

NOT YET SCHEDULED FOR ORAL ARGUMENT

No. 16-1413

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

NATURAL RESOURCES DEFENSE COUNCIL and SIERRA CLUB,
Petitioners,

v.

U.S. ENVIRONMENTAL PROTECTION AGENCY and SCOTT PRUITT,
Administrator, U.S. Environmental Protection Agency,
Respondents.

On Petition for Review of a Final Agency Action of
the U.S. Environmental Protection Agency

EPA'S FINAL ANSWERING BRIEF

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CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

As required by D.C. Cir. Rule 28(a)(1), I certify as follows:

A. Parties and amici

All parties and intervenors appearing in this Court are identified in the Opening Brief of Environmental Petitioners. On August 24, 2017, the National Cattlemen's Beef Association, Public Lands Council, Kansas Livestock Association, and Oklahoma Cattlemen's Association notified the Court of their intent to file a brief as amici curiae in support of Respondents.

B. Rulings under review

The final agency action under review is a rule entitled, Treatment of Data Influenced by Exceptional Events, 81 Fed. Reg. 68,216 (Oct. 3, 2016).

C. Related cases

This case was not previously before this Court or any other court.

/s/ Sue Chen

SUE CHEN

Counsel for Respondents

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GLOSSARY

Br.	Opening Brief of Environmental Petitioners
Comment Letter	Letter from NRDC, Sierra Club, and Comite Civico Del Valle (Feb. 3, 2016)
EPA	U.S. Environmental Protection Agency
Exceptional Events Rule	Treatment of Data Influenced by Exceptional Events, 81 Fed. Reg. 68,216 (Oct. 3, 2016)
JA	Joint Appendix
NRDC	Natural Resources Defense Council
Response to Comments	Responses to Significant Comments on the 2015 Proposed Rule Revisions to the Treatment of Data Influenced by Exceptional Events (Sept. 2016)
Section 319(b)	42 U.S.C. § 7619(b)

INTRODUCTION

This dispute owes its existence to a mistake by Petitioners: They have misread EPA's definition of the term "natural event" and on that basis, petition for this Court's review.

The definition is part of EPA's Exceptional Events Rule, promulgated in October 2016, implementing Section 319(b) of the Clean Air Act, 42 U.S.C. § 7619(b). Congress enacted that provision so that states would not be penalized for air-quality problems caused by events beyond their control. To that end, Section 319(b) authorizes EPA to exclude, from certain determinations under the Act, air-quality data influenced by exceptional events, including "natural events" that cause pollution concentrations to exceed EPA's standards for air quality.

Because Congress never defined "natural event," EPA had to fill in the gap when implementing Section 319(b). Opting for an approach that is neither so broad as to distort the statutory term, nor so narrow as to thwart congressional intent, EPA defined "natural event" to fundamentally mean an event in which human activity plays little or no direct causal role. A natural event, in essence, requires an act of nature.

Petitioners' mistake is rooted in the second part of the definition, which addresses the treatment of a unique act of nature, high-speed wind. Under EPA's definition, high-speed winds that sweep up dust from anthropogenic sources can be

natural events, provided those sources have implemented reasonable emission controls. Misreading this provision as somehow allowing human activities to qualify as natural events, Petitioners ask the Court to set aside EPA's definition.

But there is nothing wrong with the definition, only with Petitioners' reading of it. The definition reasonably limits its scope to acts of nature and faithfully executes Congress's intent that natural events "should not influence whether a region is meeting its Federal air quality goals." S. Rep. No. 109-53, at 41, JA219. It is therefore entitled to this Court's deference under *Chevron*.

STATEMENT OF JURISDICTION

This Court has jurisdiction under 42 U.S.C. § 7607(b).

ISSUE PRESENTED

In the Exceptional Events Rule, EPA interpreted the term "natural event" in Section 319(b) of the Clean Air Act to mean an event and its resulting emissions in which human activity plays little or no direct causal role. EPA's definition also specifies, primarily in the case of high-speed winds, that anthropogenic sources play no direct causal role in an event's emissions, provided those sources implemented reasonable emission controls. The sole issue presented for review is whether, given congressional silence, EPA permissibly defined "natural event."

STATUTES AND REGULATIONS

Pertinent statutes and regulations not reproduced in the addendum to Petitioners' brief are reproduced in the separate addendum to this brief.

STATEMENT OF THE CASE

I. Statutory and regulatory background

A. Regulating anthropogenic emissions under the Clean Air Act

The Clean Air Act, 42 U.S.C. §§ 7401-7671q, creates a comprehensive national program to protect the public from harmful effects of air pollutants. Among other things, the program sets standards for air quality, and determines whether and how to regulate air pollution from anthropogenic sources.

The Act directs EPA to establish national ambient air quality standards (or “standards”) for pollutants that may reasonably be anticipated to endanger public health and welfare. 42 U.S.C. §§ 7408-09. The agency has established both primary and secondary standards for particulate matter, ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, and lead, which are known as criteria pollutants. *See generally* 40 C.F.R. §§ 50.4-50.13; 42 U.S.C. § 7409(a)(1). EPA sets primary standards at levels that protect public health with an adequate margin of safety, and secondary standards at levels that protect public welfare. 42 U.S.C. § 7409(b). The standards specify the maximum pollution concentration permitted in the

ambient air, and are periodically reviewed and, as appropriate, revised by EPA to ensure that they give the necessary protection. *See id.* § 7409(d).

Next, after considering recommendations from states, EPA determines whether each area of the country meets the standards, and designates it as “attainment” (meeting a standard), “nonattainment” (not meeting a standard), or, if the agency cannot determine an area’s status after evaluating available information, “unclassifiable.” 42 U.S.C. § 7407(d)(1). EPA generally makes these determinations based on extensive information on air quality, including data collected from air monitors around the country.

States bear primary responsibility for ensuring that their air quality meets the standards. *Id.* § 7407(a). Each state must develop a plan that provides for the implementation, maintenance, and enforcement of the standards in its jurisdiction, including measures to bring nonattainment areas into attainment and to maintain air quality in attainment areas. *Id.* § 7410(a). These implementation plans impose on anthropogenic sources enforceable emission limits and other control measures to reduce emissions. *See id.* § 7410(a)(2)(A).

An implementation plan must undergo reasonable notice and a public hearing before adoption by the state and submission to EPA. *Id.* § 7410(a)(1). EPA can approve the state’s plan or, if the state fails to submit an approvable plan, the Act requires EPA to promulgate an implementation plan for the state. *Id.* §

7410(c), (k). Once final, the implementation plan becomes binding on the state and regulated entities, and it is generally enforceable as federal law under the Act. *Id.* §§ 7413, 7602(q).

B. Measuring pollution concentrations at air monitors

To determine whether an area is in attainment, EPA generally reviews data from a national network of thousands of state and local air monitors.¹ 42 U.S.C. § 7619(a)(1)-(2); 40 C.F.R. Parts 50, 53, 58. The monitors measure ambient concentrations of pollution over a set interval. An exceedance occurs when that concentration is higher than what the relevant standard allows. Whether an area attains a standard depends on the number of exceedances over a specified time period.² In this way, monitoring data plays a critical role in attainment determinations.

¹ Monitoring data is stored in a database called the Air Quality System, which also contains meteorological data, descriptive information about each monitor, and information on data quality assurance and quality control. *See* <https://www.epa.gov/aqs> (last visited Aug. 29, 2017). Information from the database is used to, among other things, assess air quality and assist in making attainment determinations. *See id.*

² For example, whether an area's air quality meets the standard for coarse particulate matter depends on how many times the 24-hour average concentration exceeds 150 $\mu\text{g}/\text{m}^3$ over a three-year period; if the average number of exceedances per year is one or fewer over that period, the air quality meets the standard. *See* 40 C.F.R. § 50.6(a); *id.* Pt. 50, App. K. This parameter is set by regulation when EPA establishes the standard for a particular pollutant.

Like anthropogenic sources, natural sources also emit pollutants. Upon reaching a monitor, those pollutants will influence the measured pollution concentrations. Limitations in monitoring technology, however, restrict how much can be known about the extent of that influence: Although some monitors can provide information on chemical constituents in a sample, monitoring readings alone cannot clearly quantify what portion of the total pollution concentration is attributable to natural sources and what portion to anthropogenic sources.³ *See* Interim Guidance on the Preparation of Demonstrations in Support of Requests to Exclude Ambient Air Quality Data Affected by High Winds Under the Exceptional Events Rule (May 2013), at 61, JA225 (source-attribution data not always available).

C. Managing data influenced by exceptional events before Section 319(b)'s enactment

Under the Clean Air Act, states have the power to regulate emissions from anthropogenic sources to attain the standards. But there are emissions affecting air quality that are beyond states' ability to reasonably regulate and control, particularly emissions from natural sources. *See* Guideline on the Identification and Use of Air Quality Data Affected by Exceptional Events (July 1986) (1986 Guideline) at 1, 29, JA360, 389 (events are exceptional when "uncontrollable or

³ In certain circumstances, additional analyses could be used to help make the attribution.

unrealistic to control through the State Implementation Plan . . . process” and “control of emissions from [exceptional] events is usually not included in the general control strategy for a given pollutant”). EPA had long known that unusual and uncontrollable events could influence monitoring data and, if unidentified, could result in its “possible misinterpretation or misuse[.]” *Id.* at 5, JA364.

Recognizing that such data may need to be handled differently in attainment determinations, EPA, starting in 1977, issued a series of guidelines on dealing with data due to “exceptional” events. *See* 72 Fed. Reg. 13,560, 13,562/1-3 (Mar. 22, 2007), JA429 (recounting history of EPA guidelines). Relevant here are the 1986 Guideline and a 1996 memorandum addressing particulate-matter exceedances due to natural events. That guidance asked states who sought to exclude air-quality data from regulatory determinations to show that the exceptional event was causally related to the data. *See* 1986 Guideline at 5, 24, JA364, 384; Areas Affected by PM-10 Natural Events (May 30, 1996) (1996 Memo) at 11, JA207. The 1986 Guideline identified various acts of nature, such as high-speed winds, volcanic eruptions, and forest fires, that could qualify as an exceptional event. *See* 1986 Guideline at 14-17, JA374-377. The 1996 Memo defined natural events to mean volcanic and seismic activities, wildland fires, and high-speed winds. *See* 1996 Memo at 6-7, JA202-203.

In addition, EPA's standards for particulate matter and ozone addressed exceptional events. *See* 72 Fed. Reg. at 13,562/1-3, JA429.

D. Codifying the treatment of exceptional events

Congress, too, recognized that exceptional events should not “influence whether a region is meeting its Federal air quality goals[.]” S. Rep. No. 109-53, at 41, JA219. Following the groundwork laid down in EPA's guidance, Congress amended the Clean Air Act in 2005 to add Section 319(b), called “Air quality monitoring data influenced by exceptional events.” 42 U.S.C. § 7619(b). That provision expressly authorizes EPA to exclude, upon a state's petition, “monitoring data that is directly due to exceptional events” from determinations regarding exceedances or violations of the standards. *Id.* § 7619(b)(3)(B)(iv).

Section 319(b) defines an “exceptional event” as “an event” that (1) “affects air quality”; (2) “is not reasonably controllable or preventable”; and—relevant here—(3) “is an event caused by human activity that is unlikely to recur at a particular location or a natural event[.]” *Id.* § 7619(b)(1)(A)(i)-(iii). Three types of occurrences are explicitly deemed *unexceptional*: stagnation of air masses or meteorological inversions; meteorological events involving high temperatures or lack of precipitation; and air pollution relating to source non-compliance. *Id.* § 7619(b)(1)(B); *see* S. Rep. No. 109-53, at 41, JA219 (“Natural climatological

occurrences such as stagnant air masses, high temperatures, or lack of precipitation” are not exceptional events).

The occurrence of an exceptional event must be demonstrated using “reliable, accurate data[.]” 42 U.S.C. § 7619(b)(3)(B)(i). “A clear causal relationship must exist between the measured exceedance[.]” of a standard and the exceptional event to show that “the exceptional event caused a specific air pollution concentration” at a particular monitor. *Id.* § 7619(b)(3)(B)(ii). And there must be a public process for determining whether an event is exceptional. *Id.* § 7619(b)(3)(B)(iii).

Section 319(b) also enumerates principles that EPA must follow in promulgating regulations, including “the principle that protection of public health is the highest priority[.]” *Id.* § 7619(b)(3)(A). Finally, until implementing regulations were promulgated, EPA had to continue to apply the 1986 Guideline and the 1996 Memo, as well as then-existing standards for particulate matter and ozone. *See id.* § 7619(b)(4).

E. The Exceptional Events Rule

In 2007 after notice and comment, EPA finalized its rule implementing Section 319(b). *See* 72 Fed. Reg. at 13,560, JA427. Nine years later, largely in response to stakeholder feedback and to clear up some regulatory uncertainty, the agency revised the rule to clarify and streamline certain provisions. *See* 81 Fed.

Reg. 68,216, 68,217/3-18/2, 68,220/2-3 (Oct. 3, 2016), JA060-061, 063; 80 Fed. Reg. 72,840, 72,843/1 (Nov. 20, 2015), JA004. The revised rule (the Exceptional Events Rule), published in the Federal Register in October 2016, is the subject of this petition for review.

Petitioners challenge the rule's definition of "natural event." See Opening Brief of Environmental Petitioners (Br.) at 18. The definition elucidates just one component of the multi-factor analysis demanded by the rule: As proponents for data exclusion, states bear the burden to demonstrate, among other things, (1) that "the event affected air quality in such a way that there exists a clear causal relationship between the specific event and the monitored exceedance," and that relationship must be supported by a comparison to historical data on pollution concentration; (2) "that the event was both not reasonably controllable and not reasonably preventable"; and—where the challenged definition comes in—(3) that "the event was a human activity that is unlikely to recur at a particular location *or was a natural event*[".]"⁴ 40 C.F.R. § 50.14(c)(3)(iv), JA124 (emphasis added). The state must give the public at least 30 days to comment on its demonstration and submit any comments to EPA, along with responses to comments challenging the demonstration's factual bases. *Id.* § 50.14(c)(3)(v), JA124.

⁴ Local and tribal air agencies sometimes can also be responsible for implementing the Exceptional Events Rule. 81 Fed. Reg. at 68,220 n.3, JA063.

Demonstrating a “clear causal relationship” between the event and the exceedance sometimes can be particularly challenging. Simply “[s]howing that an event and elevated pollutant concentrations occurred simultaneously may not establish [the necessary] causality.” 81 Fed. Reg. at 68,241/2, JA084. Correlation, after all, is not causation, so states must submit information to establish that “emissions of the pollutant . . . from the event were transported to monitor[s] recording the elevated concentration measurement[s].” *Id.* Further, as states prepare their demonstrations, they regularly communicate with EPA, which could identify any concerns it might have. *Id.* at 68,239/1, JA082. And unless states can address those concerns, they may find it difficult to demonstrate that the natural event clearly caused the exceedance.

Limitations in monitoring technology complicate the causation demonstration. That is because states frequently are not able to perform source-attribution analyses to estimate what portion of the total pollution concentration was caused by natural events and what portion was caused by other sources. *See supra* § I.B. All demonstrations, however, should include comparisons between the event day’s pollution concentration and historical concentrations⁵ at that monitor. 40 C.F.R. § 50.14(c)(3)(iv)(C), JA124. The difference between these

⁵ Historical concentrations do not include data from event days. *See* 81 Fed. Reg. at 68,242/1-2 & Table 2, JA085. Thus, they approximate normal conditions at the monitor.

two values is, roughly speaking, the concentration of additional emissions on the event day. *Cf.* 81 Fed. Reg. at 68,242/1-2 & Table 2, JA085. States bear the burden of showing why that difference is clearly attributable to the natural event.

Sometimes, states may need to submit more detailed evidence to meet their burden. As a general rule, “[i]f the actual effect of the event were small, it may be very difficult to distinguish the effect of the event with sufficient confidence because many other factors could have produced similar effects.” *Id.* at 68,241/1-2, JA084. For that reason, the smaller the event’s effect, “the stronger the necessary evidence would have to be to justify exclusion of data for regulatory purposes.” 72 Fed. Reg. at 13,569/3, JA436. Conversely, the greater the event’s effect, the “lesser amount of documentation or evidence may be required to demonstrate that the event affected air quality.” *Id.*

EPA reviews the demonstrations holistically and considers the weight of the evidence. *See, e.g.*, 81 Fed. Reg. at 68,227/1 & n.19, JA070. Based on the totality of circumstances in each case, EPA determines whether a state has met its burden. If the agency concurs with the state, it will exclude the relevant data from certain regulatory analyses, such as attainment determinations. *See* 40 C.F.R. § 50.14(a)(1)(i), JA120.

Of course, the event day’s additional emissions might not be wholly or mostly attributable to the natural event, indicating that there might lurk another

cause for the exceedance. Thus, although the causation analysis focuses on the relationship between the exceedance and the natural event, *id.* § 50.14(c)(3)(iv)(B), JA124, in evaluating demonstrations EPA also keeps an eye out for other potential causes for the exceedance, for instance, an anthropogenic source's failure to comply with control requirements. *See Responses to Significant Comments on the 2015 Proposed Rule Revisions to the Treatment of Data Influenced by Exceptional Events* (Sept. 2016) (Response to Comments) at 48, JA149. As such, the agency "generally expects evidence that the controls determined to be reasonable, if any, were effectively implemented and appropriately enforced." 81 Fed. Reg. at 68,234 n.39, JA077. This assessment "should include a review and description of any known nearby facility upsets or malfunctions that could have resulted in emissions of the relevant pollutant(s) that influenced the monitored measurements on the day(s) of the claimed events." *Id.* If EPA has sufficient evidence indicating that something besides the natural event actually caused the exceedance, then the state necessarily fails to show that the natural event was the clear cause.

Finally, the rule directs states seeking relief to take appropriate and reasonable actions to protect public health from exceedances caused by exceptional events. *See* 40 C.F.R. § 51.930, JA125. States must promptly notify the public of exceedances or expected exceedances, educate the public about how to reduce exposure to unhealthy air quality during and after an exceptional event, and

implement appropriate measures to protect public health from exceedances caused by those events. *See id.* § 51.930(a), JA125. States must also develop plans to address known recurring events by, among other things, identifying and implementing measures to mitigate their effects on the public. *See id.* § 51.930(b), JA125.

The only issue Petitioners present for review is whether EPA permissibly defined “natural event.” Below we discuss that definition, as well as what it covers and what it does not cover.

1. The meaning of “natural event”

The Clean Air Act does not define “natural event,” leaving EPA to elucidate its meaning when implementing Section 319(b), 42 U.S.C. § 7619(b). As defined by EPA,

[1] *Natural event* means an event and its resulting emissions, which may recur at the same location, in which human activity plays little or no direct causal role. [2] For purposes of the definition of a natural event, anthropogenic sources that are reasonably controlled shall be considered to not play a direct role in causing emissions.

40 C.F.R. § 50.1(k), JA120.

The first sentence, which largely reflects the definition in the previous rule,⁶ delineates the fundamental boundary between natural events and everything else.

⁶ The 2007 rule defined “natural event” as “an event in which human activity plays little or no direct causal role.” 72 Fed. Reg. at 13,580/2, JA447.

It articulates the definition's central requirement that there must be an "event . . . in which human activity plays little or no direct causal role." That is, a natural event must have predominantly natural causes.

Apart from being "natural," a natural event must be an "event." An "event" is an occurrence that deviates from normal or expected conditions. 81 Fed. Reg. at 68,232/1, JA075. So although "routine biological emissions," such as emissions from vegetation, are natural, they are not events and therefore not natural events.

Id.

In contrast, acts of nature, such as wildfires, are natural events because they have predominantly natural causes and because they are deviations from normal or expected conditions. *See id.* at 68,232/1, 68,225/1, JA075, 068 (requiring physical event and listing examples); 80 Fed. Reg. at 72,849/3-50/1, JA010-011 (discussing "naturally occurring physical event and its associated resulting emissions" in context of natural events); Response to Comments at 68, JA169 ("for international emissions to qualify as a natural event, they must originate from natural, event-based sources (e.g., wildfire, volcanic activity.)"). Without an act of nature, there is no natural event, and the analysis ends there.

2. The special case of high-speed wind

Most acts of nature are themselves the source of pollutants they emit. For example, wildfires generate particulate matter, a criteria pollutant under the Act.

See 81 Fed. Reg. at 68,247/3-48/1, JA090-091. Human activities play little or no direct causal role in these acts of nature and their resulting emissions, so those phenomena are natural events under the definition's first sentence. *See* 80 Fed. Reg. at 72,854/2, JA015. One act of nature, however, is unique and its distinguishing feature complicates the analysis.

Blowing across natural, undisturbed lands (such as deserts) as well as lands disturbed by human activities (such as construction sites), high-speed winds sweep up dust from the landscape, causing it to become airborne. 80 Fed. Reg. at 72,854/2, JA015. Once in the air, dust is regulated as particulate matter. The wind then transports this resulting emission of particulate matter, elevating pollution concentrations at the monitors it passes. *See* 40 C.F.R. § 50.1(p), JA120 (defining "high wind dust events," as an "event that includes the high-speed wind and the dust that the wind entrains and transports to a monitoring site."); 81 Fed. Reg. at 68,226/1, JA069 (noting that wind events "directly cause emissions."). Because wind's resulting emissions contain a mix of particles from natural and anthropogenic sources, 80 Fed. Reg. at 72,854/2-3, JA015, it is not necessarily self-evident whether human activities play "little or no direct causal role" in those emissions as required by the definition's first sentence.

The definition's second sentence, added in 2016, resolves this ambiguity: Anthropogenic sources that are reasonably controlled—generally sources that

implement control measures required by applicable implementation plans—play no direct causal role in high-speed winds’ resulting emissions. *See* 40 C.F.R. §§ 50.1(k), 50.14(b)(8)(v), JA120, 123.

To illustrate, imagine a dirt road near a desert. The road’s owner has placed chemical suppressants on the road to limit dust emitted into the air (and which we assume are reasonable controls here). One day, wind with a sustained speed of 30 miles an hour whips through, sweeping up dust from the natural, undisturbed landscape, the desert. It also overwhelms the road’s controls, similarly causing dust from the road to become airborne. The wind transports these emissions to the monitor, which records an exceedance of a standard for particulate matter.

Under the definition’s second sentence, although some particles transported by the wind originated from the road, an anthropogenic source, the high-speed wind and its resulting emissions nevertheless are a natural event⁷ because the road was reasonably controlled and therefore played no direct causal role in those

⁷ The 2016 rule added a provision, not challenged here, on “high wind dust event.” 40 C.F.R. § 50.14(b)(5), JA122; 81 Fed. Reg. at 68,257/2, JA100. Consistent with the “natural event” definition, this new provision treats a high wind dust event as a natural event “where windblown dust is entirely from natural undisturbed lands in the area or where all anthropogenic sources are reasonably controlled[.]” 40 C.F.R. § 50.14(b)(5)(ii), JA122. It further identifies circumstances when high wind dust events could qualify as an exceptional event. *See id.* § 50.14(b)(5), JA122.

emissions.⁸ *See* 81 Fed. Reg. at 68,231 n.29, JA074; 80 Fed. Reg. at 72,854/3, JA015 (“an event with a mix of natural emissions and reasonably controlled human-affected emission sources may be considered a natural event.”). Assuming the rule’s other criteria are met, the exceedance may be excluded from certain regulatory determinations. By contrast, had the road not been reasonably controlled, the windborne emissions would not be considered to have predominantly natural causes and the wind event cannot be a natural event. *See* 81 Fed. Reg. at 68,231/3, JA074.

To be clear, under EPA’s definition, not any breeze can amount to a natural event; the wind must be a “high[]speed” one.⁹ *See id.* at 68,232/1, JA075 (events are deviations from normal conditions); 40 C.F.R. §§ 50.1(p), 50.14(b)(5)(ii),

⁸ Emissions result from high-speed wind when the wind causes dust to become airborne. In contrast, when an *anthropogenic* source causes dust to become airborne (by, say, releasing it into the air through a smokestack) and wind simply transports those emissions to the monitor, the emissions result from the anthropogenic source, not the wind, and the rule offers no relief. *See* 81 Fed. Reg. at 68,245/3-46/1 & n.53, JA088 (“Routine emissions generated by and transported from anthropogenic sources are not exceptional events.”); *cf. id.* at 68,226/1, JA069 (contrasting events that do not cause emissions with events, including wind, that “do directly cause emissions.”).

⁹ To give clarity on when wind speed is sufficiently high, the rule’s provision on high wind dust events describes how to identify “high wind threshold[s].” *See* 40 C.F.R. § 50.14(b)(5)(iii), JA122; 81 Fed. Reg. at 68,257/2-59/2, JA100-102. For example, provided there is no evidence to the contrary, a threshold of 25 miles an hour is generally appropriate for certain western states; states can also use a different, EPA-approved threshold that is “more representative of local or regional conditions, if appropriate.” 40 C.F.R. § 50.14(b)(5)(iii), JA122.

JA120, 122 (“high wind dust events,” which includes “high-speed wind,” are natural events); 80 Fed. Reg. at 72,877/1, JA038 (integral to “high wind dust event” is “high” wind speed). Relatedly, an area’s history of wind informs whether reasonable emission controls should have been in place. *See* Response to Comments at 49, JA150 (“A recurring event informs the [states] that the event has the potential to recur and should spark consideration of appropriate controls”); 80 Fed. Reg. at 72,858/3, JA019 (event recurrence “should affect decisions regarding those measures that constitute reasonable controls.”). Controls are generally reasonable when they make anthropogenic sources as resistant to wind as nearby undisturbed landscapes, such as deserts, which “[t]ypically . . . have a natural crust that protects the surface and tends to limit emissions of windblown dust.” 80 Fed. Reg. at 72,877/1-2, JA038; *see* 40 C.F.R. § 50.14(b)(5)(v), JA122. So as a practical matter, reasonable controls generally withstand low-speed winds. It is the high-speed winds that are more likely to overwhelm reasonable controls and result in exceedances necessitating relief as “exceptional events.” 42 U.S.C. § 7619(b).

3. What are *not* natural events

“Natural event,” as defined and interpreted by EPA, covers only a small set of phenomena, namely, acts of nature and their resulting emissions. The definition excludes a great deal from its sphere, and those exclusions, those things that are

not natural events, are critical to understanding the definition and this dispute. The exclusions fall into two categories:

One excluded category consists of routine biological emissions. As explained earlier, though these emissions are natural, they are not events, as they are not deviations from normality. Therefore, they are not natural events. *See supra* § I.E.1.

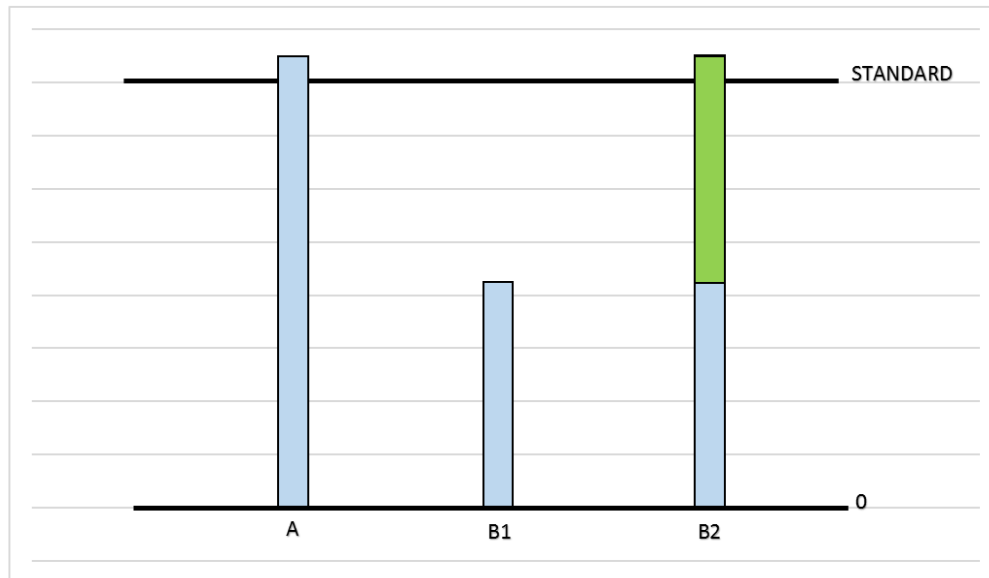
The other excluded category consists of human activities. To state the obvious, human activities are not natural. Thus, they cannot be natural events. This principle applies to all types of human activities—relevant here, neither anthropogenic sources nor their emissions can be natural events. *See generally* Response to Comments at 56-57, JA157-158.

Emissions from things that are not natural events are “routine emissions.”¹⁰ They represent the emission level on an ordinary day, when no exceptional event happens. *See* 81 Fed. Reg. at 68,232/1, JA075 (distinguishing exceptional events

¹⁰ To be precise, routine emissions are emissions from things that are neither natural events nor human activities unlikely to recur at a particular location—that is, they are emissions from things that are not exceptional events. *See* 42 U.S.C. § 7619(b)(1)(A)(iii). For simplicity our brief focuses on natural events, as they are the only category of exceptional events in dispute.

And to be clear, “routine emissions” is simply used as a convenient shorthand in the exceptional-events context. *See, e.g.*, 81 Fed. Reg. at 68,245/3, JA088; Response to Comments at 93, JA194. Its meaning may differ in other Clean Air Act contexts.

from “normal or expected conditions”); *id.* at 68,242/1-2, JA085 (distinguishing event-influenced data from non-event-influenced data). The following diagram illustrates how routine emissions, represented by the blue bars, come into play in the rule:¹¹



Scenario A shows an exceedance in which routine emissions, including emissions from anthropogenic sources, contribute to the entire pollution concentration recorded by a monitor. No act of nature occurred, so there is no natural event and thus no exceptional event. *See* 40 C.F.R. § 50.14(c)(3)(iv)(E), JA124; 81 Fed. Reg. at 68,231/3, JA074 (no natural event if all emissions come

¹¹ The diagram oversimplifies the complex readings that monitors produce in real life. Critically, the lengths of the blue and green bars in scenario B₂ (which represent routine emissions and emissions from natural events) usually cannot be easily determined because monitoring data does not break down pollution concentration by source type.

from anthropogenic sources). Accordingly, no relief is available under the Exceptional Events Rule. Instead, this sort of exceedance is dealt with elsewhere under the Clean Air Act. For example, if the exceedance is due to source non-compliance, then EPA, the state, or concerned citizens may bring an enforcement action against the offending source. *See* 42 U.S.C. §§ 7413, 7604; *see also, e.g.*, 81 Fed. Reg. at 68,245/3-46/1 & n.53, JA088-089 (explaining that the Act's provisions on interstate and international transport address anthropogenic emissions transported to another jurisdiction).

Scenario B₁ shows another set of routine emissions recorded by a monitor. No exceedance exists, and all is well. But suppose that one day, though routine emissions occur as before, a wildfire burns nearby and emits pollutants. On that day the same monitor records an exceedance. This is the scenario in B₂, where the green bar represents emissions from the wildfire.

Because human activities play little or no direct causal role in the wildfire and its resulting emissions, a natural event exists in scenario B₂. 40 C.F.R. § 50.1(k), JA120. If the natural event satisfies the rule's other requirements and qualifies as an exceptional event, the monitoring data associated with the exceedance in B₂ can be excluded. As the diagram illustrates, this is so even if the wildfire's emissions alone—just the green bar—do not exceed the standard. *See* Response to Comments at 57, JA158. That is, the rule accepts routine emissions as

a given and asks whether the natural event's emissions pushed the total pollution concentration above the standard.

II. Factual background

Shortly after EPA promulgated the 2007 rule implementing Section 319(b), Petitioner NRDC challenged it in this Court. *See NRDC v. EPA*, 559 F.3d 561 (D.C. Cir. 2009). That petition for review sought to vacate the rule's definition of "natural event" and several statements in the preamble. *See id.* at 562.

This Court dismissed the petition after concluding that NRDC had failed to object to EPA's definition during the public comment period and was therefore barred from raising the argument on judicial review. *See id.* at 562-63. The Court also held that it lacked jurisdiction to review the preamble statements because they were not final agency action. *See id.* at 564-65. Judge Rogers filed an opinion concurring in part and dissenting in part. *See id.* at 565-69. Though she thought that NRDC had adequately objected to the definition during rulemaking, *id.* at 565-68, on the merits she would have deferred to EPA's definition under *Chevron* because "[t]he Clean Air Act does not define 'natural event' or specify how to categorize events with predominantly natural causes but some human contribution," *id.* at 569. "Because the statute leaves a gap to be filled by EPA," Judge Rogers wrote, "the statutory term is ambiguous. EPA's definition, in turn, is permissible." *Id.*

In November 2015 EPA proposed to revise its rule. 80 Fed. Reg. at 72,840, JA001. One proposed change was to amend the “natural event” definition to “clarify that anthropogenic emission sources that contribute to the event emissions that are reasonably controlled do not play a ‘direct role’ in causing emissions.” *Id.* at 72,854/3, JA015. Thus, “an event with a mix of natural emissions and reasonably controlled human-affected emission sources”—primarily high-speed wind—“may be considered a natural event.” *Id.* As proposed, “natural event” meant “an event and its resulting emissions, which may recur, in which human activity plays little or no direct causal role. Anthropogenic sources that are reasonably controlled shall be considered to not play a direct role in causing emissions.” *Id.* at 72,894/1, JA055.

Petitioners NRDC and Sierra Club, along with another environmental group, jointly commented on the 2015 proposal. *See* Letter from NRDC, Sierra Club, and Comite Civico Del Valle (Feb. 3, 2016) (Comment Letter), JA227-248. In three short paragraphs they objected to the proposed definition, arguing that it improperly blurred the statutory distinction between “events [that] are either ‘natural’ or ‘caused by human activity.’” *Id.* at 7-8, JA233-234 (quoting 42 U.S.C. § 7619(b)(1)(A)). To Petitioners, “a natural event must have no human activity component at all.” *Id.* at 8, JA234.

In the final rule EPA revised its proposed language to clarify that natural events can recur in the same location. It further explained that if an exceedance occurs even though anthropogenic sources were reasonably controlled during a natural event, these sources would be considered to have played little or no direct causal role in the exceedance. *See* Response to Comments at 34, JA135. For support EPA noted that in Section 319(b) Congress had instructed the agency to continue to apply its exceptional-event guidance until it promulgated implementing regulations, and that guidance “indicated that there is not always a bright line that excludes all anthropogenic activity from a ‘natural event.’” *Id.* The Exceptional Events Rule, which superseded the 2007 rule, was published in the Federal Register in October 2016. 81 Fed. Reg. at 68,220/3, JA063.

SUMMARY OF ARGUMENT

Faced with a statutory gap left by Congress, EPA reasonably defined the ambiguous statutory term “natural event” to mean an event with predominantly natural causes. A natural event, in practice, requires an act of nature: A wildfire burns, for example, sending pollutants into the air; or a powerful windstorm tears across the arid landscape, sweeping up and carrying away dust. Without acts of nature such as these, there is no natural event.

Petitioners misread EPA's definition to mean that emissions from reasonably controlled anthropogenic sources can themselves be natural events. They are wrong: Those emissions are not natural and cannot be natural events.

EPA's definition, moreover, warrants deference under *Chevron, U.S.A. v. NRDC*, 467 U.S. 837 (1984). In filling the statutory gap, EPA reasonably required a natural event to live up to its name and feature an event with predominantly natural causes. At the same time, to avoid robbing the statutory term of all practical meaning, EPA steered clear of an absolute and inflexible "purity" test, one that would have demanded that a natural event be totally untouched by any human activity. The definition further provides that where high-speed wind overcomes an anthropogenic source's reasonable emission controls and sweeps dust into the air, the wind event can still be considered a natural event. In so defining "natural event," EPA heeded the principle that motivated Congress to enact Section 319(b): States should not be punished for air-quality problems caused by natural events that are beyond their control.

For these reasons, EPA's definition permissibly interprets the Clean Air Act and commands this Court's deference.

STANDARD OF REVIEW

In *Chevron's* two-step analysis, courts first determine "whether Congress has directly spoken to the precise question at issue." *Chevron*, 467 U.S. at 842. If

they “reach the unmistakable conclusion that Congress had an intention” on that question, the “inquiry ends there.” *Nat’l Recycling Coal., Inc. v. Browner*, 984 F.2d 1243, 1250 (D.C. Cir. 1993) (internal quotation marks omitted).

But “if the statute is silent or ambiguous,” the analysis proceeds to step two, where “the question for the court is whether the agency’s answer is based on a permissible construction of the statute.” *Chevron*, 467 U.S. at 843. “If Congress has explicitly left a gap for the agency to fill, there is an express delegation of authority to the agency to elucidate a specific provision of the statute by regulation.” *Id.* at 843-44. These regulations “are given controlling weight, unless they are arbitrary, capricious, or manifestly contrary to the statute.” *Id.* at 844; *see Nat’l Recycling Coal.*, 984 F.2d at 1250 (“we defer to the agency’s interpretation of the statute if it is reasonable and consistent with the statute’s purpose.” (internal quotation marks omitted)). For EPA to prevail, its interpretation need not be the only permissible construction of the statute, merely a reasonable one. *See Nat’l Recycling Coal.*, 984 F.2d at 1251.

Separately, EPA’s interpretation of its own regulations implementing the Clean Air Act is “controlling” unless “plainly erroneous or inconsistent with the regulation.” *Auer v. Robbins*, 519 U.S. 452, 461 (1997) (internal quotation marks omitted). When, as here, the regulation concerns a complex and highly technical program, this Court owes “heightened deference” to the agency’s interpretation of

its own regulations. *Via Christi Hosps. Wichita, Inc. v. Burwell*, 820 F.3d 451, 456 (D.C. Cir. 2016).

ARGUMENT

I. ***Chevron* step one: Congress has not spoken to the meaning of “natural event.”**

The precise question here is whether EPA reasonably interpreted the statutory term “natural event” in Section 319(b). *See* 42 U.S.C. § 7619(b)(1)(A)(iii). Congress has not spoken to that question: “The Clean Air Act does not define ‘natural event’ or specify how to categorize events with predominantly natural causes but some human contribution.” *NRDC*, 559 F.3d at 569 (Rogers, J., concurring in part and dissenting in part). And contrary to Petitioners’ assertion, Br. at 25, the meaning of the word “natural” is notoriously ambiguous—witness, for instance, the legal battles waged over whether food containing some amount of artificial ingredients may be labeled “natural.” *See, e.g., Gedalia v. Whole Foods Market Servs., Inc.*, 53 F. Supp. 3d 943, 950-55, 958 (S.D. Tex. 2014) (collecting and discussing cases, while lamenting the “confusing, piecemeal, state-by-state construction of what may qualify as a ‘natural’ product.” (internal quotation marks omitted)).

Nor does anything else reveal congressional intent on the precise limits of the term “natural event.” As Petitioners point out, “[t]he legislative history makes no mention of human activities as they relate to natural events.” Br. at 39 (citing

H.R. Rep. No. 109-203, at 1066-67). Similarly, EPA's guidance predating Section 319(b)'s enactment does not help Petitioners: Under that guidance, pollution concentrations due to dust raised by unusually high-speed winds were treated as uncontrollable natural events, even when the dust originated from controlled anthropogenic sources. *See* 1996 Memo at 7, JA203. Not only did Congress not prohibit this interpretation, it affirmatively required EPA to continue using that approach while regulations were being promulgated. 42 U.S.C. § 7619(b)(4). To be sure, that requirement was, as Petitioners emphasize, a temporary one, Br. at 32-34; but by so using the guidance, Congress indicated "natural event" could include some role for human contributions in certain circumstances. At the very least, the interim provision underscores the ambiguity in congressional intent.

What damages Petitioners' step-one arguments beyond repair is their reliance on the false premise that EPA's definition allows human activities to qualify as natural events. *See* Br. at 2 ("Regular industrial pollution in vast amounts may qualify as a natural event and exceptional event"); *see also id.* at 18, 28-29. On that flawed theory Petitioners purport to find significance in Section 319(b)'s "clear distinction between a 'natural event' and an 'event caused by human activity.'" *Id.* at 26 (quoting 42 U.S.C. § 7619(b)(1)(A)(iii)); *see also id.* at 26-28, 36-37. Regular industrial pollution and other human activities, however,

are emphatically not natural events.¹² *See supra* Statement of the Case § I.E.1. Petitioners’ arguments therefore collapse on faulty foundations.¹³ In any case, many of those arguments speak to the reasonableness of EPA’s interpretation and thus are the subject for *Chevron* step two. *See* Br. at 28-33. Here on step one, nothing about the Clean Air Act allows this Court to reach the “unmistakable conclusion that Congress had an intention” as to the meaning of “natural event” and how EPA interpreted the term. *Nat’l Recycling Coal.*, 984 F.2d at 1250 (internal quotation marks omitted). The analysis therefore proceeds to step two.

II. *Chevron* step two: EPA reasonably defined “natural event” and that definition warrants deference.

Tasked with elucidating the ambiguous term “natural event,” EPA reasonably defined it to mean an event with predominantly natural causes. The definition then goes on to address, largely for high-speed wind, the role of

¹² Should Petitioners stand by their misreading of “natural event” and accuse EPA of impermissibly interpreting its own definition, this Court should reject that contention. An agency’s interpretation of its own regulation controls unless it is “plainly erroneous or inconsistent with the regulation.” *Auer*, 519 U.S. at 461 (internal quotation marks omitted). EPA’s interpretation is nothing of the sort. *See supra* Statement of the Case § 1.E.1-.3.

¹³ Petitioners also contend that EPA’s definition—or, more precisely, their misreading of EPA’s definition—disregards Section 319(b)’s governing principle prioritizing public health. *See* Br. at 34-38; 42 U.S.C. § 7619(b)(3)(A)(i). But by limiting “natural event” to events with predominantly natural causes, EPA did heed that principle. *See infra* Argument § II.A.1. More broadly, the rule specifically directs states to protect public health by, for example, notifying the public about exceedances and developing mitigation plans. *See* 40 C.F.R. § 51.930, JA125.

reasonably controlled anthropogenic sources. EPA's interpretation is "based on a permissible construction of the statute," *Chevron*, 467 U.S. at 843, and therefore compels this Court's deference.

A. EPA's definition is reasonable.

1. The definition's first sentence permissibly interprets "natural event" to mean an event with predominantly natural causes.

EPA defined "natural event" to mean "an event and its resulting emissions, which may recur at the same location, in which human activity plays little or no direct causal role." 40 C.F.R § 50.1(k), JA120. The definition further provides that "anthropogenic sources that are reasonably controlled shall be considered to not play a direct role in causing emissions." *Id.*

The central pillar of the definition lies in its first sentence: A natural event requires an act of nature. Or, put another way, a natural event must include an event and must have predominantly natural causes. *See supra* Statement of the Case § I.E.1. In so defining that term, EPA gives effect to Congress's intent that Section 319(b) offers relief on account of acts of nature such as forest fires. *See S. Rep. No. 109-53, at 41, JA219.* And EPA used its common sense in demanding that natural causes play the starring role in a natural event—after all, a natural event ought to have predominantly natural causes, else it would be odd to call it "natural." *See NRDC*, 559 F.3d at 569 (Rogers, J., concurring in part and

dissenting in part) (permissible to define natural event as event with “predominantly natural causes but some human contribution.”). These parameters also prevent states from using any natural occurrence as a pretext for excluding an exceedance. In this way, the definition heeds the principles governing Section 319(b), in particular that “protection of public health is the highest priority[.]” 42 U.S.C. § 7619(b)(3)(A)(i).

At the same time, the definition’s first sentence permits human activities to play a “little” role in natural events. 40 C.F.R. § 50.1(k), JA120. This approach acknowledges the reality that human activities have impacts on the natural environment that reach far and wide, and it is the rare act of nature that can remain totally free from the human touch. High-speed wind offers a prime example, for it blows across a wide range of landscapes, indiscriminately sweeping up dust from natural and anthropogenic sources alike. *See* 80 Fed. Reg. at 72,854/2, JA015; 1996 Memo at 7, JA203 (noting that wind sweeps up dust from controlled anthropogenic sources and indicating no bright line between human activities and acts of nature). Or take wildfires: “[S]ome accidental human actions [can] initiate some wildfires and, to some degree, prior land management practices can influence the frequency and scale of wildfires.” 81 Fed. Reg. at 68,231/1, JA074; *see* S. Rep. No. 109-53, at 41, JA219 (recognizing that forest fires are natural events). Adopting an absolute and inflexible purity test would all but eviscerate Section

319(b)'s "natural event" language because few natural events would ever pass muster under that draconian standard. *See, e.g., Coal River Energy, LLC v. Jewell*, 751 F.3d 659, 663 (D.C. Cir. 2014) (rejecting interpretation that would "essentially nullify" statutory provision). EPA acted reasonably to avoid that outcome.

Because nothing in the Clean Air Act or its legislative history suggests that EPA's approach in defining "natural event" runs afoul of congressional intent, the definition's first sentence is permissible.

2. The definition's second sentence permissibly addresses the role of reasonably controlled anthropogenic sources in high-speed-wind events.

Unlike the definition's first sentence, the second sentence establishes no overarching definitional concept. It merely provides that, primarily for high-speed winds, reasonably controlled anthropogenic sources "shall be considered to not play a direct causal role" in natural events. 40 C.F.R. § 50.1(k), JA120. This provision is permissible because Congress, well aware of EPA's longstanding guidance embracing this very stance, refrained from rejecting it when enacting Section 319(b).

High-speed wind sweeps up dust from both natural and anthropogenic sources and carries the resulting emissions to other places. The definition's second sentence provides that when the dust originates from anthropogenic sources that are reasonably controlled, those sources are considered to play no direct causal role

in high-speed wind's resulting emissions; the wind and its emissions are therefore a natural event. *See* 40 C.F.R. § 50.1(k), JA120. The logic underlying this principle is illustrated by the dirt-road hypothetical. *See supra* Statement of the Case § I.E.2. By implementing dust controls, the road's owner in the hypothetical did what was reasonable to prevent the road from emitting pollutants in ordinary conditions (and in the process made the road as resistant to wind as a natural area would be). *Id.* § 50.14(b)(5)(v), JA122. Despite those efforts, however, the high-speed wind overwhelmed the controls and, as a result, dust from the road ended up in the air as particulate matter. It is therefore the wind, not the road, that caused the emissions. *See* 81 Fed. Reg. at 68,231/1, JA074 (“anthropogenic emission sources that contribute to the event emissions (and subsequent exceedance or violation) that are reasonably controlled do not play a ‘direct role’ in causing emissions.”).

EPA's definition is perfectly permissible under the Clean Air Act. In fact, when enacting Section 319(b), Congress was well aware of longstanding EPA guidance that, like the challenged definition, treated high-speed winds as natural events even when they swept up dust from controlled anthropogenic sources. *See* 1996 Memo at 7, JA203; 42 U.S.C. § 7619(b)(4)(A) (requiring 1996 Memo as interim measure). Significantly, Congress could have—but did not—reject that approach in the statute: Whereas it excluded natural phenomena such as stagnation

of air masses and lack of precipitation from the category of “exceptional events,” Congress never excluded high-speed wind. 42 U.S.C. § 7619(b)(1)(B).

Congress’s failure to do so implies that it is not opposed to allowing relief for high-speed-wind events under Section 319(b) and EPA’s definition is therefore permissible.¹⁴ *See Hillman v. Maretta*, 133 S. Ct. 1943, 1953 (2013) (when Congress explicitly enumerates certain exceptions, additional exceptions are not to be implied absent evidence of contrary legislative intent). Indeed, there appears to be little disagreement between the parties that EPA’s treatment of high-speed wind is reasonable, as Petitioners all but concede that these winds are properly considered natural events. *See Br.* at 2 (“The Act and its legislative history make clear Congress is concerned with natural events, like dust storms.”).

To summarize, EPA’s interpretation of “natural event” reasonably fills in the gap left by Congress. It limits natural events to those events with predominantly natural causes, while recognizing the reality that few acts of nature are truly free from human influences. EPA’s interpretation—which Congress never rejected—further permissibly addresses the treatment of reasonably controlled anthropogenic sources in high-speed-wind events. This Court must defer to EPA’s reasonable statutory interpretation.

¹⁴ Similarly, the legislative history shows that in considering whether natural climatological events could be exceptional events, Congress excluded specific phenomena but not wind. *See S. Rep. No. 109-53*, at 41, JA219.

B. Petitioners' criticism is based on a misreading of the definition and lacks merit.

Petitioners' contention that EPA's definition fails *Chevron* step two suffers from two glaring defects: Petitioners not only misread the Exceptional Events Rule's "natural event" definition, but also ignore the rule's other provisions that contradict their arguments. This Court should reject their contention.

Like their argument under *Chevron* step one, Petitioners' step-two arguments rest on the false notion that human activities can qualify as a natural event under EPA's definition. *See* Br. at 40-41 ("EPA's rule allows human activities and their emissions to qualify as natural events without those activities abiding by the restrictions Congress imposed on human activities"). The definition, however, countenances no such thing: Human activities are not natural and cannot be natural events. *See supra* Statement of the Case § I.E.1-.3. Petitioners' arguments are therefore meritless.

Petitioners also misread the phrase in the definition's first sentence, "which may recur at the same location[.]" They incorrectly contend that this phrase allows natural events (and therefore exceptional events) to encompass human activities that are likely to recur at a given spot. That outcome, they say, violates Section 319(b) because the only human activities that can be exceptional events are those that are *unlikely* to recur at a particular location. *See* Br. at 27-32, 42. But the antecedent of the quoted language belies Petitioners' reading: "Natural event

means *an event and its resulting emissions, which* may recur at the same location” 40 C.F.R. § 50.1(k), JA120 (emphasis added). Thus, under EPA’s definition, what is allowed to recur in the same place and still be a natural event is the *act of nature and its resulting emissions*. See 81 Fed. Reg. at 68,231/2, JA074 (“natural events can recur in the same area or at the same location and still be considered as exceptional events.”). This approach reflects Section 319(b)(1)(A)(iii) of the Act, in which Congress did not limit the recurrence of natural events. See 42 U.S.C. § 7619(b)(1)(A)(iii) (requiring an exceptional event to be, among other things, “an event caused by human activity that is unlikely to recur at a particular location *or* a natural event;” (emphasis added)). More fundamentally, Petitioners are wrong because human activities—whether they recur or not—are not natural events and so cannot qualify as exceptional events on that basis.

Another flaw in Petitioners’ argument is its disregard for the rule’s other provisions. Petitioners correctly point out that under the statute, an exceptional event must be an event that is “not reasonably controllable or preventable.” Br. at 28 (quoting 42 U.S.C. § 7619(b)(1)(A)(ii)); see generally *id.* at 28-31, 42. But they insist that EPA “contravenes this explicit congressional prohibition by defining a natural event to encompass human activities that ‘are reasonably controlled’” and thus “dispenses with the condition that a permissible exceptional event must not be ‘reasonably . . . preventable.’” *Id.* at 28 (quoting 42 U.S.C. §

7619(b)(1)(A)(ii)); *see id.* at 18 (“The rule violates § 319 by ignoring and rendering irrelevant whether an event caused by human activity is preventable.”).

But EPA never ignored Section 319(b)’s “not reasonably preventable” criterion. To the contrary, the Exceptional Events Rule specifies that “[t]he not reasonably controllable or preventable criterion has two prongs that the state must demonstrate: prevention and control.” 40 C.F.R. § 50.14(b)(8)(i), JA122; *see id.* § 50.14(c)(3)(iv)(D), JA124. It then explains that EPA’s Administrator will “determine that an event is not reasonably preventable if the State shows that reasonable measures to prevent the event were applied at the time of the event.” *Id.* § 50.14(b)(8)(ii), JA122. In other words, under the rule, states still must show that an exceptional event is not reasonably preventable and EPA’s “natural event” definition does nothing to alter that requirement.¹⁵

Next, Petitioners seem to fault the definition for not requiring assessment of the causal relationship between an exceedance and *routine* emissions. *See Br.* at 44. That is, they prefer that states and EPA adjust monitoring data showing an exceedance “to exclude any portion attributable to an exceptional event” and then

¹⁵ It is not clear whether Petitioners also accuse EPA of ignoring Section 319(b)’s “not reasonably controllable” criterion. *See Br.* at 28. If so, they are wrong again. The rule specifically provides that to qualify as an exceptional event, “the event”—meaning the natural event, not the reasonably controlled anthropogenic sources—must “not [be] reasonably controllable,” and explains what satisfies this requirement. 40 C.F.R. § 50.14(c)(3)(iv)(D), JA124; *see Response to Comments* at 46, JA147.

“determine whether the remaining portions from industrial and other recurring human activities nonetheless would have caused” an exceedance. *Id.*

Petitioners’ preferred approach, though it in no way undermines the reasonableness of EPA’s “natural event” definition, is misguided: As a practical matter, it is generally unworkable because monitoring data does not break down pollution concentrations by source type, so states cannot just take that data and exclude “portions” attributable to natural events. *See supra* Statement of the Case § I.B. As a legal matter, Petitioner’s approach deviates from Section 319(b), which requires “a clear causal relationship . . . between the measured exceedances . . . and the *exceptional event*”—not routine emissions—“to demonstrate that the *exceptional event*”—not routine emissions—“caused a specific air pollution concentration[.]” 42 U.S.C. § 7619(b)(3)(B)(ii) (emphases added). Whereas EPA’s rule fulfills this objective by focusing the causation analysis on the exceptional event, Petitioners would focus on an element—routine emissions—not in Section 319(b). *See* 40 C.F.R. § 50.14(c)(3)(iv)(B), (C), JA124. In any case, EPA *does* consider routine emissions in the causation analysis; indeed, that is why the agency expects states to discuss any occurrences besides natural events that could have resulted in emissions that influenced the monitoring data. *See* 81 Fed. Reg. at 68,234 n.39, JA077; 40 C.F.R. § 50.14(c)(3)(iv)(B), (C) (requiring demonstration of clear causal relationship).

And to the extent Petitioners' preferred approach is motivated by dissatisfaction with the potential for high levels of ordinary anthropogenic emissions, *see* Br. at 37-38, Petitioners can raise their concerns through state and federal programs under the Clean Air Act.¹⁶ Those concerns, however, are not properly addressed under Section 319(b) by attacking EPA's reasonable construction of the term "natural event."

In the end, what Petitioners apparently want is an absolute and inflexible purity test: A natural event, they urge, must be unsullied by the human touch. *See* Br. at 18; Comment Letter at 8, JA234 ("a natural event must have no human activity component at all."). But on *Chevron* step two, Petitioners' preferred interpretation is irrelevant; the question before this Court is whether the *agency's* interpretation of ambiguous statutory language is permissible. *See Nat'l Recycling Coal.*, 984 F.2d at 1251. And as EPA has shown, its interpretation passes that test and therefore compels this Court's deference.

¹⁶ Generally, the emission controls required of anthropogenic sources is the result of regulatory decisions, including, for example, decisions regarding states' implementation plans. *See generally* 42 U.S.C. §§ 7408, 7410; *id.* Subpt. II, Pt. D. Petitioners can comment on those decisions in their proposed form during public comment periods and, once they are finalized, further challenge those decisions in appropriate administrative or judicial processes. In addition, the Act provides for enforcement against non-complying sources. *See id.* §§ 7413, 7604.

III. The Exceptional Events Rule is not a free pass for states to shirk their obligations under the Clean Air Act.

At heart, Petitioners' challenge voices the fear that the "natural event" definition gives states too much latitude to erase an exceedance whenever it suits them. *See* Br. at 37. That fear is premised on a misreading of the definition. But even setting that aside, Petitioners overlook the rule's built-in safeguards against potential abuse.

Consider a scenario that tests the boundaries of EPA's definition, one obliquely presented in Petitioners' brief: Assume the relevant standard is 100 $\mu\text{g}/\text{m}^3$. Historically, the monitor records pollution concentrations around 98 $\mu\text{g}/\text{m}^3$, which is below, but hovers near, the standard. A natural event occurs—a severe windstorm rips through the area, for example—and the day's pollution concentration at the monitor records an exceedance of 102 $\mu\text{g}/\text{m}^3$. Petitioners appear to suggest that this exceedance would be excluded even though the natural event contributed so little pollution. *See* Br. at 16-17, 26-27, 44, 46.

That concern is groundless. For one thing, it assumes an outcome that is anything but guaranteed. For another, it ignores the kind of affirmative demonstration states would need to make to obtain relief under the Exceptional Events Rule. *See* Statement of the Case § I.E.

As EPA has cautioned, when, as here, a natural event's emissions are relatively minor, it could be "very difficult" to demonstrate a clear causal

relationship between the event and the exceedance. 81 Fed. Reg. at 68,241/1-2, JA084; 72 Fed. Reg. at 13,569/3, JA436. Complicating the state's task in this hypothetical is how closely routine emissions hover near the standard, such that small variations in those emissions could easily result in an exceedance even absent a natural event. *See id.*

On top of the inherent difficulty in establishing clear causation, the state must invite public scrutiny of its demonstration. 40 C.F.R. § 50.14(c)(3)(v), JA124. Members of the public, including Petitioners, could identify any factual weaknesses in the state's analysis, and the state would need to respond to those comments. *Id.*

EPA then would review that demonstration, considering the weight of the evidence. *See, e.g.*, 81 Fed. Reg. at 68,227/1 & n.19, JA070. If EPA were unconvinced—because, for example, the state did not satisfactorily respond to comments pointing out infirmities in its case—the state will have failed to meet its burden.

If, however, the state succeeds in making the necessary demonstration in this scenario, then it would be proper to exclude the exceedance. *See* Response to Comments at 63, JA164 (possible states “could show that a relatively small contribution [from an event] caused the exceedance”). After all, when a natural event that was not reasonably controllable or preventable clearly caused an

exceedance, that exceedance should not count against the state in regulatory determinations. That is true whether the concentration of routine emissions falls far below the relevant standard or just a breath short—in either case, without the natural event there would have been no exceedance.¹⁷ To the extent Petitioners believe that the level of ordinary anthropogenic emissions is too high or that the relevant standard is not sufficiently protective, the proper avenue for voicing that objection is a challenge to the regulatory decisions that resulted in those emissions or that standard. It is not to withhold relief when a state meets its burden under the Exceptional Events Rule. *See supra* Argument § II.B.

This outcome, far from flouting congressional intent, *see* Br. at 45, is precisely what Section 319(b) envisions: Although states are responsible for meeting the standards, they ought not be penalized for exceedances due to emissions from sources beyond their control. *See* 42 U.S.C. § 7619(b); *cf.* 81 Fed Reg. at 68,236/1-2, JA079 (“The [Clean Air Act] as a whole, and section 319(b) in particular, is premised on the idea that states should undertake reasonable actions to control emissions and protect public health.”). If a state can demonstrate to EPA’s satisfaction that an act of nature caused the exceedance, then relief is

¹⁷ That is because if the weight of the evidence demonstrates that an exceedance would have occurred even absent a natural event, then the state would not be able to show that it was the natural event that clearly caused the exceedance.

appropriate, no matter how close the level of routine emissions comes to the standard.

CONCLUSION

EPA defined “natural event” as an event with predominantly natural causes—an act of nature. Thus, human activities are not, as Petitioners mistakenly believe, natural events. EPA’s definition interprets this ambiguous statutory term in a way that stays within the bounds of Section 319(b) while accomplishing its objective that states should not suffer regulatory consequences for air-quality problems due to acts of nature beyond their control. That interpretation is reasonable and commands deference under *Chevron*. This Court must therefore deny the petition.

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CERTIFICATE OF COMPLIANCE

I certify that this brief complies with the requirements of Fed. R. App. P. 32(a)(5) and (6) because it has been prepared in 14-point Times New Roman, a proportionally spaced font.

I further certify that this brief complies with the type-volume limitation of Fed. R. App. P. 32(a)(7)(B) because according to the count of Microsoft Word, it contains 9954 words, excluding the parts of the brief exempted under Rule 32(f).

 /s/ Sue Chen

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CERTIFICATE OF SERVICE

I certify that on November 14, 2017, I electronically filed the foregoing with the Clerk of the Court of the U.S. Court of Appeals for the District of Columbia Circuit by using the appellate CM/ECF system.

I further certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

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