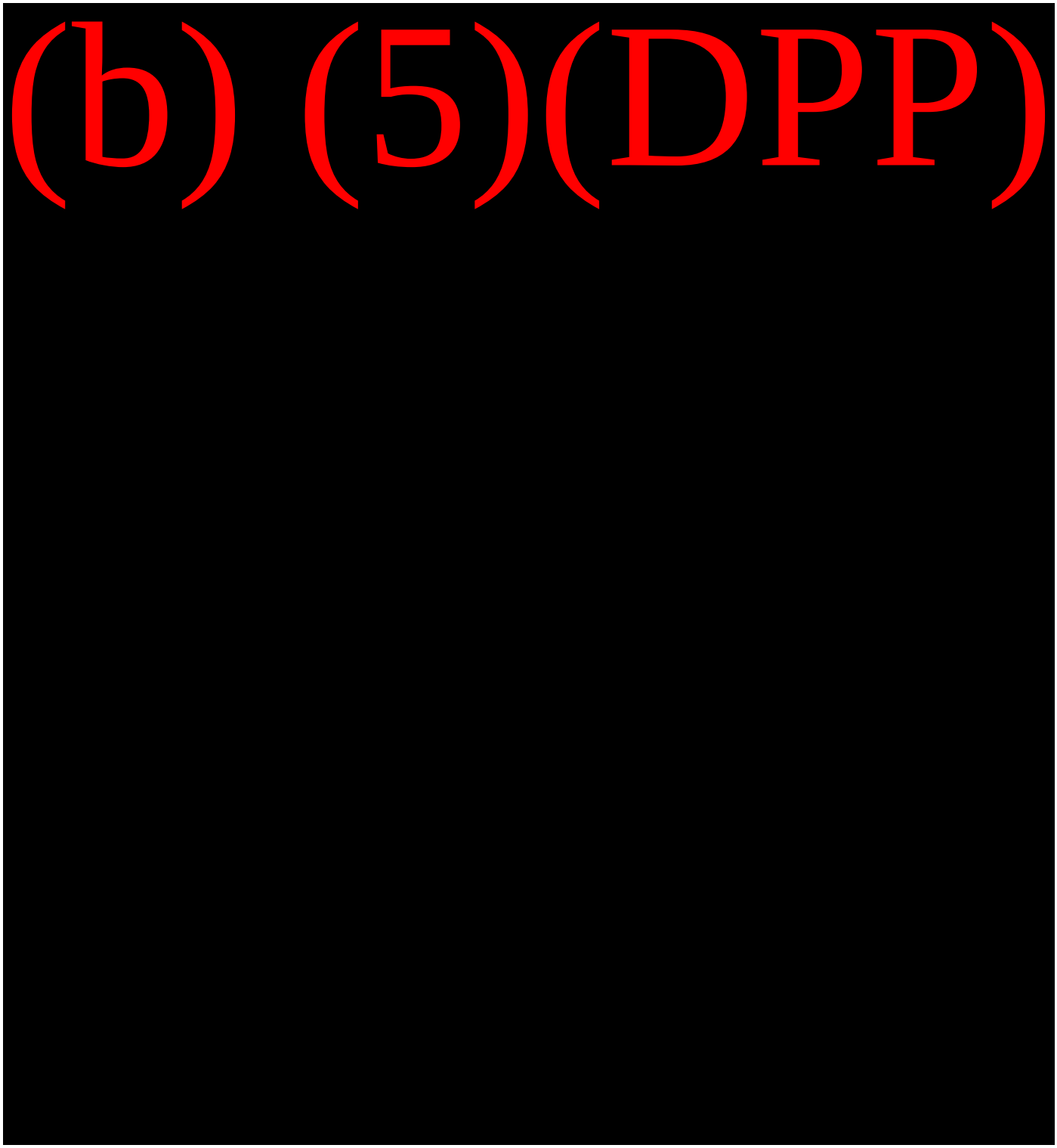
Burke L. Healey, DVM
Deputy Administrator
APHIS Veterinary Services (VS)

1400 Independence Ave, 318-E
Washington, DC 20250
p: 202-799-7146
burke.l.healey@usda.gov

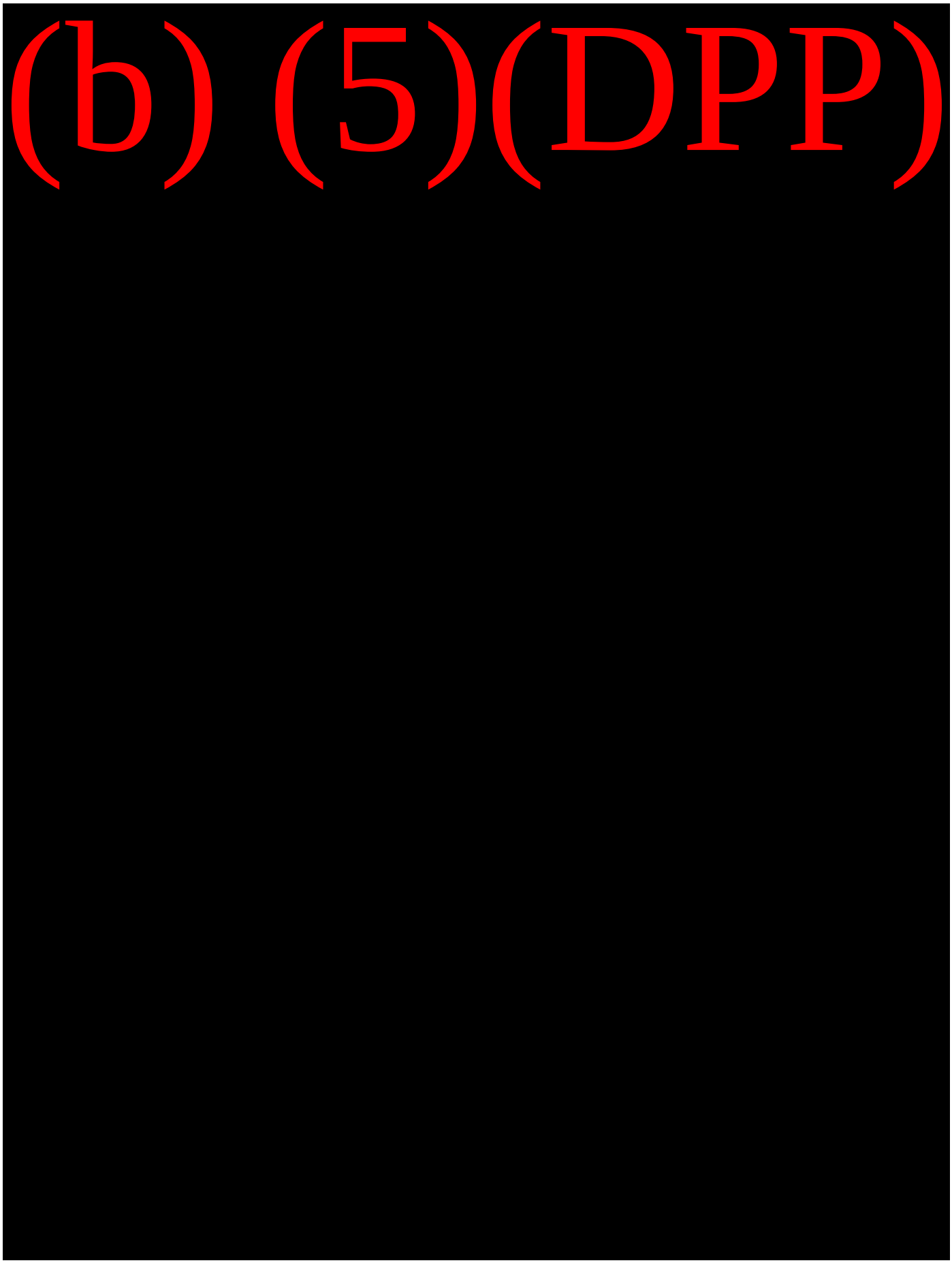
From: Ibach, Greg - OSEC, Washington, DC <Greg.Ibach@usda.gov>
Sent: Friday, April 24, 2020 11:35 AM
To: CLS1, SLC1 - OSEC, Washington, DC <SLC1@usda.gov>; Young, Joby - OSEC, Washington, DC <joby.young@usda.gov>; Walker, Lorren - OSEC, Washington, DC <Lorren.Walker@usda.gov>; Hoskins, Dudley - OSEC, Washington, DC <dudley.hoskins@usda.gov>
Cc: Crosswhite, Caleb - APHIS <Caleb.Crosswhite@usda.gov>; Shea, Kevin - APHIS <kevin.a.shea@usda.gov>; Davidson, Mark L - APHIS <mark.l.davidson@usda.gov>; Shere, Jack A - APHIS <jack.a.shere@usda.gov>; Healey, Burke L - APHIS <burke.l.healey@usda.gov>
Subject: Deliverables on Euthanasia
Importance: High

(b) (5)(DPP)

Under Secretary
Marketing & Regulatory Programs
United States Department of Agriculture
228-W Whitten Building
Office: 202-720-4256
Cell: 202-617-4510
greg.ibach@osec.usda.gov


(b) (5)(DPP)


(b) (5)(DPP)


(b) (5)(DPP)

From:	Link, Donald B - APHIS
To:	Healey, Burke L - APHIS; Sifford, Rosemary B - APHIS; Zack, Jonathan T - APHIS
Cc:	Dijab, Adis - APHIS; McKenna, Thomas S - APHIS; Duong, Nhu-Phuong - APHIS
Subject:	FW: Resources that may be needed
Date:	Friday, April 24, 2020 1:33:27 PM
Attachments:	image001.jpg

To inform our current discussion, here is the information out of Iowa that we just received from Dr. Petersburg.
I am receiving/collating similar information from other states, as we receive it.

Donnie
Field Ops, ACOS

From: Petersburg, Kevin L - APHIS
Sent: Friday, April 24, 2020 1:18 PM
To: Dijab, Adis - APHIS <adis.dijab@usda.gov>; Schaefbauer, Stephan L - APHIS <stephan.l.schaefbauer@usda.gov>; Halstead, Steven L - APHIS <steven.l.halstead@usda.gov>
Cc: McKenna, Thomas S - APHIS <thomas.s.mckenna@usda.gov>; APHIS-VS FiOps ADA Assistants <VS.FiOps.ADA.Assistants@usda.gov>
Subject: Resources that may be needed

The Iowa Department of Agriculture and Land Stewardship and the Iowa Pork Producers Association are (this morning) drafting some options for depopulation and disposal of market swine. They have requested records related to the cost of renting equipment for burial of carcasses and for composting carcasses. I have provided records available pertaining to 2015 HPAI.

Equipment needed may include, horizontal grinders, excavators, payloaders, trucks, skid loaders, backhoes, and wheel loaders, captive bolt guns, CO2 manifolds, tarps to cover trailers, heaters for VSD plus.

SMEs for composting. Personnel skilled at using captive bolt guns (possibly a pneumatic captive bolt gun). Possibly experts with knowledge of how to use CO2 to depopulate swine. Possibly experts to advise how to implement ventilation shutdown. Safety experts. An IMT to coordinate trucking of animals to a central location for euthanasia of swine, grinding of carcasses, and building compost piles as well as coordination of depopulation of some swine on farms and hauling swine carcasses to renderers or to a compost site. SMEs to monitor building compost piles on farms. Logistics expert to acquire carbon material for composting and required equipment listed above. Experts at constructing on –farm electrocution units.

Contracting officers, Contracting officers representatives, Public Information Officer, Critical Stress Debriefing Teams.

Kevin Petersburg
AVIC, IA/WI

From: Dijab, Adis - APHIS
Sent: Friday, April 24, 2020 11:35 AM
To: Petersburg, Kevin L - APHIS <kevin.l.petersburg@usda.gov>; Schaefbauer, Stephan L - APHIS <stephan.l.schaefbauer@usda.gov>; Halstead, Steven L - APHIS <steven.l.halstead@usda.gov>
Cc: McKenna, Thomas S - APHIS <thomas.s.mckenna@usda.gov>; APHIS-VS FiOps ADA Assistants <VS.FiOps.ADA.Assistants@usda.gov>
Subject: FW: APHIS Briefing Memo: COVID-19 Slaughter Plants - and VS capabilities

Folks,
Rodney is addressing issue of the potential contracts and the NVS stockpile assistance. I was wondering, based on your operational knowledge, is APHIS personnel requested, and if so in what capacity we could provide assistance on the local level.
Thanks,
Adis

Adis Dijab, DVM
USDA APHIS Veterinary Services
Field Operations
Executive Director
4700 River Road, Riverdale, MD 20737
☎ (O) 301-851-3319 (C) 334-657-5300
Email: adis.dijab@usda.gov

From: Zack, Jonathan T - APHIS
Sent: Friday, April 24, 2020 12:26 PM
To: APHIS-VS SP NPIC All <VS.SP.NPIC.All@usda.gov>; White, Rodney A - APHIS <rodney.white@usda.gov>; Hans, Thomas R - APHIS <thomas.r.hans@usda.gov>; Brown, Lisa A - APHIS <lisa.a.brown@usda.gov>; Miller, Lori P - APHIS <lori.p.miller@usda.gov>; Humphrey, Nicki L - APHIS <nicki.l.humphrey@usda.gov>; Dijab, Adis - APHIS <adis.dijab@usda.gov>; McKenna, Thomas S - APHIS <thomas.s.mckenna@usda.gov>; Petersburg, Kevin L - APHIS <kevin.l.petersburg@usda.gov>; Schaefbauer, Stephan L - APHIS <stephan.l.schaefbauer@usda.gov>
Cc: Healey, Burke L - APHIS <burke.l.healey@usda.gov>; Shere, Jack A - APHIS <jack.a.shere@usda.gov>; Tomlinson, Sarah M - APHIS <sarah.m.tomlinson@usda.gov>
Subject: APHIS Briefing Memo: COVID-19 Slaughter Plants - and VS capabilities
FYI from Burke
Kevin Shea wants to know:

From: Healey, Burke L - APHIS
Sent: Friday, April 24, 2020 9:40 AM
To: Zack, Jonathan T - APHIS <jonathan.t.zack@usda.gov>; Miller, Lori P - APHIS <lori.p.miller@usda.gov>
Cc: APHIS-VS DA Executive Team <APHIS-VSExecutiveTeam@usda.gov>
Subject: FW: Briefing Memo: COVID-19 Slaughter Plants
Jon / Lori,
In case you haven't yet seen .

Burke L. Healey, DVM
Deputy Administrator

APHIS Veterinary Services (VS)

1400 Independence Ave, 318-E
Washington, DC 20250
p: 202-799-7146
burke.l.healey@usda.gov

From: Shea, Kevin - APHIS <kevin.a.shea@usda.gov>
Sent: Friday, April 24, 2020 7:19 AM
To: Shere, Jack A - APHIS <jack.a.shere@usda.gov>; Healey, Burke L - APHIS <burke.l.healey@usda.gov>; Davidson, Mark L - APHIS <mark.l.davidson@usda.gov>
Subject: FW: Briefing Memo: COVID-19 Slaughter Plants

Thanks for pulling this together. I think (b) (5)(DPP) [redacted]

From: Helming, Sarah J - APHIS <sarah.j.helming@usda.gov>
Sent: Friday, April 24, 2020 9:10 AM
To: APHIS-OA <APHISOA@usda.gov>
Subject: Briefing Memo: COVID-19 Slaughter Plants

All – Here is the briefing memo from MRPBS/Jack on slaughter plants.
Let us know if you'd like us to send to MRP.
Sarah

From:	Jandegian, Caitlin - APHIS
To:	Porter-Spalding, Barbara A - APHIS; APHIS-VS SP NPIC All
Subject:	RE: INTERNAL ONLY : Update on National Swine Slaughter Capacity - 4.29.2020
Date:	Wednesday, April 29, 2020 6:24:09 PM
Attachments:	image001.png

I don't have much to help out, but here is a news article discussing all livestock and milk. Its also the first one I've seen that mentions alternative methods to depopulation: https://www.forbes.com/sites/jennysplitter/2020/04/28/farmers-face-their-worst-case-scenarios-depopulating-chickens-euthanizing-pigs-and-dumping-milk/#982573c30030

From: Porter-Spalding, Barbara A - APHIS
Sent: Wednesday, April 29, 2020 5:09 PM
To: APHIS-VS SP NPIC All <VS.SP.NPIC.All@usda.gov>
Subject: FW: INTERNAL ONLY : Update on National Swine Slaughter Capacity - 4.29.2020

Do we have anything else for this?
Or know of any other source of the info?
Thanks,
barb

From: Serach, Michael J - APHIS
Sent: Wednesday, April 29, 2020 6:08 PM
To: APHIS-Jere Dick Operations Center (JDOC) <JDOC@usda.gov>; Porter-Spalding, Barbara A - APHIS <barbara.a.porter-spalding@usda.gov>
Cc: Days-Austin, Rosalynn C - APHIS <rosalynn.days-austin@usda.gov>
Subject: RE: INTERNAL ONLY : Update on National Swine Slaughter Capacity - 4.29.2020

Barbara:

Thanks for this information! It's a great start to address the RFI received earlier today regarding depops and closures. Stating the obvious; it only addresses the pork industry. Are there similar tables for the beef and poultry industries? Do you have any information you can provide to assist in responding to the following questions:

1. ***Have there been any other alternatives explored outside of depopulation? (e.g. utilizing small butchers and meat processors, coordinating with state and local ag to house animals at alternate locations from feedlots)***
2. ***Are animals generally still at feedlots/coops or are they being housed at processors?***
3. ***Is there a timeline for culling, either at the federal, state or private sector level?***

I've also forwarded these questions to the Food Safety Inspection Service (FSIS); but if VS has valuable insight it will help us to provide the best possible answer. Thanks!

MIKE SERACH
ESF #11 Deputy National Coordinator
NRCC Desk Operations (Virtual)
COVID-19 Response
Mobile: **240-495-5571**

From: Porter-Spalding, Barbara A - APHIS
Sent: Wednesday, April 29, 2020 4:52 PM
To: APHIS-Jere Dick Operations Center (JDOC) <JDOC@usda.gov>

Cc: Days-Austin, Rosalynn C - APHIS <rosalynn.days-austin@usda.gov>
Subject: Re: INTERNAL ONLY : Update on National Swine Slaughter Capacity - 4.29.2020

This is a daily report of all impacted plants, not just IA. SWINE ONLY>

Shows what their normal capacity is, what % functioning they are at, the # idled or NOT being slaughtered, and the number being slaughtered.

So if Slaughter says '0', they are closed.

This comes from National Pork Producer Council and sent to satisfy the request passed from JDOC on ESF14 questions.

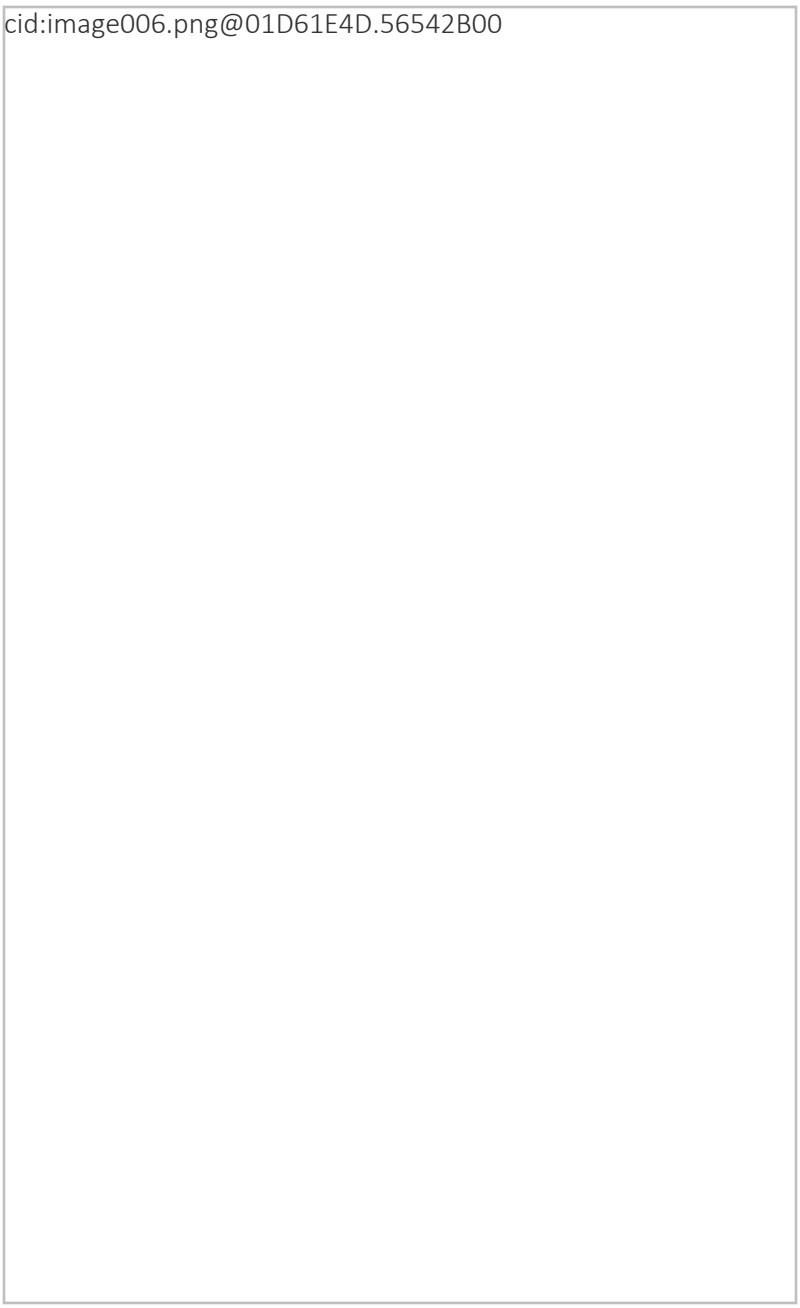
APHIS has no schedule, and no knowledge of daily depopulations. But this table gives an idea of what is stuck on the farm and likely to need depopulated, or moved to other Plants.

Dr. Shere receives this daily, maybe someone in ESF11 already gets this too, not sure.

Right now this is all we have passed to us to share with FEMA.

"Daily Idle Capacity Calcs" report Courtesy of from Mr. Steve R. Meyer, Ph.D., Kerns and Associates

Sioux City is down due to a power outage and water in the basement. Should only be today. We are hearing of a few plants that will try to start back up next week. We think it is likely that this week is the worst of it barring new covid outbreaks.



SRM

From: Fisher, Sharon S - APHIS
To: Zack, Jonathan T - APHIS
Subject: RE: Question from ESF #14 (FW: Culling Schedule)
Date: Wednesday, April 29, 2020 12:51:00 PM
Attachments: image001.jpg
image003.jpg

Here are a few sentences, if helpful.

(b) (5)(DPP)

APHIS-Jere Dick Operations Center (JDOC)

Sent: Wednesday, April 29, 2020 12:16 PM

To: Shere, Jack A - APHIS <jack.a.shere@usda.gov>; APHIS-VS JDOC <VS.JDOC@usda.gov>

Cc: Porter-Spalding, Barbara A - APHIS <barbara.a.porter-spalding@usda.gov>; Zack, Jonathan T - APHIS <jonathan.t.zack@usda.gov>; Fisher, Sharon S - APHIS <sharon.s.fisher@usda.gov>; Mullaney, Roxanne C - APHIS <roxanne.c.mullaney@usda.gov>

Subject: Question from ESF #14 (FW: Culling Schedule)

Good afternoon, Dr. Shere and Veterinary Services JDOC contacts.

Our ESF #11 deputy national coordinator is virtually assisting FEMA at the National Response Coordination Center (NRCC), which is activated for the COVID-19 pandemic response. As USDA's representative for Agriculture and Natural Resources, today he received an inquiry from the ESF #14--Cross-Sector Business and Infrastructure /National Business Emergency Operations Center representative, William Tombaugh at the NRCC, asking for information regarding the depopulation of livestock. Specifically, Mr. Tombaugh is interested in knowing whether there has been a schedule developed for depopulation of livestock and whether the Federal Government has produced such a schedule. He states his assumption that any depopulation action would be under the purview of states/private sector with guidance from the Federal Government. He also asks whether USDA has any visibility on the numbers of beef, swine, and poultry that have already been euthanized?

In seeking additional information from the ESF #14 inquirer, we have learned that any information we provide would be used internally within FEMA headquarters and the FEMA Regions to understand the impacts on commercial and retail supply chains and to anticipate future issues. He indicates the information will not be shared outside of FEMA.

Do you and/or Veterinary Services have any information on this topic that we can provide to Mr. Tombaugh with ESF #14? (b) (5)(DPP)

Thanks for your help.

Holly

HOLLY O'BRIEN | WRITER/EDITOR

USDA · APHIS · MRPBS · EMERGENCY MANAGEMENT, SAFETY, & SECURITY DIVISION · DIRECTOR'S OFFICE
☎ 301-436-3113 | ✉ Holly.J.O'Brien@usda.gov

From: Serach, Michael J - APHIS
Sent: Wednesday, April 29, 2020 10:58 AM
To: OpsCenter - OHS, Washington, DC <OpsCenter@USDA.GOV>
Cc: Days-Austin, Rosalynn C - APHIS <rosalynn.days-austin@usda.gov>; Fantinato, Jessica - OHS, Washington, DC <jessica.fantinato@usda.gov>; APHIS-Jere Dick Operations Center (JDOC) <JDOC@usda.gov>
Subject: Fwd: Culling Schedule

Good morning:
I just received this request for information (below) and hope you can help me filter it to the right people for answers.
v/r,
MIKE SERACH
ESF # 11 Deputy National Coordinator
NRCC Desk Operations
Mobile: 240-495-5571

From: FEMA-NRCC-NBEOC, <FEMA-NRCC-NBEOC@fema.dhs.gov>
Sent: Wednesday, April 29, 2020 10:47:58 AM
To: Serach, Michael J - APHIS <michael.j.serach@usda.gov>
Subject: Culling Schedule

Good Morning Michael,
We received a question on the depopulation of livestock. Has there been any schedule for depopulation produced by the federal government? I assume that any action would be under the purview of states/private sector with guidance from the federal government. Also, do you have any visibility on the numbers of beef, swine, and poultry that have already been euthanized?
Tx

From: Porter-Spalding, Barbara A - APHIS
To: Fisher, Sharon S - APHIS; Zack, Jonathan T - APHIS; Bragg, Matthew P - APHIS
Subject: RE: Request Re: Availability Federal assets-depopulation - MN
Date: Tuesday, April 21, 2020 9:40:48 AM

(b) (5)(DPP)

Barb

From: Fisher, Sharon S - APHIS
Sent: Tuesday, April 21, 2020 8:50 AM
To: Zack, Jonathan T - APHIS <jonathan.t.zack@usda.gov>; Porter-Spalding, Barbara A - APHIS <barbara.a.porter-spalding@usda.gov>; Bragg, Matthew P - APHIS <matthew.bragg@usda.gov>
Subject: RE: Request Re: Availability Federal assets-depopulation - MN

WS sounded like they'd be interested in helping. Would be good 'practice' for mass ASF depops.

From: Zack, Jonathan T - APHIS
Sent: Tuesday, April 21, 2020 8:47 AM
To: Porter-Spalding, Barbara A - APHIS <barbara.a.porter-spalding@usda.gov>; Bragg, Matthew P - APHIS <matthew.bragg@usda.gov>
Cc: Fisher, Sharon S - APHIS <sharon.s.fisher@usda.gov>
Subject: FW: Request Re: Availability Federal assets-depopulation - MN

FYI

Jon Zack, DVM
Director National Preparedness and Incident Coordination (NPIC)
USDA APHIS Veterinary Services
4700 River Rd, Unit 42
Riverdale, MD 20737
301-851-3460 desk
240-252-8074 mobile
http://www.aphis.usda.gov/fadprep

From: Zack, Jonathan T - APHIS
Sent: Tuesday, April 21, 2020 8:27 AM
To: Tomlinson, Sarah M - APHIS <sarah.m.tomlinson@usda.gov>; Bowling-Heyward, Joyce W - APHIS <joyce.w.bowling-heyward@usda.gov>; Dijab, Adis - APHIS <adis.dijab@usda.gov>; McKenna, Thomas S - APHIS <thomas.s.mckenna@usda.gov>; Miller, Lori P - APHIS <lori.p.miller@usda.gov>; APHIS-VS SP ADA Assistants <VS.SP.ADA.Assistants@usda.gov>; Huddleston, Alan R - APHIS

<alan.r.huddleston@usda.gov>
Cc: Healey, Burke W - APHIS <burke.w.healey@usda.gov>; Sifford, Rosemary B - APHIS <rosemary.sifford@usda.gov>; APHIS-VS DA Assistants <vsdaassistants@usda.gov>
Subject: Request Re: Availability Federal assets-depopulation - MN

Below is request from Dr. Beth Thompson, MN SAHO regarding availability of APHIS or Federal resources to assist with depopulation and disposal.

Dr. Thompson does not mention this in her email, but JBS establishment in Worthington, MN (20,000 pigs processed a day) has been closed due to covid pandemic.

Policy Issues:

1) APHIS directly supporting State government requests?
2) APHIS directly supporting individual companies?
3) Temporal Issues? Short term duration of issue or long term duration?
4) APHIS Resources requested needs to be defined as support to State or company: technical, financial, personnel, contracted services, incident coordination, incident management.
5) Budget source?

Summary: expectations for any support may go well beyond 'pilot projects' for depopulation projects.

Star Tribune article has good summary of establishments currently impacted
https://www.startribune.com/amid-spike-in-covid-19-cases-jbs-closes-worthington-minnesota-pork-plant-indefinitely/569787592/

Jon Zack, DVM
Director National Preparedness and Incident Coordination (NPIC)
USDA APHIS Veterinary Services
4700 River Rd, Unit 42
Riverdale, MD 20737
301-851-3460 desk
240-252-8074 mobile
http://www.aphis.usda.gov/fadprep

From: Thompson, Beth (BAH) [mailto:beth.thompson@state.mn.us]
Sent: Monday, April 20, 2020 9:27 PM
To: Zack, Jonathan T - APHIS <jonathan.t.zack@usda.gov>
Subject: Federal assets-depopulation

Hello, Dr. Zack-
I've been pestering a number of people (NPB, AVMA, congressional staff, etc.) and thought I'd turn my attention to you. Please share with Drs. Healey or Shere if needed-

(b) (5)(DPP)

I hope you are well-
Beth

Beth S. Thompson, JD, DVM
State Veterinarian
Minnesota Board of Animal Health

651-201-6844

From: Tomlinson, Sarah M - APHIS
To: Zack, Jonathan T - APHIS
Subject: RE: Summary of Depop/Disposal pilot project call
Date: Thursday, April 23, 2020 11:12:39 AM
Attachments: image001.jpg

More and corrections below for clarification below:
Jack is going to the point person, apparently for interfacing with the industry and working on APHIS coordination.
National Coordination- Burke thinks it looks like this:

(b) (5)(DPP)

Sarah M. Tomlinson, DVM
Associate Deputy Administrator, Strategy and Policy
VS, APHIS, USDA
2150 Centre Ave, Bldg B.
Fort Collins, CO 80526
Office: 970.494.7152
Cell: 970.217.7433
Email: Sarah.M.Tomlinson@aphis.usda.gov

From: Tomlinson, Sarah M - APHIS
Sent: Thursday, April 23, 2020 9:02 AM
To: Zack, Jonathan T - APHIS <jonathan.t.zack@usda.gov>
Subject: FW: Summary of Depop/Disposal pilot project call

(b) (5)(DPP)

Sarah M. Tomlinson, DVM

Associate Deputy Administrator, Strategy and Policy
VS, APHIS, USDA
2150 Centre Ave, Bldg B.
Fort Collins, CO 80526
Office: 970.494.7152
Cell: 970.217.7433
Email: Sarah.M.Tomlinson@aphis.usda.gov

From: Tomlinson, Sarah M - APHIS
Sent: Thursday, April 23, 2020 8:47 AM
To: Healey, Burke L - APHIS <burke.l.healey@usda.gov>
Subject: RE: Summary of Depop/Disposal pilot project call

Were you able to get any info from this am's call that we should provide Jon before he gets on with NASAHO in 15 mins?

Sarah M. Tomlinson, DVM
Associate Deputy Administrator, Strategy and Policy
VS, APHIS, USDA
2150 Centre Ave, Bldg B.
Fort Collins, CO 80526
Office: 970.494.7152
Cell: 970.217.7433
Email: Sarah.M.Tomlinson@aphis.usda.gov

From: Tomlinson, Sarah M - APHIS
Sent: Wednesday, April 22, 2020 3:43 PM
To: Healey, Burke L - APHIS <burke.l.healey@usda.gov>; McKenna, Thomas S - APHIS <thomas.s.mckenna@usda.gov>; APHIS-VS DA ALL <APHIS-VSDA@usda.gov>
Cc: Dijab, Adis - APHIS <adis.dijab@usda.gov>; APHIS-VS FiOps ADA Assistants <VS.FiOps.ADA.Assistants@usda.gov>
Subject: RE: Summary of Depop/Disposal pilot project call

So given this and the info about NRCS, which seems it will preclude the FEMA approach- does this now mean it is a USDA response and we shouldn't be directing them to FEMA? And if so, then WHO is going to lead i/direct the activities- APHIS, NRCS, Department??

Sarah M. Tomlinson, DVM
Associate Deputy Administrator, Strategy and Policy
VS, APHIS, USDA
2150 Centre Ave, Bldg B.
Fort Collins, CO 80526
Office: 970.494.7152
Cell: 970.217.7433
Email: Sarah.M.Tomlinson@aphis.usda.gov

From: Healey, Burke L - APHIS
Sent: Wednesday, April 22, 2020 2:12 PM
To: Tomlinson, Sarah M - APHIS <sarah.m.tomlinson@usda.gov>; McKenna, Thomas S - APHIS <thomas.s.mckenna@usda.gov>; APHIS-VS DA ALL <APHIS-VSDA@usda.gov>
Cc: Dijab, Adis - APHIS <adis.dijab@usda.gov>; APHIS-VS FiOps ADA Assistants

<VS.FiOps.ADA.Assistants@usda.gov>

Subject: RE: Summary of Depop/Disposal pilot project call

Just to add to the conversation. (b) (5)(DPP) [redacted]

Thanks,
Burke

Burke L. Healey, DVM
Deputy Administrator
APHIS Veterinary Services (VS)

1400 Independence Ave, 318-E
Washington, DC 20250
p: 202-799-7146
burke.l.healey@usda.gov

From: Tomlinson, Sarah M - APHIS <sarah.m.tomlinson@usda.gov>

Sent: Wednesday, April 22, 2020 1:51 PM

To: McKenna, Thomas S - APHIS <thomas.s.mckenna@usda.gov>; APHIS-VS DA ALL <APHIS-VSDA@usda.gov>

Cc: Dijab, Adis - APHIS <adis.dijab@usda.gov>; APHIS-VS FiOps ADA Assistants <VS.FiOps.ADA.Assistants@usda.gov>

Subject: RE: Summary of Depop/Disposal pilot project call

(b) (5)(DPP) [redacted]

Any additional details/guidance to add will be helpful.

Thanks, Sarah

Sarah M. Tomlinson, DVM
Associate Deputy Administrator, Strategy and Policy
VS, APHIS, USDA
2150 Centre Ave, Bldg B.
Fort Collins, CO 80526
Office: 970.494.7152
Cell: 970.217.7433
Email: Sarah.M.Tomlinson@aphis.usda.gov

From: McKenna, Thomas S - APHIS
Sent: Wednesday, April 22, 2020 9:09 AM
To: APHIS-VS DA ALL <APHIS-VSDA@usda.gov>
Cc: Dijab, Adis - APHIS <adis.dijab@usda.gov>; APHIS-VS FiOps ADA Assistants <VS.FiOps.ADA.Assistants@usda.gov>; Tomlinson, Sarah M - APHIS <sarah.m.tomlinson@usda.gov>
Subject: Summary of Depop/Disposal pilot project call

Hi Burke and Rosemary,

We held a call this morning to discuss possible pilot projects that we could pursue to exercise depopulation and/or disposal while providing some assistance to states and industry as they address the problem of what to do with animals that are not able to be processed due to the closure of several processing plants.

That is a quick summary – Sarah and Adis: please add your thoughts.

Tom

Tom McKenna, DVM, PhD
Acting Associate Deputy Administrator, Field Operations Services
USDA, APHIS, Veterinary Services
4A-03J
4700 River Road
Riverdale, MD 20737
thomas.s.mckenna@usda.gov
301-851-2051 (Office)
508-887-3421 (Cell)

From:	Alfalla, Lynn - APHIS
To:	Zack, Jonathan T - APHIS; Hunter, Dawn K - APHIS; Rushin, Gerald L - APHIS; Porter-Spalding, Barbara A - APHIS; Shere, Jack A - APHIS; Bragg, Matthew P - APHIS; Healey, Burke L - APHIS
Cc:	Fisher, Sharon S - APHIS; Fritts, Patricia R - APHIS; Nichols, Eric S - APHIS
Subject:	RE: USDA APHIS Establishing Coordination Center to Assist Producers Affected by Meat Processing Plant Closures
Date:	Thursday, April 30, 2020 9:29:20 AM

Thanks, Jon. I know folks are watching closely the climbing slaughter capacity numbers.
I'll pass it on.

From: Zack, Jonathan T - APHIS <jonathan.t.zack@usda.gov>
Sent: Thursday, April 30, 2020 9:27 AM
To: Alfalla, Lynn - APHIS <lynn.alfalla@usda.gov>; Hunter, Dawn K - APHIS <dawn.k.hunter@usda.gov>; Rushin, Gerald L - APHIS <gerald.l.rushin@usda.gov>; Porter-Spalding, Barbara A - APHIS <barbara.a.porter-spalding@usda.gov>; Shere, Jack A - APHIS <jack.a.shere@usda.gov>; Bragg, Matthew P - APHIS <matthew.bragg@usda.gov>; Healey, Burke L - APHIS <burke.l.healey@usda.gov>
Cc: Fisher, Sharon S - APHIS <sharon.s.fisher@usda.gov>; Fritts, Patricia R - APHIS <patricia.fritts@usda.gov>; Nichols, Eric S - APHIS <eric.s.nichols@usda.gov>
Subject: RE: USDA APHIS Establishing Coordination Center to Assist Producers Affected by Meat Processing Plant Closures
Alternative markets = a slaughter facility that was not the original contracted slaughter facility
Example: marketing market weight pigs through cull sow slaughter facilities.
The issue is national daily slaughter capacity is currently decreased 40-50 percent.
Jon Zack, DVM
Director National Preparedness and Incident Coordination (NPIC)
USDA APHIS Veterinary Services
4700 River Rd, Unit 42
Riverdale, MD 20737
301-851-3460 desk
240-252-8074 mobile
http://www.aphis.usda.gov/fadprep

From: Alfalla, Lynn - APHIS
Sent: Thursday, April 30, 2020 9:16 AM
To: Zack, Jonathan T - APHIS <jonathan.t.zack@usda.gov>; Hunter, Dawn K - APHIS <dawn.k.hunter@usda.gov>; Rushin, Gerald L - APHIS <gerald.l.rushin@usda.gov>; Porter-Spalding, Barbara A - APHIS <barbara.a.porter-spalding@usda.gov>; Shere, Jack A - APHIS <jack.a.shere@usda.gov>; Bragg, Matthew P - APHIS <matthew.bragg@usda.gov>
Cc: Fisher, Sharon S - APHIS <sharon.s.fisher@usda.gov>; Fritts, Patricia R - APHIS <patricia.fritts@usda.gov>; Nichols, Eric S - APHIS <eric.s.nichols@usda.gov>
Subject: RE: USDA APHIS Establishing Coordination Center to Assist Producers Affected by Meat Processing Plant Closures
Importance: High
All,
Following up on the information shared Monday, Canadian industry and FAS are asking us:

What are the alternative markets we are considering?

From the stakeholder announcement: While this work continues, the USDA's Animal and Plant Health Inspection Service (APHIS) is establishing a National Incident Coordination Center to provide direct support to producers whose animals cannot move to market as a result of processing plant closures due to COVID-19. Going forward, APHIS' Coordination Center, State Veterinarians, and other state officials will be assisting to help identify potential alternative markets if a producer is unable to move animals, and if necessary, advise and assist on depopulation and disposal methods.

Do we know if CFIA has contact VS directly about this?

Thanks,

Lynn

From: Alfalla, Lynn - APHIS
Sent: Monday, April 27, 2020 11:20 AM
To: Zack, Jonathan T - APHIS <jonathan.t.zack@usda.gov>; Hunter, Dawn K - APHIS <dawn.k.hunter@usda.gov>; Rushin, Gerald L - APHIS <gerald.l.rushin@usda.gov>; Porter-Spalding, Barbara A - APHIS <barbara.a.porter-spalding@usda.gov>; Shere, Jack A - APHIS <jack.a.shere@usda.gov>; Bragg, Matthew P - APHIS <matthew.bragg@usda.gov>
Cc: Fisher, Sharon S - APHIS <sharon.s.fisher@usda.gov>; Fritts, Patricia R - APHIS <patricia.fritts@usda.gov>; Nichols, Eric S - APHIS <eric.s.nichols@usda.gov>
Subject: RE: USDA APHIS Establishing Coordination Center to Assist Producers Affected by Meat Processing Plant Closures

Thanks, Jon, for the information.

I'll share the links as they are public. Anything else we can share with Canada?

*****I just got a message from FAS that the NSC has called in USDA and others to discuss a request from Canada for a level dialogue with the U.S. on supply disruptions in the COVID context and possible U.S.-Canada solutions.**

The top supply concerns for Canada are 1) medical devices/pharmaceuticals, and **2) food security.** USDA is on the Agenda to speak on 'Options to Use Existing Dialogues/ Channels: Food Security.' Western Hemisphere Division plans to share information about the productive dialogues USDA officials have had with Canada during the COVID-19 crisis. **We have been asked if we have any updates to share ahead of this call?**

I'll share these links and the incoming questions from Canada – anything else?

Thoughts?

Thanks.

Lynn

From: Zack, Jonathan T - APHIS <jonathan.t.zack@usda.gov>
Sent: Monday, April 27, 2020 10:21 AM
To: Hunter, Dawn K - APHIS <dawn.k.hunter@usda.gov>; Alfalla, Lynn - APHIS <lynn.alfalla@usda.gov>; Rushin, Gerald L - APHIS <gerald.l.rushin@usda.gov>; Porter-Spalding, Barbara A - APHIS <barbara.a.porter-spalding@usda.gov>; Shere, Jack A - APHIS <jack.a.shere@usda.gov>; Bragg, Matthew P - APHIS <matthew.bragg@usda.gov>
Cc: Fisher, Sharon S - APHIS <sharon.s.fisher@usda.gov>; Fritts, Patricia R - APHIS <patricia.fritts@usda.gov>
Subject: RE: USDA APHIS Establishing Coordination Center to Assist Producers Affected by Meat Processing Plant Closures

Dr. Jack Shere is the APHIS lead for COVID Response.

Jon Zack and Matt Bragg are coordinating with Jack.

As of today the USDA NRCS EQIP program - an existing USDA program - is the financial assistance USDA has available for swine producers.

Information on the USDA NRCS EQIP program can be found here:

https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/eqip/
https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/financial/eqip/?cid=nrcs143_008223

Jon Zack, DVM
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USDA APHIS Veterinary Services
4700 River Rd, Unit 42
Riverdale, MD 20737
301-851-3460 desk
240-252-8074 mobile
http://www.aphis.usda.gov/fadprep

From: Hunter, Dawn K - APHIS
Sent: Monday, April 27, 2020 10:10 AM
To: Alfalla, Lynn - APHIS <lynn.alfalla@usda.gov>; Zack, Jonathan T - APHIS <jonathan.t.zack@usda.gov>; Rushin, Gerald L - APHIS <gerald.l.rushin@usda.gov>; Porter-Spalding, Barbara A - APHIS <barbara.a.porter-spalding@usda.gov>
Subject: FW: USDA APHIS Establishing Coordination Center to Assist Producers Affected by Meat Processing Plant Closures
Importance: High

Hi Lynn,

I am forwarding your email to the folks who (at least one of them…) should know the appropriate responses to your questions.

- Dawn

From: Alfalla, Lynn - APHIS
Sent: Monday, April 27, 2020 10:04 AM
To: Hunter, Dawn K - APHIS <dawn.k.hunter@usda.gov>
Cc: Nichols, Eric S - APHIS <eric.s.nichols@usda.gov>
Subject: FW: USDA APHIS Establishing Coordination Center to Assist Producers Affected by Meat Processing Plant Closures
Importance: High

Hi Dawn,

The Embassy of Canada and contacted me about the Friday stakeholder announcement. And, then I got a similar request from the US Embassy in Ottawa.

Just a few questions, which frankly would be good for us to know as well. This is for me: Who is the lead of the National Incident Center? Jon Zack?

The CAN Embassy is interested in knowing if the CVOs are in discussion on this Center specifically or is the dialog happening with others?

Many of Canada's meat plants, especially pork, are closed and they are pressuring their government for compensation, direct support to producers whose animals cannot move to the market due to COVID-19.

This is also for internal use – (b) (5)(DPP) [redacted]

Thanks,

Lynn

From: APHIS Stakeholder Registry [mailto:aphis@subscribers.usda.gov]
Sent: 2020-04-24 9:36 PM
To: Miner, Jennifer (CFIA/ACIA)
Subject: USDA APHIS Establishing Coordination Center to Assist Producers Affected by Meat Processing Plant Closures

USDA-APHIS GovDelivery Header

Having trouble viewing this email? View it as a Web page.

American livestock and poultry producers are facing an unprecedented emergency due to COVID-19, particularly with the closing of meat processing plants in several states. USDA is leading the federal response by working in coordination with the Vice President's Task Force, the CDC, OSHA, Department of Labor, industry, state and local governments, and others across the federal family to mitigate the impacts of COVID-19 on producers. We will continue to seek solutions to ensure the continuity of operations and return

to production as quickly, safely and as health considerations allow at these critical facilities.

While this work continues, the USDA's Animal and Plant Health Inspection Service (APHIS) is establishing a National Incident Coordination Center to provide direct support to producers whose animals cannot move to market as a result of processing plant closures due to COVID-19. Going forward, APHIS' Coordination Center, State Veterinarians, and other state officials will be assisting to help identify potential alternative markets if a producer is unable to move animals, and if necessary, advise and assist on depopulation and disposal methods.

Additionally, APHIS will mobilize and deploy assets of the National Veterinary Stockpile as needed and secure the services of contractors that can supply additional equipment, personnel, and services, much as it did during the large-scale Highly Pathogenic Avian Influenza emergency in 2015.

Additionally, the USDA's Natural Resources and Conservation Service (NRCS) will be providing state level technical assistance to producers and will provide cost share assistance under the Environmental Quality Incentives Program (EQIP) in line with program guidelines for disposal.

#

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United States Department of Agriculture

Swine Industry Incident Coordination Group
April 28, 2020 Coordination Plan

INCIDENT NAME

National Incident Coordination Center – Swine Industry

April 27, 2020 — ongoing

OPERATIONAL PERIOD

From: April 28, 2020 4 pm EST

To: April 29, 2020 4 pm EST

Background

- Suspended and/or decreased capacity at some U.S. swine slaughter facilities linked to COVID-19-related worker shortages has resulted in an immediate surplus of production livestock.
- As these are otherwise healthy animals, existing state animal health authorities and APHIS' authority under the Animal Health Protection Act to order euthanasia and to pay indemnity do not apply.
- APHIS is providing technical assistance at the request of State Animal Health Officials (SAHO).

Objectives

- Utilize the National Incident Coordination Center assist State Veterinarians and producers in helping identify potential alternative markets if a producer is unable to move animals, and if necessary, advise and assist on depopulation and disposal methods.
- Deploy assets of the National Veterinary Stockpile as needed and secure the services of contractors that can supply additional equipment, personnel, and services.
- Identify funding sources, such as Natural Resources and Conservation Service (NRCS) to provide state level technical assistance to producers and will provide cost share assistance under the Environmental Quality Incentives Program (EQIP).
- Identify or develop platforms and mechanisms for ongoing coordination of messaging and for sharing of communications-related information.

NOTES

- Guidance for Meat and Poultry Processing Workers and Employers – CDC
- MN, IA at critical capacity loss. State websites list resources—e.g., renderers, carbon sources. Iowa is standing up Iowa Resource Coordination Center as local parallel to the National Incident Coordination Center. APHIS has carcass management tools and resources available on its website.
- NRCS EQIP Program -- Through EQIP, a producer can apply for cost-share funding via Emergency Animal Mortality Management, which includes four options that NRCS is offering for the proper disposal of animal carcasses. Payment cap is $25,000 per conservation practice per eligible applicant. Application and waiver must be in place before depopulation activities begin.

CALL SCHEDULE

Meeting/Call name	Meeting Time	Participants
Swine Industry Coordination Call	4:00 p.m. ET	Federal agency representatives

United States Department of Agriculture

Swine Industry Incident Coordination Group
April 29, 2020 Coordination Plan

INCIDENT NAME

National Incident Coordination Center – Swine Industry

April 27, 2020 — ongoing

OPERATIONAL PERIOD

From: April 29, 2020 4 pm EST

To: April 30, 2020 4 pm EST

Background

- Suspended and/or decreased capacity at some U.S. swine slaughter facilities linked to COVID-19-related worker shortages has resulted in an immediate surplus of production livestock.
- As these are otherwise healthy animals, existing state animal health authorities and APHIS' authority under the Animal Health Protection Act to order euthanasia and to pay indemnity do not apply.
- APHIS is providing technical assistance at the request of State Animal Health Officials (SAHO).

Objectives

- Utilize the National Incident Coordination Center assist State Veterinarians and producers in helping identify potential alternative markets if a producer is unable to move animals, and if necessary, advise and assist on depopulation and disposal methods.
- Deploy assets of the National Veterinary Stockpile as needed and secure the services of contractors that can supply additional equipment, personnel, and services.
- Identify funding sources, such as Natural Resources and Conservation Service (NRCS) to provide state level technical assistance to producers and will provide cost share assistance under the Environmental Quality Incentives Program (EQIP).
- Identify or develop platforms and mechanisms for ongoing coordination of messaging and for sharing of communications-related information.

Resources

- Guidance for Meat and Poultry Processing Workers and Employers – CDC
- APHIS carcass management tools and resources

NOTES

- On April 28, the President issued an Executive Order stating "the Secretary of Agriculture shall take all appropriate action under that section to ensure that meat and poultry processors continue operations consistent with the guidance for their operations jointly issued by the CDC and OSHA." Implementing instructions are pending.

CALL SCHEDULE

Meeting/Call name	Meeting Time	Participants
Interagency Coordination Call	4:00 p.m. ET	Federal agency representatives
APHIS Coordination Call	4:30 p.m. ET	APHIS internal

United States Department of Agriculture

Swine Industry Incident Coordination Group
April 30, 2020 Coordination Plan

INCIDENT NAME

National Incident Coordination Center – Swine Industry

April 27, 2020 — ongoing

OPERATIONAL PERIOD

From: April 30, 2020 4 pm EST

To: May 1, 2020 4 pm EST

Background

- Suspended and/or decreased capacity at some U.S. swine slaughter facilities linked to COVID-19-related worker shortages has resulted in an immediate surplus of production livestock.
- As these are otherwise healthy animals, existing state animal health authorities and APHIS' authority under the Animal Health Protection Act to order euthanasia and to pay indemnity do not apply.
- APHIS is providing technical assistance at the request of State Animal Health Officials (SAHO).

Objectives

- Utilize the National Incident Coordination Center assist State Veterinarians and producers in helping identify potential alternative markets if a producer is unable to move animals, and if necessary, advise and assist on depopulation and disposal methods.
- Deploy assets of the National Veterinary Stockpile as needed and secure the services of contractors that can supply additional equipment, personnel, and services.
- Identify funding sources, such as Natural Resources and Conservation Service (NRCS) to provide state level technical assistance to producers and will provide cost share assistance under the Environmental Quality Incentives Program (EQIP).
- Identify or develop platforms and mechanisms for ongoing coordination of messaging and for sharing of communications-related information.

Resources

- Guidance for Meat and Poultry Processing Workers and Employers – CDC
- APHIS carcass management tools and resources

NOTES

- FSIS Meat, Poultry, and Egg Product Inspection Directory: https://www.fsis.usda.gov/wps/portal/fsis/topics/inspection/mpi-directory

  This link does not display the current status of each establishment, but gives the user the ability to see establishments on a map and drill down by geographic area and facility type.

CALL SCHEDULE

Meeting/Call name	Meeting Time	Participants
Interagency Coordination Call	4:00 p.m. ET	Federal agency representatives
APHIS Coordination Call	4:30 p.m. ET	APHIS internal

KEVIN PETERSBURG

Digitally signed by KEVIN PETERSBURG
Date: 2020.05.19 11:12:47 -05'00'

FINANCIAL PLAN Iowa Department of Agriculture and Land Stewardship –May 14, 2020 - May 13, 2021

	Item Description	Total Budget
Personnel		
	Subtotal	
Fringe Benefits		
	Subtotal	0.00
Travel		
	Subtotal	0.00
Equipment	V-restrainer	60,200.00
	Subtotal	60,200.00
Supplies & Expenses		
	Subtotal	0.00
Contractual	Iowa State University	205,976.00
	Subtotal	
Other		
	Subtotal	
Totals	TOTAL DIRECT COSTS	266,176.00
	INDIRECT COSTS (% On Total Direct Costs)	
	TOTAL PROJECT COSTS	266,176.00
	Less Cooperator Share	
	APHIS Cost Share (based on 2018-19 request)	

Work Plan to Design, Build, Operate and Evaluate Two AVMA Approved Euthanasia Methods at Mass Depopulation Scale

Introduction: As marketing opportunities have been reduced by COVID19 and are expected to remain below pre-pandemic levels, a backlog of slaughter weight animals will likely be euthanized. AVMA approved methods have not been designed or proved as mass depopulation methods outside of the packing plant setting. This proposal funds pilot studies of two euthanasia methods (Carbon dioxide provided by the NCSU model using common off-the-shelf equipment ("CO_2 Common"), and penetrating captive bolt ("Bolt Gun")). In each case, pilot studies will be designed and operated that are sized for full truckloads of market weight animals, sufficiently replicated to understand reliability in the field, and monitored sufficiently to develop data that would describe performance capabilities in further scaled situations. The information gained will advance preparation for FAD response and future market interruptions or pandemics. A potential immediate benefit will be the adoption of preferred methods (CO_2 and penetrating captive bolt) over non-preferred methods that are perceived to be more readily available (ventilation shutdown).

Objectives: Conduct two pilot projects to design, build, operate and assess AVMA approved euthanasia techniques at mass depopulation scale. In each project, we will leverage existing organizational structure, draft designs, producer relationships and animals already destined for euthanasia to cost effectively study truckload scale versions without the expense that would be incurred in peace time. Existing well informed but hypothetical designs will be refined, built and operated in the field in Iowa. Based on the data generated, analysis will determine the potential for each plan to scale to 10,000 hd/day. A 10,000 hd / day target is essentially replacement for the acute removal of a typical pork packing plant shift from the United States infrastructure.

Deliverables: The deliverables of this project include i) a real-time, functional field demonstration of the plans for producers seeking an emergency option ii) an operations manual for each method with equipment lists, refined budgets and resources lists, iii) identification of the most useful equipment that should be considered for the national veterinary stockpile, iv) dissemination of lessons learned through extension and veterinary education infrastructure already integrated in the pilot project planning and v) training and safety manuals for all specialized equipment.

Roles and Responsibilities:

The Iowa Resource Coordination Center (RCC) is a private-public partnership between the Iowa Department of Agriculture and Land Stewardship, Iowa State University, and the Iowa Pork Producers Association. The RCC connects producers with industry experts, state agencies and technical specialists to explore every option to harvest livestock. As a last resort, the RCC provides technical resources to help producers humanely euthanize and dispose of livestock. This one-stop-shop for information and resources ensures all producers have access to the same resources, assistance and technical information, with personalized customer service thru telephone or web at www.iowafarmerhelp.com.

The RCC maintains an Incident Command structure that facilitates daily communication among resources that are critical to successful completion of the pilot studies: Iowa Department of Agriculture and Land Stewardship; USDA-APHIS; Iowa Department of Natural Resources; Iowa National Resources Conservation Service; Iowa Pork Producers Association; and Iowa State University. The role of the RCC in these pilot studies is to coordinate resources and regulatory groups, identify potential industry collaborators, facilitate updates and communication, define characteristics of pilot studies and establish project milestone goals.

The Swine Medicine Education Center at Iowa State University (www.smec.iastate.edu) is the national leader in swine medicine education for veterinarians and veterinary students and operates SMECSmart: Swine Medicine Applied Research Team. SMECSMart will manage daily project activities to meet RCC milestones. They will lead project management, provide technical advice on euthanasia parameters, collect data, perform analysis, and provide licensed veterinary oversight. SMECSmart will design and analyze data collection as well as final operations manual and educational packages.

Iowa Department of Agriculture and Land Stewardship (IDALS) will provide input and oversight as part of the RCC and will manage budget and funding.

Preparations Already In Place: Significant to the likelihood of success of these pilot projects is the preparation already underway to deal with the extraordinary challenge presented by acute market access limitations. Briefly, through a series of small team discussions, research literature reviews, and consultation with a wide range of experts the following has already been created: draft conceptual plans written for each of the proposed pilots (described briefly in this executive summary), content expert critique of draft plans, an expert advisory and project leadership team assembled and briefed, producer connections established with depopulation needs and timing established, technical brainstorming discussions with heavy equipment operators, significant budget and cost investigation/estimation, lengthy consideration of regional and national regulatory rules and limits, cleaning and refurbishment of potentially useful equipment (pneumatic captive bolt gun), location and reservation of critical rental equipment (grinders, transport), site evaluations and location scouting, identification of existing candidate sites for projects, attended demonstrations of key equipment (CO_2 and penetrating captive bolt euthanasia stations in packing plants), follow-up with key academic researchers (Dr. Rice at NCSU, Dr. Millman at ISU) for insight on relevant research, calculation of CO_2 volume and flow rate requirements, design of 4 potential CO_2 chamber styles, assessment of CO_2 availability (currently in adequate supply in Midwest), confirmed sourcing of key common components and preliminary coordination with planned disposal projects for carcasses generated by pilot studies.

Pilot Plans: The two pilot plans have consistent features and each will: operate for up to 10 days; euthanize a minimum of 2400 pigs total; require 3 months total of SMECSmart labor for preparation/project runtime/data analysis/report writing/educational package writing; will evolve to better practices in real time during the 10 day operational period; will observe pigs with video; will protect personnel with area and personal CO_2 monitors as appropriate; and lessons learned will be disseminated through the RCC and stakeholder connections in real time rather than waiting for final summary conclusions.

CO2 Common

The CO_2 Common approach adapts the guidelines developed by North Carolina State University as illustrated at https://www.ncagr.gov/oep/MassDepop.htm to scales consistent with Midwest production.

- Acquire sheltered site (currently inactive turkey barns have been identified, provides 60’ x 550’ feet of operational area)
- Size and construct CO_2 chambers within the turkey barn
    - Chambers (4) are 16’ x 56’ which uses standard plywood increments and has room for one semitruck market load of animals
    - Composed of 0.75" plywood construction screwed to 8'x4"x4" posts in tamped earth holes spaced every 4 feet. Plywood is outside layer. Inside layer is 34" x 16' standard hog panel. Long side has two horizontal 2"x6"x8' reinforcements at the base. One side of pen is 16' Hog Gate with plywood attached to facilitate animal and equipment entry.
    - These chambers hold 3584 cubic feet of CO_2 minus the volume of the pigs. This converts to 409lbs or 48.8 gallons of liquid CO_2.
- Park liquid CO_2 transport parallel to the outside wall of the barn
- Build CO_2 vaporizer from commonly sourced parts outside of barn using NCSU template
- Store gas in 12’ x 250’ AgBag located with barn structure to accumulate sufficient gas to rapidly fill (20% volume by minute) CO_2 chambers
- Using blowers and a flow meter, discharge CO_2 from AgBag storage to chambers to achieve 20% volume / minute fill rate
- Unload animals by portable chute, load into chambers, fill with CO_2 and cover with 6mil plastic

- Observe appropriate dwell time and monitor animal status through clear plastic cover
- Once euthanasia is complete, open 16' gate on long side and remove carcasses with skid loader to dump transport
- Personnel wear CO_2 exposure monitoring devices
- CO_2 alarms are posted throughout barn structure
- Pens are positioned close to exit doors
- Large portable fans and barn ventilation system help to safely disperse gas after dwell time

Bolt Gun

Penetrating captive bolt guns can be powered by black powder explosive cartridges or pneumatically with compressed air. In this pilot study, both will be tested. Other than swapping those devices, the structure and general plan of the pilot project is the same

- Acquire a 2,400 head double wide finishing barn or buying station to serve as an unloading and staging area
- Producers or their drivers deliver a semi load of market aged hogs (presume 160 head per load) to the site
- The semi is backed up and market pigs are unloading into the barn into holding pens.
    - 2 people will unload the semi
    - 1 person will count pigs and coordinate with an invoice to give to the producer or driver
    - 1 site supervisor will assist in the process and coordinate site activities
- 2 people will take the pigs from the holding pens out the back door to panels leading to the V restrainer conveyer belt
- Pigs will be advanced from the restrainer belt to the pneumatic captive bolt trailer
- Pigs will be euthanized via pneumatic captive bolt at the head of the restrainer conveyor belts
- For a portion of the pilot study, Cash Special captive bolt guns will be used in place of the pneumatic captive bolt gun
    - 2 people will be needed to reload, rotate and maintain the black powder captive bolt guns
- Pigs will be dropped from the restrainer conveyor belt onto a horizontal conveyor belt
- Pigs will be checked for insensibility and death while being moved on the conveyor belt
- Any pigs not confirmed insensible and dead will be pulled off the line and additional captive bolt applied
- Once the animal is confirmed to be insensible and death has occurred, then that pig will be loaded into the side dump trailer
- The horizontal conveyor will be setup so that the conveyor is elevated enough to drop the pig carcasses into the side dumping trailer
- The side dumping trailer will then take the pig to the regional disposal site, drop them off and return to the euthanasia site.

The plans will monitor common performance criteria including but not limited to: Time points during process that pigs develop unconsciousness defined as sternal or laterally recumbency and not trying to right themselves or lift their heads): time to first pig loses consciousness, all pigs lose consciousness, number of pigs per load, chamber fill times (CO_2) or pigs per minute (Bolt Gun) with pigs, facility temperature/humidity measurements, actual fuel/supply cost, total process time, minimum staff required and consistency of pig responses with expectations for method.

Budget: Total Project Cost to perform the two pilot studies (including cost of V-restrainer is **$266,176**. The two pilot plans have consistent budget features: equipment is rented where that option has been confirmed; equipment is purchased where a rental option has not yet been confirmed (which means current budget represents a worst-case-scenario); actual recently acquired quotes are used as often as possible; manual and equipment operator labor is assumed at $25/hour; a 10% contingency is included to cover price changes and unexpected expenses; and the cost of

pigs is assumed to be $0.00 due to the current lack of market access. Collaborators have agreed to provide pigs at no cost for these pilot plans.

	CO2 Common	CO2 Industrial	Bolt Gun	**Total**
Equipment	$ 18,197	$	$ 10,648	**$ 28,845**
Supplies	$ 22,002	$	$ 19,209	**$ 41,211**
Labor	$ 18,265	$	$ 15,470	**$ 33,735**
Management, analysis, reporting	$ 32,480	$	$ 32,480	**$ 64,960**
Contingency	$ 9,094	$	$ 28,131	**$ 37,225**
Total	**$ 100,038**	**$**	**$ 105938**	**$ 205,976**

V-Belt restrainer = $60,200

Total for CO2 Common + Bolt Gun + V-Belt restrainer = $266,176.

COOPERATIVE AGREEMENT DETAILED FINANCIAL PLAN

Cost Category	Item Description	Quantity	Rate	Recipient Share	APHIS Share	Total Budget
Personnel	Incident Mangement Team-oversight and testing (6 members)	48	$42.20		$2,025.60	$2,025.60
						$0.00
						$0.00
						$0.00
				$0.00	**$2,025.60**	**$2,025.60**
Fringe Benefits	26% fringe for all personnel				$526.66	$526.66
						$0.00
						$0.00
						$0.00
				$0.00	**$526.66**	**$526.66**
Travel	Semi with wet line kit and operator	6	$1,500.00		$9,000.00	$9,000.00
	Demonstration per diem	6	$31.00		$186.00	$186.00
						$0.00
						$0.00
				$0.00	**$9,186.00**	**$9,186.00**
Equipment	Depopulation trailer	2	$30,000.00		$60,000.00	$60,000.00
	Compressed gas/mechanical trailer	1	$15,000.00		$15,000.00	$15,000.00
	Vapor trailer	1	$13,100.00		$13,100.00	$13,100.00
						$0.00
				$0.00	**$88,100.00**	**$88,100.00**
Supplies	Regulators and hoses	1	$2,500.61		$2,500.61	$2,500.61
	Vaporizer	1	$20,000.00		$20,000.00	$20,000.00
	CO2 tank rental (daily)	12	$140.00		$1,680.00	$1,680.00
	CO2 tank refills	36	$175.00		$6,300.00	$6,300.00
				$0.00	**$30,480.61**	**$30,480.61**
Contractual	Assembly coordination & management				$25,000.00	$25,000.00
						$0.00
						$0.00
						$0.00
				$0.00	**$25,000.00**	**$25,000.00**
Other						$0.00
						$0.00
						$0.00
						$0.00
				$0.00	**$0.00**	**$0.00**
Totals			**Total Direct Costs**	**$0.00**	**$155,318.87**	**$155,318.87**
			Agency Indirect Costs (26.10% of)		**$666.1388**	**$666.14**
			Total Project Costs	**$0.00**	**$155,985.00**	**$155,985.00**

Note: If there is no Recipient Share, then Column E should be left blank (do not remove column)

PROJECT PROPOSAL/WORK PLAN AND BUDGET FOR MANAGING THE
***Covid-19 Livestock Supply Chain Disruption* EMERGENCY**
FOR FY 2020

Recipient: Minnesota Department of Agriculture
Geographic Location: State of Minnesota
Project Coordinator: Lucia Hunt
Title: Minnesota Department of Agriculture Emergency Response Supervisor
Address: 625 North Robert Street, St. Paul, MN 55155
Phone: 651-201-6377
Fax:
E-Mail: lucia.hunt@state.mn.us

This Work Plan (WP) reflects a cooperative relationship between the Minnesota Department of Agriculture (MDA), the Recipient, and the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS). It outlines the mission-related goals, objectives, and anticipated Performances as well as the approach for conducting the construction of a complete and functional oxygen depletion trailer system for mobile or fixed-site depopulation of livestock. The mechanism of action employed by this system displaces oxygen from the chamber and results in anoxia for swine contained within. When O2 is depleted to levels of <2% through the addition of CO2 in a sealed container, loss of consciousness and death results in an effective and humane manner with minimal stress observed. The constructed equipment derived from materials and labor costs covered by this grant will be used by the Recipient until the end of the agreement period (June 2020 – June 2021) and will ultimately be returned to the National Veterinary Stockpile inventory.

Project leadership and management will be from agents of the Recipient, the Minnesota Board of Animal Health (BAH), and USDA-APHIS-VS. Minnesota state agencies have access to state emergency response contractors at West Central Environmental Consultants (WCEC) who will be responsible for coordination and management of the construction. Pipestone Veterinary Services, a Minnesota-based swine health clinic, has developed, tested, and trialed an oxygen depletion trailer that provides the model for the units to be built under this agreement.

Objective/Need for Assistance
Pork producers in Minnesota are experiencing an immediate need for large scale, humane depopulation methods as a result of processing plant closures, both temporary and long term, or plants operating at reduced capacity. The uncertainty of the market, along with continuing demand for valuable barn space, is forcing producers to depopulate large groups of animals. There is great reluctance to take these actions in part because of the lack of knowledge and equipment to properly carry out such a project. Federal and state sponsored programs that offer depopulation services at a broad scale when other acceptable methods are not logistically feasible for producers will ease these burdens on individuals and the market. The mass depopulation system will be available to all producers in the state.

The National Veterinary Stockpile (NVS) inventory does not contain the necessary equipment to meet the needs of mass depopulation on a large scale without significant physical and emotional strain. This request is to build depopulation equipment using a lethal dose of carbon dioxide gas as approved by the AVMA. Finished and functional equipment will remain the property of the NVS. Objectives for this request are:

1. Source standard, ready-made equipment on the new/used market that can be retrofitted and customized. This may include purchasing dump trailers, pull-behind trailers, tanks, and other stock materials.
2. Fabricate all necessary injection ports, fittings, nozzles, and plumbing connections for even gas flow and distribution from tanks to oxygen depletion chamber. The gas delivery system will be fitted and attached to modified equipment to ensure a humane depopulation pursuant to AVMA guidelines.
3. Construct a portable delivery/recovery system that is easily transported and set up/taken down alone or in a series. All equipment and materials should be self-contained and transported as a unit to minimize lost/damaged parts and allow access for maintenance and storage.
4. Test the equipment and train staff to monitor CO2 valves, hoses, and regulators to ensure correct connections and flow rates. On farm training will be conducted to demonstrate both effective large-scale depopulation and the logistics of mobility for the complete system.

Approach

Plan of Action:

Funding for these objectives allows the Recipient to respond to immediate depopulation needs of Minnesota livestock producers affected by supply chain disruptions due to the Covid-19 pandemic. It also allows the Recipient to be prepared for a future foreign animal disease outbreaks by expanding the inventory of the National Veterinary Stockpile.

To attain these objectives, the Recipient will contract with West Central Environmental Consultants (WCEC) to construct the depopulation trailer system. Specifications for trailer modifications, plumbing, inlets, and carbon dioxide delivery as developed by Pipestone Veterinary Service were made available to the contractors. The Pipestone system has demonstrated performance of the units to the satisfaction of state officials and the swine veterinary community. WCEC will use this researched and tested trailer and gas delivery designs and specifications to construct the depopulation trailer system.

The Recipient, as a function of the state Agriculture Incident Management Team and in partnership with the Minnesota Board of Animal Health, will lead the project, issue work orders, monitor progress, ensure functionality of the system, and be responsible for payment of WCEC upon finalization.

Upon completion of construction, WCEC will test and train operators on the use of all equipment, mobilization and demobilization procedures, gas flow regulation, and needs for daily operation.

Timeline:

- June 2020
    - Receive federal award notification
- July 2020
    - Receive state spending authorization
    - Issue work order to WCEC to commence construction
    - Test and demonstrate completed system
- August 2020
    - Final report from WCEC
    - Schedule depopulation system for use at Minnesota farms

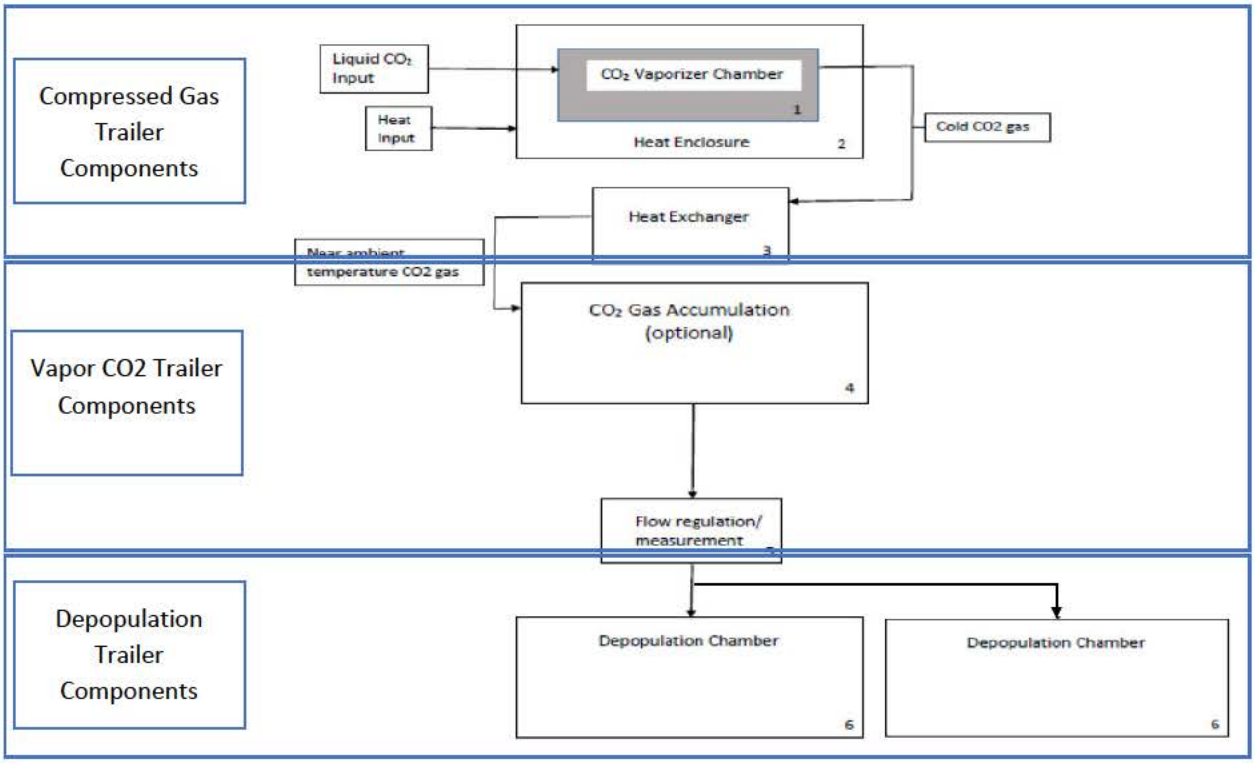
- September-December 2020
    - Continue field operations with the depopulation system
    - Store and maintain equipment
- June 2021 (or other negotiated date)
    - Return depopulation system to NVS inventory

Resource Requirements:

To meet the depopulation trailer construction objectives, the Recipient is asking for funds to help support the contract with WCEC to source parts for and build the trailer system. WCEC has personnel on staff with the necessary mechanical experience to order and assemble parts of the system so the finished system operates at or above previously demonstrated capacity and throughput. WCEC will coordinate with fabricators and oversee the manufacture and installation of parts according to specifications.

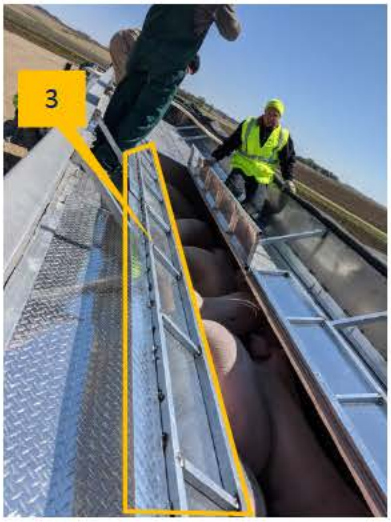
The complete system is comprised of a compressed gas/mechanical trailer and a vapor trailer which can together support up to two depopulation trailers. Mass depopulation trailers set up in a tandem system are supported by compressed gas and vapor trailers with gas delivery hoses switched between the two sets of inlets. This allows a 30-minute depopulation cycle of loading-administering gas-wait time-unloading to alternate between the two trailers allowing steady and nearly continuous throughput.

While this system is designed to use carbon dioxide gas, the trailers themselves will be suitable for use with other gas inputs. Nozzles, inlets, hoses, and other accessory equipment may need upgrading, retrofitting, or remodeling for use with other gasses. The schematic for the flow of CO2 from the Compressed gas trailer (Liquid CO2 input) to the Vapor trailer (CO2 gas accumulation) and into the depopulation chamber is presented below:



Depopulation Trailer:
The design is based on a standard 39' dump trailer with a modified interior chamber. Modifications are made to the container for gas fittings, an additional back door with a gate to facilitate loading, and a slippery floor covering so that carcasses slide out easily when the unit is lifted for dumping. Cost estimates including the purchase of used trailers and the fabrication and installation of all modifications come to $30,000 per trailer.

A 39' end-dump trailer can contain approximately 60 market-weight hogs in one load. It has a (1) modified loading door to minimize leakage of gas during the administration and holding periods. The front of the trailer has (2) an additional opening to encourage animals to load freely. Ceiling panels (3) along the length of the trailer fold down to seal gas inside the chamber.



Compressed gas/mechanical trailer:
A separate enclosed trailer contains four 440 lb. Vertical Gas Liquid (VGL) CO2 tanks (4) feeding the vapor lines through a regulator. The extremely cold temperature of liquid carbon dioxide requires very slow release from the tank to avoid autorefrigeration. Increased transfer rates are made possible by heating the trailer with a gas heater (w/generator) and a non-electric vaporizer. A vaporizer acts to pull heat from the surrounding air to gradually warm up the CO2 as it changes phase from liquid to gas. Ambient temperatures above 75 degrees F will reduce the need for adding heat to the system. Cost estimates for this trailer which include the tanks and equipment to release it are $15,000.

Vapor CO2 trailer:

This trailer carries two modified 1000-gallon tanks (5) filled with enough CO2 gas to fill half of the available space inside dump trailer chamber (55psig). High pressure gas released from the compressed gas tanks feed low pressure tanks which hold and warm up the vapor. Two hoses per tank fitted with 4-1" ball valves feed the inlets on the depopulation trailer. Tanks work in tandem to feed multiple trailers if there is constant gas supply from a high-pressure source. Tanks are securely fastened to the trailer for roadworthy travel. Cost estimates for this trailer and modified tank setup are $13,100.

Results:

After construction, these units will be field-tested to train operators on their use and demonstrate their functionality. Later they will be deployed to assist pork producers with on-site depopulation for the remainder of the emergency. Storage, transportation, and use of the units will be financed separately during this period. Terms of storage, maintenance, and transportation of the trailers and all components will be mutually agreed upon by NVS and the MDA.

Expected Performances:

Outputs:

Mass depopulation of livestock will be made available to swine producers affected by market disruptions. The equipment built under the terms of this agreement will be operated by a 6-8 person crew consisting of four technicians to monitor the flow of gas and mechanical systems, one veterinarian to monitor animal welfare and confirm death, and enough animal handlers (producers) to load live hogs onto the trailer. All participants will be trained in the operation of equipment, safety procedures, and protocols for efficient use of the system.

Approximately 50-60 market-weight hogs will be loaded into the trailer for each cycle. Once loaded, ceiling panels are closed and sealed to confine the space needed to fill with carbon dioxide. Gas flow through inlets will displace oxygen to render the animals senseless and allowed 15 minutes of wait time to ensure death. Carbon dioxide is then recovered or released for human safety and confirmation of death is documented. The dump mechanism then unloads the carcasses for disposal. The process from loading to unloading takes approximately 30 minutes. Trailers may be used in tandem to increase throughput so a two-trailer system will achieve an output of approximately 1400 market-weight hog carcasses per day.

Outcomes:

With funding secured and state approval for spending confirmed, the contractor will begin accomplishing objectives immediately. Procurement, fabrication, and construction will take approximately 14 days from start to finish.

Equipment such as dump trailers, enclosed trailers, flatbed trailers, and tanks are readily available in the marketplace. The objective will be achieved by buying properly sized, structurally sound, and road-worthy equipment from reputable dealers/sellers. Minor repairs/maintenance on tires, axels, hitches and electrical connections will be made prior to putting the units into service.

WCEC will engage fabricators to produce high quality parts for inlets, nozzles, fittings, additional doors, and ceiling panels. Materials, methods, and products will be manufactured to the specifications provided by the existing model and built to standards that will hold up safely with high usage, animal contact, and transportation.

Finally, components of pre-built and custom equipment will be combined to form a system of trailers that converts liquid carbon dioxide to vapor which is injectable into a chamber.

The system will be tested with CO2 and monitored to ensure it is leak-free and producing the correct flow rates to meet gas administration requirements. Once preliminary tests are done, the completed units (2 depopulation trailers, 1 compressed gas trailer, and 1 vapor trailer) will be transported to successive volunteer farms to demonstrate both effective depopulation on a large scale and the logistics of mobility for the complete system. Successful demonstrations that satisfy the Recipient, the BAH, and USDA agents will mark the end of the project.

A report will be generated by WCEC containing specifications, instructions, safety indications, and lessons learned for replicating this design of a mass depopulation trailer system. The written report may serve as an instruction manual for future construction of similar systems.

United States Department of Agriculture
Animal and Plant Health Inspection Service
AWARD FACE SHEET

1. FAIN	2. Amendment FAIN	3. Period of Performance	4. Type of Instrument
AP20VSSPRS00C106		05/14/2020 through 05/13/2021	Cooperative Agreement
5. Type of Action	**6. Proposal Number**	**7. CFDA Number**	**8. NICRA**
New	APP-12856	10.025	0.00

9. Authority:

7 USC 8301-8317, 7 USC 2279g

10. Agency (Name and Address)

Animal and Plant Health Inspection Service
STEVEN HALSTEAD
Coolidge Road, Suite 325
East Lansing,MI 48823

11. Recipient Organization

AGRICULTURE AND LAND STEWARDSHIP IOWA DEPARTMENT OF
DUNS: 808389936
WALLACE STATE OFFICE BLDG
DES MOINES, IA 50319-0051

12. Program Point of Contact:	Administrative Point of Contact:	13. Recipient Program Contact:	Recipient Administrative Contact:
Kevin Petersburg	AARON ROSALES	Jeffrey Kaisand	Ginny Eason
(515) 284-4140	(970) 494-7385	(515) 281-0866	(515) 281-8617
kevin.l.petersburg@aphis.usda.gov	Aaron.R.Rosales@aphis.usda.gov	jeff.kaisand@iowaagriculture.gov	ginny.eason@iowaagriculture.gov

14. Title of Proposal

FY20 D2 IA Swine Depop

15. Funding:

	Federal	Non-Federal
Previous Total	$266,176.00	$0.00
+ or -	$0.00	$0.00
Total	$266,176.00	$0.00
Grand Total	$266,176.00	

16. Provisions

APHIS General Terms and Conditions: https://www.aphis.usda.gov/aphis/ourfocus/business-services/financial-management-division/financial_services_branch/agreements_service_center/terms-conditions-for-aphis-awards

PROJECT DESCRIPTION

The purpose of this Agreement is to conduct Animal Health National Surveillance and Response activities that will provide specific information to the Recipient, APHIS, and other interested parties for various Commodities under this Umbrella agreement.

*Please note, the ezFedGrants system names the reports according to Calendar Year Quarters instead of the Agreement Quarters.

REPORTING REQUIREMENTS

Accomplishment and financial reports will be due as follows:

Reporting Period	Due Dates
Financial Report - Quarterly	
Second Quarter: Apr 01,2020 to Jun 30,2020	Jul 30,2020
Third Quarter : Jul 01,2020 to Sep 30,2020	Oct 30,2020
Fourth Quarter : Oct 01,2020 to Dec 31,2020	Jan 31,2021
First Quarter : Jan 01,2021 to Mar 31,2021	Apr 30,2021
Final Report :	Aug 13,2021
Performance Report - Quarterly	
Second Quarter: Apr 01,2020 to Jun 30,2020	Jul 30,2020
Third Quarter : Jul 01,2020 to Sep 30,2020	Oct 30,2020
Fourth Quarter : Oct 01,2020 to Dec 31,2020	Jan 31,2021
First Quarter : Jan 01,2021 to Mar 31,2021	Apr 30,2021
Final Report :	Aug 13,2021

Property Report -
Not Required

FOR THE UNITED STATES DEPARTMENT OF AGRICULTURE

This award, subject to the provisions above, shall constitute an obligation of funds on behalf of the Government. Such obligation may be terminated without further causes unless the recipient commences the timely drawdown of funds; such drawdowns may not exceed one year from the issuance date of the award.

APHIS Name	Signature	Date
District Director	SHALSTEAD	05/28/2020
RECIPIENT Name	**Signature**	**Date**
Julie Kenney Deputy Secretary	JKENNEY	05/28/2020

United States Department of Agriculture
Animal and Plant Health Inspection Service
AWARD FACE SHEET

1. FAIN	2. Amendment FAIN	3. Period of Performance	4. Type of Instrument
AP20VSSPRS00C118		06/01/2020 through 05/31/2021	Cooperative Agreement
5. Type of Action	**6. Proposal Number**	**7. CFDA Number**	**8. NICRA**
New	APP-14226	10.025	0.00

9. Authority:

7 USC 8301-8317, 7 USC 2279g

10. Agency (Name and Address)

Animal and Plant Health Inspection Service
STEVEN HALSTEAD
Coolidge Road, Suite 325
East Lansing,MI 48823

11. Recipient Organization

AGRICULTURE, MINNESOTA DEPARTMENT OF
DUNS: 804886208
625 ROBERT STREET NORTH
SAINT PAUL, MN 55155-2538

12. Program Point of Contact:	Administrative Point of Contact:	13. Recipient Program Contact:	Recipient Administrative Contact:
Stephan Schaefbauer (651) 234-5684 stephan.l.schaefbauer@aphis.usda.gov	AARON ROSALES (970) 494-7385 Aaron.R.Rosales@aphis.usda.gov	GIA HUONG PHAM (651) 201-6088 christine.pham@state.mn.us	GIA HUONG PHAM (651) 201-6088 christine.pham@state.mn.us

14. Title of Proposal

FY20 D2 MN MDA Swine Depop

15. Funding:

	Federal	Non-Federal
Previous Total	$155,985.00	$0.00
+ or -	$0.00	$0.00
Total	$155,985.00	$0.00
Grand Total	$155,985.00	

16. Provisions

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REPORTING REQUIREMENTS

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Fourth Quarter : Oct 01,2020 to Dec 31,2020	Jan 31,2021
First Quarter : Jan 01,2021 to Mar 31,2021	Apr 30,2021
Final Report :	Aug 31,2021
Performance Report - Quarterly	
Third Quarter : Jul 01,2020 to Sep 30,2020	Oct 30,2020
Fourth Quarter : Oct 01,2020 to Dec 31,2020	Jan 31,2021
First Quarter : Jan 01,2021 to Mar 31,2021	Apr 30,2021
Final Report :	Aug 31,2021
Property Report -	
Not Required	

FOR THE UNITED STATES DEPARTMENT OF AGRICULTURE

This award, subject to the provisions above, shall constitute an obligation of funds on behalf of the Government. Such obligation may be terminated without further causes unless the recipient commences the timely drawdown of funds; such drawdowns may not exceed one year from the issuance date of the award.

APHIS Name	Signature	Date
District Director	SHALSTEAD	07/24/2020
RECIPIENT Name	**Signature**	**Date**
Andrea Vaubel Assistant Commissioner	AVAUBEL	07/24/2020

APHIS

USDA

United States Department of Agriculture

Animal and Plant Health Inspection Service

Veterinary Services

Field Operations

4700 River Rd
Riverdale, MD 20737

05/13/2020

MEMORANDUM

TO: Dr. Kevin Petersburg, Primary Program Manager
Area Veterinarian in Charge, District 2, IA
Dr. Paul Kunde, Secondary Program Manager
Assistant Area Veterinarian in Charge, District 2, WI

FROM: Dr. Steven Halstead, District Director (SO)

SUBJECT: Designation of Responsibilities to the Program Manager (PM)
Continuation of Notice of Award
CRM Agreement ID No.: **6000013901**
Program: **Swine Depop**
Federal Award Amount: **$266,176** Recipient share: **$0**
Recipient: **Iowa Dept. of Agriculture & Land Stewardship**
Period of Performance: **05/14/2020 – 05/13/2021**
Accomplishment Reports Due: **Quarterly**

You **are hereby** designated as Program Manager (PM) for **CRM Agreement ID** No. **6000013901** in effect between the **Iowa Dept. of Agriculture & Land Stewardship** and the United States Department of Agriculture, Animal and Plant Health Inspection Service (APHIS), Veterinary Services.

This designation is an APHIS requirement in accordance with the APHIS Agreements Management Manual. You are responsible for functions and activities within each phase of the **agreement** management process. Specifically, you are to:

Planning Phase

1. Determine and, as needed, verify the mission authority with the Signatory Official (SO) before any contact/negotiation with the applicant or posting of an announcement of a funding opportunity.

2. Verify that funding is available for the intended purpose.

3. Confirm, with your servicing Grants Specialist (GS) as needed, that a cooperative agreement or grant is the proper instrument for the proposed activity.

4. Prepare a Decision Memorandum for each agreement for approval of the SO as required.

5. When competition is sought,

    a. Prepare a funding announcement for competitive projects. You will work with your GS to complete the necessary documents for posting on grants.gov. Develop evaluation criteria for conducting a fair and equitable evaluation, or

b. If the agreement cannot be competed, prepare an APHIS-63 to justify non-competition.

6. Take the steps necessary to become familiar with applicable laws, regulations, and agency policy related to the agreements management process and to secure guidance and training, as needed. You must apply this knowledge in announcing, negotiating, and managing the project and ensuring recipient compliance.

7. Take mandatory ADODR training in AgLearn to obtain and maintain competency.

8. Seek guidance from the GS, as needed.

Pre-award Phase

1. Once applications are received for competitive awards, coordinate evaluation of applications and recommend the awardee(s) based on results.

2. Work with your GS to verify whether potential recipient has been debarred or suspended. This verification includes those with whom we are proposing to enter into a continuation agreement. Refer to 2 CFR 417 for transactions that are excluded, i.e., not covered. Specifically, APHIS has some activities for which we can enter into an agreement even though the applicant is determined to be debarred or suspended as noted in the System for Award Management (SAM). Check with your servicing GS for special terms and conditions that might be required for a high risk applicant.

3. Ensure the applicant does not start work before the execution of the award by all parties, unless pre-award activities and costs have been justified by the applicant and approved by the SO in writing.

4. Determine whether the State has an Executive Order 12372 Intergovernmental Review of the APHIS Program as identified by CFDA No**. 10.025** by referring to the APHIS Web site at http://www.aphis.usda.gov/mrpbs/mfd/agreements_services_center.shtml. If applicable, notify the applicant that they must provide written notification to their state's Single Point of Contact (SPOC) and that a copy of the SPOC's response to them is required when submitting their application to APHIS. This response will provide information to permit APHIS to proceed with an award by indicating (1) the review has been completed or (2) the review has been waived. In the absence of this response and before making an award, APHIS must wait 60 days for new awards or 30 days for continued and some revised awards to provide adequate time for the SPOC to execute a proper review process in their state.

5. For cooperative agreements, negotiate the terms and conditions of the projects and work collaboratively with the applicant to document them, including each party's roles, responsibilities, and contributions in the work plan(s) and financial plan(s).

6. For grants, review project proposals (work plan) and negotiate any terms and conditions.

7. Ensure that the costs proposed in the financial plan are reasonable, allocable, and allowable under the applicable OMB guidance governing cost principles.

8. Approve work plan(s) and financial plan(s).

9. When indirect costs are included in the financial plan, obtain a current, signed Indirect Cost Rate Agreement (ICRA) and verify the proper application of indirect costs.

10. Review and approve the Application for Federal Funding in ezFedGrants.

Award Phase

1. Review the Agreement prepared by the GS in ezFedGrants and provide the GS and SO assurance that: (1) the relevant authorities (e.g., the Plant Protection Act, the Animal Health Act, NEPA, etc.) are cited, (2) special terms and conditions are imposed when a recipient is classified as "high risk", and (3) the purpose and all terms and conditions in the NOA are consistent with negotiations and intent. When using umbrella-type agreements, that the scope and all terms and conditions of the NOA are applicable to all work plans and financial plans covered by the agreement, e.g. method for applying program income, provisions for personal property, etc. Refer to the PM Checklist for help with this process. Contact your GS for assistance, as needed.

2. Discuss any issues that require additional approval, e.g., disposal of program income.

3. Ensure that all required forms, SF-424; SF-424A; SF-424B; work and financial plans; Certification Regarding Lobbying, SF-LLL (required for awards in excess of $100,000), SPOC letter, Supplemental Form for FFATA reporting, and Indirect Cost Rate Agreement (when applicable); and signed Notice of Award are properly completed and submitted to the GS to obtain the signature of the SO.

4. Obtain/verify the proper accounting information from the GS and/or the budget analyst.

Post-Award Phase

1. Monitor and evaluate the recipient's performance through the timely submission of performance reports in ezFedGrants and site visits and resolve any discrepancies or deficiencies in program performance.

2. Document and notify the SO and GS of all performance issues/deficiencies and efforts made to correct them.

3. Ensure that the terms of the agreement remain current through monitoring the recipient's performance and the need to adapt to changing conditions or program direction. Notify the SO and GS of the need to update the award documents. Review and approve all revised documents.

4. Notify the recipient of the need for additional EO 12372 SPOC review, if the scope of the agreement changes.

5. Review and accept, if consistent with anticipated program expenditures and program accomplishments, all Financial Status Reports, SF-425, received from the recipient

through ezFedGrants. Ensure the cost-share ratio is maintained, program income is properly applied, and indirect costs are properly reported. If deficiencies are noted, obtain corrected reports from the recipient and notify the SO and GS of unresolved issues.

6. Review and certify claim requests in ezFedGrants as correct and appropriate in accordance with program accomplishments and planned activities and projected cash disbursements. Ensure payment requests are consistent with projected cash flow needs as shown in Section D of the SF-424A, Budget Information. Notify the recipient through the rejection of the claim request in ezFedGrants of any deficiencies in the request and obtain corrected SF-270s, when needed. Withhold certification of payment, as appropriate, in accordance with regulations and terms of the Agreement.

7. Notify the recipient, in writing, when progress reports or SF-425 reports are overdue or incorrect and of your intent to withhold payments if the problems are not resolved.

8. When APHIS is substantially involved in program activities under a cooperative agreement, work cooperatively with and provide technical assistance to the recipient on program activities conducted within the scope and terms of the agreement.

9. Resolve discrepancies and notify the SO and GS of unresolved issues related to the project and progress reports, SF-425s, and/or claim requests.

10. Notify the SO of the recipient's request to terminate the award, when applicable.

11. If APHIS needs to terminate for cause, recommend action be taken to debar, suspend, or disqualify and provide a justification and any other required paperwork.

12. Work with your GS to obtain and review a copy of the A-133 audit report from the Federal Audit Clearinghouse website. When recommendations or findings pertaining to the PM's agreements are found, the PM is responsible for providing resolution to the findings, working with the recipient, SO and GS as necessary to close out the findings.

13. When deemed necessary, recommend a formal compliance review to the SO. Respond to/resolve recommendations and findings, working with the recipient as needs dictate.

14. Seek guidance for program issues from the SO or Commodity Program Manager.

15. Seek guidance from the GS for administrative matters pertaining to the management of agreements.

16. Elevate disputes to the SO for resolution.

Close-Out Phase

Execute a formal closeout by completing a Closeout Report, Exhibit 4-4, in the APHIS Agreements Management Manual, and provide a copy of the completed closeout report to the GS and inform the SO of completion. This close out includes, but is not limited to:

1. Obtaining a **final** performance report.

2. Ensuring that the **final** Federal Financial Report, SF-425, is received and a copy is provided to the GS to initiate action, if unobligated balances remain.

3. Timely approval and submission, through the GS, of all claims, including a **final**.

4. Upon receipt of final financial report and claim, notifying the recipient to issue a check to USDA, APHIS to repay any excess advances or improper payments. If efforts to collect fail, you must notify the SO and GS of any excess advances or over payments due APHIS, including any interest due. Such action is also required to recover advance or excess payments upon determination that the recipient has performed inadequately. Recipients must remit any interest earned in excess of $500 per year to Health and Human Services. Indian tribal nations are exempt under the Indian Self-Determination and Education and Assistance Act, as amended (25 U.S.C. 450).

5. Closing out property, including:

    a. Reconcile all inventories based on ownership (federal, state, and leased).
    b. For property purchased in full or in part with federal funds where the recipient will retain title, issue a recommendation for disposition to the SO and GS to take appropriate action based on type of recipient.
    c. Notify the SO of any discrepancies in the inventory of Federally-owned property, document the condition, and take appropriate action to bill the recipient for lost, stolen, damaged or destroyed property as stated in the NOA. Notify the Administrative Services Division's Property Team in Minneapolis, Minnesota to take action accordingly.
    d. Recommend to the SO the transfer of title to any property. Verify a mechanism and the availability of funds to pay the recipient for their pro-rata share (the ratio is based on the cost-share in the year the property was purchased) of the fair market value at the time of transfer.
    e. With the approval of the SO and after the SO's written notification to the recipient, initiate action to transfer title, including the submission of any requisitions to contracting.
    f. Ensure all accountable, transferred property is entered on the Accountable Property Officer's inventory by notifying the Property Team in Minneapolis.
    g. Submit copies of all documentation relating to property disposal and transfers to the GS for the SO file.
    h. Properly accounting for any excess inventory of supplies on hand, purchased with federal funds, at the close of the project.

6. Preparing the summary evaluation report to address the performance, accomplishments, and deficiencies, if any, of the recipient and submit it to the SO and a copy to the GS.

General post-award or close-out requirements

1. Recommend action be taken to debar, suspend, or disqualify based on recipient performance or other deficiencies. Prepare a justification and documentation required to initiate debarment and suspension action.

2. Maintain a PM case file in accordance with the APHIS Records Management Handbook

and ensure that all pertinent information regarding interactions with the recipient are properly documented therein. These records are critical to conduct proper compliance reviews and audits of the recipient and the specific agreement or grant, when warranted.

3. Elevate disputes to the SO for resolution

The recipient must obtain, through you as the PM, written approval of the SO to change any of the terms and conditions of the Agreement, Work Plan, or Financial Plan.

If you have any questions regarding these responsibilities, your servicing Grants Specialist is Aaron Rosales and can be reached at 970-494-7385. Please contact this individual for an overview of these responsibilities and if you have any questions regarding them. You will be responsible for obtaining any training mandated by the Agency and your SO in order to effectively carry out these responsibilities.

I have received and read this letter. I will contact my servicing Grant Specialist to obtain clarification of any responsibilities I do not understand.

_____

Primary Program Manager Date

_____

Secondary Program Manager Date

From: Neault, Mike J

To: kretallick@wppa.org; dmeeker@nara.org; collinsc3@michigan.gov; Doug.Meckes@ncagr.gov; michael.starkey@state.mn.us; mash@boah.in.gov; Randolph.Chick@agriculture.arkansas.gov; gmuller@sdppc.org; Nancy Foster; Bucknall, Janet L - APHIS; Allen, Anna; ahamberg@pa.gov; Brewer, Becky L - APHIS; Cole, Leslie E - APHIS; dennis.hughes@nebraska.gov; Gilmore, Sandy; kebrightbi@pa.gov; Andy.Schwartz@tahc.texas.gov; mark.ernst@illinois.gov; alicia.gorczyca-southerland@ag.ok.gov; Rod.Hall@ag.ok.gov; Jeff.Kaisand@Iowaagriculture.gov; bmarsh@boah.in.gov; Sarah.Reinkemeyer@mda.mo.gov; Jean.Schmidt@mda.mo.gov; Justin.Smith@KS.gov; Steve.Strubberg@mda.mo.gov; beth.thompson@state.mn.us; winelandn@michigan.gov; Dustin.oedekoven@state.sd.us; Goodrich, Jarold (MDARD; Derrer, Denise; Mcooper1@boah.in.gov; Sara.Mcreynolds@ks.gov; john.howard@ncagr.gov; Tony.Forshey@Agri.ohio.gov; Hudyncia, Joseph; Werling, Kelli K; Todd.Tedrow@state.sd.us; Henrietta.Holbrooks@ncagr.gov; darlene.konkle@wisconsin.gov; Angela.Daniels@tahc.texas.gov; Mayes, Michael; Shipman, Kyle W; brian.hoefs@state.mn.us; nhanshaw@pa.gov; Andy.Hawkins@ks.gov; Dpyburn@pork.org; snelson@aasv.org; psundberg@swinehealth.org; Michael.Martin@ncagr.gov; Reardon, Joe W; Vet Conference Line; Tim.Derickson@agri.ohio.gov; beth.ruby@ag.ok.gov; Julie.mcgwin@wisconsin.gov; Andy Curliss; Bill.pittenger@mda.mo.gov; Olson, Kelsey [KDA]; WagstromL@nppc.org; staci.slager@illinois.gov; Bryan Humphreys; Mary Kelpinski; Shere, Jack A - APHIS; Healey, Burke L - APHIS; Hayworth, Anna; pmcgonegle@iowapork.org; jennifer@ilpork.com; jtrenary@inpork.org; tims@kspork.org; david@mnpork.com; don@mopork.com; al@nepork.org; Cheryl Day; rllindsey@okpork.org; jdarr@pennag.com; bgunn@texaspork.org; TLee@meatinstitute.org; Cassil, Terry; Sifford, Rosemary B - APHIS; rebecca.slater@wisconsin.gov; gary.flory@deq.virginia.gov; Meade, Barry J - APHIS; burkgren@aasv.org; Norton, Kevin - NRCS, Washington, DC; lucia.hunt@state.mn.us; Pruitt, Michael R - APHIS; Shufro, Nick; Sombke, Kyle H - APHIS; Harvell, Kevin; Smith, Greg; McKenna, Thomas S - APHIS; Barber, David A - APHIS; Hines, Angela Y - APHIS; Petersburg, Kevin L - APHIS; Tanner, Rick J - APHIS; Ray, Jean S - APHIS; Schaefbauer, Stephan L - APHIS; Gosch, Terry L - APHIS; Custer, Koren M - APHIS; Skorupski, Susan - APHIS; Kornreich, Michael A - APHIS; Tesar, Lynn A - APHIS; Kunde, Paul W - APHIS; Wilmot, Delwin D - APHIS; Halstead, Steven L - APHIS; Dodds, Lewis E - APHIS; Mark Hutchinson; Peer, Robert (DEQ); Miller, Lori P - APHIS; Peterson, Steve - FSA, Washington, DC; Broadaway, Jeffrey B; james.kittrell@ncagr.gov; christina.law@ncagr.gov; Carol.Woodlief@ncagr.gov; nfoster@nara.org; peastma@clemson.edu; john.king@state.mn.us; Zack, Jonathan T - APHIS; carolynn.bissett@vdacs.virginia.gov; Porter, Jeffrey - NRCS, Greensboro, NC

Cc: annette.jones@cdfa.ca.gov

Subject: Covid-19 Affecting Animal Industries Tuesday, June 23, 2020 Update

Date: Monday, June 22, 2020 10:41:33 PM

Attachments: 2020.06.19 Update 32 - Near Term Issue Meat Supply Chain.pdf
Understanding Muzzle Energy when Selecting an Appropriate Firearm for Humane Euthanasia (1).pdf

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Good evening or morning pending where you are.

Attachment and Update

1. From Dr. Shearer, correspondence reply from Eric Nelson on the use of sodium nitrite

   Dr. Shere,

   We are aware of the impact COVID-19 has had on the swine processing industry, as well as the ancillary impact on swine producers' ability to ship hogs for slaughter, thus creating a need for depopulation. We understand that these depopulation activities are being monitored by APHIS/VS and the swine industry is testing the use of encapsulated sodium nitrite as a depopulation agent.

   CVM has regulatory responsibility for animal drugs as well as animal food. Sodium nitrite intended for depopulation of swine is considered a drug under section 201(g)(1)(C) of the Federal Food, Drug and Cosmetic Act (FD&C Act), as it is intended to affect the structure or function of the body of swine by causing death, and a new animal drug under section 201(v) of the FD&C Act.

   We have limited information about the use of sodium nitrite for depopulation and its safety and effectiveness has not been established. We also have limited information regarding the likelihood of the presence of unsafe residues in the tissues of swine administered this drug. For the duration of the public health emergency declared by

Department of Health and Human Services Secretary Alex Azar on January 31, 2020, or until further notice by CVM, whichever occurs first, CVM will not object to the use of sodium nitrite to depopulate production swine, provided the following conditions are met:

- Swine depopulated with sodium nitrite do not enter the human or animal food supply, including through the edible rendering process. We do not object to rendering for non-food use (such as biodiesel or other industrial ingredients) as long as no rendered material enters the human or animal food supply.
- Disposal of remains, including rendered materials, must be in conformance with federal, state and local environmental regulations.
- Sodium nitrite is presented in a concentration and form that ensures ingestion at a level that results in a toxic dose and death within an acceptable time frame (i.e., 1-3 hours).
- If sodium nitrate is mixed with or further processed into animal food, the equipment used is of suitable design and construction to ensure uniform distribution and concentration of sodium nitrate and adequate clean-out procedures are used to prevent unsafe contamination of other animal food.

Please note that our current position is the result of the unusual circumstances that have arisen due to the COVID-19 pandemic. We may reevaluate this position if we become aware of any changes in the potential risks posed or for other reasons, we determine are appropriate. If you have any questions or need further assistance, please contact me, Eric Nelson at 240-402-5642 or eric.nelson@fda.hhs.gov.

Eric M Nelson
Director of Compliance
FDA/Center for Veterinary Medicine (HFV-230)
7519 Standish Place
Rockville, MD 20855-2773
office: (240) 402-5642
fax: (240) 276-9241
e-mail: Eric.Nelson@fda.hhs.gov

2. From Jennifer van de Ligt of the Food Protection and Defense Institute – Near-Term Issues
    a. Meat Supply Chain Update #32
3. From Dr. Pyburn, National Pork Board Firearm Update posted on website.
4. From Andy Curliss, NCPC, Embarrassed to Feed People? Not Us.
5. From Dr. Cole, shared a link to a ProMed article on UK meat-processing plant outbreak

Action Items

- USDA requests that all equipment requests come through the AVIC using the ICS 213RR for the National Veterinary Stockpile.
- USDA is asking states to share possible euthanasia and disposal plans with them, along with expected needs. Although funding is not available at this

time, if they have a list of needs they can present an argument for funding to support operations or share funding for operations if it does become available.

- If your state public health offices have algorithms for testing at plants and in the surrounding communities and are willing to share, please forward to me and I will add as an attachment to the evening updates.
- NPB requests that if you are performing field trails with CO_2 euthanasia please email to Dave Pyburn (dpyburn@pork.org) the protocol followed, the design of the equipment utilized, and the outcome of the trial. Dave will pull this data together and make available to the industry.

Next Conference Call

Friday, June 26, 2020 at 9:00 AM ET.
Conference Line: (b) (5)(DPP)
Access code: (b) (5)(DPP)

Draft Agenda –

1. Quick Updates
    a. Federal
    b. Industry
    c. States
2. Lessons Learned
    a. An email will be sent shortly looking at capturing lessons learned

Thanks,
Mike

Michael Neault, DVM, Director of Livestock Programs, Veterinary Division
N.C. Department of Agriculture & Consumer Services
Physical Address: 2 W. Edenton Street, Raleigh, NC 27601
Mailing Address: 1030 Mail Service Center, Raleigh, NC 27699-1030
Phone: 919-707-3250
Fax: 919-733-2277

Food Protection and Defense Institute
A Homeland Security Center of Excellence

June 19, 2020

COVID-19 Near-Term Issues Spotting in Food Supply Chain

Meat Supply Chain and Mass Hog Depopulation – UPDATE #32

Updates issued on Fridays to track recovery trends

UNIVERSITY OF MINNESOTA
1365 GORTNER AVENUE
ST. PAUL, MN 55108-1010

(612) 624-2459
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FOODPROTECTION.UMN.EDU

Action Opportunity Update

Critical path to meat supply chain disruption resolution

- Maintain full operating capacity at processing facilities in consideration of worker health
    - Implement weekend processing to enhance short-term capacity
    - Coordinate worker protective equipment to:
        - maintain worker safety with normal operation PPE (specific to each job function and may include, for example, cut-resistant clothing, bump caps, dust masks/respirators, protective eyewear, protective foot wear, etc.);
        - maintain food safety with normal operation sanitation wear (specific to each product produced and may include, for example, hair/beard nets, disposable gloves, cloth or disposable coats/gowns, shoe covers, etc.); and
        - enhance COVID-19 infection control measures through cloth-face coverings, social distancing, physical barriers, etc.
- Manage depopulation and disposal of hog overstock in multiple states including rendering, composting, and burial as appropriate in each locality
- Support livestock producers and processors in achieving new equilibrium including financial and liability considerations

Transition point from meat supply chain to broader food system disruption

- Address increasing level of COVID-19 infections in non-meat supply chain food production and facilities
    - Enhance COVID-related worker health and surveillance processes
    - Coordinate worker protective equipment to:
        - maintain worker safety with normal operation PPE;
        - maintain food safety with normal operation sanitation wear; and
        - enhance COVID-19 infection control measures
- Begin enhanced monitoring of food production and processing status to identify transition points and potential cascading effects

Situation Update

Action by Appointed and Elected Officials

- Pigs at slaughter: measures to address welfare concerns – European Food Safety Authority, June 17, 2020
  - Welfare of pigs at slaughter – EFSA Journal
- Food Outlook: Biannual Report on Global Food Markets COVID-19 – FAO

Recommendations from authoritative bodies (cumulative)

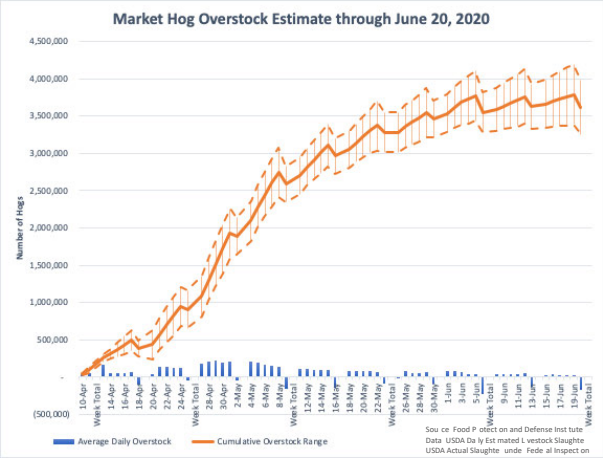
- NEW Daily Life and Coping – CDC
- NEW COVID-19 Frequently Asked Questions – OSHA (Context – cloth face coverings)
- Policy Brief: The Impact of COVID-19 on Food Security and Nutrition – United Nations
- Agriculture Workers and Employers – CDC and US Dept of Labor
  - Agricultural Employer Checklist for Creating a COVID-19 Assessment and Control Plan
- COVID-19 Federal Rural Resource Guide - USDA
- Opening Facilities
  - Use of Cloth Face Coverings to Help Slow the Spread of COVID-19 – CDC
  - FAQs regarding the use of masks in the workplace – OSHA
  - Guidance for workers and employers – OSHA (many documents available)
  - Reporting a Temporary Closure or Significantly Reduced Production by a Human Food Establishment and Requesting FDA Assistance During the COVID-19 Public Health Emergency - FDA
  - CDC updates COVID-19 transmission webpage to clarify information about types of spread - CDC
  - Food and Agriculture: Considerations for Prioritization of PPE, Cloth Face Coverings, Disinfectants, and Sanitation Supplies During the COVID-19 Pandemic - FDA
  - Meat and Poultry Processing Workers and Employers – CDC
  - Strategies to reduce COVID-19 transmission at Smithfield Foods Sioux Falls Pork Plant - CDC
  - COVID-19 Health and Safety Guidelines for the Meatpacking Industry – Minnesota Department of Health
  - Cleaning and Disinfection for Community Facilities - CDC
  - Exercise Starter Kit for Workshop on Reconstituting Operations – FEMA
  - North American Meat Institute Coronavirus Update - NAMI
- Depopulation and Disposal
  - APHIS Livestock Coordination Center – USDA
  - Recommendations for Swine Depopulation (updated) – American Association of Swine Veterinarians
    - Evaluating Emergency Euthanasia or Depopulation of Livestock and Poultry
  - Emergency Animal Mortality Management – Swine – USDA
  - USDA Carcass Management Dashboard – USDA

- COVID from Food and Food Packaging
  - How COVID-19 Spreads – CDC (updated May 20, 2020)
  - Best Practices for Retail Food Stores, Restaurants, and Food Pick-Up/Delivery Services During the COVID-19 Pandemic – FDA
  - Best Practices for Re-Opening Retail Food Establishments During the COVID-19 Pandemic – FDA
  - Safe Food Handling - FDA
  - Food Product FAQs - FDA
  - Food Safety and the Coronavirus Disease 2019 (COVID-19) – FDA
  - What to Do if You Have COVID-19 Confirmed Positive or Exposed Workers in Your Food Production, Storage, or Distribution Operations Regulated by FDA – FDA

Hog Update

Daily Hog Slaughter and Overstock Addition[1]

- Total overstock estimate – 3.6MM, uncertainty range 3.3MM to 3.9MM – no change from previous week
  (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)



(USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)

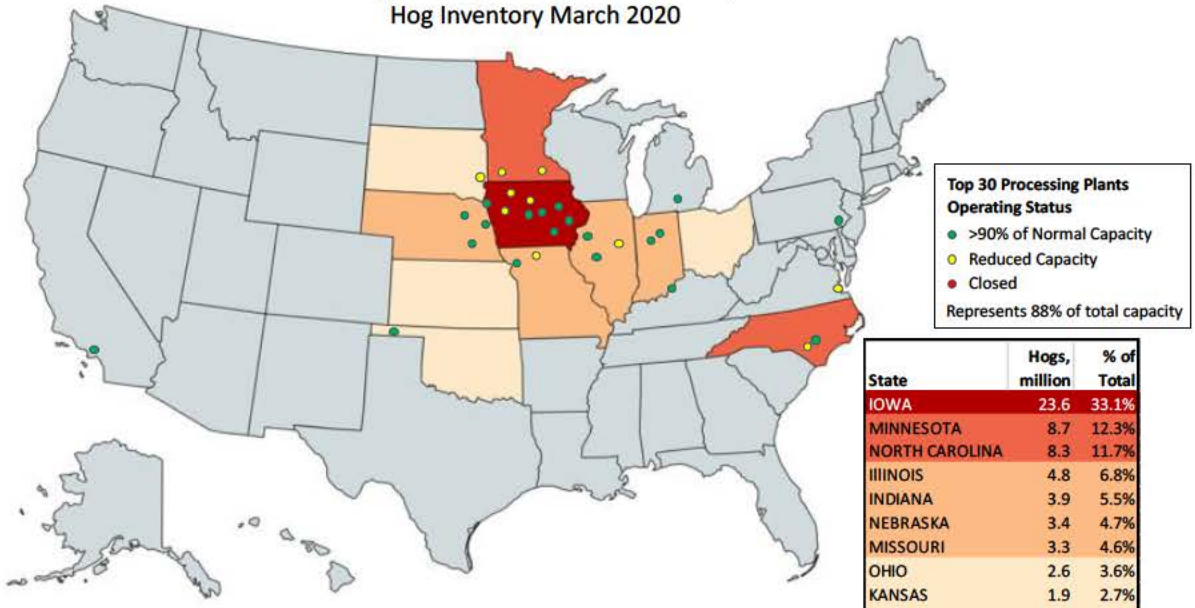
- Daily slaughter numbers

	Daily Estimate	Same day April 3-9	Year Ago
June 15	457,000	474,731	474,125
June 16	458,000	483,431	478,424
June 17	460,000	472,974	478,905
June 18	460,000	467,945	478,775
June 19	457,000	482,993	458,069
June 20	290,000	140,189	86,176

- Daily pork processing capacity
  - Approximately 99% of pre-COVID capacity for the week ending June 13
  - Capacity reduction from maximal capacity approximately 9.2% on June 15 and 16, 8.5% on June 17, 7.8% on June 18 and 19. June 18 had 18 of 28 previously impacted plants functioning at over 90% normal capacity, 7 at 80-90%, and 3 at 55-80%. (USDA Daily Estimated Livestock Slaughter; Kern and Associates courtesy of NPPC)

[1] Total hog overstock estimates do not include depopulation numbers due to the confidentiality and sensitivity of these numbers. Public reporting includes 10,000 per day in Minnesota, 300,000 as of June 11, and 600,000 in Iowa in the near future.

Processing Plant Operating Status June 19, 2020
Hog Inventory March 2020



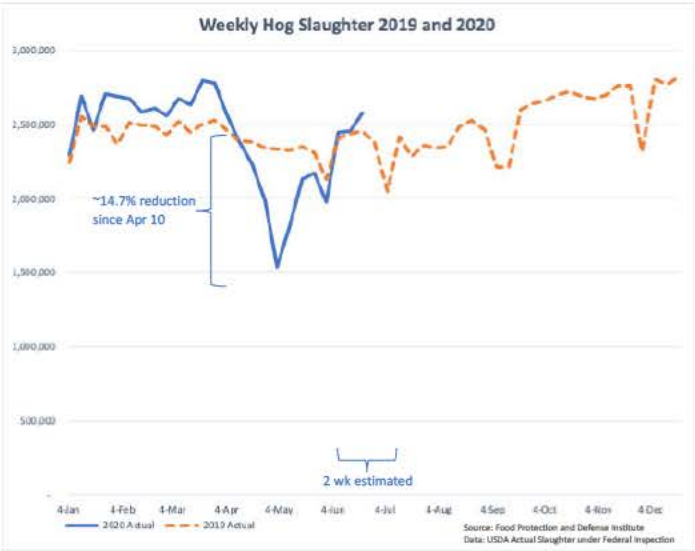
State	Hogs, million	% of Total
IOWA	23.6	33.1%
MINNESOTA	8.7	12.3%
NORTH CAROLINA	8.3	11.7%
ILLINOIS	4.8	6.8%
INDIANA	3.9	5.5%
NEBRASKA	3.4	4.7%
MISSOURI	3.3	4.6%
OHIO	2.6	3.6%
KANSAS	1.9	2.7%
OKLAHOMA	1.8	2.5%
SOUTH DAKOTA	1.7	2.4%

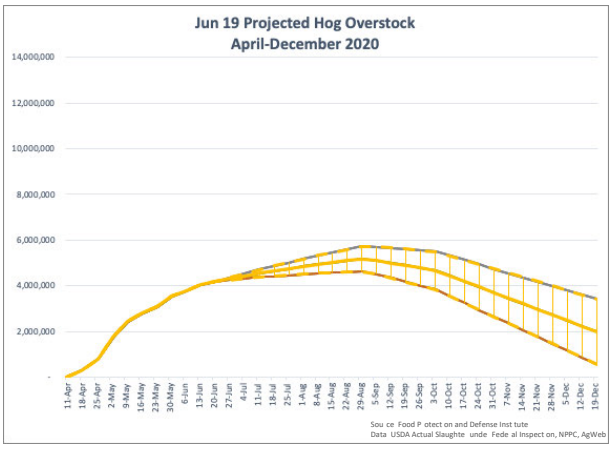
Top 11 States represent 90% of total hog inventory

Source: Food Protection and Defense Institute
Data: USDA National Agricultural Statistics Service Quarterly Hogs and Pigs;
Steiner Group and Kerns & Associates courtesy of NPPC

Weekly Hog Slaughter and Overstock Projections

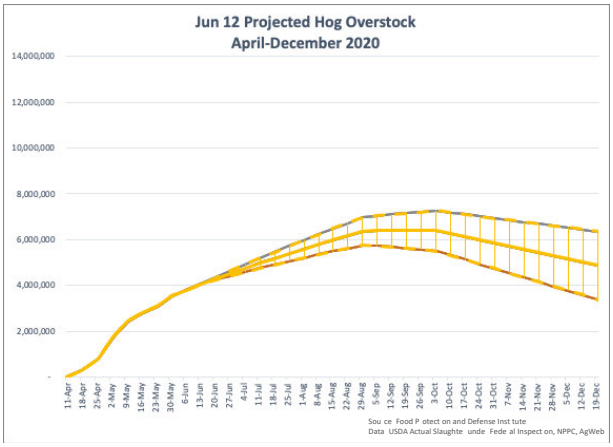
- Weekly slaughter numbers for the week ending June 20 were down approximately 1% from pre-COVID levels with a 14.7% reduction to date starting from the week ending April 11. (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)
- Total hog overstock projections through December 2020 expected to peak at about 5.1MM market weight hogs peaking in September due to continued accelerated recovery. Historical production capacity is lower during summer months which provides room for surge processing capacity that may assist with hog overstock in some regions. June 19 and June 12 models are provided for comparison.





Assumptions
- Hog inventory at 95% plant capacity through mid-October representing market conditions for pigs already born and in growth cycle prior to COVID-19
- Year on year capacity increase of 6.4% to April 9 excluded after Aug 31, 2020
- Adjusted for normal weekly fluctuation in plant capacity (e.g. holiday reductions)
- Average plant capacity
  - 90% by week of Jun 5
  - Normal capacity through remainder of year
- Young pig and sow culling (relative to Q1)
  - No culling prior to April 10
  - 5% for pigs reaching market weight in mid-September
  - 10% for pigs reaching market weight in mid-October
- The 10% reduction in herd size and 90% normal plant capacity creates a pseudo-equilibrium

(Date June 19, 2020)



Assumptions
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- Average plant capacity
  - 90% by week of Jun 5 through remainder of year
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  - No culling prior to April 10
  - 5% for pigs reaching market weight in mid-September
  - 10% for pigs reaching market weight in mid-October
- The 10% reduction in herd size and 90% normal plant capacity creates a pseudo-equilibrium

(Date: June 12, 2020)

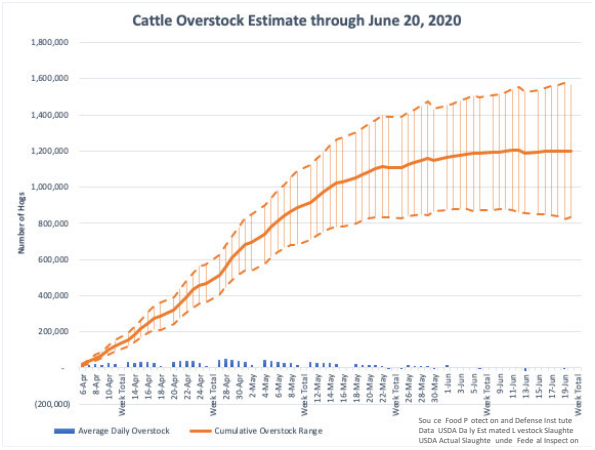
Cattle Update

Daily Cattle Slaughter and Overstock Addition

- Total overstock estimates – 1.2MM, uncertainty range 0.8MM to 1.5MM – no change from previous week (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)

- Daily slaughter numbers

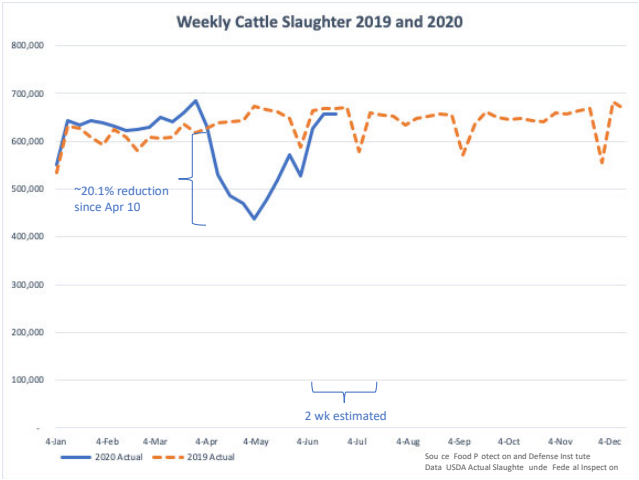
	Daily Estimate	Same day Wk Apr 4	Year Ago
June 15	119,000	118,756	120,366
June 16	119,000	119,473	122,260
June 17	120,000	117,235	121,859
June 18	120,000	115,152	120,513
June 19	119,000	107,188	118,954
Jun e 20	59,000	53,495	64,317



(USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)

Weekly Cattle Slaughter and Overstock Projections

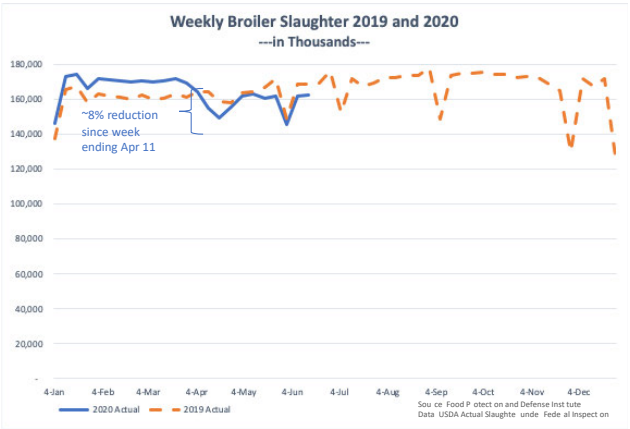
- Weekly slaughter numbers for the week ending June 20 were down approximately 6% with a 20% reduction to date starting from the week ending April 4. (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)

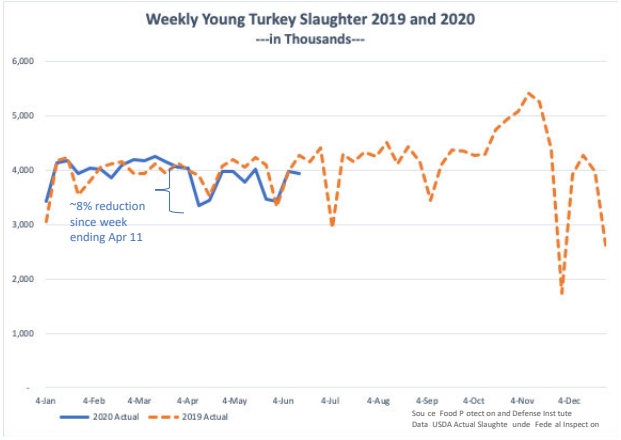


Poultry Update

Weekly Poultry Slaughter and Overstock

- Young Turkeys
  - Young turkey weekly slaughter numbers for the week ending June 13 were down approximately 10% with an 8% reduction to date starting from the week ending April 4. (USDA Actual Slaughter under Federal Inspection)
- Broilers
  - Broiler slaughter numbers for the week ending June 13 were down approximately 8% with an 8% reduction to date starting from the week ending April 4. (USDA Actual Slaughter under Federal Inspection)





Livestock Media Update

Webinars

- [COVID-19 and the Food and Agricultural System] - Board on Agriculture and Natural Resources, National Academy of Sciences – webinar recorded on June 19, 2020, recording available week of June 22

Processing facilities media coverage

(This section contains exemplary material from multiple perspectives around the issue.)

- [Covid-19: Is US pig processing back to normal?] – Pig Progress, June 19, 2020
- [Meatpacking workers often absent after Trump order to reopen] – Reuters, June 15, 2020

  - "Nationwide, 30% to 50% of meatpacking employees were absent last week, said Mark Lauritsen, a vice president at the United Food and Commercial Workers International Union (UFCW)."
- Covid-19: Tönnies closes largest pork plant in Germany – Pig Progress, June 19, 2020 (Context: 730 of 1,106 employees tested positive)
- How Did Europe Avoid the COVID-19 Catastrophe Ravaging US Meatpacking Plants? – Mother Jones, June 13, 2020
- China finds heavy coronavirus traces in seafood, meat sections of Beijing food market – Reuters, June 18, 2020
  - "suspects the area's low temperature and high humidity may have been contributing factors, officials said on Thursday."
- UK food producer temporarily shuts Welsh poultry plant after COVID-19 outbreak – Reuters, June 18, 2020
- Mapping Covid-19 outbreaks in the food system – Food & Environment Reporting Network
  - "According to data collected by FERN, as of June 19 at 12pm ET, at least 333 meatpacking and food processing plants (249 meatpacking and 84 food processing) and 45 farms and production facilities have confirmed cases of Covid-19, and two meat plants are currently closed. At least 32,049 workers (27,138 meatpacking workers, 2,190 food processing workers, and 2,721 farmworkers) have tested positive for Covid-19 and at least 109 workers (99 meatpacking workers, 8 food processing workers, and 2 farmworkers) have died."

Economic media coverage

(This section contains exemplary media coverage from multiple perspectives around the issue.)

- As Meat Plants Stayed Open to Feed Americans, Exports to China Surged – New York Times, June 16, 2020
- As leaders warned of US meat shortages, overseas exports of pork and beef continued – USA Today, June 16, 2020
- Meatpacking rebounds but high prices and backlogs to persist – AP, June 14, 2020
- Coronavirus: China bans imported pork from German meat plant after more than 650 infected in outbreak – South China Morning Post, June 18, 2020

Producer media coverage

(This section contains exemplary media coverage from multiple perspectives around the issue.)

- Minnesota Pork Producers Work To Bounce Back As COVID-19 Restrictions Loosen – WCCO, June 18, 2020 (video)
- To prevent livestock euthanasia, effort brings hogs to WNC families to slaughter – Blue Ridge Now, June 14, 2020
- Iowa Pig Farmers Show Community Spirit During COVID-19 Crisis – Iowa Pork Producers Association, June 12, 2020

Food shortage media coverage

(This section contains exemplary media coverage from multiple perspectives around the issue. At present, there are no indications of wide-scale food shortages although supply chain disruptions continue to create spot limited supply or out of stock situations.)

- More Households Face Food Scarcity during COVID-19 – Federal Reserve Bank of St. Louis, June 18, 2020
- Global pork output projected to drop 8% in 2020 due to ASF, COVID-19 – National Hog Farmer, June 16, 2020
- Coronavirus outbreak linked to Beijing wholesale food market could impact China's meat imports – CNBC, June 16, 2020
- COVID-19 will affect the food and financial security of many for years to come – Science Daily, June 15, 2020
- The Impact of COVID-19 On Food Security [opinion] – MarketWatch, June 15, 2020

Previous updates available upon request

ANIMAL WELL-BEING

Understanding Muzzle Energy (Energy) when Selecting an Appropriate Firearm for Humane Euthanasia

Authors: Thomas J Fangman DVM, MS, DABVP Sr Veterinarian Swine Technical Services' Huvepharma.
Chad A Stahl PhD, Global Director of Meat Science/Benchmarking, Choice Genetics.
John T Fangman, Mechanical Engineer.

Background

Humane euthanasia of livestock is sometimes necessary, and it is important to recognize that it be conducted skillfully to quickly render the animal unconscious and insensible to pain while being mindful of personal safety. Important considerations when determining the most appropriate method of humane euthanasia include: human safety, animal welfare, practicality, cost limitations, aesthetics, and technical skill requirements.[1]

A gunshot to the head is an effective method of euthanasia of swine if done correctly.[1] The impact caused by the penetrating bullet causes concussion and damage to vital areas of the brain of the pig. Ammunition must have adequate energy to concuss and penetrate the skull with the first shot.[1] A minimum muzzle energy of 300 feet-pound (ft-lb) is recommended for grow-finish pigs and mature sows and boars (up to 400 pounds) because of the thickness of their skulls.[1,2] For animals larger than 400 pounds, 1,000 ft-lb is required.[3]

This fact sheet will focus on humane euthanasia, human safety considerations, proper firearm placement and proper caliber and ammunition selection to achieve a minimum of 300 feet-pound for predictable humane euthanasia by gunshot. The intended purpose of this information is to aid the trained professional in making an informed decision on firearm selection for humane euthanasia. Probably the most important point to be made relative to the use of gunshot for euthanasia is that scientific information on firearm and bullet selection is lacking. This is an area of urgent need in euthanasia research.[4]

Considerations When Euthanizing an Animal

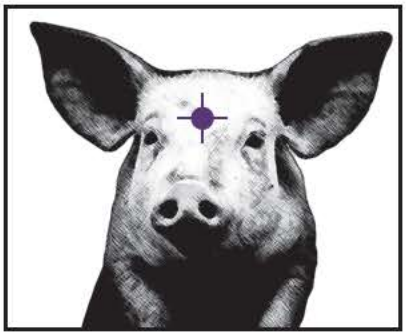
According to information from the American Veterinary Medical Association's Guidelines for the Euthanasia of Animals: 2020 edition,[4] there are 14 general criteria that must be met when euthanizing an animal:

1. Ability to induce loss of consciousness and death with a minimum of pain and distress
2. Time required to induce loss of consciousness
3. Reliability
4. Safety of personnel
5. Irreversibility
6. Compatibility with intended animal use and purpose
7. Documented emotional effect on observers or operators
8. Compatibility with subsequent evaluation, examination, or use of tissue
9. Drug availability and human abuse potential
10. Compatibility with species, age, and health status
11. Ability to maintain equipment in proper working order
12. Safety for predators or scavengers should the animal's remains be consumed
13. Legal requirements
14. Environmental impacts of the method or disposition of the animal's remains

Firearm Placement

The firearm should be aimed so that the projectile enters the brain, causing instant loss of consciousness.[5] Given that the brain of the pig is relatively small and well protected by sinuses,[6] proper firearm placement is critical. Knowing this, it is strongly recommended that only trained personnel operate the appropriate firearm. The appropriate firearm should be selected for the situation, with the goal being penetration and destruction of brain tissue without emergence from the contralateral side of the head.[3,7]

Figure A



The ideal target for gunshot is half an inch above eye level, on the midline of the forehead and aiming toward the tail of the pig.[1] An alternative target for gunshot is behind the ear. When shooting this way, the bullet should enter the skull from behind the ear aiming toward the opposite eye.[1] This method can present a risk to onlookers or other pigs as this shot has the potential to pass through the pig's head.[1] Refer to the illustration depicted

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in Figure A when determining the appropriate placement of the firearm. When using a firearm, the muzzle should be held 2 to 10 inches from the pig's skull.[1] Ideally, the pig should be outdoors, on soil where the danger of a bullet ricocheting is reduced. Pigs that are non-ambulatory should be euthanized where they lie or be humanely transported to a safe location. Restraint may be necessary and onlookers or assistants should always stand behind the person delivering the shot.[1]

Post-Stunning Observations

To ensure that the animal has been effectively rendered unconscious and insensible to pain, both the National Pork Board[1] and American Association of Swine Veterinarians[4] suggests that you look for signs of consciousness such as 1) rhythmic breathing, 2) constricted pupils, 3) attempts to raise the head (righting reflex), 4) vocalization, 5) palpebral reflex (run finger along the eyelash and if the pig blinks or moves its eye, the pig is sensible), and 6) response to a painful stimulus (such as a nose prick with a needle) while also remembering that clonic motion, involuntary kicking and(or) paddling better known as grand mal seizures are the animal's normal reaction to proper stunning and signify a proper stun.[5]

Above all, you must confirm the death of the animal prior to disposal. The American Veterinary Medical Association's Panel on Euthanasia[4] suggests that death be confirmed by examining the euthanized animal for cessation of vital signs, giving special consideration to the animal species and method of euthanasia. Signs of death include but are not limited to: 1) no breathing, 2) no heartbeat, 3) no movement or muscle tone, 4) no response to painful stimulus (such as a nose pinch or prick with a needle), 5) no vocalization, and 6) no corneal reflex (the eye blinks when an object touches the cornea).[5]

Description of Bullet Energy

Evidence suggests that the .22 LR is one of the most frequently used firearms for euthanasia of livestock with varying degrees of success. An understanding of bullet energy will help in the selection of the appropriate caliber and bullet characteristics to assure improved success of achieving humane euthanasia. There is little doubt that success or failure is partially related to firearm and bullet characteristics, but probably more so to selection of the ideal anatomic site (i.e., a site more likely to affect the brainstem) for conducting the procedure.[4]

To aid in the selection of the appropriate firearm that will penetrate the skull and sinuses to destroy brain tissue without emergence from the contralateral side of the head[3,7] requires a basic understanding of bullet energy:[4]

- Kinetic energy of an object increases as the speed and weight of the object increase
- The bullet's kinetic energy (muzzle energy) is the energy of the bullet as it leaves the end of the barrel when the firearm is discharged
- The heavier the bullet and the greater its velocity, the higher its muzzle energy and capacity for penetration into tissue and bone in its path
- In general, when comparing handguns with rifles, the longer the barrel, the higher the muzzle velocity
- It is believed that the rifle will be the preferred firearm when making caliber and bullet selections for humane euthanasia
- For euthanasia, the combination of firearm and ammunition[2] selected must achieve a muzzle energy of at least 300 feet-pound (407 J) for animals weighing up to 400 pounds (180 kg)
    - Some would argue that the recommended muzzle energy (Energy) of 300 ft-lb is well beyond what is necessary to achieve satisfactory results
    - This energy value was derived under field conditions during a foreign animal disease outbreak[2] and will be utilized here for comparative purposes
    - The 300 feet-pound energy value has been utilized in Table 1 to demonstrate rifle caliber and bullet energy differences when selecting an appropriate firearm
- For animals larger than 400 pounds, 1,000 ft-lb (1,356 J) is required[3]
- To accommodate units of measure in the USA (for civilian firearms) muzzle energy (E) is described as energy (E) and expressed as bullet weight (W) times velocity (V) times velocity (V) [V in feet per second] dividing the result by 450,450.

In all cases, the most important factors in ensuring successful euthanasia are the experience and skill of the shooter.

Selection of Proper Caliber and Ammunition

The intended purpose of this information is to aid the trained professional in making an informed decision on firearm selection for humane euthanasia by providing bullet energy data. It is not our intention to advise the trained professional on the selection of the specific firearm.

If a .22 caliber and .22 LR ammunition is used for euthanasia, it is best fired from a rifle. The .22 should never be used on aged bulls, boars, or rams.[3] Table 1 suggests that the energy from common .22 ammunition does not achieve the desired 300 ft-lb. However, preliminary data from ongoing research supported by the National Pork Board (June, 2020) would suggest that a .22 caliber copper-plated bullet (FMJ) at ~ 150 ft-lb. energy is safe and effective when properly placed.* As the caliber selected increases to a .22 magnum (mag) the 300 ft-lb energy can be attained with select ammunition. Increasing the rifle caliber and ammunition to a .38 special and 9mm increases the bullet energy to a more attainable 300 ft-lb.

Note: The energy values associated with the .38 special caliber are less than the 300 ft-lb recommendation. However, these energy

values are associated with velocities out of handgun length barrels (4 inches). It is recommended that all calibers in Table 1 be utilized with a rifle, and with the longer barrel of a rifle, the .38 Special velocity (and therefore energy) would be increased, and would exceed the 300 ft lb recommendation (further research required).

The ammunition considered in Table 1 is considered typical. There are many different manufacturers producing similar loadings and Table 1 is not intended to be all inclusive but rather to demonstrate the variation in available bullet energy.

Bullet selection is quite possibly the most important consideration for euthanasia of livestock by gunshot.[4] For the purposes of euthanasia of livestock, the first requirement is that the bullet possesses sufficient energy to penetrate the skull and enter the underlying brain tissue (300 ft-lb). An explanation of bullet abbreviations is included in Appendix A. Solid-point, round nosed bullets are preferred for euthanasia since they are designed for greater penetration of their targets.[1,4] Under ideal conditions this type of bullet will also undergo moderate expansion to a mushroom shape that increases its destructive characteristics. Full metal jacket bullets do not expand or fragment on impact with their targets. These bullets have a lead core with a thin metal jacket cover surrounding the bullet (copper is frequently used for this cover). Full metal jacket bullets generally achieve maximum penetration, which may have benefits for euthanasia, but also creates additional safety hazards for bystanders. Of note, preliminary data from on-going research supported by the National Pork Board (June, 2020) has determined that full metal jacket (FMJ) ammunition in both .38 special and 9 mm caliber (> 300 ft-lb.) will penetrate the contralateral portion of the skull in market-weight animals with enough remaining energy to create a worker safety issue. Therefore, these caliber/ammunition combinations are NOT recommended as a means of safe and efficacious euthanasia. This is a primary concern as FMJ ammunition is readily available at this time and would likely become the projectile of choice in this caliber if individuals are faced with a mass-depopulation scenario within their production system.* Hollow-point bullets are designed with a hollowed-out tip that causes rapid expansion and deformation of the bullet on impact. The hollow-point design allows maximum transfer of energy without risk of overpenetration. For applications where it may be desirable to control or reduce the degree of bullet penetration, hollow-point bullets are preferred. The concern with hollow-point bullets is that they may not have sufficient energy to traverse the skull when the majority of their energy is released on impact through fragmentation. Shotguns loaded with shot shells (number 4, 5, or 6) have sufficient energy to traverse the skull, but rarely exit the skull. These are important considerations when selecting a firearm for on-farm euthanasia.[1,4]

Firearm Safety[8]

1. Always keep the muzzle pointed in a safe direction
2. Firearms should be unloaded when not actually in use
3. Don't rely on your gun's "Safety"
4. Be sure of your target and what's beyond it
5. Use correct ammunition
6. If your gun fails to fire when the trigger is pulled, handle with care!
7. Always wear eye and ear protection when shooting
8. Be sure the barrel is clear of obstructions before shooting
9. Don't alter or modify your gun, and have guns serviced regularly
10. Learn the mechanical and handling characteristics of the firearm you are using

Firearm Maintenance[9,10]

Any weapon used for the humane euthanasia of animals should be correctly maintained, cleaned and oiled at the end of each day of firearm use, even if it has discharged only one shot. The inside of the barrel should be thoroughly cleaned out and be free of any condensation. The outside of the gun should be cleaned and then a thin film of oil applied all over, using an oily rag. A drop of oil should be applied regularly to all moving parts, but avoid getting oil into the breech of any weapon.

APPENDIX I:

Acronyms defined:

BTHP: Boat Tail Hollow Point
Cal: Caliber
CPHP: Copper Plated Hollow Point
CPRN: Copper Plated Round Nose
FMJ: Full Metal Jacket
HP: Hollow Point
HV: High Velocity
JHP: Jacketed Hollow Point
JSP: Jacketed Soft Point
LRN: Lead Round Nose
LR: Long Range
Mag: Magnum
PSP: Pointed Soft Point
S: Short
TMJ: Total Metal Jacket
W: Winchester
WMR: Winchester Magnum Rimfire
WSM: Winchester Short Magnum

Every six months, regardless of whether or not the weapon has been used, it should be taken out, inspected and thoroughly cleaned and lubricated. A log should be kept in the gun cabinet and, every time a weapon is used and/or cleaned, the details should be recorded and dated.[11] Similarly, a log should be kept in the ammunition cabinet and entries made for each type of ammunition, to record when it is bought and when it is used.

- After each use, thoroughly clean the weapon before locking it away
- Make sure that the weapon is unloaded before cleaning
- When not in use, firearms and ammunition should be stored separately and locked away in approved storage cabinet

*Addendum

Of note, preliminary data from on-going research supported by the National Pork Board (June, 2020) has determined that full metal jacket (FMJ) ammunition in both .38 special and 9 mm caliber (> 300 ft-lb.) will penetrate the contralateral portion of the skull in market-weight animals with enough remaining energy to create a worker safety issue. Therefore, these caliber/ammunition combinations are NOT recommended as a means of safe and efficacious euthanasia. This is a primary concern as FMJ ammunition is readily available at this time and would likely become the projectile of choice in this caliber if individuals are faced with a mass-depopulation scenario within their production system.*Additional data from this NPB research would suggest that a .22 caliber copper-plated bullet (FMJ) at ~150 ft-lb. energy is safe and effective when properly placed.

TABLE 1: TABLE OF COMMON AMMUNITION ENERGY VALUES.

Red text denotes those calibers and bullet type combinations providing the recommended 300 ft-lb energy.

Caliber	Manufacturer	Bullet Type	Bullet Mass (Grains)	Manufacturer Part Number	Manufacturer Published Muzzle Velocity (ft/s)	Manufacturer Published Muzzle Energy (ft-lb)	Manufacturer Data Source
.22 Long Rifle (.22 LR)	CCI	CPHP	36	31	1260	127	https://www.cci-ammunition.com/rimfire/cci/mini-mag/6-31.html
	CCI	CPRN	40	30	1235	135	https://www.cci-ammunition.com/rimfire/cci/target_mini-mag/6-30.html
	CCI	CPHP (Stinger)	32a	50	1640	191	https://www.cci-ammunition.com/rimfire/cci/stinger/6-50.html
.22 Winchester Magnum Rimfire (.22 WMR)	Federal	FMJ	40	737	1880	314	https://www.federalpremium.com/rimfire/champion/champion-training---rimfire/11-737.html
	CCI	TMJ	40	23	1875	312	https://www.cci-ammunition.com/rimfire/cci/maxi-mag_tmj/6-23.html
	CCI	JSP	40	22	1875	312	https://www.cci-ammunition.com/rimfire/cci/gamepoint/6-22.html
.38 Special	Winchester	FMJ	130	Q4171	800	185	https://winchester.com/Products/Ammunition/Handgun/USA/Q4171
	Hornady	JHP	125	90324	900	225	https://www.hornady.com/ammunition/handgun/38-special-125-gr-xtp-american-gunner#!/
	Speer	JHP (+P)	135	23921GD	860	222	https://www.speer.com/ammunition/handgun/gold_dot_short_barrel_personal_protection/19-23921GD.html
	Hornady	JHP	158	90362	800	199	https://www.hornady.com/ammunition/handgun/38-special-158-gr-xtp#!/
.357 Magnum	Winchester	JHP	110	Q4204	1295	410	https://winchester.com/Products/Ammunition/Handgun/USA/Q4204
	Federal	JHP	125	C357B	1440	575	https://www.federalpremium.com/handgun/federal-personal-defense/personal-defense-revolver/11-C357B.html
	Hornady	FTX	140	92755	1440	644	https://www.hornady.com/ammunition/handgun/357-mag-140-gr-ftx-leverevolution#!/
	Federal	JHP	180	C357G	1080	466	https://www.federalpremium.com/handgun/power-shok/power-shok-handgun/11-C357G.html
9mm Luger (9x19mm Parabellum) (9mm NATO)	Winchester	FMJ	115	Q4172	1190	362	https://winchester.com/Products/Ammunition/Handgun/USA/Q4172
	Federal	FMJ	124	AE9AP	1150	364	https://www.federalpremium.com/handgun/american-eagle/american-eagle-handgun/11-AE9AP.html
	Federal	FMJ	147	AE9FP	1000	326	https://www.federalpremium.com/handgun/american-eagle/american-eagle-handgun/11-AE9FP.html
	Hornady	JHP	115	90244	1155	341	https://www.hornady.com/ammunition/handgun/9mm-luger-115-gr-xtp-american-gunner#!/
	Federal	JHP	124	P9HST1S	1150	364	https://www.federalpremium.com/handgun/premium-personal-defense/personal-defense-hst/11-P9HST1S.html
.223 Remington	Federal	FMJ	55	AE223	3240	1282	https://www.federalpremium.com/rifle/american-eagle/american-eagle-rifle/11-AE223.html
	Federal	BTHP	55	P223S	3200	1250	https://www.federalpremium.com/rifle/premium-centerfire-rifle/barnes-tsx/11-P223S.html
	Federal	Soft Point	64	223L	3050	1322	https://www.federalpremium.com/rifle/power-shok/power-shok-rifle/11-223L.html
	Federal	BTHP	77	GM223M3	2720	1265	https://www.federalpremium.com/rifle/gold-medal/gold-medal-sierra-matchking/11-GM223M3.html
12 Gauge	Federal	Rifled Slug	437.5	F127 RS	1610	2521	https://www.federalpremium.com/shotshell/power-shok/power-shok-rifled-slug/11-F127+RS.html
	Remington	Rifled Slug	437.5	SP12RS	1560	2361	https://www.remington.com/ammunition/shotshell/slugs/slugger-rifled-slugs

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Cc: annette.jones@cdfa.ca.gov

Subject: Covid-19 affecting animal industries update - June 30, 2020

Date: Tuesday, June 30, 2020 2:58:03 PM

Attachments: 2020.06.26 Update 33 - Near Term Issue Meat Supply Chain.pdf

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Good afternoon everyone.

As announced on the last call, we have our Covid-19 call this week on Wednesday, July 1, 2020 at 9:00 AM ET due to the July 4th holiday. I have updated the calendar appointment to reflect this (all information is also included below).

I am changing the call format to the following:

- Roll call
- National organizations/federal partner reports
- Active state reports (State/Industry/USDA AVIC)
- Lessons learned

I'll be reaching out to Iowa, Minnesota, and North Carolina for updates as they have been the most active states on the calls after hearing from our national partners. I am asking for any other state, state executive, or AVIC who has updates to reply to this email and let me know before the call tomorrow morning and I will add you to the agenda.

When the active state reports are complete, we will begin on lessons learned discussions. Scheduled for this meeting are:

1. Industry – National Pork Board, Dr. Pyburn
2. State – Minnesota
    a. Swine executive +/- any producer or veterinarians that are invited

b. State of Minnesota

Tentatively, the reports are up to 10 minutes per participant, and the Zoom platform will allow presenters to share any pictures/videos to the group from their electronic device. The calls will not be recorded, and notes will be taken and shared.

Since this is our first time doing this, I am only going to schedule 2-3 presentations for the first few calls to get an idea how this format will work, and then modify the number as we move forward.

Also, attached is the last report from the University of Minnesota on the Near Term Issue Meat Supply Chain.

Thanks,

Mike

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Food Protection and Defense Institute
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June 26, 2020

COVID-19 Near-Term Issues Spotting in Food Supply Chain

Meat Supply Chain and Mass Hog Depopulation – UPDATE #33

Updates issued on Fridays to track recovery trends

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Action Opportunity Update

Critical path to meat supply chain disruption resolution

- Maintain full operating capacity at processing facilities in consideration of worker health
    - Implement weekend processing to enhance short-term capacity
    - Coordinate worker protective equipment to:
        - maintain worker safety with normal operation PPE (specific to each job function and may include, for example, cut-resistant clothing, bump caps, dust masks/respirators, protective eyewear, protective foot wear, etc.);
        - maintain food safety with normal operation sanitation wear (specific to each product produced and may include, for example, hair/beard nets, disposable gloves, cloth or disposable coats/gowns, shoe covers, etc.); and
        - enhance COVID-19 infection control measures through cloth-face coverings, social distancing, physical barriers, etc.
- Continue to manage overstock through processing capacity, husbandry practices, alternative slaughter options, rendering, composting, and burial as appropriate in each locality
- Support livestock producers and processors in achieving new equilibrium including financial and liability considerations

Transition point from meat supply chain to broader food system disruption

- Address increasing level of COVID-19 infections in non-meat supply chain food production and facilities
    - Enhance COVID-related worker health and surveillance processes
    - Coordinate worker protective equipment to:
        - maintain worker safety with normal operation PPE;
        - maintain food safety with normal operation sanitation wear; and
        - enhance COVID-19 infection control measures
- Begin enhanced monitoring of food production and processing status to identify transition points and potential cascading effects

Situation Update

Action by Appointed and Elected Officials

- Preparing for the Next Pandemic – Senator Lamar Alexander, June 9, 2020
- Warren, Booker Open Investigation into Meatpackers' Manipulation of COVID-19 Crisis to Raise Prices and Exploit Workers

Recommendations from authoritative bodies (cumulative)

- NEW Protecting Seafood Processing Workers from COVID-19 - CDC
- Daily Life and Coping – CDC
- Policy Brief: The Impact of COVID-19 on Food Security and Nutrition – United Nations
- COVID-19 Federal Rural Resource Guide - USDA
- Opening Facilities
    - Updated Meat and Poultry Processing Workers and Employers – CDC
    - Updated Meat and Poultry Processing Facility Assessment Toolkit – CDC
    - Agriculture Workers and Employers – CDC and US Dept of Labor
        - Agricultural Employer Checklist for Creating a COVID-19 Assessment and Control Plan
    - Guidance for workers and employers – OSHA (many documents available)
    - COVID-19 Health and Safety Guidelines for the Meatpacking Industry – Minnesota Department of Health
    - Reporting a Temporary Closure or Significantly Reduced Production by a Human Food Establishment and Requesting FDA Assistance During the COVID-19 Public Health Emergency - FDA
    - CDC updates COVID-19 transmission webpage to clarify information about types of spread - CDC
    - Food and Agriculture: Considerations for Prioritization of PPE, Cloth Face Coverings, Disinfectants and Sanitation Supplies During the COVID-19 Pandemic - FDA
    - COVID-19 Frequently Asked Questions – OSHA (Context – cloth face coverings)
    - Use of Cloth Face Coverings to Help Slow the Spread of COVID-19 – CDC
    - FAQs regarding the use of masks in the workplace – OSHA
    - Strategies to reduce COVID-19 transmission at Smithfield Foods Sioux Falls Pork Plant - CDC
    - Cleaning and Disinfection for Community Facilities - CDC
    - Exercise Starter Kit for Workshop on Reconstituting Operations – FEMA
    - North American Meat Institute Coronavirus Update – NAMI
    - Testing Strategy for Coronavirus (COVID-19) in High-Density Critical Infrastructure Workplaces after a COVID-19 Case Is Identified - CDC
- Depopulation and Disposal
    - APHIS Livestock Coordination Center – USDA

  - Recommendations for Swine Depopulation (updated) – American Association of Swine Veterinarians
    - Evaluating Emergency Euthanasia or Depopulation of Livestock and Poultry
  - Emergency Animal Mortality Management – Swine – USDA
  - USDA Carcass Management Dashboard – USDA
- COVID from Food and Food Packaging
  - How COVID-19 Spreads – CDC (updated May 20, 2020)
  - Best Practices for Retail Food Stores, Restaurants, and Food Pick-Up/Delivery Services During the COVID-19 Pandemic – FDA
  - Best Practices for Re-Opening Retail Food Establishments During the COVID-19 Pandemic – FDA
  - Safe Food Handling - FDA
  - Food Product FAQs - FDA
  - Food Safety and the Coronavirus Disease 2019 (COVID-19) – FDA
  - What to Do if You Have COVID-19 Confirmed Positive or Exposed Workers in Your Food Production, Storage, or Distribution Operations Regulated by FDA – FDA

Hog Update

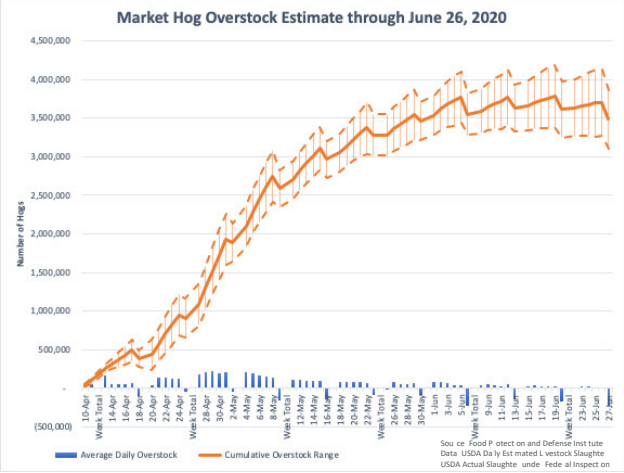
Daily Hog Slaughter and Overstock Addition

- Cumulative overstock estimate
  - 3.5MM, uncertainty 3.1-3.9 MM
  - lower than previous week

  (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)

- Daily slaughter numbers

	Daily Estimate	Same day April 3-9	Year Ago
June 22	458,000	474,731	449,241
June 23	468,000	483,431	472,966
June 24	468,000	472,974	473,210
June 25	472,000	467,945	477,480
June 26	472,000	482,993	452,857
June 27	323,000	140,189	59,792

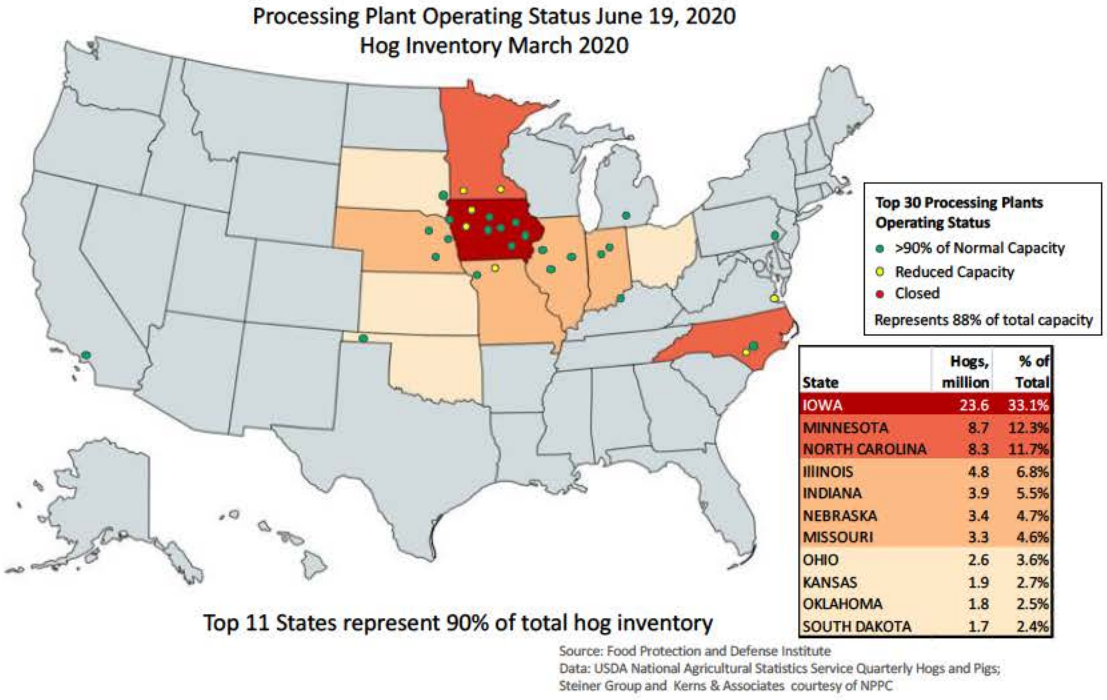


(USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)

- Cumulative hog overstock estimates do not include depopulation numbers due to the confidentiality and sensitivity of these numbers. Public reporting of depopulation includes 10,000 hogs per day in Minnesota with 300,000 total hogs as of June 11 and 600,000 hogs in Iowa in early June. Preliminary indicators suggest larger than anticipated rendering capacity and extraordinary innovation by producers in identifying and leveraging alternative supply chains. Nutritional and husbandry interventions to slow growth of hogs in addition to aggressive culling of young pigs throughout the system have also been implemented to slow demand for processing capacity. As a result, current remaining hog overstock is estimated

at about 1.5-2.0 MM and is regionalized rather than evenly distributed throughout the US. Initial estimates including current capacity gains indicate hog overstock will persist into September and October. (in consultation with NPPC)

- Daily pork processing capacity
  - Approximately 104% of pre-COVID capacity for the week ending June 27
  - Capacity reduction from maximal capacity approximately 9.8% June 22, 8.3% on June 23, and 7.2% on June 24. June 24 had 21 of 28 previously impacted plants functioning at over 90% normal capacity, 4 at 80-90%, and 3 at 69-80%. (USDA Daily Estimated Livestock Slaughter; Kern and Associates courtesy of NPPC)

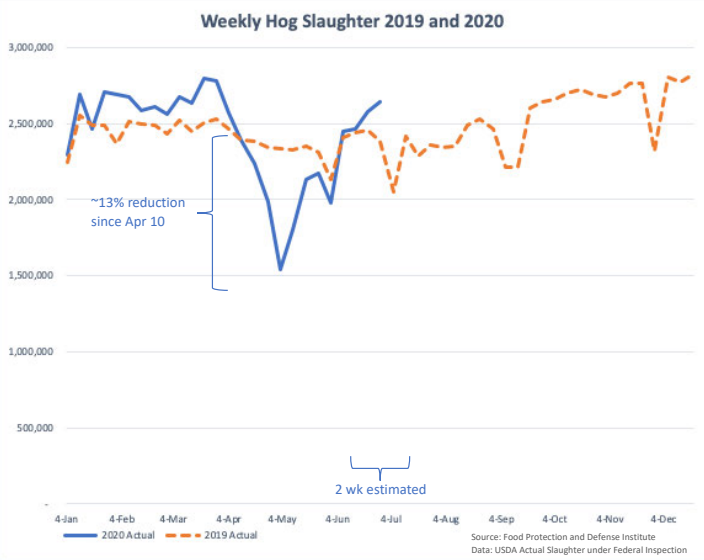


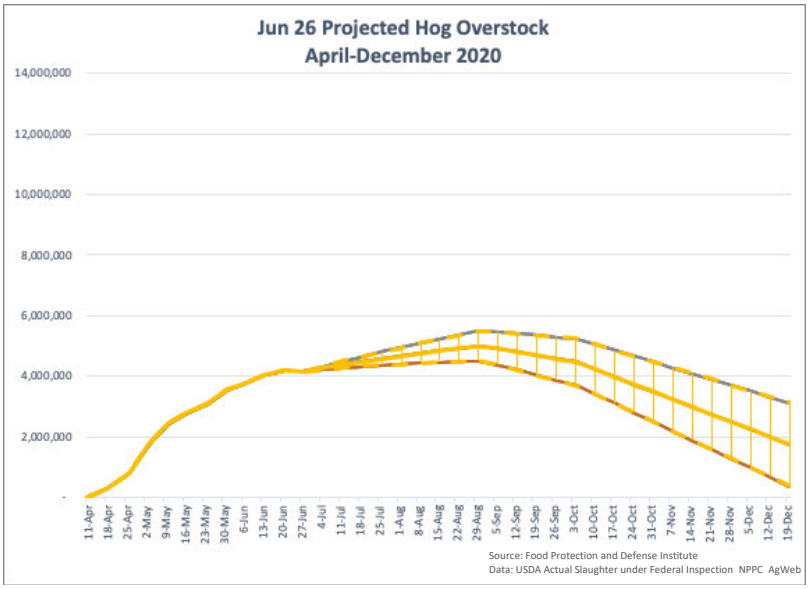
State	Hogs, million	% of Total
IOWA	23.6	33.1%
MINNESOTA	8.7	12.3%
NORTH CAROLINA	8.3	11.7%
ILLINOIS	4.8	6.8%
INDIANA	3.9	5.5%
NEBRASKA	3.4	4.7%
MISSOURI	3.3	4.6%
OHIO	2.6	3.6%
KANSAS	1.9	2.7%
OKLAHOMA	1.8	2.5%
SOUTH DAKOTA	1.7	2.4%

Source: Food Protection and Defense Institute
Data: USDA National Agricultural Statistics Service Quarterly Hogs and Pigs; Steiner Group and Kerns & Associates courtesy of NPPC

Weekly Hog Slaughter and Overstock Projections

- Weekly slaughter numbers for the week ending June 27 were up approximately 4% from pre-COVID levels with a 13% reduction to date starting from the week ending April 11. (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)
- Total hog overstock projections through December 2020 expected to peak at about 5.0MM market weight hogs peaking in early September due to continued accelerated recovery.





Assumptions

- Hog inventory at 95% plant capacity through mid-October representing market conditions for pigs already born and in growth cycle prior to COVID-19
- Year on year capacity increase of 6.4% to April 9 excluded after Aug 31, 2020
- Adjusted for normal weekly fluctuation in plant capacity (e.g. holiday reductions)
- Average plant capacity
  - 90% by week of Jun 5
  - Normal capacity through remainder of year
- Young pig and sow culling (relative to Q1)
  - No culling prior to April 10
  - 5% for pigs reaching market weight in mid-September
  - 10% for pigs reaching market weight in mid-October

(Date: June 26, 2020)

Hogs and Pigs Quarterly USDA Report

- The Hogs and Pigs Quarterly Report issued on June 25, 2020 and reports hog numbers as of June 1, 2020 (Q2). When comparing these values to the pre-COVID quarter report on March 1, 2020 (Q1), it is possible to identify where the most significant COVID-related impacts are occurring.
- Total market hog inventory across all life stages in 2020 as compared to 2019 increased in Q2 as compared to Q1 by 1MM pigs or 1.5% points. However, this is not equally distributed across age ranges:

  - Under 50 lbs – decreased 931,000 pigs; -4.2% points change
  - 50-119 lbs – decreased 16,000 pigs; ~0% change
  - 120-179 lbs – increased 1,325,000 hogs; 9.2% points change
  - 180 lbs and over – increased 628,000 hogs; 4.8% points
- Translating these weight4 ranges to time periods with current growth restriction protocols in place results in:
  - Under 50 lbs – market weight between early Oct and late Nov
  - 50-119 lbs – market weight between late Aug and early Oct
  - 120-179 lbs – market weight between mid-July and late Aug
  - 180 lbs and over – market weight through mid-July
- These results support the modeling that peak overstock will occur in late August with the opportunity to take advantage of lower hog inventory thereafter to continue to work through accumulated overstock.
- Accumulated overstock is not equally distributed across the nation and the total hog overstock numbers obscure the actual number of overweight pigs. This is due to aggressive culling of young stock in some states.
- When removing young stock, the accumulated overstock of hogs to be marketed between now and late August (hogs 120 lbs and over) is about 1.9MM which aligns with overstock models that include reductions through depopulation and alternative supply chains.
- Evaluating this in the individual states below shows:
  - Older pig overstock is concentrated in Iowa and Minnesota with North Carolina, Indiana, and Kansas having more than 100,000 older hogs in overstock
  - Younger pig aggressive culling is most pronounced in Iowa, Minnesota, and North Carolina with additional reductions of at least 50,000 younger pigs in Nebraska, Ohio, and Oklahoma.

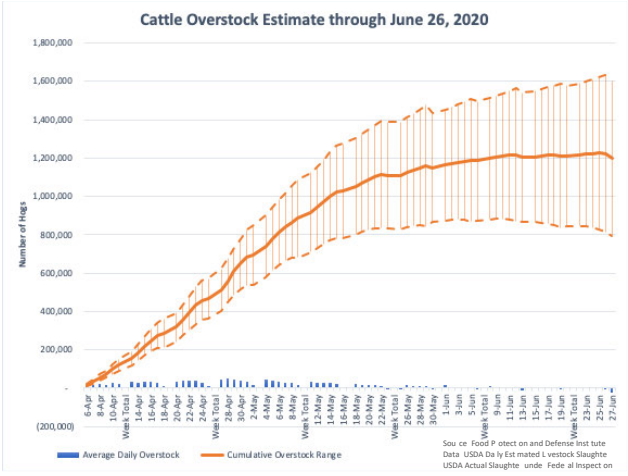
State	Weight Range	Overstock (1,000 head)	Change Mar to Jun % point change	Overstock (1,000 head)	Change Mar to Jun % point change
Iowa	Under 50 lbs	-571	-9.6%	-424	-3.2%
	50-119 lbs	130	1.7%		
	120-179 lbs	557	10.3%	810	8.6%
	180 lbs and over	238	5.9%		
Minnesota	Under 50 lbs	-74	-2.8%	-248	-4.8%
	50-119 lbs	-173	-6.7%		
	120-179 lbs	243	14.0%	538	17.9%
	180 lbs and over	294	23.0%		
North Carolina	Under 50 lbs	-291	-8.6%	-298	-5.7%
	50-119 lbs	-8	-0.5%		
	120-179 lbs	166	11.1%	274	8.8%
	180 lbs and over	110	6.9%		
Indiana	Under 50 lbs	-17	-1.6%	134	5.9%
	50-119 lbs	150	12.7%		
	120-179 lbs	103	12.2%	170	9.6%
	180 lbs and over	71	7.6%		

Cattle Update

Daily Cattle Slaughter and Overstock Addition

- Total overstock estimates – 1.2MM, uncertainty range 0.8MM to 1.6MM – no change from previous week (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)
- Daily slaughter numbers

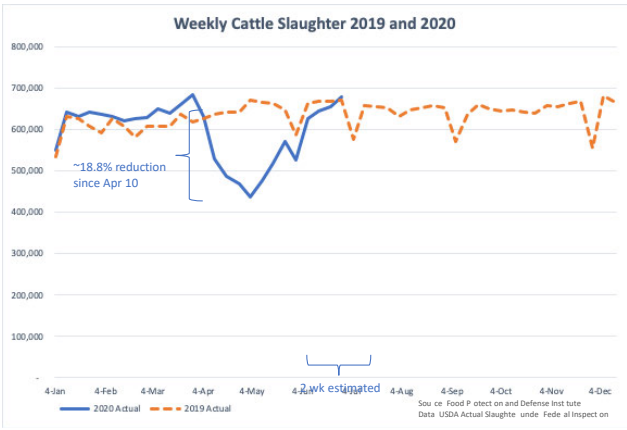
	Daily Estimate	Same day Wk Apr 4	Year Ago
June 22	119,000	118,756	121,436
June 23	120,000	119,473	122,581
June 24	120,000	117,235	123,375
June 25	120,000	115,152	122,920
June 26	119,000	107,188	120,826
June 27	82,000	53,495	59,173



(USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)

Weekly Cattle Slaughter and Overstock Projections

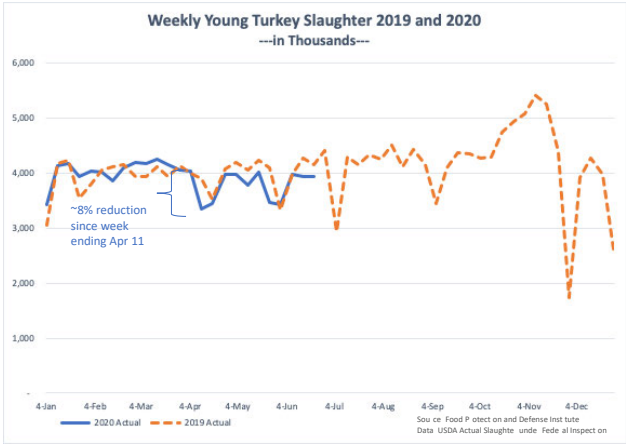
- Weekly slaughter numbers for the week ending June 27 were down approximately 3% with a 19% reduction to date starting from the week ending April 4. (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)



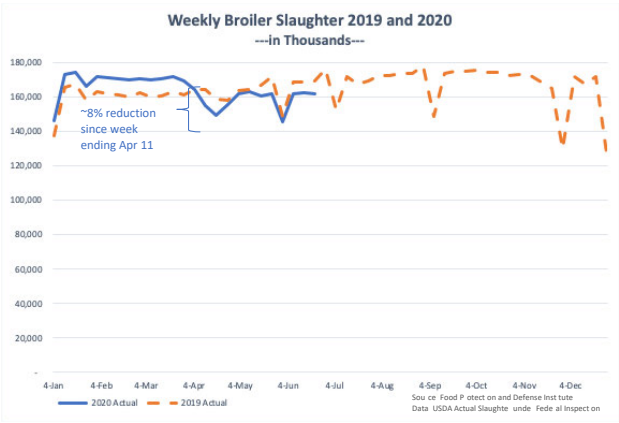
Poultry Update

Weekly Poultry Slaughter and Overstock

- Young Turkeys
  - Young turkey weekly slaughter numbers for the week ending June 20 were down approximately 7% with an 8% reduction to date starting from the week ending April 4. (USDA Actual Slaughter under Federal Inspection)
- Broilers
  - Broiler slaughter numbers for the week ending June 20 were down approximately 9% with an 8% reduction to date starting from the week ending April 4. (USDA Actual Slaughter under Federal Inspection)



Livestock Media Update



Webinars

- COVID-19 and the Food and Agricultural System - Board on Agriculture and Natural Resources, National Academy of Sciences – recording of webinar recorded on June 19, 2020

Processing facilities media coverage

(This section contains exemplary material from multiple perspectives around the issue.)

- Is Eating Meat From Meatpacking Plants With Covid-19 Coronavirus Outbreaks Safe? – Forbes, June 21, 2020
- Emails reveal chaos as meatpacking companies fought health agencies over COVID-19 outbreaks in their plants – Minnesota Reformer, June 22, 2020
- Coronavirus kills 93 U S meatpacking food-processing workers union says – Reuters, June 25, 2020
- He's considered an 'essential' worker What he feels, though, is underpaid and at risk – CNN, June 26, 2020
- Florida Governor Ripped For Trying To Pin COVID-19 Spike On Hispanic Workers – Huffington Post, June 20, 2020
- The giant meatpacking company at the heart of Germany's new coronavirus hotspot – CNN, June 23, 2020
- Mapping Covid-19 outbreaks in the food system – Food & Environment Reporting Network
    - "According to data collected by FERN, as of June 26 at 12pm ET, at least 343 meatpacking and food processing plants (253 meatpacking and 90 food processing) and 50 farms and production facilities have confirmed cases of Covid-19, and two meat plants are currently closed. At least 33,823 workers (28,303 meatpacking workers, 2,537 food processing workers, and 2,802 farmworkers) have tested positive for Covid-19 and at least 116 workers (102 meatpacking workers, 12 food processing workers, and 2 farmworkers) have died."

Economic media coverage

(This section contains exemplary media coverage from multiple perspectives around the issue.)

- Record fall for U S frozen pork supplies as COVID-19 boosted meat prices – Reuters, June 22, 2020
- Rabobank: ASF remains biggest threat to global pork market – Meat+Poultry, June 22, 2020
- China Suspends Poultry Imports From Tyson Foods Plant In Arkansas – NPR, June 21, 2020

Food shortage media coverage

(This section contains exemplary media coverage from multiple perspectives around the issue. At present, there are no indications of wide-scale food shortages although supply chain disruptions continue to create spot limited supply or out of stock situations.)

- Food Insecurity Concerns Grow Amid Coronavirus Pandemic – WLFI, June 22, 2020
- COVID-19 changes the way we view food supply – National Hog Farmer, June 26, 2020
- Minnesota Projected To Experience Hunger Crisis Not Seen Since Great Depression – WCCO, June 24, 2020
- Data: Minnesota will see increase in food insecurity – Pioneer Press, June 24, 2020
    - "Before the outbreak, 1 in 11 Minnesota residents struggled to afford food. It's projected that 1 in 8 residents will by August."
- Editorial: Tackling the "food desert" crisis – The Virginian Pilot, June 24, 2020
- After warning of meat shortages, companies exported record amounts of pork to China – USA Today, June 24, 2020

Previous updates available upon request

From: Neault, Mike J

To: michael.starkey@state.mn.us; mash@boah.in.gov; Randolph.Chick@agriculture.arkansas.gov; gmuller@sdppc.org; Nancy Foster; Bucknall, Janet L - APHIS; Allen, Anna; ahamberg@pa.gov; Brewer, Becky L - APHIS; Cole, Leslie E - APHIS; dennis.hughes@nebraska.gov; Gilmore, Sandy; kebrightbi@pa.gov; Andy.Schwartz@tahc.texas.gov; mark.ernst@illinois.gov; alicia.gorczyca-southerland@ag.ok.gov; Rod.Hall@ag.ok.gov; Jeff.Kaisand@Iowaagriculture.gov; bmarsh@boah.in.gov; Doug.Meckes@ncagr.gov; Sarah.Reinkemeyer@mda.mo.gov; Jean.Schmidt@mda.mo.gov; Justin.Smith@KS.gov; Steve.Strubberg@mda.mo.gov; beth.thompson@state.mn.us; winelandn@michigan.gov; Dustin.oedekoven@state.sd.us; Goodrich, Jarold (MDARD; Derrer, Denise; Mcooper1@boah.in.gov; Sara.Mcreynolds@ks.gov; john.howard@ncagr.gov; Tony.Forshey@Agri.ohio.gov; Hudyncia, Joseph; Werling, Kelli K; Todd.Tedrow@state.sd.us; Henrietta.Holbrooks@ncagr.gov; darlene.konkle@wisconsin.gov; Angela.Daniels@tahc.texas.gov; Mayes, Michael; Shipman, Kyle W; collinsc3@michigan.gov; brian.hoefs@state.mn.us; nhanshaw@pa.gov; Andy.Hawkins@ks.gov; Dpyburn@pork.org; snelson@aasv.org; psundberg@swinehealth.org; Michael.Martin@ncagr.gov; Reardon, Joe W; Vet Conference Line; Tim.Derickson@agri.ohio.gov; beth.ruby@ag.ok.gov; Julie.mcgwin@wisconsin.gov; Andy Curliss; Bill.pittenger@mda.mo.gov; Olson, Kelsey [KDA]; WagstromL@nppc.org; staci.slager@illinois.gov; Bryan Humphreys; Mary Kelpinski; Shere, Jack A - APHIS; Healey, Burke L - APHIS; Hayworth, Anna; pmcgonegle@iowapork.org; jennifer@ilpork.com; jtrenary@inpork.org; tims@kspork.org; david@mnpork.com; don@mopork.com; al@nepork.org; Cheryl Day; rllindsey@okpork.org; jdarr@pennag.com; bgunn@texaspork.org; kretallick@wppa.org; TLee@meatinstitute.org; Cassil, Terry; Sifford, Rosemary B - APHIS; rebecca.slater@wisconsin.gov; gary.flory@deq.virginia.gov; Meade, Barry J - APHIS; burkgren@aasv.org; Norton, Kevin - NRCS, Washington, DC; lucia.hunt@state.mn.us; Pruitt, Michael R - APHIS; Shufro, Nick; Sombke, Kyle H - APHIS; Harvell, Kevin; Smith, Greg; McKenna, Thomas S - APHIS; Barber, David A - APHIS; Hines, Angela Y - APHIS; Petersburg, Kevin L - APHIS; Tanner, Rick J - APHIS; Ray, Jean S - APHIS; Schaefbauer, Stephan L - APHIS; Gosch, Terry L - APHIS; Custer, Koren M - APHIS; Skorupski, Susan - APHIS; Kornreich, Michael A - APHIS; Tesar, Lynn A - APHIS; Kunde, Paul W - APHIS; Wilmot, Delwin D - APHIS; Halstead, Steven L - APHIS; Dodds, Lewis E - APHIS; Mark Hutchinson; Peer, Robert (DEQ); Miller, Lori P - APHIS; Peterson, Steve - FSA, Washington, DC; Broadaway, Jeffrey B; james.kittrell@ncagr.gov; christina.law@ncagr.gov; Carol.Woodlief@ncagr.gov; nfoster@nara.org; dmeeker@nara.org; peastma@clemson.edu; john.king@state.mn.us; Zack, Jonathan T - APHIS; carolynn.bissett@vdacs.virginia.gov; Porter, Jeffrey - NRCS, Greensboro, NC

Cc: annette.jones@cdfa.ca.gov

Subject: Covid-19 affecting animal industries Wednesday, June 6, 2020 Update

Date: Wednesday, June 10, 2020 8:31:20 AM

Attachments: 2020.06.09 Update 30 - Near Term Issue Meat Supply Chain.pdf

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Good morning everyone.

Attachment and Update

1. From Jennifer van de Ligt of the Food Protection and Defense Institute – Near-Term Issues
    a. Meat Supply Chain Update #30. The next issue will be released on Friday, June 12, 2020.

Action Items

- USDA requests that all equipment requests come through the AVIC using the ICS 213RR for the National Veterinary Stockpile.
- USDA is asking states to share possible euthanasia and disposal plans with them, along with expected needs. Although funding is not available at this time, if they have a list of needs they can present an argument for funding to support operations or share funding for operations if it does become available.
- If your state public health offices have algorithms for testing at plants and in the surrounding communities and are willing to share, please forward to me and I will add as an attachment to the evening updates.
- NPB requests that if you are performing field trails with CO_2 euthanasia please email to Dave Pyburn (dpyburn@pork.org) the protocol followed, the

design of the equipment utilized, and the outcome of the trial. Dave will pull this data together and make available to the industry.

Next Conference Call

Friday, June 12, 2020 at 9:00 AM ET.

Conference Line: (b) (5)(DPP)

Access code: (b) (5)(DPP)

Draft Agenda –

1. Federal Partners Updates
2. Industry Updates
3. State Updates (will begin with Iowa and Minnesota)

Thanks,

Mike

Michael Neault, DVM, Director of Livestock Programs, Veterinary Division
N.C. Department of Agriculture & Consumer Services
Physical Address: 2 W. Edenton Street, Raleigh, NC 27601
Mailing Address: 1030 Mail Service Center, Raleigh, NC 27699-1030
Phone: 919-707-3250
Fax: 919-733-2277

Food Protection and Defense Institute
A Homeland Security Center of Excellence

June 9, 2020

COVID-19 Near-Term Issues Spotting in Food Supply Chain

Meat Supply Chain and Mass Hog Depopulation – UPDATE #30

Updates issued on Fridays to track recovery trends

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Action Opportunity Update

Critical path to meat supply chain disruption resolution

- Achieve full operating capacity at processing facilities in consideration of worker
    - Implement weekend processing to enhance short-term capacity
    - Coordinate worker protective equipment to:
        - maintain worker safety with normal operation PPE (specific to each job function and may include, for example, cut-resistant clothing, bump caps, dust masks/respirators, protective eyewear, protective foot wear, etc.);
        - maintain food safety with normal operation sanitation wear (specific to each product produced and may include, for example, hair/beard nets, disposable gloves, cloth or disposable coats/gowns, shoe covers, etc.); and
        - enhance COVID-19 infection control measures through cloth-face coverings, social distancing, physical barriers, etc.
- Manage depopulation and disposal of hog overstock in multiple states including rendering, composting, and burial as appropriate in each locality
- Support livestock producers and processors in achieving new equilibrium including financial and liability considerations

Transition point from meat supply chain to broader food system disruption

- Address increasing level of COVID-19 infections in non-meat supply chain food production and facilities
    - Enhance COVID-related worker health and surveillance processes
    - Coordinate worker protective equipment to:
        - maintain worker safety with normal operation PPE;
        - maintain food safety with normal operation sanitation wear; and
        - enhance COVID-19 infection control measures
- Begin enhanced monitoring of food production and processing status to identify transition points and potential cascading effects

Situation Update

Action by Appointed and Elected Officials (updated Tuesday and Friday)

- America's Meatpacking Facilities Operating More Than 95% of Capacity Compared to 2019 – USDA
  (Context: This release states that hog processing is at 95% capacity as compared to last year. This is a correct statement for the week ending June 6. However, the following factors should also be considered:
  - Prior to COVID disruption, hog processing was over 106% as compared to last year with hog production in equilibrium with this level of processing
  - The quoted 95% level equals about 90% of total hog processing capacity whereas pre-COVID processing was at 95% of total capacity
  - This level of processing achieved last week was due in part to a tremendous Saturday effort
  - At current processing levels, about 100,000 hogs are added to overstock each week with no diminution of past overstock levels except those that have been depopulated. Past overstock is estimated to be in excess of 3 million hogs.
  - Processing facility recovery is occurring more quickly than initial predictions with 12 of 28 previously impacted plants currently operating above 90% capacity, 11 plants between 80-90%, and the remaining 5 plants above 50% capacity.)

Recommendations from authoritative bodies (cumulative)

- NEW Policy Brief: The Impact of COVID-19 on Food Security and Nutrition – United Nations
- Agriculture Workers and Employers – CDC and US Dept of Labor
- COVID-19 Federal Rural Resource Guide - USDA
- Opening Facilities
  - Reporting a Temporary Closure or Significantly Reduced Production by a Human Food Establishment and Requesting FDA Assistance During the COVID-19 Public Health Emergency - FDA
  - CDC updates COVID-19 transmission webpage to clarify information about types of spread - CDC
  - Food and Agriculture: Considerations for Prioritization of PPE Cloth Face Coverings Disinfectants, and Sanitation Supplies During the COVID-19 Pandemic - FDA
  - Meat and Poultry Processing Workers and Employers – CDC
  - Strategies to reduce COVID-19 transmission at Smithfield Foods Sioux Falls Pork Plant - CDC
  - COVID-19 Health and Safety Guidelines for the Meatpacking Industry – Minnesota Department of Health
  - Cleaning and Disinfection for Community Facilities - CDC
  - Exercise Starter Kit for Workshop on Reconstituting Operations – FEMA
  - North American Meat Institute Coronavirus Update - NAMI
- Depopulation and Disposal
  - APHIS Livestock Coordination Center – USDA

  - Recommendations for Swine Depopulation (updated) – American Association of Swine Veterinarians
    - Evaluating Emergency Euthanasia or Depopulation of Livestock and Poultry
  - Emergency Animal Mortality Management – Swine – USDA
  - USDA Carcass Management Dashboard – USDA
- COVID from Food and Food Packaging
  - How COVID-19 Spreads – CDC (updated May 20, 2020)
  - Best Practices for Retail Food Stores, Restaurants, and Food Pick-Up/Delivery Services During the COVID-19 Pandemic – FDA
  - Best Practices for Re-Opening Retail Food Establishments During the COVID-19 Pandemic – FDA
  - Safe Food Handling - FDA
  - Food Product FAQs - FDA
  - Food Safety and the Coronavirus Disease 2019 (COVID-19) – FDA
  - What to Do if You Have COVID-19 Confirmed Positive or Exposed Workers in Your Food Production, Storage, or Distribution Operations Regulated by FDA – FDA

Activist Situation Update

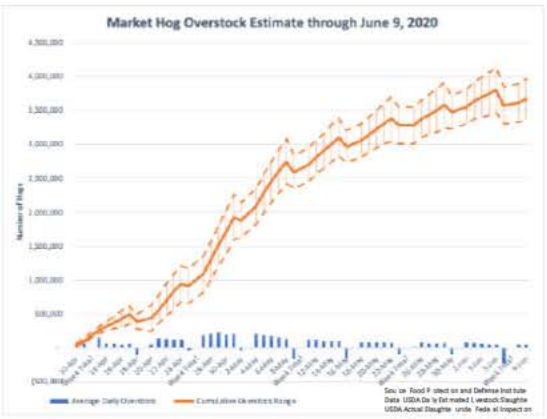
An activist situation report was prepared by FPDI and provided to the Food and Agriculture Sector Coordinating Council on June 5, 2020. It was also included in the Update #29, June 5, 2020, of this series.

Although activist situations are primarily targeted at individual facilities, the current climate indicates there is a larger national security threat as well due to the active destabilization efforts directed at all levels of animal agriculture, the incorporation of violence by animal activist groups in unrelated social unrest, and the enhanced risk of animal disease transmission that results from breaches of facility biosecurity by activists.

Hog Update

Daily Hog Slaughter and Overstock Addition (updated Tuesday and Friday)[1]

- Total overstock estimate – 3.6MM, uncertainty range 3.4MM to 4.0MM.
  (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)



- Daily slaughter numbers

	Daily Estimate	Same day April 3-9	Year Ago
June 8	445,000	474,731	465,191
June 9	450,000	483,431	478,435

(USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)

- Daily pork processing capacity
  - Approximately 88% for the first two days of the week ending June 13
  - Capacity reduction approximately 12% June 8. June 8 had 12 of 28 previously impacted plants functioning at over 90% normal capacity. (USDA Daily Estimated Livestock Slaughter; Kern and Associates courtesy of NPPC)

Processing Plant Operating Status June 8, 2020
Hog Inventory March 2020

Top 30 Processing Plants Operating Status
- >90% of Normal Capacity
- Reduced Capacity
- Closed

Represents 88% of total capacity

State	Hogs, million	% of Total
IOWA	23.6	33.1%
MINNESOTA	8.7	12.3%
NORTH CAROLINA	8.3	11.7%
ILLINOIS	4.8	6.8%
INDIANA	3.9	5.5%
NEBRASKA	3.4	4.7%
MISSOURI	3.3	4.6%
OHIO	2.6	3.6%
KANSAS	1.9	2.7%
OKLAHOMA	1.8	2.5%
SOUTH DAKOTA	1.7	2.4%

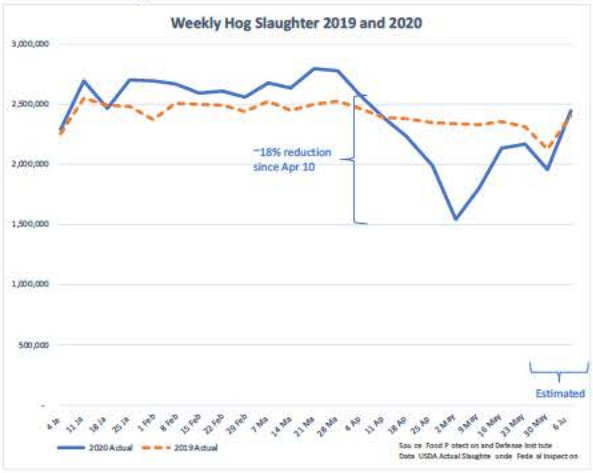
Top 11 States represent 90% of total hog inventory

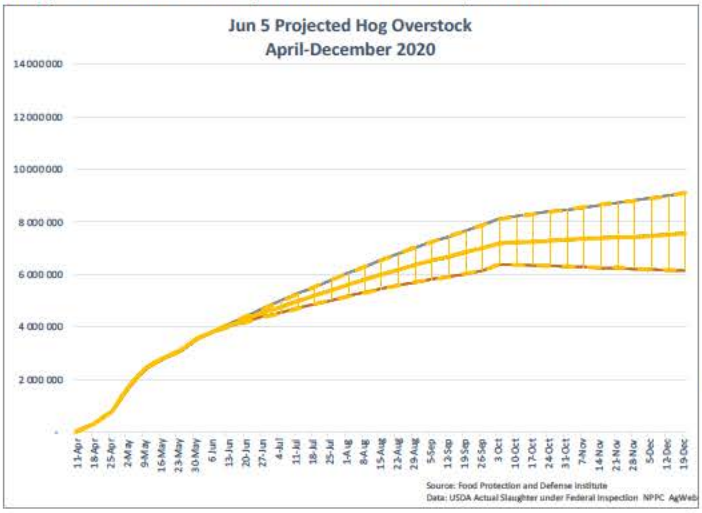
Source: Food Protection and Defense Institute
Data: USDA National Agricultural Statistics Service Quarterly Hogs and Pigs; Steiner Group and Kerns & Associates courtesy of NPPC

1 Total hog overstock estimates do not include depopulation numbers due to the confidentiality and sensitivity of these numbers. Public reporting includes 10,000 per day in Minnesota and 600,000 in Iowa in the near future.

Weekly Hog Slaughter and Overstock Projections (updated Friday)

- Weekly slaughter numbers for week ending June 5 down approximately 4.6% (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)
- Total slaughter numbers are down 17% to date starting from the week ending April 11. (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)
- Total hog overstock projections through December 2020 expected to peak at about 7.5MM market weight hogs due to unanticipated recovery during the week of June 5. June 5 and May 31 models are provided for comparison.

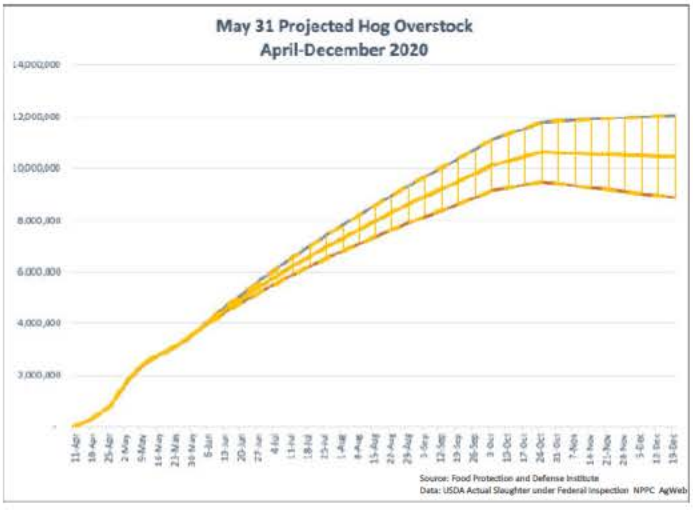




Assumptions

- Hog inventory at 95% plant capacity through mid-October representing market conditions for pigs already born and in growth cycle prior to COVID-19
- Year on year capacity increase of 6.4% to April 9
- Adjusted for normal weekly fluctuation in plant capacity (e.g. holiday reductions)
- Average plant capacity
  - 90% by week of Jun 5 through remainder of year
- Young pig and sow culling (relative to Q1)
  - No culling prior to April 10
  - 5% for pigs reaching market weight in mid-September
  - 10% for pigs reaching market weight in mid-October
- The 10% reduction in herd size as compared to Q1 2020 and 90% normal plant capacity creates a pseudo-equilibrium

(Date: June 5, 2020)



Assumptions

- Hog inventory at 95% plant capacity through mid-October representing market conditions for pigs already born and in growth cycle prior to COVID-19
- Year on year capacity increase of 6.4% to April 9
- Adjusted for normal weekly fluctuation in plant capacity (e.g. holiday reductions)
- Average plant capacity
  - 85% by week of May 17
  - 90% by week of Aug 1 – level expected for COVID-19 worker health and safety measures
- Young pig and sow culling (relative to Q1)
  - No culling prior to April 10
  - 5% for pigs reaching market weight in mid-September
  - 10% for pigs reaching market weight in mid-October
  - 17% for pigs reaching market weight in November
- The 17% reduction in herd size as compared to Q1 2020 and 90% normal plant capacity creates a pseudo-equilibrium

(Date: May 29, 2020)

Hog media coverage (updated Tuesday and Friday)

(This section contains exemplary media coverage from multiple perspectives around the issue.)

- COVID-19 exacts a high cost from Minnesota hog farmers – CBS News, June 9, 2020

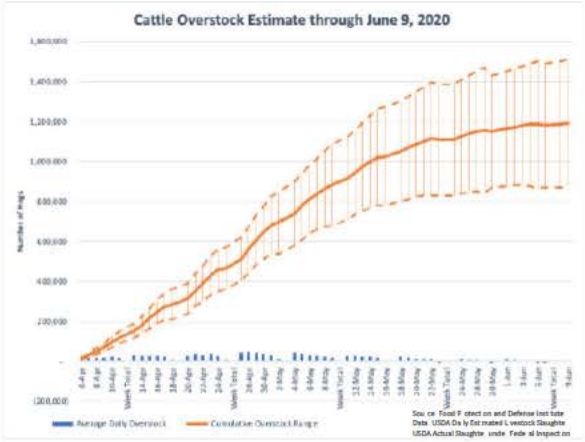
Cattle Update

Daily Cattle Slaughter and Overstock Addition (updated Tuesday and Friday)

- Total overstock estimates – 1.2MM, uncertainty range 0.9MM to 1.5MM. (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)
- Daily slaughter numbers

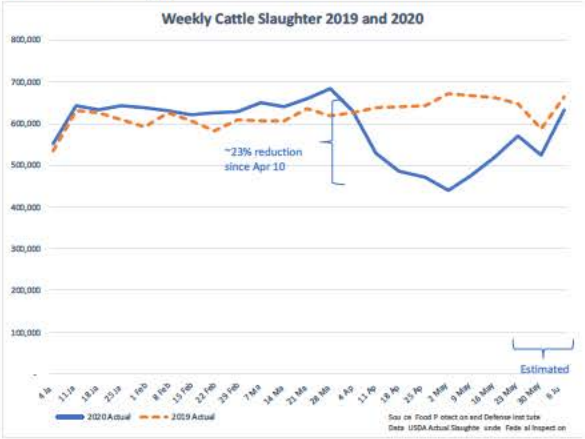
	Daily Estimate	Same day April 3-9	Year Ago
June 8	117,000	117,773	121,892
June 9	117,000	122,055	118,440

(USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)



Weekly Cattle Slaughter and Overstock Projections (updated Friday)

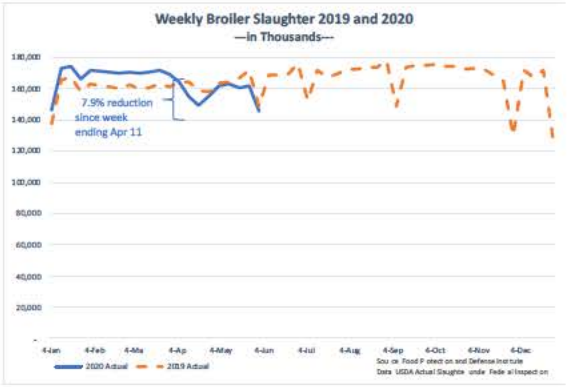
- Weekly slaughter numbers for the week ending June 5 were down approximately 9% with a 23% reduction to date starting from the week ending April 4. (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)



Poultry Update

Weekly Poultry Slaughter and Overstock (updated Friday)

- Young Turkeys
  - Young turkey weekly slaughter numbers for the week ending May 30 were down approximately 0% with an 8.6% reduction to date starting from the week ending April 4. (USDA Actual Slaughter under Federal Inspection)
- Broilers
  - Broiler slaughter numbers for the week ending May 30 were down approximately 6.9% with an 7.9% reduction to date starting from the week ending April 4. (USDA Actual Slaughter under Federal Inspection)



Livestock Media Update (updated Tuesday and Friday)

Webinars

- -

Processing facilities media coverage

(This section contains exemplary material from multiple perspectives around the issue.)

- Outbreaks at 60 U.S. Food Plants Raise Specter of More Shortages – Bloomberg, June 9, 2020 (Image included)
  - "About 35% of food processing and dairy facilities have had at least one confirmed Covid-19 case, according to an International Brotherhood of Teamsters survey in May of union locals representing 79 plants. Roughly 80% of employers weren't testing for the virus and more than a quarter of the workplaces didn't allow employees to physically distance themselves 6 feet apart, the survey showed."
- Take a Look at How Covid-19 Is Changing Meatpacking Plants – New York Times, June 9, 2020 (Context: Easy to read infographic style)

- Meatpacking plant linked to third of all Utah COVID-19 cases still open, officials say – The News Tribune, June 9, 2020
- Mapping Covid-19 outbreaks in the food system – Food & Environment Reporting Network
    - "According to data collected by FERN, as of June 9 at 12pm ET, at least 283 meatpacking and food processing plants and 39 farms and production facilities have confirmed cases of Covid-19, and no meat or food processing plants are currently closed. At least 28,713 workers (24,715 meatpacking workers, 1,770 food processing workers, and 2,228 farmworkers) have tested positive for Covid-19 and at least 101 workers (92 meatpacking workers, 7 food processing workers, and 2 farmworkers) have died."

Economic media coverage

(This section contains exemplary media coverage from multiple perspectives around the issue.)

- U.S. food makers stock up on ingredients in case of another coronavirus surge – Los Angeles Times, June 9, 2020

Producer media coverage

(This section contains exemplary media coverage from multiple perspectives around the issue.)

- Animal ag speaks out on COVID-19 blame game – Feedstuffs, June 9, 2020
    - Open Letter on the Value of Animal Agriculture

Food shortage media coverage

(This section contains exemplary media coverage from multiple perspectives around the issue. At present, there are no indications of wide-scale food shortages although supply chain disruptions continue to create spot limited supply or out of stock situations.)

- Fastest-Rising Food Prices in Decades Drive Consumers to Hunt for Value – Wall Street Journal, June 9, 2020
- World faces worst food crisis for at least 50 years, UN warns – The Guardian, June 9, 2020
- What Will It Take to Avoid a Global Food Shortage – Bloomberg Green, June 9, 2020

Activist media coverage

(This section contains exemplary media coverage around the issue and should not be interpreted as the views of the author or the Institute.)

- -

Previous updates available upon request

[Watch] Dogs Can Tell If You Have Coronavirus by Smelling Your Armpit: Here's the Breed That Does It Best – The Science Times, June 8, 2020 (Context: 83-100% accuracy)

From: Neault, Mike J

To: kretallick@wppa.org; dmeeker@nara.org; collinsc3@michigan.gov; Doug.Meckes@ncagr.gov; mash@boah.in.gov; Randolph.Chick@agriculture.arkansas.gov; gmuller@sdppc.org; Nancy Foster; Bucknall, Janet L - APHIS; Allen, Anna; ahamberg@pa.gov; Brewer, Becky L - APHIS; Cole, Leslie E - APHIS; dennis.hughes@nebraska.gov; Gilmore, Sandy; kebrightbi@pa.gov; Andy.Schwartz@tahc.texas.gov; mark.ernst@illinois.gov; alicia.gorczyca-southerland@ag.ok.gov; Rod.Hall@ag.ok.gov; Jeff.Kaisand@Iowaagriculture.gov; bmarsh@boah.in.gov; Sarah.Reinkemeyer@mda.mo.gov; Jean.Schmidt@mda.mo.gov; Justin.Smith@KS.gov; Steve.Strubberg@mda.mo.gov; beth.thompson@state.mn.us; winelandn@michigan.gov; Dustin.oedekoven@state.sd.us; Goodrich, Jarold (MDARD; Derrer, Denise; Mcooper1@boah.in.gov; Sara.Mcreynolds@ks.gov; john.howard@ncagr.gov; Tony.Forshey@Agri.ohio.gov; Hudyncia, Joseph; Werling, Kelli K; Todd.Tedrow@state.sd.us; Henrietta.Holbrooks@ncagr.gov; darlene.konkle@wisconsin.gov; Angela.Daniels@tahc.texas.gov; Mayes, Michael; Shipman, Kyle W; brian.hoefs@state.mn.us; nhanshaw@pa.gov; Andy.Hawkins@ks.gov; Dpyburn@pork.org; snelson@aasv.org; psundberg@swinehealth.org; Michael.Martin@ncagr.gov; Reardon, Joe W; Vet Conference Line; Tim.Derickson@agri.ohio.gov; beth.ruby@ag.ok.gov; Julie.mcgwin@wisconsin.gov; Andy Curliss; Bill.pittenger@mda.mo.gov; Olson, Kelsey [KDA]; WagstromL@nppc.org; staci.slager@illinois.gov; Bryan Humphreys; Mary Kelpinski; Shere, Jack A - APHIS; Healey, Burke L - APHIS; Hayworth, Anna; pmcgonegle@iowapork.org; jennifer@ilpork.com; jtrenary@inpork.org; tims@kspork.org; david@mnpork.com; don@mopork.com; al@nepork.org; Cheryl Day; rllindsey@okpork.org; jdarr@pennag.com; bgunn@texaspork.org; TLee@meatinstitute.org; Cassil, Terry; Sifford, Rosemary B - APHIS; rebecca.slater@wisconsin.gov; gary.flory@deq.virginia.gov; Meade, Barry J - APHIS; burkgren@aasv.org; Norton, Kevin - NRCS, Washington, DC; lucia.hunt@state.mn.us; Pruitt, Michael R - APHIS; Sombke, Kyle H - APHIS; Harvell, Kevin; Smith, Greg; McKenna, Thomas S - APHIS; Barber, David A - APHIS; Hines, Angela Y - APHIS; Petersburg, Kevin L - APHIS; Tanner, Rick J - APHIS; Ray, Jean S - APHIS; Schaefbauer, Stephan L - APHIS; Gosch, Terry L - APHIS; Custer, Koren M - APHIS; Skorupski, Susan - APHIS; Kornreich, Michael A - APHIS; Tesar, Lynn A - APHIS; Kunde, Paul W - APHIS; Wilmot, Delwin D - APHIS; Halstead, Steven L - APHIS; Dodds, Lewis E - APHIS; Mark Hutchinson; Peer, Robert (DEQ); Miller, Lori P - APHIS; Peterson, Steve - FSA, Washington, DC; Broadaway, Jeffrey B; james.kittrell@ncagr.gov; christina.law@ncagr.gov; Carol.Woodlief@ncagr.gov; nfoster@nara.org; peastma@clemson.edu; john.king@state.mn.us; Zack, Jonathan T - APHIS; carolynn.bissett@vdacs.virginia.gov; Porter, Jeffrey - NRCS, Greensboro, NC; Jamee Eggers; Lackman, Linda L - APHIS

Cc: annette.jones@cdfa.ca.gov

Subject: Covid-19 Affecting Animal Industry Working Group Updates Friday, July 10, 2020

Date: Friday, July 10, 2020 3:44:28 PM

Attachments: 2020.07.10 Update 35 - Near Term Issue Meat Supply Chain.pdf
20200701 - Text for Introduction - Relief for Producers Act of 2020 - Clean Copy.docx
LTO.20-07-07.Pork Processing Support final.docx
External FW MMWR Early Release - Vol. 69 July 7 2020.msg
CovidcaLLHOTWASH_JW.DOCX

Good afternoon everyone.

Attachments and Updates

1. Thanks to Drs. Cole and Jimmy Wortham for volunteering to put together the Covid Hotwash document. Please take a moment to complete this document and return via email to me and we will compile these and add them to the lessons learned.
2. From Jennifer van de Ligt of the Food Protection and Defense Institute – Near-Term Issues
    a. Meat Supply Chain Update #35
3. From Dr. Wagstrom, NPPC – Text for Introduction – Relief for Producers Act of 2020
4. From Dave Preisler, Minnesota Pork – Smith Pork Processing Support Letter
5. From Dr. Pyburn, NPB –

    The National Pork Board is requesting proposals for the development of a low-cost mobile CO2 vaporization / sublimator system protype that can be used to meet the AVMA guidelines for depopulation of

swine using carbon dioxide. The funding limit for submitted proposals is $95,000 and proposals must address the following criteria to be considered for funding:

- Portability
- Ease of setup and use
- Level of training needed to operate
- On site resources needed to operate
- Maximum chamber volume that the prototype can fill at the required 20% CO2 displacement rate over 5 minutes.
- Ease of external cleaning and disinfection using commonly available disinfectants in the pork industry
- Strategy for testing proof of concept
- Cost to produce (must be under $75,000 per unit)

Please go to our website for more details.
https://www.pork.org/research/ [pork.org]

NOTES:

Proposal selection will occur in late August 2020.
Notification of grant awards will be done by September 2020.
Project funding may begin as early as mid-September and October 1, 2020
If you have questions specific to the content of the proposal, please contact Dr. Patrick Webb at pwebb@pork.org or
If you have questions specific to the site and submission process, please contact Bev Everitt at beveritt@pork.org or 515 223 2750. If you encounter problems with the site, note specific information about the browser type and version you are using, what you were doing when the problem occurred and the exact text of any error messages you encounter.

6. From Dr. Cole, USDA – MMWR on Covid-19 in meat processing facilities

Action Items

- USDA requests that all equipment requests come through the AVIC using the ICS 213RR for the National Veterinary Stockpile.
- If your state public health offices have algorithms for testing at plants and in the surrounding communities and are willing to share, please forward to me and I will add as an attachment to the evening updates.
- NPB requests that if you are performing field trails with CO_2 euthanasia please email to Dave Pyburn (dpyburn@pork.org) the protocol followed, the design of the equipment utilized, and the outcome of the trial. Dave will pull

this data together and make available to the industry.

Next Conference Call

Time: Jul 17, 2020 09:00 AM Eastern Time (US and Canada)

Thanks and have a great weekend.

Mike

Michael Neault, DVM, Director of Livestock Programs, Veterinary Division
N.C. Department of Agriculture & Consumer Services
Physical Address: 2 W. Edenton Street, Raleigh, NC 27601
Mailing Address: 1030 Mail Service Center, Raleigh, NC 27699-1030
Phone: 919-707-3250
Fax: 919-733-2277

Covid-19 Swine Supply Chain Disruption Industry/Regulatory collaboration calls project Hot Wash
(please edit title or name to improve)
We think that this series of calls and the collaboration and unity of effort they engendered was a very valuable and unusual event. A Hot Wash is being conducted to gather best practices, identify gaps and capture the good ideas, relationships and collaborations that were developed.

1. ***What was the main benefit you received from participating in the daily calls?***

2. ***What improvements would you make to the daily calls and why?***

3. ***What is the major challenge that you saw most States struggle with and how would you suggest overcoming that in future responses?***

4. ***What strategies or tactics did you see as successes that would help you during an ASF response?***

5. ***What strategies or tactics didn't work that will need to be fixed before an ASF response?***

6. ***Any final comments or thoughts.***

From: Cole, Leslie E - APHIS
To: mike.neault@ncagr.gov
Subject: [External] FW: MMWR Early Release - Vol. 69, July 7, 2020
Date: Tuesday, July 7, 2020 2:33:46 PM

FYI MMWR on COVID-19 in meat processing facilities

From: Morbidity and Mortality Weekly Report (MMWR) (CDC) [mailto:no-reply@emailupdates cdc gov]
Sent: Tuesday, July 7, 2020 12:17 PM
To: Cole, Leslie E - APHIS <leslie e cole@usda gov>
Subject: MMWR Early Release - Vol 69, July 7, 2020

Report on COVID-19 Update Among U.S. Workers in Meat and Poultry Processing Facilities.

MMWR banner

July 7, 2020

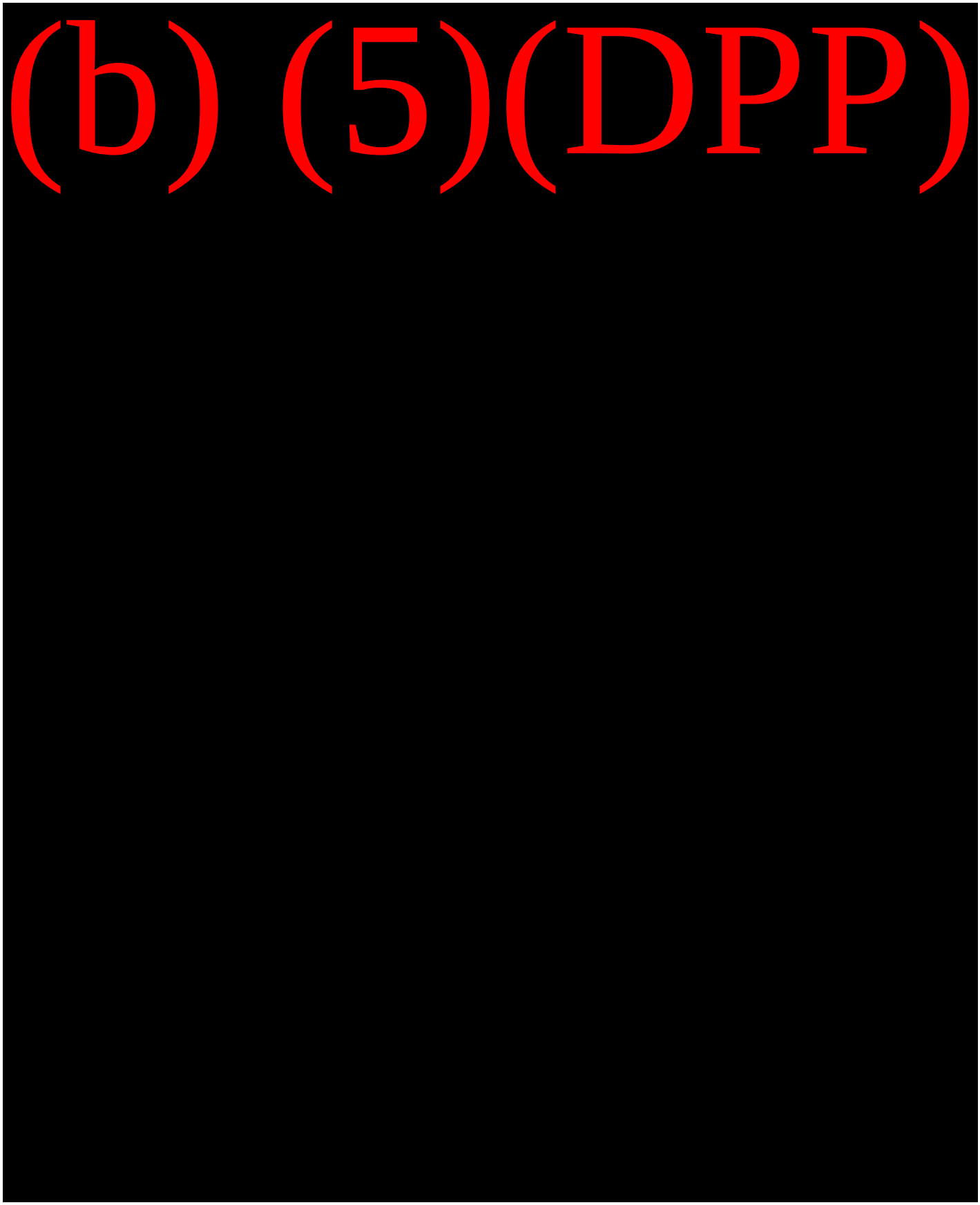
[gcc02 safelinks protection outlook com] [gcc02 safelinks protection outlook com]

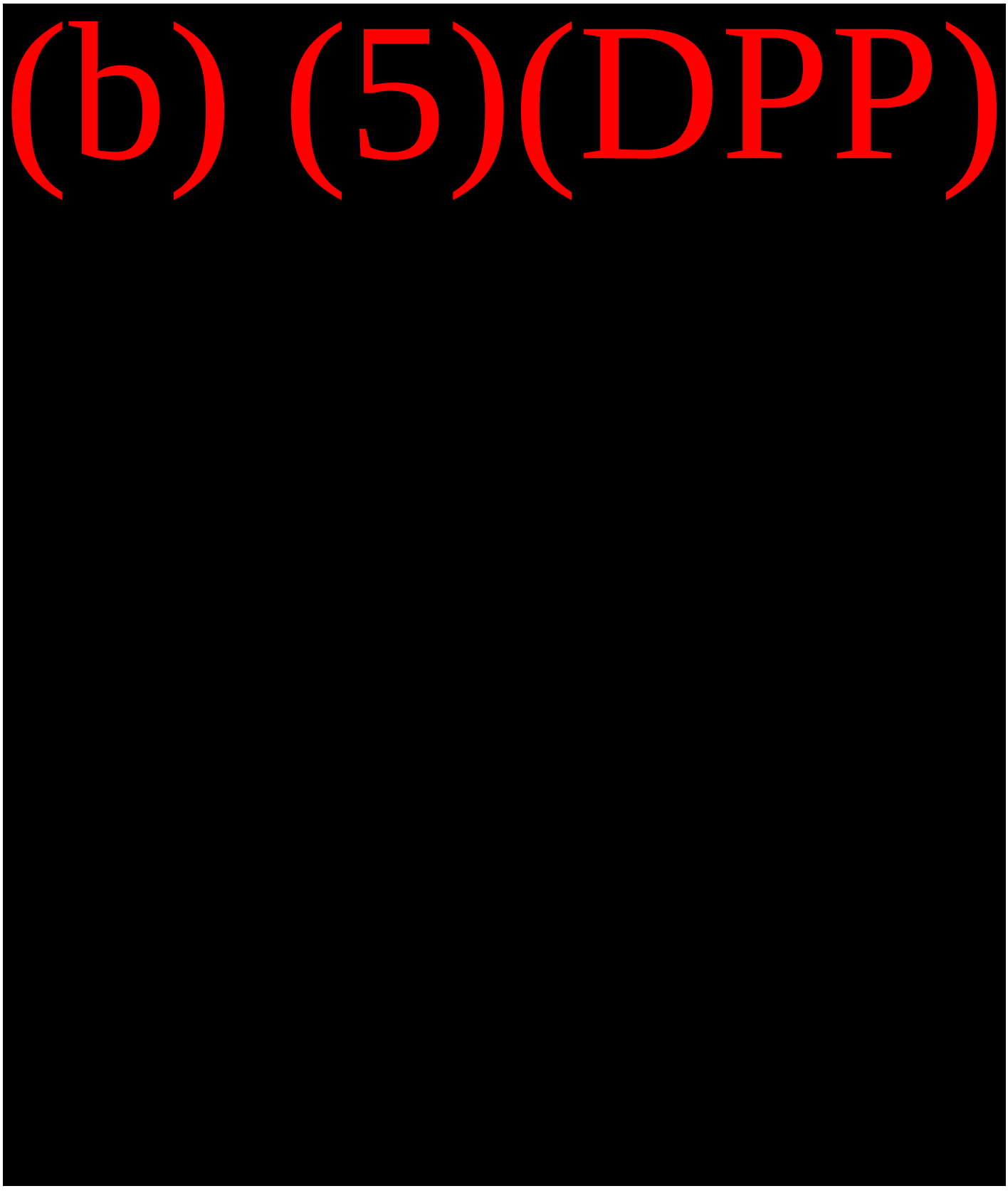
EARLY RELEASE

[gcc02 safelinks protection outlook com]
Update: COVID-19 Among Workers in Meat and Poultry Processing Facilities — United States, April-May 2020
[gcc02 safelinks protection outlook com]
PDF of this report (link [gcc02.safelinks.protection.outlook.com]).

[gcc02.safelinks.protection.outlook.com] [gcc02.safelinks.protection.outlook.com] [gcc02.safelinks.protection.outlook.com] [gcc02.safelinks.protection.outlook.com]

Centers for Disease Control and Prevention
1600 Clifton Rd Atlanta GA 30329 1-800-CDC-INFO (800-232-4636) TTY: 888-232-6348
Questions or Problems [gcc02.safelinks.protection.outlook.com] | Unsubscribe [gcc02.safelinks.protection.outlook.com]


(b) (5)(DPP)


(b) (5)(DPP)

Title: To require the Secretary of Agriculture to provide relief from hardship due to the COVID–19 pandemic to agricultural producers, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Responding to Epidemic Losses and Investing in the Economic Future for Producers Act of 2020" or the "RELIEF for Producers Act of 2020".

SEC. 2. EMERGENCY ASSISTANCE FOR LIVESTOCK AND POULTRY LOSSES.

(a) Definitions.—In this section:

(1) COVERED LIVESTOCK OR POULTRY.—The term "covered livestock or poultry" means livestock or poultry that is—

(A) used only for breeding purposes;

(B) fattening; or

(C) market-ready.

(2) COVERED PRODUCER.—The term "covered producer" means a person or legal entity that assumes the production and market risks associated with the agricultural production of livestock and poultry (as those terms are defined in section 2(a) of the Packers and Stockyards Act, 1921 (7 U.S.C. 182)).

(3) COVID–19 PUBLIC HEALTH EMERGENCY.—The term "COVID–19 public health emergency" means the public health emergency declared by the Secretary of Health and Human Services under section 319 of the Public Health Service Act (42 U.S.C. 247d) on January 31, 2020, with respect to COVID–19.

(4) INTENTIONAL DEPOPULATION.—The term "intentional depopulation" means—

(A) the destruction of covered livestock or poultry; and

(B) the transfer of covered livestock or poultry without compensation to a noncommercial interest.

(5) LIVE POULTRY DEALER.—The term "live poultry dealer" has the meaning given the term in section 2(a) of the Packers and Stockyards Act, 1921 (7 U.S.C. 182(a)).

(6) PACKER.—The term "packer" has the meaning given the term in section 201 of the Packers and Stockyards Act, 1921 (7 U.S.C. 191).

(7) SECRETARY.—The term "Secretary" means the Secretary of Agriculture.

(b) Payments for Covered Producers.—The Secretary shall make payments to covered producers to offset the loss of income related to the intentional depopulation of covered livestock and poultry due to insufficient regional access to meat or ~~and~~ poultry processing related to the

COVID–19 public health emergency, as determined by the Secretary.

(c) Payment Rate for Covered Producers.—

(1) PAYMENTS FOR FIRST 30-DAY PERIOD.—For a period of 30 days beginning, with respect to a covered producer, on the initial date of the intentional depopulation described in subsection (b) of the covered livestock or poultry of the covered producer, the Secretary shall reimburse the covered producer for 85 percent of the value of actual losses as determined under subsection (d).

(2) SUBSEQUENT 30-DAY PERIODS.—For each 30-day period subsequent to the 30-day period described in paragraph (1), the Secretary shall reduce the value of the actual losses determined under subsection (d) with respect to a covered producer by 10 percent.

(3) MAXIMUM AGGREGATE PAYMENT.—In no case shall the amount of payments received by a producer under this section exceed 100 percent of the loss of that producer.

(d) Valuation.—

(1) IN GENERAL.—In calculating the amount of actual losses for purposes of the payment rates under subsection (c), the Secretary shall use the average fair market value, as determined by the Secretary in collaboration with the Chief Economist of the Department of Agriculture and the Administrator of the Agricultural Marketing Service, for covered livestock or poultry, as applicable, during the period beginning March 1, 2020, and ending on the date of enactment of this section.

(2) LIMITATION.—In no case shall a payment made under subsection (b) exceed the average market value of covered ~~market ready~~ livestock or poultry on the date of the depopulation described in that subsection.

(e) Excluded Animals.—The Secretary may not make payments under this section for actual losses associated with livestock owned by a packer or poultry owned by a live poultry dealer.

(f) Funding.—There are appropriated, out of any amounts in the Treasury not otherwise appropriated, such sums as are necessary to carry out this section.

SEC. 3. ANIMAL DISEASE PREVENTION AND PREPAREDNESS.

(a) Purpose – to offset COVID-19 impacts and further prevention and preparedness activities conducted by entities under 7 U.S. Code § 8308a.

(b) In General.—Out of any amounts in the Treasury not otherwise appropriated, there is appropriated to carry out section 10409A of the Animal Health Protection Act (7 U.S.C. 8308a) $300,000,000, to remain available until expended.

(c) Effect.—Nothing in subsection (a) supersedes existing activities carried out under section 10409A of the Animal Health Protection Act (7 U.S.C. 8308a).

SEC. 4. EMERGENCY AUTHORITY FOR THE COMMODITY CREDIT CORPORATION.

Section 5 of the Commodity Credit Corporation Charter Act (15 U.S.C. 714c) is amended—

(1) by redesignating subsection (h) as subsection (j); and

(2) by inserting after subsection (g) the following:

"(h) Remove and dispose of, or aid in the removal or disposition of, surplus livestock and poultry due to significant supply chain interruption during an emergency period.

"(i) Aid agricultural processing plants to ensure supply chain continuity during an emergency period.".

Food Protection and Defense Institute
A Homeland Security Center of Excellence

July 10, 2020

COVID-19 Near-Term Issues Spotting in Food Supply Chain

Meat Supply Chain and Mass Hog Depopulation – UPDATE #35

Updates issued on Fridays to track recovery trends

This material is based upon work supported by the U.S. Department of Homeland Security under Grant Award Number 18STCBT00001-03-00 Master Subaward Agreement M2002122. The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. Department of Homeland Security.

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Action Opportunity Update

Critical path to meat supply chain disruption resolution

- Maintain full operating capacity at processing facilities in consideration of worker health
    - Implement weekend processing to enhance short-term capacity
    - Coordinate worker protective equipment to:
        - maintain worker safety with normal operation PPE (specific to each job function and may include, for example, cut-resistant clothing, bump caps, dust masks/respirators, protective eyewear, protective foot wear, etc.);
        - maintain food safety with normal operation sanitation wear (specific to each product produced and may include, for example, hair/beard nets, disposable gloves, cloth or disposable coats/gowns, shoe covers, etc.); and
        - enhance COVID-19 infection control measures through cloth-face coverings, social distancing, physical barriers, etc.
- Continue to manage overstock through processing capacity, husbandry practices, alternative slaughter options, rendering, composting, and burial as appropriate in each locality
- Support livestock producers and processors in achieving new equilibrium including financial and liability considerations

Transition point from meat supply chain to broader food system disruption

- Address increasing level of COVID-19 infections in non-meat supply chain food production and facilities
    - Enhance COVID-related worker health and surveillance processes
    - Coordinate worker protective equipment to:
        - maintain worker safety with normal operation PPE;
        - maintain food safety with normal operation sanitation wear; and
        - enhance COVID-19 infection control measures
- Begin enhanced monitoring of food production and processing status to identify transition points and potential cascading effects
- Begin monitoring of global impact of COVID-19 on food security as a potential precursor for civil unrest

Situation Update

Action by Appointed and Elected Officials

- Coronavirus (COVID-19) Update: FDA prepares for resumption of domestic inspections with new risk assessment system – FDA, July 10, 2020
- Update: COVID-19 Among Workers in Meat and Poultry Processing Facilities — United States, April–May 2020 – CDC, July 7, 2020
- U.S. Department of Labor Issues Poster to Keep Meat Packing, Poultry and Pork Workers Safe During the Coronavirus Pandemic – Dept of Labor, July 8, 2020
- Germany: COVID-19 Will Change German Livestock Industry – USDA GAIN, July 6, 2020 (Context: Reports includes indication that cooling system "likely responsible for the quick spread of COVID-19.")
- RAMP-UP Act Will Help Meat and Poultry Processors Access Inspection to Meet Demand – Peterson, July 2, 2020

Hog Update

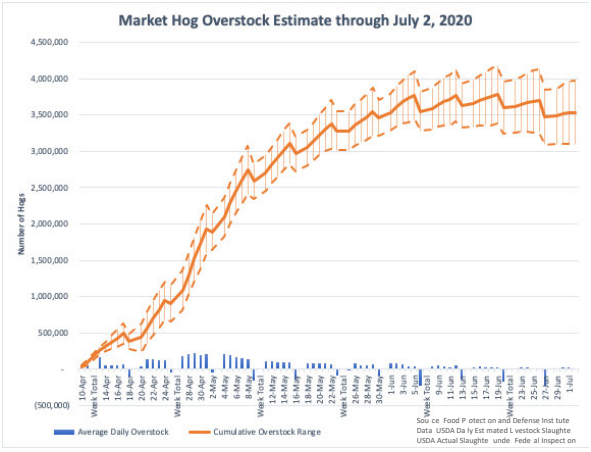
Daily Hog Slaughter and Overstock Addition

- Cumulative overstock estimate
  - 3.3MM, uncertainty 2.9-3.6 MM
  - lower than previous week

  (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)

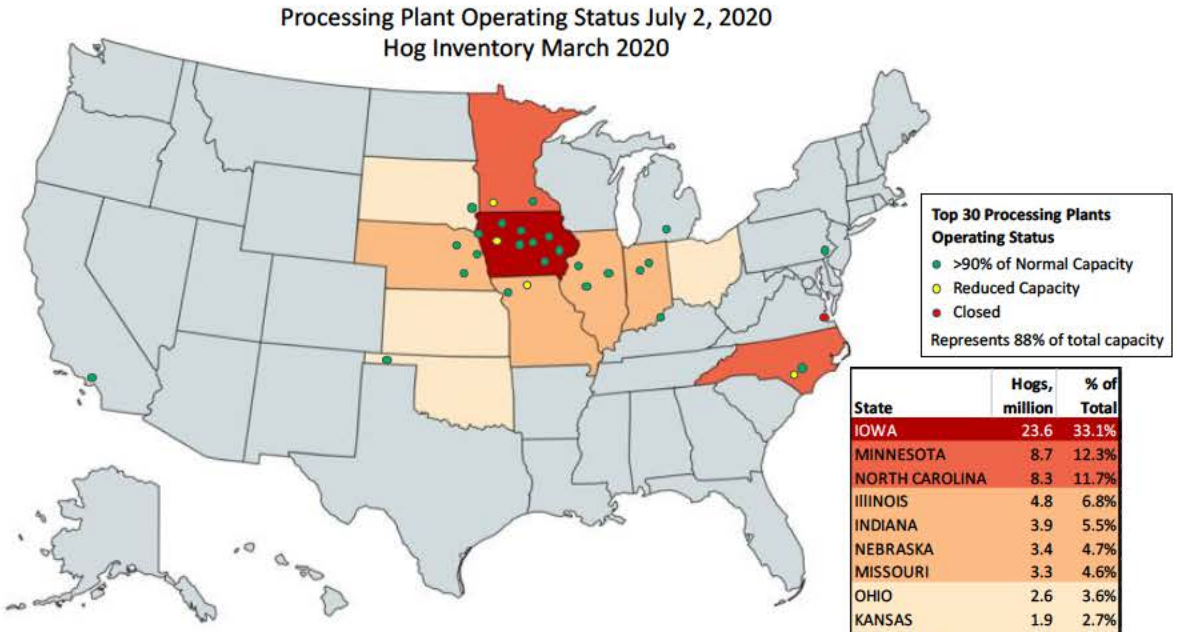
- Daily slaughter numbers

	Daily Estimate	Same day April 3-9	Year Ago
July 6	452,000	474,731	483,042
July 7	469,000	483,431	476,681
July 8	467,000	472,974	481,869
July 9	469,000	467,945	478,373
July 10	466,000	482,993	460,276
July 11	283,000	140,189	38,552



(USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)

- Daily pork processing capacity
  - Approximately 100% of pre-COVID capacity for the week ending July 11
  - Capacity reduction from maximal capacity approximately 6% on July 2 with 23 of 28 previously impacted plants functioning at over 90% normal capacity and 16 of these over 95% capacity. The plant closure was for facility remodeling. (USDA Daily Estimated Livestock Slaughter; Kern and Associates courtesy of NPPC)



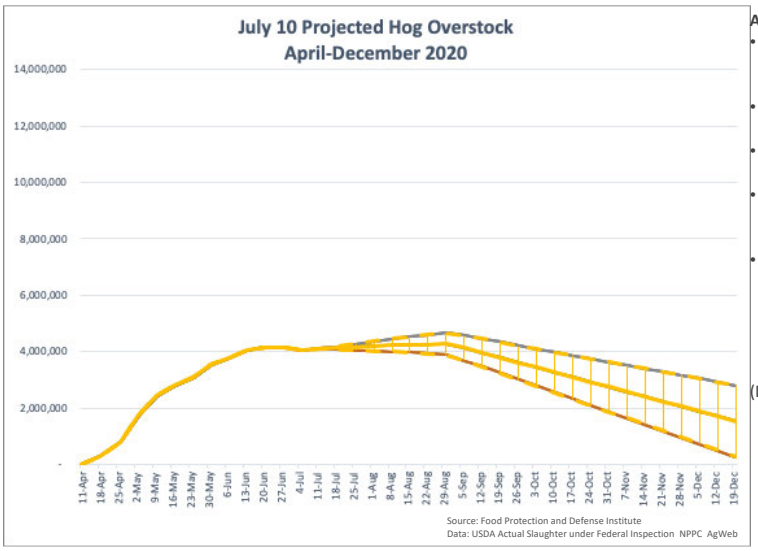
State	Hogs, million	% of Total
IOWA	23.6	33.1%
MINNESOTA	8.7	12.3%
NORTH CAROLINA	8.3	11.7%
IIIINOIS	4.8	6.8%
INDIANA	3.9	5.5%
NEBRASKA	3.4	4.7%
MISSOURI	3.3	4.6%
OHIO	2.6	3.6%
KANSAS	1.9	2.7%
OKLAHOMA	1.8	2.5%
SOUTH DAKOTA	1.7	2.4%

Top 11 States represent 90% of total hog inventory

Source: Food Protection and Defense Institute
Data: USDA National Agricultural Statistics Service Quarterly Hogs and Pigs;
Steiner Group and Kerns & Associates courtesy of NPPC

Weekly Hog Slaughter and Overstock Projections

- Weekly slaughter numbers for the week ending July 11 were near pre-COVID levels with a 11% reduction to date starting from the week ending April 11. (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)
- Total hog overstock projections through December 2020 expected to peak at about 4.2MM market weight hogs peaking in early September due to continued accelerated recovery. The model for final quarter of 2020 supports a lessened amount of culling to support slaughter equilibrium.



Assumptions

- Hog inventory at 95% plant capacity through mid-October representing market conditions for pigs already born and in growth cycle prior to COVID-19
- Year on year capacity increase of 6.4% to April 9 excluded after Aug 31, 2020
- Adjusted for normal weekly fluctuation in plant capacity (e g. holiday reductions)
- Average plant capacity
  - 90% by week of Jun 5
  - Normal capacity through remainder of year
- Young pig and sow culling (relative to Q1)
  - No culling prior to April 10
  - 5% for pigs reaching market weight in mid-September
  - 5% for pigs reaching market weight in mid-October

(Date: July 10, 2020)

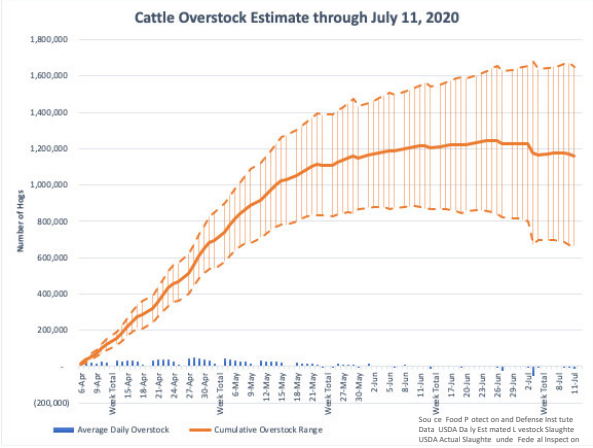
Cattle Update

Daily Cattle Slaughter and Overstock Addition

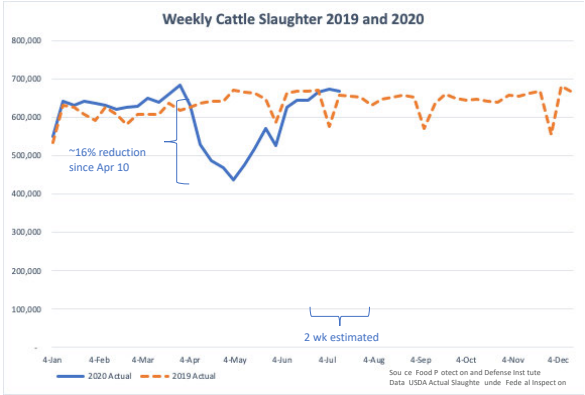
- Total overstock estimates – 1.2MM, uncertainty range 0.M7M to 1.6MM – slightly lower than previous week (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)

- Daily slaughter numbers

	Daily Estimate	Same day Wk Apr 4	Year Ago
July 6	119,000	118,756	119,137
July 7	119,000	119,473	119,848
July 8	120,000	117,235	118,260
July 9	120,000	115,152	119,269
July 10	119,000	107,188	117,059
July 11	71,000	53,495	64,859



(USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)



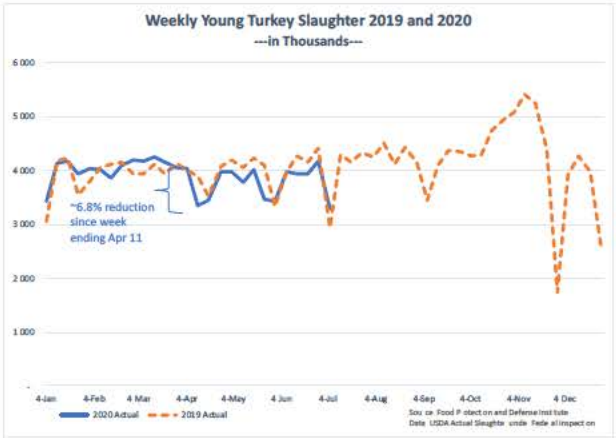
Weekly Cattle Slaughter and Overstock Projections

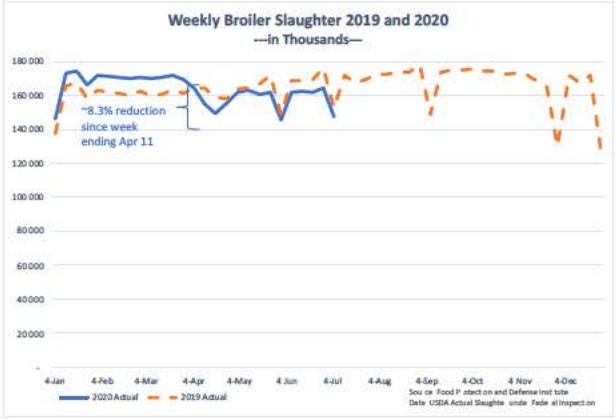
- Weekly slaughter numbers for the week ending July 11 were up approximately 3% with a 16% reduction to date starting from the week ending April 4. (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)

Poultry Update

Weekly Poultry Slaughter and Overstock

- Young Turkeys
  - Young turkey weekly slaughter numbers for the week ending July 4 were up approximately 9% with an 7% reduction to date starting from the week ending April 4. (USDA Actual Slaughter under Federal Inspection)
- Broilers
  - Broiler slaughter numbers for the week ending July 4 were down approximately 8% with an 8% reduction to date starting from the week ending April 4. (USDA Actual Slaughter under Federal Inspection)





Livestock Media Update

Webinars

- Food Safety During the Coronavirus – Sonnyside of the Farm, July 9, 2020 (recorded podcast)

Processing facilities media coverage

(This section contains exemplary material from multiple perspectives around the issue.)

- USDA won't require meat and poultry testing for COVID-19 – Food Safety News, July 9, 2020
- Covid-19: Meatpacker Tönnies might restart, with safety plan – Pig Progress, July 7, 2020
- Tyson Turns to Robot Butchers, Spurred by Coronavirus Outbreaks – Wall Street Journal, July 9, 2020
- Coronavirus reported in over half of Latino meat, poultry workers in 21 states, CDC says – NBC News, July 8, 2020
- COVID-19 hit U.S. meat, poultry plant workers hard in April, May: U.S. report – Reuters, July 7, 2020
- Nearly 90 percent of COVID-19 cases at meat plants were minority workers: CDC – The Hill, July 7, 2020
- Mapping Covid-19 outbreaks in the food system – Food & Environment Reporting Network
  - "According to data collected by FERN, as of July 10 at 12pm ET, at least 490 meatpacking and food processing plants (367 meatpacking and 123 food processing) and 63 farms and production facilities have had confirmed cases of Covid-19. At least 43,077 workers (34,961 meatpacking workers, 3,988 food processing workers, and 4,128 farmworkers) have tested positive for Covid-19 and at least 162 workers (144 meatpacking workers, 14 food processing workers, and 4 farmworkers) have died."

Producer media coverage

(This section contains exemplary media coverage from multiple perspectives around the issue.)

- See why potato farmers are destroying millions of potatoes – Business Insider, June 30, 2020
- How is COVID-19 impacting Minnesota's pork industry? – Swineweb, July 10, 2020

Economic media coverage

(This section contains exemplary media coverage from multiple perspectives around the issue.)

- The lives upended around a $20 cheeseburger – Washington Post, July 7, 2020 (Context: human side of hamburger supply chain)
- Beef and Pork Supply Chain Recovering – Farm Bureau, July 10, 2020
- Coronavirus Slowed U S Exports of Beef and Pork in May – Successful Farming, July 8, 2020
- COVID-19 causes disruptions in pork, beef export markets – Farm Progress, July 7, 2020
- BlackRock Bottom Line: 3 geopolitical themes shaping the post-COVID 19 world – Black Rock, June 25, 2020
- China to auction 20,000T of frozen pork from state reserves on July 10 – Reuters, July 7, 2020
- China halts imports from two more Brazil meat plants amid COVID-19 concerns – Reuters, July 5, 2020
- China Continues to Scale Back Meat Imports Amid Pandemic – Forbes, July 9, 2020
- China flags another imported food as possible COVID-19 carrier – Fortune, July 10, 2020

Food shortage media coverage

(This section contains exemplary media coverage from multiple perspectives around the issue. At present, there are no indications of wide-scale food shortages although supply chain disruptions continue to create spot limited supply or out of stock situations.)

- How COVID-19 has changed the way we eat, according to five experts – Fast Company, July 2, 2020
- Prices for beef, chicken rise to new highs as a result of COVID-19 pandemic – ABC Columbia, July 9, 2020
- 12,000 people per day could die from Covid-19 linked hunger by end of year, potentially more than the disease, warns Oxfam – Oxfam, July 9, 2020
    - The hunger virus: how COVID-19 is fuelling hunger in a hungry world
- Covid/protests bring food shortages and community support – The Circle, July 6, 2020
- Cities Respond to COVID Needs by Rescuing Surplus Food – NRDC, July 9, 2020
- Is the COVID-19 pandemic turning into a European food crisis? – European Journal of Public Health, July 8, 2020
- In Syria, a Grim Trade-Off Between Tackling Pandemic and Famine – Foreign Policy, July 7, 2020

Recommendations from authoritative bodies (cumulative)

- Protecting Seafood Processing Workers from COVID-19 - CDC
- Daily Life and Coping – CDC
- Policy Brief: The Impact of COVID-19 on Food Security and Nutrition – United Nations
- COVID-19 Federal Rural Resource Guide - USDA
- Opening Facilities
    - Meat and Poultry Processing Workers and Employers – CDC
    - Meat and Poultry Processing Facility Assessment Toolkit – CDC
    - Agriculture Workers and Employers – CDC and US Dept of Labor
        - Agricultural Employer Checklist for Creating a COVID-19 Assessment and Control Plan
    - Guidance for workers and employers – OSHA (many documents available)
    - COVID-19 Health and Safety Guidelines for the Meatpacking Industry – Minnesota Department of Health
    - Reporting a Temporary Closure or Significantly Reduced Production by a Human Food Establishment and Requesting FDA Assistance During the COVID-19 Public Health Emergency - FDA
    - CDC updates COVID-19 transmission webpage to clarify information about types of spread - CDC
    - Food and Agriculture: Considerations for Prioritization of PPE, Cloth Face Coverings, Disinfectants, and Sanitation Supplies During the COVID-19 Pandemic - FDA
    - COVID-19 Frequently Asked Questions – OSHA (Context – cloth face coverings)
    - Use of Cloth Face Coverings to Help Slow the Spread of COVID-19 – CDC
    - FAQs regarding the use of masks in the workplace – OSHA
    - Strategies to reduce COVID-19 transmission at Smithfield Foods Sioux Falls Pork Plant - CDC
    - Cleaning and Disinfection for Community Facilities - CDC
    - Exercise Starter Kit for Workshop on Reconstituting Operations – FEMA
    - North American Meat Institute Coronavirus Update – NAMI
    - Testing Strategy for Coronavirus (COVID-19) in High-Density Critical Infrastructure Workplaces after a COVID-19 Case Is Identified - CDC
- Depopulation and Disposal
    - APHIS Livestock Coordination Center – USDA
    - Recommendations for Swine Depopulation (updated) – American Association of Swine Veterinarians
        - Evaluating Emergency Euthanasia or Depopulation of Livestock and Poultry
    - Emergency Animal Mortality Management – Swine – USDA
    - USDA Carcass Management Dashboard – USDA
- COVID from Food and Food Packaging
    - How COVID-19 Spreads – CDC (updated May 20, 2020)
    - Best Practices for Retail Food Stores, Restaurants, and Food Pick-Up/Delivery Services During the COVID-19 Pandemic – FDA

- Best Practices for Re-Opening Retail Food Establishments During the COVID-19 Pandemic – FDA
- Safe Food Handling - FDA
- Food Product FAQs - FDA
- Food Safety and the Coronavirus Disease 2019 (COVID-19) – FDA
- What to Do if You Have COVID-19 Confirmed Positive or Exposed Workers in Your Food Production, Storage, or Distribution Operations Regulated by FDA – FDA

Previous updates available upon request

From: Neault, Mike J

To: michael.starkey@state.mn.us; mash@boah.in.gov; Randolph.Chick@agriculture.arkansas.gov; gmuller@sdppc.org; Nancy Foster; Bucknall, Janet L - APHIS; Allen, Anna; ahamberg@pa.gov; Brewer, Becky L - APHIS; Cole, Leslie E - APHIS; dennis.hughes@nebraska.gov; Gilmore, Sandy; kebrightbi@pa.gov; Andy.Schwartz@tahc.texas.gov; mark.ernst@illinois.gov; alicia.gorczyca-southerland@ag.ok.gov; Rod.Hall@ag.ok.gov; Jeff.Kaisand@Iowaagriculture.gov; bmarsh@boah.in.gov; Doug.Meckes@ncagr.gov; Sarah.Reinkemeyer@mda.mo.gov; Jean.Schmidt@mda.mo.gov; Justin.Smith@KS.gov; Steve.Strubberg@mda.mo.gov; beth.thompson@state.mn.us; winelandn@michigan.gov; Dustin.oedekoven@state.sd.us; Goodrich, Jarold (MDARD; Derrer, Denise; Mcooper1@boah.in.gov; Sara.Mcreynolds@ks.gov; john.howard@ncagr.gov; Tony.Forshey@Agri.ohio.gov; Hudyncia, Joseph; Werling, Kelli K; Todd.Tedrow@state.sd.us; Henrietta.Holbrooks@ncagr.gov; darlene.konkle@wisconsin.gov; Angela.Daniels@tahc.texas.gov; Mayes, Michael; Shipman, Kyle W; collinsc3@michigan.gov; brian.hoefs@state.mn.us; nhanshaw@pa.gov; Andy.Hawkins@ks.gov; Dpyburn@pork.org; snelson@aasv.org; psundberg@swinehealth.org; Michael.Martin@ncagr.gov; Reardon, Joe W; Vet Conference Line; Tim.Derickson@agri.ohio.gov; beth.ruby@ag.ok.gov; Julie.mcgwin@wisconsin.gov; Andy Curliss; Bill.pittenger@mda.mo.gov; Olson, Kelsey [KDA]; WagstromL@nppc.org; staci.slager@illinois.gov; Bryan Humphreys; Mary Kelpinski; Shere, Jack A - APHIS; Healey, Burke L - APHIS; Hayworth, Anna; pmcgonegle@iowapork.org; jennifer@ilpork.com; jtrenary@inpork.org; tims@kspork.org; david@mnpork.com; don@mopork.com; al@nepork.org; Cheryl Day; rllindsey@okpork.org; jdarr@pennag.com; bgunn@texaspork.org; kretallick@wppa.org; TLee@meatinstitute.org; Cassil, Terry; Sifford, Rosemary B - APHIS; rebecca.slater@wisconsin.gov; gary.flory@deq.virginia.gov; Meade, Barry J - APHIS; burkgren@aasv.org; Norton, Kevin - NRCS, Washington, DC; lucia.hunt@state.mn.us; Pruitt, Michael R - APHIS; Shufro, Nick; Sombke, Kyle H - APHIS; Harvell, Kevin; Smith, Greg; McKenna, Thomas S - APHIS; Barber, David A - APHIS; Hines, Angela Y - APHIS; Petersburg, Kevin L - APHIS; Tanner, Rick J - APHIS; Ray, Jean S - APHIS; Schaefbauer, Stephan L - APHIS; Gosch, Terry L - APHIS; Custer, Koren M - APHIS; Skorupski, Susan - APHIS; Kornreich, Michael A - APHIS; Tesar, Lynn A - APHIS; Kunde, Paul W - APHIS; Wilmot, Delwin D - APHIS; Halstead, Steven L - APHIS; Dodds, Lewis E - APHIS; Mark Hutchinson; Peer, Robert (DEQ); Miller, Lori P - APHIS; Peterson, Steve - FSA, Washington, DC; Broadaway, Jeffrey B; james.kittrell@ncagr.gov; christina.law@ncagr.gov; Carol.Woodlief@ncagr.gov; nfoster@nara.org; dmeeker@nara.org; peastma@clemson.edu; john.king@state.mn.us; Zack, Jonathan T - APHIS; carolynn.bissett@vdacs.virginia.gov; Porter, Jeffrey - NRCS, Greensboro, NC

Cc: annette.jones@cdfa.ca.gov

Subject: Covid-19 affecting the animal industries Update Morning of 6-8-2020

Date: Monday, June 8, 2020 10:00:46 AM

Attachments: 2020.06.05 Update 29 - Near Term Issue Meat Supply Chain.pdf
COVID-19 Swine Depopulation and Disposal Form.pdf
8-things-to-know-before-moving-your-pigs-outdoors-1.pdf

Good morning everyone.

Attachment and Update

1. From Jennifer van de Ligt of the Food Protection and Defense Institute – Near-Term Issues
    a. Meat Supply Chain Update #29. The next issue will be released on Tuesday, June 9, 2020.
2. Update from Jeff Porter, NRCS to questions asked by the State Vets
    a. Payment Rates:

i. For this situation, program policy will cap payment at $25,000 per contract item (CIN).

ii. Producers may have multiple CINs for the same practice on the same land provided one CIN does not fully address the resource concern.

iii. State Conservationists have authority to provide more restrictive caps based on input from the State Technical Committee (STC).

    b. Shallow Burial (Above Ground Burial):

i. 50 animal unit limit

1. There have been a limited number of studies evaluating the

performance of shallow burial, and it is a relatively new disposal option.

2. The largest study evaluated has been 44 animal units. This limit may be increased in the future based on results from other studies.

ii. Limited to non-disease related mortalities

1. The NRCS guidance was developed for non-disease related mortalities. If deaths are caused or result from disease, addition criteria will likely need to be evaluated such as an increased separation distance from ground water or bedrock.
2. NRCS does not have authority to address disease related mortalities. The guidance was developed for NRCS applications.

Please do not hesitate to contact Jeff with any questions at:

Jeff Porter, PE
National Animal Manure and Nutrient Management Team Leader
USDA-NRCS-ENTSC
2901 East Gate City Blvd., Suite 2100
Greensboro, NC 27401
jeffrey.porter@usda.gov
336-370-3342 (o)
336-404-4348 (c)

3. From Dr. Pyburn at the National Pork Board –
   a. Form producers can complete in case if compensation funding for animals becomes available.
   b. With the discussion of swine moving to states that normally don't have large populations of swine, or many swine veterinarians, the second attachment covers moving pigs from indoor to outdoor operations.

Action Items

- USDA requests that all equipment requests come through the AVIC using the ICS 213RR for the National Veterinary Stockpile.
- USDA is asking states to share possible euthanasia and disposal plans with them, along with expected needs. Although funding is not available at this time, if they have a list of needs they can present an argument for funding to support operations or share funding for operations if it does become available.
- If your state public health offices have algorithms for testing at plants and in the surrounding communities and are willing to share, please forward to me and I will add as an attachment to the evening updates.

NPB requests that if you are performing field trails with CO_2 euthanasia please email to Dave Pyburn (dpyburn@pork.org) the protocol followed, the design of the equipment utilized, and the outcome of the trial. Dave will pull this data together and make available to the industry.

Next Conference Call

Friday, June 12, 2020 at 9:00 AM ET.

Conference Line: (b) (5)(DPP)

Access code: (b) (5)(DPP)

Draft Agenda –

1. Federal Partners Updates
2. Industry Updates
3. State Updates (will begin with Iowa and Minnesota)

Thanks,

Mike

Michael Neault, DVM, Director of Livestock Programs, Veterinary Division
N.C. Department of Agriculture & Consumer Services
Physical Address: 2 W. Edenton Street, Raleigh, NC 27601
Mailing Address: 1030 Mail Service Center, Raleigh, NC 27699-1030
Phone: 919-707-3250
Fax: 919-733-2277

8 Things to Know Before Moving Your Pigs Outdoors

Although a small percentage of U.S. pigs live their lives in outdoor-based pens or pastures, the majority of American farmers raise pigs in modern barns where the animals are protected from the elements and potential predators. However, more producers than ever are thinking about how to successfully move their pigs to outdoor spaces given the indoor space crunch triggered by packing plant closures due to COVID-19 issues.

"It's critical to think through how moving pigs to an outdoor environment will affect them in every possible way," says Chris Hostetler, animal science director for the Pork Checkoff. "It's not as simple as quickly fencing off part of a pasture and calling it good. Even nearly grown pigs will go through some level of shock going from inside to outside if proper steps aren't taken to limit downside risks."

According to Hostetler, producers should consider these key areas before moving pigs outdoors.

1. **Determine if moving outside is really right.** Is there any other way to maintain pig flow? What else could you do first to buy some more time to reach market? Feeding pigs a less-optimal diet is one way to slow down pigs reaching market weight. Could you find an open turkey, broiler and duck house that is no longer in use that could house your pigs temporarily? What are the environmental implications? (Check with your state's regulatory authority.)

2. **Maintain good animal welfare.** Pigs should only be housed outside if animal welfare is kept at a high level. Moving pigs accustomed to housing in which environment is closely regulated to outside paddocks where environment is not controlled could compromise pig well-being and health.

3. **Use solid, substantial fencing.** Sturdy penning inside barns are designed to withstand the wear of multiple turns of pigs, and pigs are accustomed to it. Market-sized pigs suddenly put out into a paddock fenced with two-strand electric fence are likely to run straight through it because they don't know what it is. So, if you use it, be sure to use it with a more substantial backing of woven wire or "hog panels" fencing.

4. **Throw some shade.** Your pigs (especially white ones) will need shade outdoors to reduce sunburn potential. It doesn't need to be hot for sunburn to occur or even fully sunny. Ideally, temporary enclosures should be entirely covered with a shade structure.

5. **Provide ample water.** As always, pigs need full access to clean, fresh drinking water at all times. Ensure that you have enough drinkers or waterers for the number of pigs.

6. **Keep feed clean, protected.** In an outdoor setting, keeping feed clean and waste to a minimum could be your biggest hurdles. Remember, your pigs are accustomed to seeing their feed in a certain way in recognizable feeders. Avoid the temptation of feeding directly on the ground as this will result in substantial waste. Metal or even wooden feeders are your best bet to keep feed dry and spoilage-free.

7. **Consider pig-handling strategy.** Most barns provide some type of "built-in" infrastructure for helping you move pigs from one pen to another or out of the barn to their next stop or market. Think about how you can move pigs outdoors while keeping pigs calm and handlers safe. What will market loadouts look like? How will individual pig treatment be done? Make effective use of any existing gates, chutes, etc.

8. **Keep biosecurity in mind.** Just because you're preparing to move pigs outside doesn't mean biosecurity should stop. It may look different outside, but it's certainly achievable with a few key steps. For example, wear dedicated, farm-specific clothing and footwear while working pigs. Configure feeders to minimize attracting wildlife. Make sure farm visitors wear disposable coveralls and foot coverings. And lastly, monitor your hogs daily for signs of illness or discomfort.

Realize How Outdoor-Raised Pigs Are Different

Remember, the overarching goal in today's limited market access is to hold pigs in the outdoor enclosure until a market can be secured. Loss of body weight in pigs and changes in final carcass composition are likely to occur, which may result in marketing discounts. Obviously, this isn't ideal, but it's only meant to be a temporary solution for what is hopefully a very short event.

Here Are Some Resources to Consider

Animal Welfare:

The Health and Welfare of Sows in Outdoor Systems

Fencing/Enclosure:

Designing Pasture Subdivisions for Practical Management of Hogs

Ten Ideas for Improving Resource Management on Your Outdoor Hog Operation

Outdoor Biosecurity:

Outdoor Biosecurity Resources from Pork Information Gateway

Shade:

Quick-and-Easy Sun Shelters for Your Pigs

Sunburn:

Sunburn Signs and Tips

Sunburn and Heat Stroke in Pigs

Sunburn and Photosensitization – Iowa State University

Have Additional Questions?

Contact the Pork Checkoff's Service Center at (800) 456-7675 or at info@pork.org

Reset All Fields

COVID-19 SWINE DEPOPULATION AND DISPOSAL

In addition to the information below, it is **ESSENTIAL THAT PRODUCERS KEEP DETAILED RECORDS AND ALL RECEIPTS OF EXPENSES INCURRED** during depopulation and disposal. The receipts should be attached to this form.

FILL OUT THIS FORM FOR EACH SITE WHERE DEPOPULATION AND DISPOSAL OCCURS.

PRODUCER AND FARM INFORMATION

Producer name		**Date**	
Farm name			
Producer address			
Phone number			
Site name			
Site address			
Premises ID			

VETERINARIAN INFORMATION

Name of USDA-accredited veterinarian	
Veterinarian address	
Veterinarian phone number	

DEPOPULATION INFORMATION

Category of pig (sow, nursery, weaner, grower, market)	Depopulation method	Number of head	Weight of pig(s)

Rationale for depopulation method	
Location of depopulation	
Mileage or transport provider if taken to central euthanasia site	
Depopulated by	
Date(s) of depopulation	

DEPOPULATION INFORMATION (continued)

Equipment used	
Hours worked	
Number of employees/contractors	
Expenses incurred (attach all receipts to this form)	

DISPOSAL INFORMATION

Category of pig (sow, nursery, weaner, grower, market)	Disposal method	Number of head	Weight of pig(s)

If composted, what carbon source was used?	
Mileage or transport provider for carcasses to disposal site	
Location of disposal	
Disposed of by	
Date(s) of disposal	
Equipment used	
Hours worked	
Number of employees/contractors	
Expenses incurred (attach all receipts to this form)	

Verifiable proof of death: It is recommended to have multiple documentation that substantiates the number of animals euthanized and the date(s) on which it occurred. For instance purchase records, veterinary records, bank or other loan papers, rendering plant and/or trucking receipts, FEMA records, National Guard records, written contracts, production records, IRS records, property tax records or private insurance records.

Reliable proof of inventory: Production records that indicate a reliable proof of inventory.

Reliable proof of death: Pictures of dead animals.

Verifiable proof of inventory: Records that can be used to establish a verifiable beginning inventory include balance sheets, bank statements, chattel inspections, canceled check records, farm credit balance sheets, inventory records used for tax purposes, loan records, private insurance records, property tax records, sales and purchase receipts, and veterinary records.

Producer signature		**Date**	
Herd veterinarian signature		**Date**	

Food Protection and Defense Institute
A Homeland Security Center of Excellence

June 5, 2020

COVID-19 Near-Term Issues Spotting in Food Supply Chain

Meat Supply Chain and Mass Hog Depopulation – UPDATE #29

Update issued on Tuesdays and Fridays unless significant situational developments arise

UNIVERSITY OF MINNESOTA
1365 GORTNER AVENUE
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FPDI@UMN.EDU
FOODPROTECTION.UMN.EDU

Action Opportunity Update

Critical path to issue resolution

- Reopen processing facilities in consideration of worker safety with federal guidance and support
    - Reopening at reduced capacity helps alleviate livestock overstock
    - Implement weekend processing to enhance short-term capacity
    - Coordinate worker protective equipment to:
        - maintain worker safety with normal operation PPE (specific to each job function and may include, for example, cut-resistant clothing, bump caps, dust masks/respirators, protective eyewear, protective foot wear, etc.);
        - maintain food safety with normal operation sanitation wear (specific to each product produced and may include, for example, hair/beard nets, disposable gloves, cloth or disposable coats/gowns, shoe covers, etc.); and
        - enhance COVID-19 infection control measures through cloth-face coverings, social distancing, physical barriers, etc.
- Coordinate a whole of government approach through ESF 11 to:
    - Manage depopulation and disposal of hog overstock in multiple states including rendering, composting, and burial as appropriate in each locality
- Support livestock producers and processors in achieving new equilibrium including financial and liability considerations

Situation Update

Action by Appointed and Elected Officials (updated Tuesday and Friday)

- -

Recommendations from authoritative bodies (cumulative)

- Agriculture Workers and Employers – CDC and US Dept of Labor
- COVID-19 Federal Rural Resource Guide - USDA
- Opening Facilities
    - Reporting a Temporary Closure or Significantly Reduced Production by a Human Food Establishment and Requesting FDA Assistance During the COVID-19 Public Health Emergency - FDA
    - CDC updates COVID-19 transmission webpage to clarify information about types of spread - CDC
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    - Safe Food Handling - FDA
    - Food Product FAQs - FDA
    - Food Safety and the Coronavirus Disease 2019 (COVID-19) – FDA
    - What to Do if You Have COVID-19 Confirmed Positive or Exposed Workers in Your Food Production, Storage, or Distribution Operations Regulated by FDA – FDA

Activist Situation Update

The following situation report was prepared by FPDI and provided to the Food and Agriculture Sector Coordinating Council on June 5, 2020.

Over the past week and related to the COVID-19 pandemic, animal activists have accelerated their activity. As a result, the threat landscape related to animal agriculture has increased significantly with activists taking action at all stages of the food supply chain from farm to retail. This is in part due to mobilization through social media during COVID-19, messaging to blame the pandemic on animal agriculture, the dissemination of an interactive map at Project Counterglow that shows the name, address, and map coordinators of most, if not all, facilities affiliated with animal agriculture, and the hog depopulation caused by meat supply chain disruptions.

On June 4, 2020, the Animal Ag Alliance and FBI profiled the current risk environment at a meeting hosted by the Food and Agriculture Government and Sector Coordinating Councils. Facilities, companies, and associations should evaluate the rising animal activist threat and may want to consider developing 1) context-specific communication plans to inform their stakeholders; 2) easy to follow actions to improve physical and personnel security for their facilities; and 3) appropriate connections with law enforcement that may be needed in the event of activist action.

The Animal Ag Alliance recommended that stakeholders consider:

- How can farmers better protect themselves, their families, employees and animals?
- Are there resources or agencies they can contact for assistance before activists attack?
- What steps should they take when activists target them?

In addition to the farm level, processors and retailers may also want to consider similar questions as they prepare for potential activist action.

The FBI highlighted that the WMD Coordinators are able to assist and welcome connections within the food supply chain. A list of WMD coordinators will be provided to the Animal Ag Alliance or facilities may contact their local FBI field office and request to speak with the WMD Coordinator.

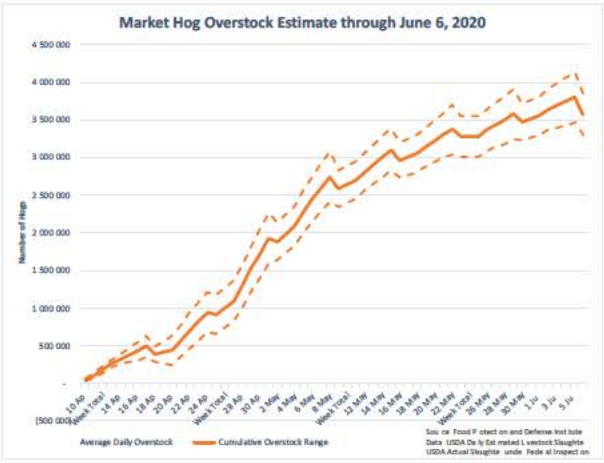
Information about the threat is also available through DHS Fusion centers.

The Food Protection and Defense Institute is an additional resource to provide information, facilitate connections, and assist in preparedness planning.

Hog Update

Daily Hog Slaughter and Overstock Addition (updated Tuesday and Friday)[1]

- Total overstock estimate – 3.5MM, uncertainty range 3.3MM to 3.9MM.
  (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)

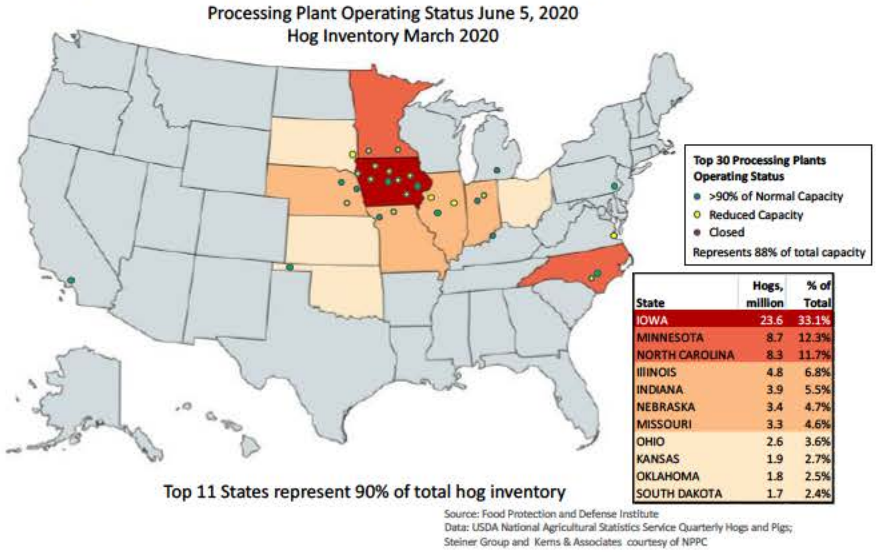


- Daily slaughter numbers

	Daily Estimate	Same day April 3-9	Year Ago
June 3	429,000	472,974	476,168
June 4	437,000	467,945	470,189
June 5	438,000	482,993	467,895
June 6	323,000	140,189	51,773

(USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)

- Daily pork processing capacity
  - Approximately 89% for week ending June 6 with significant capacity increase due to estimated Saturday slaughter
  - Capacity reduction approximately 14% June 3, 13% June 4, and 12% June 5 due to COVID and non-COVID issues (e.g. riots and wastewater issues). June 5 had 11 previously impacted plants functioning at over 90% normal capacity. (USDA Daily Estimated Livestock Slaughter; Kern and Associates courtesy of NPPC)

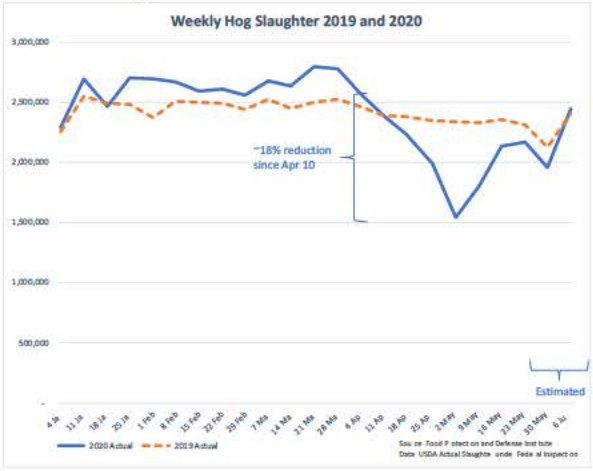


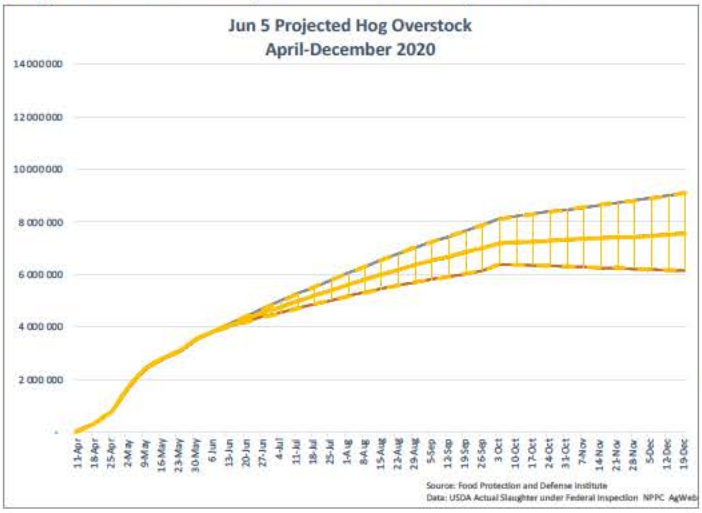
State	Hogs, million	% of Total
IOWA	23.6	33.1%
MINNESOTA	8.7	12.3%
NORTH CAROLINA	8.3	11.7%
ILLINOIS	4.8	6.8%
INDIANA	3.9	5.5%
NEBRASKA	3.4	4.7%
MISSOURI	3.3	4.6%
OHIO	2.6	3.6%
KANSAS	1.9	2.7%
OKLAHOMA	1.8	2.5%
SOUTH DAKOTA	1.7	2.4%

1 Total hog overstock estimates do not include depopulation numbers due to the confidentiality and sensitivity of these numbers. Public reporting includes 10,000 per day in Minnesota and 600,000 in Iowa in the near future.

Weekly Hog Slaughter and Overstock Projections (updated Friday)

- Weekly slaughter numbers for week ending June 5 down approximately 4.6% (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)
- Total slaughter numbers are down 17% to date starting from the week ending April 11. (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)
- Total hog overstock projections through December 2020 expected to peak at about 7.5MM market weight hogs due to unanticipated recovery during the week of June 5. June 5 and May 31 models are provided for comparison.

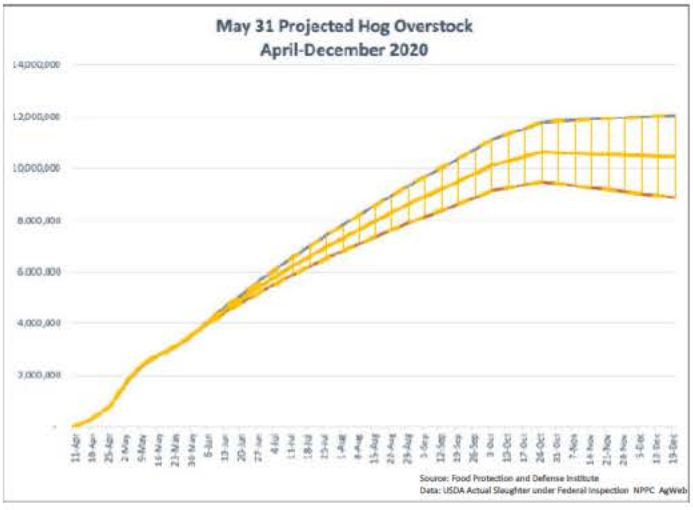




Assumptions

- Hog inventory at 95% plant capacity through mid-October representing market conditions for pigs already born and in growth cycle prior to COVID-19
- Year on year capacity increase of 6.4% to April 9
- Adjusted for normal weekly fluctuation in plant capacity (e.g. holiday reductions)
- Average plant capacity
  - 90% by week of Jun 5 through remainder of year
- Young pig and sow culling (relative to Q1)
  - No culling prior to April 10
  - 5% for pigs reaching market weight in mid-September
  - 10% for pigs reaching market weight in mid-October
- The 10% reduction in herd size as compared to Q1 2020 and 90% normal plant capacity creates a pseudo-equilibrium

(Date: June 5, 2020)



Assumptions

- Hog inventory at 95% plant capacity through mid-October representing market conditions for pigs already born and in growth cycle prior to COVID-19
- Year on year capacity increase of 6.4% to April 9
- Adjusted for normal weekly fluctuation in plant capacity (e.g. holiday reductions)
- Average plant capacity
  - 85% by week of May 17
  - 90% by week of Aug 1 – level expected for COVID-19 worker health and safety measures
- Young pig and sow culling (relative to Q1)
  - No culling prior to April 10
  - 5% for pigs reaching market weight in mid-September
  - 10% for pigs reaching market weight in mid-October
  - 17% for pigs reaching market weight in November
- The 17% reduction in herd size as compared to Q1 2020 and 90% normal plant capacity creates a pseudo-equilibrium

(Date: May 29, 2020)

Hog media coverage (updated Tuesday and Friday)

(This section contains exemplary media coverage from multiple perspectives around the issue.)

- Will COVID-19 Speed the Adoption of Technology in the Pork Industry? – Farm Journal's Pork, June 5, 2020
- Q&A Series: Pig Farmers Open Up About the Future – Farm Journal's Pork, June 3, 2020

Hog depopulation and disposal media coverage (updated Tuesday and Friday)

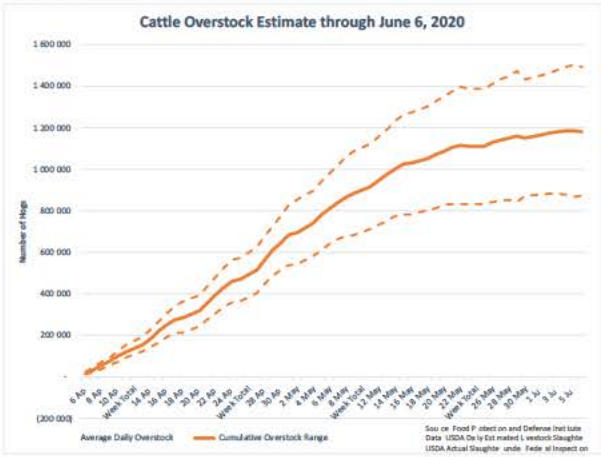
(This section contains exemplary media coverage from multiple perspectives around the issue.)

- Farmers Find Ways To Save Millions Of Pigs From Being Euthanized – NPR, June 5, 2020
  - "According to estimates of pork producers and officials in the hardest-hit states of Minnesota and Iowa, hog farmers have been forced to kill and dispose of fewer than 200,000 animals so far."
- Slaughter delays lead to depopulation – AVMA, May 28, 2020

Cattle Update

Daily Cattle Slaughter and Overstock Addition (updated Tuesday and Friday)

- Total overstock estimates – 1.2MM, uncertainty range 0.9MM to 1.5MM. (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)



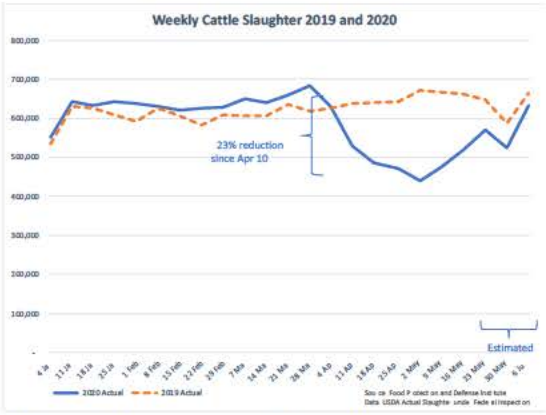
- Daily slaughter numbers

	Daily Estimate	Same day April 3-9	Year Ago
June 3	114,000	117,235	119,718
June 4	117,000	115,152	122,162
June 5	116,000	107,188	119,021
June 6	63,000	53,495	63,356

(USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)

Weekly Cattle Slaughter and Overstock Projections (updated Friday)

- Weekly slaughter numbers for the week ending June 5 were down approximately 9% with a 23% reduction to date starting from the week ending April 4. (USDA Daily Estimated Livestock Slaughter; USDA Actual Slaughter under Federal Inspection)



Cattle media update (updated Tuesday and Friday)

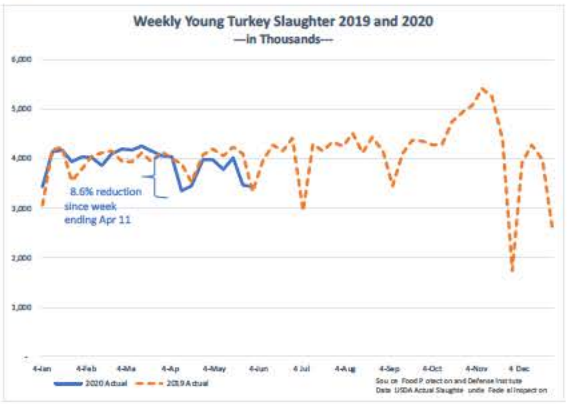
(This section contains exemplary media coverage from multiple perspectives around the issue.)

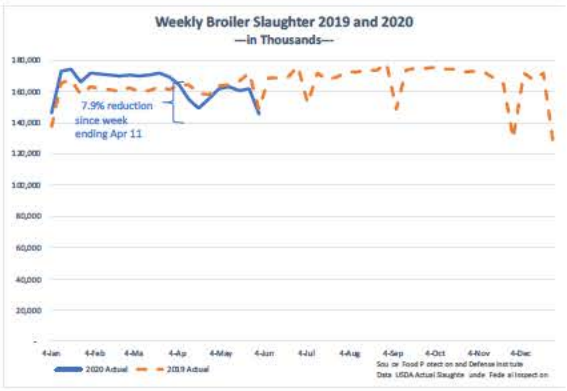
- From the Ground Up: Beef Supply is Safe Despite Coronavirus – KBTX, June 4, 2020
- Kentucky cattle industry feels the sting of COVID-19 – Wave 3 News, June 4, 2020

Poultry Update

Weekly Poultry Slaughter and Overstock (updated Friday)

- Young Turkeys
  - Young turkey weekly slaughter numbers for the week ending May 30 were down approximately 0% with an 8.6% reduction to date starting from the week ending April 4. (USDA Actual Slaughter under Federal Inspection)
- Broilers
  - Broiler slaughter numbers for the week ending May 30 were down approximately 6.9% with an 7.9% reduction to date starting from the week ending April 4. (USDA Actual Slaughter under Federal Inspection)





Poultry media update (updated Tuesday and Friday)

(This section contains exemplary media coverage from multiple perspectives around the issue.)

- Canada - COVID-19 Impact on Poultry Sector – USDA FAS, June 2, 2020
- Koch Foods Fails To Protect Poultry Workers During COVID-19 – Value Walk, June, 1, 2020

Livestock Media Update (updated Tuesday and Friday)

Webinars

- -

Processing facilities media coverage

(This section contains exemplary material from multiple perspectives around the issue.)

- Hormel, Quality Pork battling Covid-19 cases in Austin, Minn. – Minneapolis St. Paul Business Journal, June 3, 2020
- Despite new coronavirus outbreaks at its Iowa plants, Tyson Foods resumes attendance policy – Des Moines Register, June 3, 2020
- Mapping Covid-19 outbreaks in the food system – Food & Environment Reporting Network
    - "According to data collected by FERN, as of June 2 at 1pm ET, at least 261 meatpacking and food processing plants and 36 farms and production facilities have confirmed cases of Covid-19, and at least one meatpacking plant and four food processing plants are currently closed. At least 23,776 workers (20,855 meatpacking workers, 1,474 food processing workers, and 1,447 farmworkers) have tested positive for Covid-19 and at least 85 workers (77 meatpacking workers, 6 food processing workers, and 2 farmworkers) have died."

Economic media coverage

(This section contains exemplary media coverage from multiple perspectives around the issue.)

- Plaintiffs Struggle To Prove Meat And Potatoes Of Antitrust Case As COVID-19 Throws Market Into Further Disarray – JDSupra, June 5, 2020
- Hog Economist: If It Weren't For The Virus, We'd Be In Expansion Mode – AgWeb, June 4, 2020

Producer media coverage

(This section contains exemplary media coverage from multiple perspectives around the issue.)

- How are America's Pig Farmers weathering the COVID-19 storm – National Hog Farmer, June 5, 2020
- COVID-19 creates mental health crisis for producers – Feed Strategy, June 4, 2020

Food shortage media coverage

(This section contains exemplary media coverage from multiple perspectives around the issue. At present, there are no indications of wide-scale food shortages although supply chain disruptions continue to create spot limited supply or out of stock situations.)

- Meat Prices on the Rise as Supply Declines During COVID-19 Pandemic – Food Quality and Safety, June 5, 2020
- Is there really a meat shortage? Why you're seeing less beef, pork and chicken in stores – CNET, June 3, 2020

Activist media coverage

(This section contains exemplary media coverage around the issue and should not be interpreted as the views of the author or the Institute.)

- Iowa Select animal rights activists clash over Grundy County site – The Grundy Register, June 3, 2020
- DxE Investigator ARRESTED for Exposing Gruesome Mass Pig Killings Due to COVID-19 – Direct Action Everywhere, June 3, 2020 (Context: Graphic video)
- Pork with a side of pandemic - Cassie's Real Review – Direct Action Everywhere, May 20, 2020
- 'A force for change': Prominent activist Wayne Hsiung runs for mayor – The Daily Californian, June 3, 2020 (Context: Wayne Hsiung is the co-founder of Direct Action Everywhere (DxE), the group responsible for the undercover video at Iowa Select Farms and Project Counterglow mentioned earlier in the update.)

Previous updates available upon request