

# ESSAY

## ACCELERATING CATASTROPHE: SLAUGHTER LINE SPEEDS AND THE ENVIRONMENT

BY

DANI REPLOGLE\* & DELCIANNA J. WINDERS\*\*

*In addition to serving as one of America's most dangerous work environments, slaughterhouses are hugely detrimental to virtually every aspect of the natural environment outside their walls. Though environmental impacts attributable to industrial slaughter are problematic nationwide, these harms are disproportionately borne by communities of color and low-income communities. As such, rethinking the way Americans kill animals and process their flesh is imperative as we strive to move toward a more just and sustainable future. This Essay examines the environmental impacts of slaughter through the lens of the U.S. Department of Agriculture's (USDA's) recent moves to raise and remove slaughterhouse line speed limits. The authors contend that the USDA's use of a categorical exclusion to change line speed limits without analyzing environmental impacts under the National Environmental Policy Act of 1969 (NEPA) is contrary not only to law, but also the tide of public opinion. As COVID-related worker abuses have come to light and ushered in calls for increased slaughterhouse accountability, this Essay concludes by positing that the time for slaughterhouse reform has arrived and that the Green New Deal is an appropriate vehicle for such reform.*

---

\*Dani Replogle is a Staff Attorney at the Mitchell Hamline Law School's Public Health Law Center.

\*\*Delci Winders is the Animal Law Program Director and a Visiting Associate Professor of Law at Vermont Law School. The authors thank Natassia Tuhovak for her invaluable research assistance.

I.	INTRODUCTION .....	1278
II.	BACKGROUND: SLAUGHTER LINE SPEEDS AND THE NATIONAL ENVIRONMENTAL POLICY ACT .....	1279
	A. <i>Brief History of Line Speed Increases</i> .....	1279
	B. <i>The National Environmental Policy Act, Categorical Exclusions, and the Food Safety Inspection Service</i> .....	1283
III.	ENVIRONMENTAL IMPACTS OF SLAUGHTERHOUSES .....	1285
	A. <i>Water Demand and Pollution</i> .....	1286
	B. <i>Solid Waste</i> .....	1290
	C. <i>Air Pollution</i> .....	1291
IV.	ONGOING LITIGATION .....	1292
V.	IMPLICATIONS FOR THE FUTURE .....	1294
	A. <i>Safe Line Speeds During COVID Act</i> .....	1294
	B. <i>Executive Order on Protecting Public Health and the Environment</i> .....	1295
	C. <i>Slaughter Regulation in the Green New Deal</i> .....	1297
VI.	CONCLUSION.....	1298

## I. INTRODUCTION

Given the severe human and animal rights abuses that occur daily at slaughterhouses, it is perhaps understandable that scrutiny of the industry up to this point has focused on these horrific violations.<sup>1</sup> However, workers and animals are not the only victims of slaughterhouse operations; because slaughterhouses use huge amounts of resources and generate substantial pollution, the environment—and all those who live in it, both human and nonhuman—also suffer at the hands of the slaughter industry.<sup>2</sup> Despite the clear risks posed by slaughterhouses, over the past three decades the federal government has not only failed to increase oversight of this industry but made a concerted effort to deregulate slaughter.<sup>3</sup> One of the most recent iterations of this deregulation effort is the U.S. Department of Agriculture (USDA) Food Safety and Inspection Service's (FSIS's) decision to increase and revoke slaughter line speed limits.<sup>4</sup> This deregulation has been undertaken without consideration of the foreseeable impacts it will have on the environment.<sup>5</sup> This Essay seeks to remedy that inattention.

---

<sup>1</sup> *E.g.*, Amy R. Connolly, *USDA Probes Animal Abuse Video from Hormel Slaughterhouse*, UPI (Nov. 12, 2015), <https://perma.cc/D5W8-ZLEE>; Michael Holtz, *Six Months Inside One of America's Most Dangerous Industries*, ATLANTIC (July/Aug. 2021), <https://perma.cc/MXG3-EC3V>.

<sup>2</sup> See discussion *infra* Part III.

<sup>3</sup> See discussion *infra* Part II.A.

<sup>4</sup> See discussion *infra* Part II.A.

<sup>5</sup> See discussion *infra* Part I.B.

## II. BACKGROUND: SLAUGHTER LINE SPEEDS AND THE NATIONAL ENVIRONMENTAL POLICY ACT

### *A. Brief History of Line Speed Increases*

For many years, pursuant to its responsibilities under the Federal Meat Inspection Act<sup>6</sup> and Poultry Products Inspection Act,<sup>7</sup> the FSIS has imposed limits on how fast slaughterhouses can operate.<sup>8</sup> To ensure a modicum of oversight of the slaughter process, no more than 1,106 pigs per hour,<sup>9</sup> 390 cattle per hour,<sup>10</sup> 140 chickens per minute,<sup>11</sup> and 55 turkeys per minute<sup>12</sup> can be killed. Though these rates are already staggering, the industry regularly lobbies to increase them or to remove line speed limits altogether, thereby allowing slaughterhouses to increase profits by killing more animals more quickly.

In 1997, the FSIS began allowing a limited number of slaughterhouses to operate at faster speeds pursuant to a pilot program referred to as the Hazard Analysis and Critical Control Point-Based Inspection Models Project (HIMP).<sup>13</sup> As anticipated, the slaughterhouses participating in HIMP increased overall production by increasing the total number of animals slaughtered. For example, an FSIS inspector who worked at Quality Pork Processors (QPP), one of five HIMP pig slaughterhouses, attested that:

QPP quickly took advantage of the waiver and began to incrementally increase line speeds. Over the years, QPP has steadily increased the number of hogs killed hourly. Currently up to 1,325 pigs are killed hourly at QPP. The line speed increases have consistently resulted in greater numbers of hogs slaughtered. . . . Thus, as the line speeds have steadily increased, so too has the number of hogs slaughtered daily and annually. As the number of hogs slaughtered increases, the number of trucks coming to the slaughterhouse necessarily increases as well.<sup>14</sup>

Since implementing HIMP, widespread issues with the program have been documented, including animal welfare, worker safety, and

---

<sup>6</sup> 21 U.S.C. §§ 601–695 (2018).

<sup>7</sup> *Id.* §§ 451–472.

<sup>8</sup> 9 C.F.R. § 310.1 (2020).

<sup>9</sup> *Id.*

<sup>10</sup> *Id.*

<sup>11</sup> *Id.* § 381.69(a).

<sup>12</sup> *Id.* § 381.69(b).

<sup>13</sup> Meeting Notice, 62 Fed. Reg. 31,553, 31,553 (June 10, 1997); Tom Philpott, *Trump's USDA Wants to Make Pork Processing Faster—and More Dangerous*, MOTHER JONES (Jan. 19, 2018), <https://perma.cc/2MM7-XK35>.

<sup>14</sup> Declaration of Jill Mauer at 2, *Farm Sanctuary v. U.S. Dep't Agric.*, No. 6:19-cv-06910-EAW (W.D.N.Y. Apr. 10, 2020).

consumer protection concerns.<sup>15</sup> Nevertheless, the FSIS recently took steps to allow even more slaughterhouses to increase their line speeds.

On October 1, 2019, the FSIS finalized a rule to “revok[e] maximum line speed[]” limits for pig slaughterhouses.<sup>16</sup> In promulgating this rule, the agency stated that, on top of the five HIMP slaughterhouses, it had determined thirty-five additional high-volume slaughterhouses would take advantage of the speed limit revocation.<sup>17</sup> Together, these forty slaughterhouses are responsible for 93% of pigs slaughtered in the U.S.<sup>18</sup> To justify the rule, the FSIS underscored that revoking line speeds would increase industry profits by an estimated \$87.64 million annually by facilitating a 12.49% increase in production.<sup>19</sup> This translates to approximately 11.5 million more pigs intensively farmed, transported, and slaughtered annually as a result of the rule change.<sup>20</sup>

Opposition to the revocation was overwhelming. According to a Washington Post analysis, “out of 84,000 public remarks made on the rule, 87% were either opposed or expressed negative opinions about the proposal. In numerous instances, groups asked for additional information to properly evaluate the proposal,”<sup>21</sup> including requests for information about the environmental impacts of the rule. In particular, commenters raised concerns about the environmental impacts of the predicted production increases and reminded the FSIS about its obligation under

---

<sup>15</sup> See, e.g., GAO HIGHLIGHTS, *Introduction to U.S. GOV'T ACCOUNTABILITY OFF., MORE DISCLOSURE AND DATA NEEDED TO CLARIFY IMPACT OF CHANGES TO POULTRY AND HOG INSPECTIONS* (Aug. 2013), <https://perma.cc/8ARK-2MLN> (finding that the FSIS failed to “thoroughly evaluate[] the performance of each of the pilot projects” and failed to disclose limitations in its information, “and that faster line speeds allowed under the pilot projects raise concerns about food safety and worker safety”); see also, e.g., U.S. DEP'T AGRIC. OFF. INSPECTOR GEN., *FOOD SAFETY AND INSPECTION SERV. - INSPECTION AND ENFT ACTIVITIES AT SWINE SLAUGHTER PLANTS 17–19* (May 2013), <https://perma.cc/54KL-J5AR> (noting the HIMP pilot program at pig slaughterhouses “show[ed] no measurable improvement to the inspection process” and the FSIS failed to “adequately oversee the program,” making it impossible to determine whether it had increased food safety, and slaughterhouses in the pilot program “have less assurance of food safety than a traditional plant”); U.S. DEP'T AGRIC. OFF. INSPECTOR GEN., *FOOD SAFETY AND INSPECTION SERVICE'S OVERSIGHT OF THE NEW POULTRY INSPECTION SYSTEM 5* (Dec. 2018), <https://perma.cc/YF89-BJKE> (noting the FSIS failed to properly evaluate the program's effectiveness in poultry slaughterhouses). Though a full discussion of the non-environmental concerns around increased slaughter line speeds is beyond the scope of this Essay, for an overview see Jessica A. Chapman et al., *Slaughterhouse Deregulation: A View of the Effects on Animals, Workers, Consumers, and the Environment*, 50 BRIEF 44 (Summer 2021).

<sup>16</sup> Modernization of Swine Slaughter Inspection, 84 Fed. Reg. 52,300, 52,300 (Oct. 1, 2019) (codified at 9 C.F.R. pts. 301, 309, 310).

<sup>17</sup> *Id.* at 52,322–34.

<sup>18</sup> *Id.* at 52,322.

<sup>19</sup> *Id.* at 52,335.

<sup>20</sup> Press Release, Center for Biological Diversity, Animal-Protection, Conservation Groups Sue U.S. Department of Agriculture for Gutting Pig Slaughterhouse Oversight (Dec. 18, 2019), <https://perma.cc/HPY5-T5NV>.

<sup>21</sup> Kimberly Kindy, *Inspector General Wants to Know If USDA Concealed Worker Safety Data*, WASH. POST (June 25, 2019), <https://perma.cc/FX23-53RQ>.

National Environmental Policy Act of 1969 (NEPA)<sup>22</sup> to assess these impacts. The agency refused, cursorily asserting that the rulemaking was categorically excluded from NEPA's requirements.<sup>23</sup> Despite justifying the rule on the grounds that it would increase production, in the very same document, the agency inconsistently asserted that "revoking line speeds is not expected to determine the number of hogs slaughtered or result in more waste or more water use, as suggested by the commenters."<sup>24</sup>

The FSIS has similarly disregarded NEPA's mandates when increasing slaughter for other species. From 2012 to 2014, the agency considered increasing chicken slaughter line speed limits from 140 to 175 birds per minute (bpm).<sup>25</sup> As with pigs, the FSIS justified this proposal on the grounds that it would increase industry profits, in this case by about \$200 million annually, and facilitate "increased sales of domestic and exported products"—i.e., increased production, or slaughter.<sup>26</sup> The agency acknowledged that the proposed line speed increase "could lead to an increase in sales of poultry products" and, consequently, chicken slaughterhouses "may choose to increase the number of birds that they slaughter, which could result in an increase in the number of condemned carcasses and parts that must be disposed of."<sup>27</sup> Nevertheless, the FSIS refused to assess the proposal's environmental impacts, claiming, as it later would for pig slaughter line speed limit revocation, that the proposed change was categorically excluded from NEPA's requirements.<sup>28</sup>

Ultimately, the agency decided against the proposed regulatory chicken line speed limit increase, choosing instead to continue limiting the number of HIMP chicken slaughterhouses to twenty.<sup>29</sup> The National Chicken Council then petitioned the FSIS to allow additional chicken slaughterhouses to increase their line speeds, emphasizing that doing so would result in increased "production volume" and remove "arbitrary production limitations"—in other words, allow more chickens to be

---

<sup>22</sup> NEPA, 42 U.S.C. §§ 4321–4370h (2018).

<sup>23</sup> 84 Fed. Reg. at 52,317.

<sup>24</sup> *Id.*

<sup>25</sup> Modernization of Poultry Slaughter Inspection, 77 Fed. Reg. 4408, 4438 n.16 (proposed Jan. 27, 2012); Modernization of Poultry Slaughter Inspection, 79 Fed. Reg. 49,566, 49,570, 49,577 (Aug. 21, 2014).

<sup>26</sup> 77 Fed. Reg. at 4438.

<sup>27</sup> *Id.* at 4,451.

<sup>28</sup> *Id.*

<sup>29</sup> 79 Fed. Reg. at 49,583. A similar proposal was submitted to the Office of Management and Budget in November 2020, but withdrawn in January 2021. Dylan Mathews, *Biden's Latest Executive Action Is a Win for Chickens and Meatpacking Workers*, VOX (Jan. 26, 2021), <https://perma.cc/5WMC-BVHG>; see also Mike Dorning & Michael Hirtzer, *Trump Makes Last Push to Speed Up Chicken Lines Despite Pandemic*, BLOOMBERG (Nov. 11, 2020), <https://perma.cc/RQJ3-Q5N6> (noting USDA's submission of "a proposal to raise the maximum line speed by 25% to the White House Office of Management and Budget" three days after the November 2020 election).

slaughtered.<sup>30</sup> Although the FSIS denied the petition in January 2018,<sup>31</sup> less than a month later the agency announced, without going through notice-and-comment rulemaking and without assessing environmental impacts, that it would begin granting line-speed waivers to chicken slaughterhouses beyond the twenty HIMP participants.<sup>32</sup> The agency declared that its decision to allow additional chicken slaughterhouses to increase their line speeds was “categorically excluded from NEPA requirements.”<sup>33</sup> Contrary to its 2012 statements, the FSIS asserted that “granting waivers to allow additional . . . establishments to operate at up to 175 bpm is not expected to affect the number of birds slaughtered or result in more waste, more water use, or require more fossil fuels to transport the birds from farm to slaughterhouse.”<sup>34</sup>

Under this policy, the number of high-speed chicken slaughterhouses has more than doubled, with the FSIS approving new line speed waivers for five slaughterhouses in 2018, fourteen slaughterhouses in 2019, and sixteen slaughterhouses in 2020.<sup>35</sup> In approving these waivers, the agency did not consider a single environmental impact.<sup>36</sup>

Then, in March 2020 the FSIS quietly approved the first line speed waiver for a cattle slaughterhouse,<sup>37</sup> again without considering any environmental impacts. The agency has stated that it plans “to go forward with rulemaking” around cattle slaughter as it has for other species.<sup>38</sup>

Industry and the FSIS have repeatedly recognized that slaughter line speed increases are directly correlated to production increases—increases in the number of animals slaughtered. Indeed, production increases are a primary reason given to justify slaughter line speed increases.<sup>39</sup> Slaughter has significant environmental impacts, including

---

<sup>30</sup> Letter from Michael J. Brown, President, National Chicken Council, to Carmen Rottenberg, Acting Deputy Under Secretary for Food Safety, U.S. Dep’t Agric., FSIS 7, 12 (Sept. 1, 2017), <https://perma.cc/P5C8-GWBJ>.

<sup>31</sup> Letter from Carmen Rottenberg, Acting Deputy Under Secretary, U.S. Dep’t Agric., FSIS, to Michael J. Brown, President, National Chicken Council (Jan. 29, 2018), <https://perma.cc/8X5S-3Y4N>.

<sup>32</sup> Food Safety and Inspection Service, *FSIS’ Criteria for Consideration of Waiver Requests from Young Chicken Slaughter Establishments to Operate at Line Speeds Up to 175 Birds Per Minute*, 21 FSIS CONSTITUENT UPDATE 1, 1 (Feb. 2018); *see also* 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, 49,048 (Sept. 28, 2018) (providing additional information on the criteria that FSIS planned to use to evaluate new line speed waiver requests).

<sup>33</sup> 83 Fed. Reg. at 49,058.

<sup>34</sup> *Id.*

<sup>35</sup> Food Safety and Inspection Service, *SALMONELLA INITIATIVE PROGRAM (SIP) PARTICIPANTS TABLE, TABLE 1* <https://perma.cc/L4EL-3EPF> (last updated June 3, 2020).

<sup>36</sup> *Id.*

<sup>37</sup> *Id.*

<sup>38</sup> Bernard Shire, *Trial by Fire*, MEAT + POULTRY (Sept. 16, 2020), <https://perma.cc/4823-74PE>.

<sup>39</sup> Modernization of Poultry Slaughter Inspection, 77 Fed. Reg. 4408, 4438 (proposed Jan. 27, 2012).

substantial water consumption and water, solid waste, and air pollution.<sup>40</sup> Increasing the number of animals slaughtered increases these impacts, as well as environmental impacts from the factory farms that supply slaughterhouses and vehicles that transport the animals to slaughter. Such impacts must be assessed under NEPA.

*B. The National Environmental Policy Act, Categorical Exclusions, and the Food Safety Inspection Service*

In passing NEPA, Congress sought “to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man.”<sup>41</sup> To this end, NEPA forbids agencies from approving any major federal action that may have significant impacts on the environment, unless the agency first analyzes and discloses those impacts to the public.<sup>42</sup> Under the Council on Environmental Quality (CEQ) regulations implementing NEPA,<sup>43</sup> analyses must take the form of either an environmental assessment (EA) or an environmental impact statement (EIS).<sup>44</sup>

After over forty years of stasis, the CEQ recently updated its NEPA regulations.<sup>45</sup> Though these new regulations technically came into effect on September 14, 2020,<sup>46</sup> their legality is highly suspect. As such they are currently the subject of no less than five federal lawsuits.<sup>47</sup> For thoroughness, this Essay refers to both the new regulations and the old. The FSIS’s obligation to conduct NEPA analysis before finalizing the proposed rule is the same under either the new or old regulations.<sup>48</sup>

If an agency is unsure whether an action’s impacts will be significant, an EA is used to examine the significance of the impacts.<sup>49</sup> When an EA shows impacts are likely to be significant, the agency must conduct a

---

<sup>40</sup> See *infra* Part III.

<sup>41</sup> 42 U.S.C. § 4321 (2018).

<sup>42</sup> See *id.* § 4332(C) (requiring detailed written analysis for actions with significant effects).

<sup>43</sup> The CEQ is the federal agency in charge of implementing NEPA. Accordingly, the CEQ’s NEPA regulations are generally applicable to all other agencies undertaking actions that may significantly affect the environment. *What Is the National Environmental Policy Act?*, U.S. ENV’T PROT. AGENCY, <https://perma.cc/562Y-VDBQ> (last visited July 26, 2021).

<sup>44</sup> See 40 C.F.R. §§ 1501.3–1501.4 (2019) (providing information on when and whether to prepare an EA or EIS).

<sup>45</sup> Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act, 85 Fed. Reg. 43,304, 43,304 (July 16, 2020).

<sup>46</sup> *Id.*

<sup>47</sup> *Wild Va. v. CEQ*, No. 3:20-cv-00045 (W.D. Va. filed Jul. 29, 2020); *Alaska Cmty. Action on Toxics v. CEQ*, No. 3:20-cv-05199 (N.D. Cal. filed Jul. 29, 2020); *State of California v. CEQ*, No. 3:20-cv-06057 (N.D. Cal. filed Aug. 28, 2020); *Env’t Just. Health All. v. CEQ*, No. 1:20-cv-06143 (S.D.N.Y. filed Aug. 6, 2020); *Iowa Citizens for Cmty. Improvement v. CEQ*, No. 1:20-cv-02715 (D.D.C. filed Sep. 23, 2020).

<sup>48</sup> Compare 40 C.F.R. §§ 1501.3–1501.4 (2019), *supra* note 44, with Update to the Regulations, *supra* note 45.

<sup>49</sup> 40 C.F.R. § 1501.5 (2020); 40 C.F.R. § 1501.3–4 (2019).

more robust analysis in an EIS.<sup>50</sup> Of note, agencies may forego an EA and skip straight to an EIS for actions they know are likely to have significant environmental impacts.<sup>51</sup>

To help agencies determine whether an action's impacts are significant, the CEQ has enumerated several factors that must be considered.<sup>52</sup> While the old regulations explicitly included a broader list of factors to consider, the new regulations retain many of these factors, including effects on public health, safety, and threatened and endangered species.<sup>53</sup> Moreover, neither the new regulations nor the old constrain agencies (or reviewing courts) from considering factors beyond those expressly included in the regulations when determining whether effects rise to the very broad significance standard.

If significant impacts may result from a proposed action, agencies must "[i]dentify environmental effects and values in adequate detail so the decision maker can appropriately consider such effects and values alongside economic and technical analyses."<sup>54</sup> Whether agencies are developing an EA or EIS, they must consider reasonable alternatives to the proposed action and ensure the scientific integrity of their analyses.<sup>55</sup> All of these pieces contribute to the "hard look" agencies must take to satisfy NEPA's mandate.<sup>56</sup>

Agencies are allowed to create categorical exclusions (CEs) for categories of actions that do not have a significant effect on the environment.<sup>57</sup> However, before applying any CE, agencies must analyze proposed actions for extraordinary circumstances that might cause significant environmental impacts.<sup>58</sup> Courts regularly look to the significance factors to determine whether extraordinary circumstances exist such that an ordinarily categorically excluded action must undergo NEPA analysis.<sup>59</sup> If extraordinary circumstances exist, the agency must examine and disclose the action's potential significant effects. And even

---

<sup>50</sup> 40 C.F.R. §§ 1501.3(a)(3), 1502.1–1502.2 (2020); 40 C.F.R. §§ 1501.4, 1502.1–.2 (2019).

<sup>51</sup> 40 C.F.R. § 1501.3 (2019).

<sup>52</sup> 40 C.F.R. § 1501.3(b) (2020); 40 C.F.R. § 1508.27 (2019).

<sup>53</sup> 40 C.F.R. § 1501.3(b) (2020).

<sup>54</sup> *Id.* § 1501.2(b)(2) (2020); *see also* 40 C.F.R. § 1501.2 (2019) ("Agencies shall integrate the NEPA process with other planning at the earliest possible time to insure that planning and decisions reflect environmental values.").

<sup>55</sup> 42 U.S.C. § 4332(C)(iii) (2018); 40 C.F.R. §§ 1502.23–.24 (2019).

<sup>56</sup> *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989) (citing *Kleppe v. Sierra Club*, 427 U.S. 390, 410 (1976)).

<sup>57</sup> *See* 40 C.F.R. § 1501.4(a)(2) (2019) (providing agencies with authority to establish CEs for categories of actions that normally do not have a significant effect on the environment); *see also id.* § 1508.4 (defining categorical exclusion as a "category of actions which do not individually or cumulatively have a significant effect on the human environment").

<sup>58</sup> *Id.* § 1508.4.

<sup>59</sup> *See, e.g., Jones v. Gordon*, 792 F.2d 821, 827 (9th Cir. 1986) (stating the "factors include the degree to which the effects on the quality of the human environment are likely to be highly controversial and the degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks" (internal quotations and citation omitted)).



if the agency determines no extraordinary circumstances exist and a CE is appropriate, the agency must show its work through a well-reasoned, written explanation.<sup>60</sup>

The USDA has adopted a regulatory CE providing that, normally, FSIS programs and activities need not undergo NEPA analysis because they generally “have no individual or cumulative effect on the human environment.”<sup>61</sup> However, this regulatory CE explicitly limits its applicability to those actions that will not have significant environmental effects.<sup>62</sup> Of course, the existence of “substantial questions [as to] whether a project may have a significant effect on the environment” is the ordinary trigger for NEPA analyses.<sup>63</sup> Thus, while it may be true that the FSIS can forego NEPA analyses most of the time because its actions normally lack any reasonably foreseeable environmental impact, its regulatory CE does not relieve the agency of its NEPA obligations where significant environmental effects may result from a proposed action. Indeed, the obligation for agencies to conduct a thorough analysis when an action may cause significant environmental impacts stems from the NEPA statute itself.<sup>64</sup> Therefore, no regulation could lawfully relieve an agency of that requirement.<sup>65</sup> Nevertheless, the FSIS maintains that its decisions to raise and even eliminate slaughterhouse line speed limits are covered by its CE.<sup>66</sup> This position is irreconcilable with the foreseeable environmental impacts of increasing slaughter speeds, as detailed in the next Part.

### III. ENVIRONMENTAL IMPACTS OF SLAUGHTERHOUSES

Despite the FSIS’s use of its CE to avoid NEPA analysis, increasing line speeds by raising and removing prior regulatory limits will have significant environmental impacts. The foreseeable response to increased or revoked line speed limits is that some slaughterhouses will use their existing staff, facilities, and operating hours to kill more animals than was

---

<sup>60</sup> *Ctr. for Biological Diversity v. U.S. Forest Serv.*, 444 F. Supp. 3d 832, 870 (S.D. Ohio 2020); *see also* *California v. Norton*, 311 F.3d 1,162, 1,176 (9th Cir. 2002) (requiring “contemporaneous documentation to show that the agency considered the environmental consequences of its action”); *Alaska State Snowmobile Ass’n, Inc. v. Babbitt*, 79 F. Supp.2d 1116, 1136, 1139 (D. Alaska 1999) (calling agency invocation of CE “insufficient” where agency “merely restated the categorical exclusion language” and did not provide any “further discussion or analysis”), *vacated on other grounds*, 2001 WL 770442 (9th Cir. Jan. 10, 2001).

<sup>61</sup> 7 C.F.R. § 1b.4(a) (2020).

<sup>62</sup> *See id.* (freeing the FSIS from its NEPA obligations “unless the agency head determines that an action may have a significant environmental effect”).

<sup>63</sup> *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1,208, 1,212 (9th Cir. 1998) (internal quotations omitted) (citing *Idaho Sporting Cong. v. Thomas*, 137 F.3d 1,146, 1,150 (9th Cir. 1998)).

<sup>64</sup> 42 U.S.C. § 4332(C) (2018).

<sup>65</sup> *See Util. Air Regulatory Grp. v. EPA*, 573 U.S. 302, 328 (2014) (“[A]n agency may not rewrite clear statutory terms to suit its own sense of how the statute should operate.”).

<sup>66</sup> *Modernization of Swine Slaughter Inspection*, 84 Fed. Reg. 52,300, 52,317 (Oct. 1, 2019) (codified at 9 C.F.R. pts. 301, 309, 310).

possible under the preexisting limits. Indeed, as discussed above, the FSIS has acknowledged as much.<sup>67</sup> Increased production exacerbates the environmental impacts attributable to slaughterhouses.<sup>68</sup> For instance, trucks carrying animals to slaughter release pollutants such as feathers and diesel fumes.<sup>69</sup> Increased production means more trucks transporting more animals to slaughter, and thus more such pollution. Moving more animals through slaughter lines more quickly may also require those trucks—and their associated pollutants—to unload more quickly, concentrating the release of pollutants to a shorter time span and potentially intensifying their effects.<sup>70</sup> Moreover, because slaughter does not occur in a vacuum, increased capacity and more concentrated production at slaughterhouses will necessarily intensify environmental harms from concentrated animal feeding operations (CAFOs), transportation, and processing facilities that turn carcasses into consumer products.<sup>71</sup> Thus, although often overlooked, slaughterhouses are significant sources of pollution that must be regulated through existing environmental laws.

#### A. Water Demand and Pollution

All slaughterhouses use incredible amounts of water.<sup>72</sup> In fact, meat processing facilities account for 29% of the agricultural sector's total freshwater consumption worldwide.<sup>73</sup> Among these facilities, poultry slaughterhouses are the thirstiest operations.<sup>74</sup> A 2003 survey sponsored by the U.S. Poultry and Egg Association found that potable water demand

---

<sup>67</sup> See *supra* text accompanying notes 19–20, 26–27.

<sup>68</sup> See discussion *infra* Parts III.A–C.

<sup>69</sup> KIRA BURKHART ET AL., ENV'T INTEGRITY PROJECT, WATER POLLUTION FROM SLAUGHTERHOUSES 8 (2018), <https://perma.cc/JSH9-G6E9>.

<sup>70</sup> See, e.g., *Particle Pollution*, AMERICAN LUNG ASS'N, <https://perma.cc/WA5Q-JFBW> (last visited Apr. 20, 2020) (describing adverse health impacts from high concentrations of particulate matter in exhaust fumes); 40 C.F.R. §§ 50.6–50.7 (setting national ambient air quality standards for particulate matter based on concentration).

<sup>71</sup> First Amended Complaint for Vacatur, Declaratory, and Injunctive Relief at 37–38, *Farm Sanctuary v. U.S. Dep't Agric.*, No. 6:19-cv-06910 (W.D.N.Y. Feb. 18, 2020).

<sup>72</sup> U.S. ENV'T PROT. AGENCY, TECHNICAL DEVELOPMENT DOCUMENT FOR THE FINAL EFFLUENT LIMITATIONS GUIDELINES AND STANDARDS FOR THE MEAT AND POULTRY PRODUCTS POINT SOURCE CATEGORY (40 CFR 432) 6-1-6-3, 6-7, 6-9 (2004), <https://perma.cc/4SEF-CNWX> [hereinafter EPA EFFLUENT LIMITATIONS TECHNICAL DOCUMENT].

<sup>73</sup> Ciro Bustillo-Lecompte & Mehrab Mehrvar, *Slaughterhouse Wastewater: Treatment, Management and Resource Recovery*, in PHYSICO-CHEMICAL WASTEWATER TREATMENT & RES. RECOVERY 153, 153 (Robina Farooq & Zaki Ahmad eds., 2017).

<sup>74</sup> Poultry facilities generate more wastewater than meat slaughterhouses and processing facilities because of necessary continuous overflow for scalding tanks and carcass immersion chillers. EPA EFFLUENT LIMITATIONS TECHNICAL DOCUMENT, *supra* note 71, at 6-8.

at poultry slaughter facilities averaged 1.46 million gallons per day.<sup>75</sup> That same survey estimated overall industry water use to be between 43.5 and 87.0 billion gallons annually.<sup>76</sup> An EPA study similarly found that chicken slaughterhouses use a mean of 9.3 gallons of water per bird (translated to 2,428 gallons per 1,000 pounds of live weight killed).<sup>77</sup> With more than 9.3 billion chickens slaughtered in the U.S. annually, that adds up to 86.5 billion gallons of water.<sup>78</sup>

Though slaughtering other animals is slightly less water-intensive, water intake at pig and cattle slaughterhouses is staggering nonetheless. Sampling conducted by the EPA indicates that pig slaughterhouses use anywhere from 291 to 442 gallons of water for every 1,000 pounds of live pig slaughtered.<sup>79</sup> With the average pig weighing 285 pounds at slaughter and approximately 130 million pigs slaughtered annually,<sup>80</sup> these slaughterhouses use upwards of 10.8 billion gallons of water each year. The number is even larger for cattle.<sup>81</sup> Pollution aside, diverting this amount of water from American waterways has a significant effect on wildlife and aquatic resources—especially in light of increased drought conditions attributable to climate change.<sup>82</sup> For this reason alone, any FSIS rulemaking likely to result in increased production at slaughterhouses must be analyzed for significant environmental impacts stemming from direct and cumulative water use.

In addition to the sheer volume of their water demand, slaughterhouses contaminate their wastewater with a plethora of pollutants, many of which are hazardous to human health and the

---

<sup>75</sup> Brian Harry Kiepper, *Characterization of Poultry Processing Slaughter Operations, Wastewater Generation, and Wastewater Treatment Using Mail Survey and Nutrient Discharge Monitoring Methods* 39 (2003) (unpublished master's thesis, University of Georgia), <https://perma.cc/KG4G-8R5E>.

<sup>76</sup> *Id.* at 32.

<sup>77</sup> EPA EFFLUENT LIMITATIONS TECHNICAL DOCUMENT, *supra* note 71, at 6-8.

<sup>78</sup> U.S. DEP'T AGRIC., POULTRY SLAUGHTER 2020 SUMMARY 5 (2021), <https://perma.cc/5KLL-KUFS>.

<sup>79</sup> EPA EFFLUENT LIMITATIONS TECHNICAL DOCUMENT, *supra* note 71, at 6-3.

<sup>80</sup> U.S. DEP'T AGRIC., LIVESTOCK SLAUGHTER 2019 SUMMARY 6 (2020), <https://perma.cc/4E7L-V4TN> [hereinafter USDA LIVESTOCK SLAUGHTER].

<sup>81</sup> Cattle slaughterhouses use between 304 and 532 gallons per 1,000 pounds of cattle slaughtered. EPA EFFLUENT LIMITATIONS TECHNICAL DOCUMENT, *supra* note 71, at 6-3. Cattle average more than 1,300 pounds at slaughter and more than thirty-three million cattle are slaughtered annually. USDA LIVESTOCK SLAUGHTER, *supra* note 79, at 6 (2020). Thus, a conservative estimate places total cattle slaughterhouse water demand at upwards of thirteen billion gallons per year.

<sup>82</sup> See Stephan Pfister et al., *Environmental Impacts of Water Use in Global Crop Production: Hotspots and Trade-Offs with Land Use*, 45 ENV'T. SCI. & TECH. 5761, 5761 (2011) (describing effects of water consumption on aquatic organisms and resources); see also Jose Pablo Ortiz Partida, *The World Is in a Water Crisis and Climate Change Is Making It Worse*, UNION CONCERNED SCIENTISTS (Sept. 9, 2019), <https://perma.cc/RF5G-49XR> (describing the environmental effect of agricultural water consumption in light of climate change); Henry Fountain, *Severe Drought, Worsened by Climate Change, Ravages the American West*, N. Y. TIMES (May 19, 2021) (describing the climate change-driven drought plaguing the entire western half of the United States).

environment.<sup>83</sup> These pollutants include organic matter such as blood, feathers, viscera, soft tissue, bone, fat, urine, and fecal matter—all of which are often laden with bacteria and pathogens.<sup>84</sup> In fact, because of the high risk these bacteria and pathogens pose to human health, poultry slaughterhouses and processing facilities use a number of antimicrobial and disinfecting chemicals that also make their way into facility wastewater.<sup>85</sup> Further, the industry's excessive use of antibacterial agents has caused the proliferation of extra-hazardous, antibiotic-resistant pathogens.<sup>86</sup> Both the organic pollutants and chemicals are high in nitrogen and phosphorus, creating wastewater with an especially high nutrient load.<sup>87</sup> Wastewater may also contain unacceptably high levels of pesticide residue and animal drugs, both of which can have adverse health impacts on humans and wildlife.<sup>88</sup>

Despite the recycling and processing that occurs onsite at these facilities, harmful pollutants make their way into both public and private waters. When the EPA developed its effluent limitations guidelines for meat and poultry product category point sources in 2004, the agency acknowledged that high concentrations of pollutants would remain in these facilities' wastewater even after the implementation of new pollutant-removal technologies.<sup>89</sup> Thus, the FSIS cannot pretend that the slaughter industry is not contributing high levels of pollution to local

---

<sup>83</sup> U.S. ENV'T PROT. AGENCY, ECON. AND ENV'T BENEFITS ANALYSIS OF THE FINAL MEAT AND POULTRY PRODUCTS RULE 7-1-7-5 (2004), <https://perma.cc/9P9C-Q9SV> [hereinafter EPA MEAT AND POULTRY PRODUCTS RULE BENEFITS ANALYSIS].

<sup>84</sup> EPA EFFLUENT LIMITATIONS TECHNICAL DOCUMENT, *supra* note 71, at 6-9-6-11; Burkhardt et al., *supra* note 80, at 8.

<sup>85</sup> See Food Safety & Inspection Serv., U.S. Dep't Agric., List of Approved On-Line Re-processing Antimicrobial Systems for Poultry (2021), <https://perma.cc/YL6D-UWV9> (providing a list of antimicrobial agents applied at slaughterhouses and processing facilities); see also Kiepper, *supra* note 74, at 65-66 (describing pollution resulting from phosphoric acid used when cleaning processing facilities); see also EPA MEAT AND POULTRY PRODUCTS RULE BENEFITS ANALYSIS, *supra* note 82, at 7-4 (describing the estrogen-mimicking pollutants that result from the breakdown of microbes in processing facilities' discharge).

<sup>86</sup> See Lisa Chedekel, *Antibiotic-Resistant Bacteria Identified Among Beef-Packing Workers*, B.U. SCH. PUB. HEALTH (Mar. 2, 2016), <https://perma.cc/7KXY-YJM4> (describing evidence of transmission of livestock-traced antibiotic-resistant bacteria to slaughterhouse workers); see also Arnaud Bridier et al., *Impact of Cleaning and Disinfection Procedures on Microbial Ecology and Salmonella Antimicrobial Resistance in a Pig Slaughterhouse*, SCI. REP., Sept. 10, 2019, at 1, 2 (highlighting cleaning and disinfecting as a route to antimicrobial resistance in the food supply chain).

<sup>87</sup> EPA EFFLUENT LIMITATIONS TECHNICAL DOCUMENT, *supra* note 71, at 6-9-6-10; BURKHART ET AL., *supra* note 84, at 8; Kiepper, *supra* note 74, at 64-66; see also *Nutrient Pollution*, U.S. ENV'T PROT. AGENCY, <https://perma.cc/7K89-VTY3> (last visited Apr. 6, 2021).

<sup>88</sup> EPA EFFLUENT LIMITATIONS TECHNICAL DOCUMENT, *supra* note 71, at 7-4; EPA MEAT AND POULTRY PRODUCTS RULE BENEFITS ANALYSIS, *supra* note 82, at 7-4; CARRIE HRIBAR, NAT'L ASS'N LOCAL BDS. HEALTH, UNDERSTANDING CONCENTRATED ANIMAL FEEDING OPERATIONS AND THEIR IMPACT ON COMMUNITIES 2-3 (Mark Schultz ed., 2010), <https://perma.cc/6FPM-MDG3>.

<sup>89</sup> See EPA EFFLUENT LIMITATIONS TECHNICAL DOCUMENT, *supra* note 71, at 11-14-11-18, 14-26-14-27, 14-32 (showing that EPA set the final limitations for the industry by assessing how the technology options compared to the long-term average).

waterways. According to an industry estimate, the average rendering operation discharges 169 gallons of wastewater *every minute*.<sup>90</sup> Many slaughterhouses and processing facilities discharge directly into waters that are already impaired by the very pollutants being discharged.<sup>91</sup> However, pollutants also enter waters via runoff and groundwater seepage from agricultural fields where slaughter facilities frequently spray their wastes.<sup>92</sup> In this manner, wastewater pollutants can contaminate drinking water wells used by local communities.<sup>93</sup> There are many documented instances of slaughterhouse pollutants making their way into drinking water sources and causing severe health problems in local residents.<sup>94</sup> Consequences of ingesting water contaminated by slaughterhouse pollutants include bacterial infections, gastrointestinal ailments, cancer, autoimmune disorders, birth defects, miscarriages, and even death.<sup>95</sup>

Importantly, slaughterhouses pollute more than the amounts allowed by their National Pollutant Discharge Elimination System (NPDES) permits.<sup>96</sup> Many slaughterhouses and processing factories regularly violate their permit conditions by discharging more pollutants than allowed, including excessive amounts of hazardous pollutants like *E. coli* and *Enterococcus*.<sup>97</sup> Because of these reasonably foreseeable violations, the exact amount of water pollution attributable to the slaughter industry is difficult to quantify. However, the existence of substantial amounts of pollution is evidenced by severe environmental consequences attributable to slaughterhouse pollutants. As mentioned, waterways that receive slaughterhouse wastewater are largely impaired by the pollutants in those wastes.<sup>98</sup>

Nutrients are a particularly concerning class of pollutants. Nutrients like nitrogen and phosphorus are necessary elements of aquatic ecosystems because they feed plant life.<sup>99</sup> But overly high nutrient levels catalyze excessive plant growth and increase biochemical oxygen demand (BOD).<sup>100</sup> Releasing nutrients into waters that are already impaired by nutrients or BOD, as many slaughterhouses do,<sup>101</sup> causes toxic algal

---

<sup>90</sup> *Id.* at 6–14.

<sup>91</sup> BURKHART ET AL., *supra* note 84, at 13–14; EPA MEAT AND POULTRY PRODUCTS RULE BENEFITS ANALYSIS, *supra* note 82, at 7–6.

<sup>92</sup> BURKHART ET AL., *supra* note 84, at 9.

<sup>93</sup> *Id.* at 22–23, 26.

<sup>94</sup> *Id.* at 22–25; EPA MEAT AND POULTRY PRODUCTS RULE BENEFITS ANALYSIS, *supra* note 82, at 7–5.

<sup>95</sup> See BURKHART ET AL., *supra* note 84, at 23–24 (noting that consuming water with too much nitrogen can cause “blue baby syndrome,” also known as methemoglobinemia—a potentially fatal condition for infants).

<sup>96</sup> See 40 C.F.R. §§ 122.1–122.64 (2021).

<sup>97</sup> *Id.* BURKHART ET AL., *supra* note 84, at 2, 13–16, 18–19.

<sup>98</sup> *Id.* at 2, 13–14.

<sup>99</sup> Kiepper, *supra* note 74, at 58.

<sup>100</sup> BURKHART ET AL., *supra* note 84, at 8, 15.

<sup>101</sup> *Id.* at 2, 13–14.

blooms and low-oxygen “dead zones” that suffocate aquatic life and pose health hazards to humans.<sup>102</sup>

### B. Solid Waste

Wastewater treatment produces not only liquid, but also solid waste. According to the EPA, solid waste is “[t]he most significant non-water quality impact” of slaughterhouse and processing regulation.<sup>103</sup> During wastewater treatment, slaughterhouses and processing facilities produce sludge consisting of contaminants removed from the water and byproducts of chemicals used in the treatment process.<sup>104</sup> These sludges and the carcasses of animals deemed unfit for slaughter create significant waste disposal issues.<sup>105</sup>

Unsurprisingly, dead animals and solids extracted from slaughterhouse wastewater are often “contaminated with high numbers of microorganisms including bacteria, viruses, prions, fungi, yeasts, and associated microbial toxins.”<sup>106</sup> Thus, slaughterhouse sludge must be treated and disposed of in a manner that prevents transmission of these hazards to humans and other animals.<sup>107</sup> But safely disposing of slaughterhouse sludge is easier said than done. Pathogens can survive rendering, composting, anaerobic digestion, and alkaline hydrolysis processes.<sup>108</sup> Moreover, these processes require additional inputs and return products that lead to additional pollution.<sup>109</sup> For instance, the use of slaughter waste to create biogas releases greenhouse gases during production and downstream when the fuel is burned by end users.<sup>110</sup>

---

<sup>102</sup> *Id.* at 8, 15; HRIBAR, *supra* note 7, at 3–5; see *Nutrient Pollution – The Issue*, U.S. ENV'T PROT. AGENCY, <https://perma.cc/M9P6-SR8D> (last updated Feb. 4, 2019) (detailing the impact of excessive nitrogen and phosphorous on the health of ecosystems).

<sup>103</sup> EPA EFFLUENT LIMITATIONS TECHNICAL DOCUMENT, *supra* note 71, at 12-5.

<sup>104</sup> See *id.* at 12-5–12-7 (acknowledging that sludge may need to undergo additional denitrification).

<sup>105</sup> Ingrid H. Franke-Whittle & Heribert Insam, *Treatment Alternatives of Slaughterhouse Wastes, and Their Effect on the Inactivation of Different Pathogens: A Review*, 39 CRITICAL REVIEWS MICROBIOLOGY 139, 139 (2013).

<sup>106</sup> *Id.* at 140.

<sup>107</sup> See *id.* (describing the historical practices including burial, burning, rendering, composting, and other waste treatment processes used to handle and treat wastes that pose potential risk to animal and human health).

<sup>108</sup> *Id.* at 148.

<sup>109</sup> See *id.* at 141–42 (describing alkaline hydrolysis and anaerobic digestion as processes that require heat and produce biogas); ROBERT B. WILLIAMS ET AL., U.S. ENV'T PROT. AGENCY, EVALUATING THE AIR QUALITY, CLIMATE & ECONOMIC IMPACTS OF BIOGAS MANAGEMENT TECHNOLOGIES 8 (2016), <https://perma.cc/A6S9-BVMH>.

<sup>110</sup> See Jan Liebetrau et al., *Methane Emissions from Biogas-Producing Facilities Within the Agricultural Sector*, 10 ENG'G LIFE SCI. 595, 599 (2010) (discussing methane emissions stemming from flawed design and operation of biogas producing facilities); see also Valerio Paolini et al., *Environmental Impact of Biogas: A Short Review of Current Knowledge*, 53 J. ENV'T SCI. & HEALTH 899, 901–03 (2018) (noting emissions impacts of both biogas production and consumption); see generally Franke-Whittle & Insam, *supra* note 104, at 142 (describing the use of slaughter wastes to create biogas); WILLIAMS ET AL., *supra* note 8, at 8

### C. Air Pollution

In addition to causing severe water pollution and waste management issues, slaughterhouses also generate air pollution. Slaughterhouses use significant amounts of energy, resulting in greenhouse gas emissions that contribute to climate change.<sup>111</sup> Beyond the emissions generated at the facilities themselves, trucks that transport animals to slaughter also emit greenhouse gases,<sup>112</sup> and manure emits nitrous oxide and methane.<sup>113</sup> Even the animals emit methane directly through enteric fermentation.<sup>114</sup> In this way, every part of the slaughter industry contributes to climate change.

Slaughterhouses, and the trucks and feeding operations that supply them, also emit other harmful substances like dust, particulate matter, and feathers that can carry bacteria and pathogens.<sup>115</sup> Further, ammonia, hydrogen sulfide, and other odorous gases from slaughterhouses and feed operations are devastating to local air quality.<sup>116</sup> Aside from being a nuisance, this air pollution causes severe health problems for nearby residents.<sup>117</sup>

Notably, slaughterhouses are disproportionately located in communities of color and low-income communities,<sup>118</sup> meaning these already vulnerable communities suffer the brunt of the pollution associated with the slaughter industry.

\*\*\*

While invoking a CE to evade NEPA analysis is appropriate for agency actions that are truly devoid of environmental impacts, CEs are completely inappropriate where, as here, an agency proposes changes to the regulatory regime governing a highly polluting industry. As both the government and slaughter industry have admitted, altering line speed limits is likely to increase slaughterhouse production.<sup>119</sup> The reasonably foreseeable result of increased production is that the existing

---

(emphasizing that biogas does not reduce greenhouse gas emissions when downstream users are accounted for).

<sup>111</sup> See EPA EFFLUENT LIMITATIONS TECHNICAL DOCUMENT, *supra* note 71, at 12-2 (quantifying energy use from wastewater treatment at slaughterhouses); see also CLAUDIA S. DUNKLEY, GLOBAL WARMING: HOW DOES IT RELATE TO POULTRY? 2-3 (Univ. Ga. Extension ed., 2011), <https://perma.cc/37J2-SUV3> (discussing the poultry industry's carbon footprint).

<sup>112</sup> Narayanan Kannan et al., *Estimation of Energy Consumption and Greenhouse Gas Emissions of Transportation in Beef Cattle Production*, 9 ENERGIES 1, 11 (2016).

<sup>113</sup> DUNKLEY, *supra* note 110, at 3-4; HRIBAR, *supra* note 7, at 7.

<sup>114</sup> DUNKLEY, *supra* note 110, at 4.

<sup>115</sup> BURKHART ET AL., *supra* note 84, at 25; HRIBAR, *supra* note 7, at 6.

<sup>116</sup> EPA EFFLUENT LIMITATIONS TECHNICAL DOCUMENT, *supra* note 71, at 12-3; see BURKHART ET AL., *supra* note 84, at 22-24 (describing how local communities in Sussex County, Delaware have been impacted by air pollution from slaughterhouses).

<sup>117</sup> BURKHART ET AL., *supra* note 84, at 22-24; see also Nina G. G. Domingo, et al., Air Quality-Related Health Damages of Food, 118 PNAS (Mar. 18, 2021), <https://perma.cc/GJ6Q-AS3J> (estimating that U.S. animal agriculture is responsible for 12,700 air pollution related deaths annually).

<sup>118</sup> *Id.* at 3.

<sup>119</sup> See *supra* text accompanying notes 19-20, 26-27.

environmental impacts discussed in this section will be exacerbated. This triggers mandatory NEPA analysis, and the FSIS cannot use a CE to avoid that analysis, especially when its CE does nothing more than reiterate NEPA's disclaimer that only actions with significant environmental impacts need to be analyzed.<sup>120</sup> Permitting the FSIS to apply its CE to line speed limit changes would be allowing the exception to swallow the rule.

#### IV. ONGOING LITIGATION

Given the severe and often dangerous environmental impacts already caused by slaughterhouses, it is entirely foreseeable that increasing slaughterhouse line speeds will exacerbate these impacts. Slaughterhouse water demand is driven in large part by the need to wash the dead animals and remove their feathers and hides.<sup>121</sup> Thus, increasing the number of animals slaughtered is likely to drive up water demand and increase air, water, and solid pollution loads. Likewise, transporting more animals and operating at increased speeds require additional energy inputs that will increase a facility's carbon footprint.<sup>122</sup> These consequences are certainly foreseeable enough that the FSIS must analyze and disclose them in either an EA or EIS before promulgating any rule that increases slaughterhouse line speeds. And yet, the agency has refused to do so.

Two lawsuits challenging the FSIS's failure to consider the environmental impacts of increased line speed limits are currently pending.<sup>123</sup> The first, filed by the Animal Law Litigation Clinic and Earthrise Law Center at Lewis & Clark Law School on behalf of a

---

<sup>120</sup> See *supra* text accompanying notes 61–65.

<sup>121</sup> EPA EFFLUENT LIMITATIONS TECHNICAL DOCUMENT, *supra* note 71, at 6-1, 6-7.

<sup>122</sup> First Amended Complaint, Farm Sanctuary v. U.S. Dep't Agric., *supra* note 70, at 36.

<sup>123</sup> Additional lawsuits challenge line speed increases on other grounds. See Complaint for Declaratory and Injunctive Relief at 2, Ctr. for Food Safety v. Sonny Perdue, No. 3:20-cv-00256 (N.D. Cal. Jan. 13, 2020) (challenge to revocation of pig slaughter line speed limits focused on consumer harms); see Complaint for Declaratory and Injunctive Relief at 1, United Food & Commercial Workers Union v. U.S. Dep't Agric., 451 F.Supp.3d 1040 (D. Minn. 2020) (No. 0:19-cv-02660) (labor unions' challenge to revocation of pig slaughter line speed limits); see also Complaint for Declaratory and Injunctive Relief at 2, United Food & Com. Workers Union v. U.S. Dep't Agric., No. 1:20-cv-02045 (D.D.C. July 28, 2020) (labor unions' challenge to chicken slaughter line speed waiver program). Litigation more generally addressing the environmental impacts of slaughterhouses—apart from line speed increases—is also pending. See, e.g., Petition for Review, Cape Fear River Watch v. EPA, No. 19-2450 (4th Cir. Dec. 18, 2019) (challenging EPA's refusal to update national standards restricting water pollution from slaughterhouses). Notably, in the case brought before the District of Minnesota, the court recently sided with the labor unions, holding that FSIS acted arbitrarily and capriciously by increasing pig slaughter line limits without properly considering impacts to worker safety. Opinion at 49–57, United Food & Com. Workers Union v. U.S. Dep't of Agric., No. 0:19-cv-02660. Accordingly, the court vacated the portion of FSIS's rule that eliminated line speed limits for pig slaughterhouses. *Id.* at 68.



coalition of seven animal and environmental protection organizations,<sup>124</sup> contends that the FSIS violated NEPA when it finalized the rule revoking slaughter line speed limits for pigs.<sup>125</sup> Specifically, the suit alleges that the FSIS erred in not conducting an environmental analysis and therefore not “tak[ing] the requisite ‘hard look’ at, and disclosing to the public, the adverse effects and potentially significant environmental impacts of the proposed action in an EA or EIS.”<sup>126</sup>

The suit details increased slaughterhouse-level environmental harms likely to result from the rule, including increased wastewater, and carcass treatment and disposal needs; increased energy, freshwater, infrastructure and transportation demands at slaughterhouses; and increased air pollution.<sup>127</sup> It further catalogs the myriad CAFO-level environmental harms likely to be exacerbated as a result of the rule, including greenhouse gas emissions and other air pollution, and water impacts from pollution that pose serious risks to humans and wildlife.<sup>128</sup> For example, the suit notes that the CAFO supplying Seaboard Farms—the first slaughterhouse to convert to higher speeds under the rule—“produces as much sewage as the city of Philadelphia, and it sits in open-air lagoons, some as large as 14 acres and as deep as 25 feet. Neighbors complain of intolerable stench, and everybody worries about water pollution.”<sup>129</sup> The suit maintains that the FSIS’s invocation of a CE is improper and inconsistent with the agency’s explanation of the rule’s benefits, which emphasizes production increases.<sup>130</sup> Moreover, the suit alleges that even if the action otherwise fell within the scope of the FSIS’s general “CE, ‘extraordinary circumstances’ exist that required the preparation of an EIS or EA.”<sup>131</sup> On June 28, 2021, the court denied the government’s motion to dismiss the case, holding that the plaintiff organizations had adequately alleged standing.<sup>132</sup>

A second lawsuit, brought by the Humane Society of the U.S., Animal Outlook, the Government Accountability Project, and Marin Humane, challenges, inter alia, the FSIS’s failure to consider environmental impacts when it implemented its 2018 policy allowing additional chicken slaughterhouses beyond the original twenty HIMP plants to increase

---

<sup>124</sup> Plaintiffs are Farm Sanctuary, Animal Equality, the Animal Legal Defense Fund, Animal Outlook, the Center for Biological Diversity, Mercy For Animals, Inc., and North Carolina Farmed Animal Save. The suit also includes additional claims not discussed in this Essay. First Amended Complaint, *Farm Sanctuary v. U.S. Dep’t Agric.*, *supra* note 70, at 1.

<sup>125</sup> *Id.* at 46.

<sup>126</sup> *Id.*

<sup>127</sup> *Id.* at 36.

<sup>128</sup> *Id.* at 37–39.

<sup>129</sup> *Id.* at 40 (quoting Jedidiah Purdy, *The New Culture of Rural America*, AM. PROSPECT (Nov. 15, 2001), <https://perma.cc/2ZD3-DTZS>).

<sup>130</sup> *Id.* at 46.

<sup>131</sup> *Id.* at 47.

<sup>132</sup> Order at 31–32, *Farm Sanctuary v. U.S. Dep’t Agric.*, No. 6:19-cv-06910 (W.D.N.Y. June 28, 2021).

slaughter line speeds.<sup>133</sup> The complaint notes that “a single facility that increases the speed of just one of its lines from 140 bpm to 175 bpm and continues to operate that line for 40 hours a week would be able to kill an additional 84,000 chickens each week and more than 4.3 million additional chickens in a year.”<sup>134</sup> Further, the complaint details the concomitant increase in environmental harms that will flow from such increased production, including from CAFOs, during transport, and at the slaughterhouse.<sup>135</sup> As in the challenge to the pig slaughter line speeds rule, plaintiffs contend that the FSIS improperly relied on its CE in disregarding NEPA.<sup>136</sup> At the time of this writing, this suit is also awaiting a ruling on a motion to dismiss on standing grounds.<sup>137</sup>

Thus, two pending lawsuits challenge the FSIS’s perfunctory invocation of a CE to avoid assessing the environmental impacts of policies that facilitate the slaughter of millions more animals annually, significantly increasing the environmental harms already posed by slaughterhouses as well as the CAFOs and transport that supply them.

## V. IMPLICATIONS FOR THE FUTURE

To avoid further environmental degradation by slaughterhouses, the environmental impacts of faster slaughter line speeds must be assessed and addressed. NEPA already requires as much, but the FSIS has defied NEPA’s mandates.<sup>138</sup> The agency must be held accountable for this defiance, and other avenues should also be explored to ensure that this issue is meaningfully addressed. Recently introduced legislation, as well as the Executive Order on Protecting Public Health and the Environment, also have some potential.<sup>139</sup> However, though these developments mark important steps in the right direction, neither goes far enough. More is needed to halt and reverse the environmental harms from high-speed slaughter and ensure a food system that is just, sustainable, and consistent with our climate and other environmental goals—and the Green New Deal is an appropriate vehicle for such reform.

### A. *Safe Line Speeds During COVID Act*

On March 11, 2021, the Safe Line Speeds During COVID-19 Act of 2021 was introduced in both the House and Senate.<sup>140</sup> The Act is focused

---

<sup>133</sup> First Amended Complaint for Declaratory and Injunctive Relief at 3, 51, Humane Soc’y U.S. v. Perdue, No. 4:20-cv-01395-SBA (May 18, 2020, N.D. Cal.).

<sup>134</sup> *Id.* at 36.

<sup>135</sup> *Id.* at 35–36.

<sup>136</sup> *Id.* at 51.

<sup>137</sup> Motion to Dismiss for Lack of Subject Matter Jurisdiction and Improper Venue or to Transfer Venue at 14–15, Humane Soc’y U.S. v. Perdue, No. 4:20-cv-01395 (June 19, 2020, N.D. Cal.).

<sup>138</sup> First Amended Complaint, Humane Soc’y U.S. v. Perdue, *supra* note 133, at 51–52.

<sup>139</sup> See *infra* Part V.A and V.B.

<sup>140</sup> H.R. 1815, S.713, 117th Cong. (2021).

on protecting slaughterhouse workers, who have been especially hard hit by COVID.<sup>141</sup> If passed, it would require the FSIS to, temporarily, during the COVID emergency: suspend previously issued slaughter line speed waivers, avoid issuing any new slaughter line speed waivers, and suspend implementation of the rule revoking line speed limits for pig slaughterhouses.<sup>142</sup> Further, it would compel agencies to report to Congress on actions they have taken pertaining to slaughterhouse policy and oversight, and compel an independent review of those actions by the Government Accountability Office.<sup>143</sup> Though the scope of the review and reports called for by the Act is broad and encompasses not just worker safety but also animal welfare and food safety, there is no reference whatsoever to the environment.

Passing the Safe Line Speeds During COVID-19 Act of 2021 would be an important first step toward curbing the environmental harms caused by faster line speeds. However, the relief afforded by the Act would be temporary, and it would not remedy the FSIS's failure to assess the environmental impacts of line speed increases.<sup>144</sup> If it is possible to amend the bill's review and reporting requirements to include consideration of environmental impacts without compromising the bill's potential to become law, this Essay's authors urge such an amendment. And if such an amendment is not possible, the authors support the passage of the Act nonetheless, but also emphasize the need for further action to ensure the environmental impacts of slaughter line speed increases are squarely and adequately addressed.

### *B. Executive Order on Protecting Public Health and the Environment*

President Biden's January 20, 2021, Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis<sup>145</sup> offers further promise for addressing the harmful environmental impacts of slaughter line speed increases. The order begins:

---

<sup>141</sup> See, e.g., Charles A. Taylor et al., *Livestock Plants and COVID-19 Transmission*, 117 PNAS 31,706, 31,706 (Dec. 22, 2020), <https://perma.cc/PP5Y-5CQ3> (noting "the presence of a slaughtering plant in a county is associated with four to six additional COVID-19 cases per thousand, or a 51 to 75% increase from the baseline rate" and "an increase in the death rate by 0.07 to 0.1 deaths per thousand people, or 37 to 50% over the baseline rate," and slaughterhouses "that received permission from the US Department of Agriculture to increase their production-line speeds saw more county-wide cases"); see also, e.g., Kimberly Kindy et al., *The Trump Administration Approved Faster Line Speeds at Chicken Plants. Those Facilities Are More Likely to Have COVID-19 Cases*, WASH. POST (Jan. 3, 2021), <https://perma.cc/QA6Y-A5EX> (high speed chicken slaughterhouses are "10 times as likely to have coronavirus cases than poultry plants without the line-speed waivers").

<sup>142</sup> H.R. 1815, S.713, 117th Cong. § 2(b) (2021).

<sup>143</sup> *Id.* § 2(c)-(d).

<sup>144</sup> See, e.g., *supra* text accompanying note 142.

<sup>145</sup> Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, Exec. Order No. 139990, 86 Fed. Reg. 7037 (Jan. 20, 2021).

Our Nation has an abiding commitment to empower our workers and communities; promote and protect our public health and the environment . . . . Where the Federal Government has failed to meet that commitment in the past, it must advance environmental justice. In carrying out this charge, the Federal Government must be guided by the best science and be protected by processes that ensure the integrity of Federal decision-making. It is, therefore, the policy of my Administration to listen to the science; to improve public health and protect our environment; to ensure access to clean air and water; to limit exposure to dangerous chemicals and pesticides; to hold polluters accountable, including those who disproportionately harm communities of color and low-income communities; to reduce greenhouse gas emissions; to bolster resilience to the impacts of climate change; . . . and to prioritize both environmental justice and the creation of the well-paying union jobs necessary to deliver on these goals.<sup>146</sup>

It then directs all agencies “to immediately review and, as appropriate and consistent with applicable law, take action to address the promulgation of Federal regulations and other actions during the last 4 years that conflict with these important national objectives, and to immediately commence work to confront the climate crisis.”<sup>147</sup>

Faster slaughter line speeds are fundamentally at odds with the policy goals set forth in this order and thus must be reviewed by the FSIS.<sup>148</sup> The USDA’s initial list of actions being considered pursuant to the executive order was due to the Office of Management and Budget on February 19, 2021.<sup>149</sup> Unfortunately, the USDA’s recent response to the Animal Law Litigation Clinic’s Freedom of Information Act (FOIA) request for that list—the agency “did not locate any records that are responsive to your FOIA request”<sup>150</sup>—suggests that the USDA is taking its duties under the executive order as seriously as it takes its NEPA responsibilities.

The public and the President must hold the USDA accountable for complying with the executive order, and ensure that, in doing so, the agency does not continue its pattern of turning a blind eye to well-documented environmental impacts of slaughter and the increased harms that flow from faster line speeds.

However, even if the USDA demonstrates integrity in complying with the executive order and addresses slaughter line speeds, more work would still be necessary. Though slaughter line speed waivers have increased in recent years, they existed long before Donald Trump took office.<sup>151</sup> Thus, fully addressing the issue will require a review that goes

---

<sup>146</sup> *Id.* § 1.

<sup>147</sup> *Id.*

<sup>148</sup> *Id.* § 2(a).

<sup>149</sup> *Id.* § 2(b).

<sup>150</sup> Letter from Alexis R. Graves, Dir., Office Info. Affairs, U.S. Dep’t Agric., to Rachel O’Flaherty, Paralegal, Animal Law Litig. Clinic (Feb. 26, 2021) (on file with recipient).

<sup>151</sup> See discussion *supra* Part II.A.

beyond the four-year scope of the executive order, to rescind *all* line speed waivers, including those of the original HIMP slaughterhouses.

### *C. Slaughter Regulation in the Green New Deal*

Despite its amorphous nature, the Green New Deal was a major talking point during the 2020 election and President Biden's generally favorable position on the comprehensive policy package loomed large in the public eye.<sup>152</sup> The Green New Deal aims to redress widespread environmental harm through policies that create economic opportunities for frontline and vulnerable communities, such as immigrant communities and communities of color.<sup>153</sup> Green New Deal policies would create a more livable environment, while simultaneously increasing the standard of living for Americans disadvantaged by existing oppressive systems.<sup>154</sup> Because slaughterhouse regulation exists at the intersection of environmental and social justice, slaughter reform is an obvious choice for inclusion in President Biden's version of the Green New Deal.

Slaughter line speed limits and slaughterhouse regulation more broadly implicate a wide range of big-ticket environmental issues, including greenhouse gas emissions that contribute to climate change and environmental justice concerns from slaughterhouse pollution in communities of color and low-income communities.<sup>155</sup> Just as increasing line speed limits exacerbates the environmental impacts of slaughter operations by increasing and concentrating production, lowering slaughterhouse line speed limits would diffuse and reduce pollution, thereby mitigating climate and other environmental impacts, especially in the vulnerable communities Green New Deal advocates are most concerned with assisting. Moreover, slaughterhouse employees whose health and safety are directly affected by line speed limits and other slaughterhouse policies are disproportionately immigrants and people of color.<sup>156</sup> Given the mainstream media's coverage of the hardships these workers suffered as a result of the slaughter industry's overwhelmingly inadequate response to the COVID-19 crisis,<sup>157</sup> slaughter reform would

---

<sup>152</sup> See David Roberts, *What Joe Biden Was Trying to Say About the Green New Deal*, VOX, <https://perma.cc/4FYZ-6E47> (last updated Oct. 7, 2020) (explaining that President "Biden cites [the Green New Deal] as his inspiration" for his climate policy plan); see also Jeff Berardelli, *How Joe Biden's Climate Plan Compares to the Green New Deal*, CBS NEWS (Oct. 5, 2020), <https://perma.cc/DXU7-E6F9> (comparing the Green New Deal to the Biden plan).

<sup>153</sup> Recognizing the Duty of the Federal Government to Create a Green New Deal, H. Res. 109, 116th Cong. § 1 (2019).

<sup>154</sup> *Id.*

<sup>155</sup> See discussion *supra* Part III.C.

<sup>156</sup> Angela Stuesse & Nathan T. Dollar, *Who Are America's Meat and Poultry Workers?*, ECON. POL'Y INST.: WORKING ECON. BLOG (Sept. 24, 2020), <https://perma.cc/6RL2-JTLZ>.

<sup>157</sup> See, e.g., *id.* (discussing COVID-19 outbreaks at two slaughterhouses that resulted in 1,500 infections and at least 12 fatal cases); see also Claire Kelloway, *How Biden Can Rein in the Big Meat Monopoly*, VOX (Feb. 24, 2021), <https://perma.cc/HU2X-S3ZP> (noting 57,000 COVID-19 cases and 284 deaths among meatpacking workers since the pandemic began,

likely be received well in the court of public opinion as an appropriate first step toward a Green New Deal.

The instructions encased in President Biden's Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis are certainly a start, but they lack the specificity necessary to create meaningful change. An executive-issued, slaughter-specific reform package instructing various agencies involved in slaughter regulation to undertake certain rulemakings would serve as a serious step toward environmental justice for humans and nonhumans. Such a package could also serve as a model for an industry-by-industry approach to the Green New Deal. While an exhaustive list of recommended slaughter reforms is beyond the scope of this Essay, a comprehensive slaughter reform package should be sure to devote Department of Justice resources to prosecuting labor and humane handling violations;<sup>158</sup> increase inspections by the Occupational Safety and Health Administration and the FSIS; mandate that the Environmental Protection Agency require more stringent technological controls on waste storage and treatment at slaughterhouses; and instruct all agencies to disincentivize increased production at slaughterhouses by revoking federal tax credits and grants for biogas generation. Moreover, biogas and other slaughter byproducts must be excluded from the definition of clean energy in any forthcoming law establishing a clean energy standard.

## VI. CONCLUSION

For far too long the FSIS has looked the other way while massive, industrial slaughterhouses wreak havoc on the environment. Slaughterhouses' environmental harms are exacerbated by slaughter line speed increases, which increase the number of animals slaughtered (and factory farmed and transported) annually in the U.S. by millions. Yet the FSIS refuses even to comply with its basic responsibilities under NEPA to assess and disclose to the public the environmental impacts of

---

due to the lack of safety standards in meatpacking plants); *see also* Leah Douglas, *Mapping COVID-19 Outbreaks in the Food System*, FOOD & ENV'T REPORTING NETWORK, <https://perma.cc/57MR-WBRJ> (last visited July 31, 2021) (“[A]s of July 30 at 12pm ET, at least 1,453 meatpacking and food processing plants (574 meatpacking and 879 food processing) and 407 farms and production facilities have had confirmed cases of Covid-19. At least 91,257 workers (58,913 meatpacking workers, 18,653 food processing workers, and 13,691 farmworkers) have tested positive for Covid-19 and at least 465 workers (297 meatpacking workers, 60 food processing workers, and 107 farmworkers) have died.” (emphasis omitted)); Select Subcommittee on the Coronavirus Crisis, House of Representatives, Congress of the United States, Memorandum (Oct. 27, 2021), <https://perma.cc/R4RL-PJ5N> (finding that COVID-19 deaths and infections among slaughterhouse workers were up to three times higher than previously thought, that meatpacking employers prioritized profits and production over worker safety, that the government agencies charged with protecting these workers failed to do so, and that minority workers were disproportionately impacted).

<sup>158</sup> *See* Kelloway, *supra* note 156 (discussing union busting, wage fixing, and other workers' rights violations).

slaughter line speed limit increases. We simply cannot continue to increase the number of animals we slaughter without regard to the environmental and environmental justice impacts of doing so. Halting line speed increases and honestly assessing the environmental impacts of slaughter are necessary steps to create a food system that is safe, sustainable, and respectful of all workers and communities.