No.

IN THE
Supreme Court of the United States

MERILYN COOK, *et al.*,
Petitioners,
v.
ROCKWELL INTERNATIONAL CORPORATION AND THE DOW CHEMICAL COMPANY,
Respondents.

On Petition for a Writ of Certiorari to the United States Court of Appeals for the Tenth Circuit

PETITION FOR A WRIT OF CERTIORARI

MERRILL G. DAVIDOFF
DAVID F. SORENSEN
JENNIFER E. MACNAUGHTON
CAITLIN G. COSLETT
BERGER & MONTAGUE, P.C.
1622 Locust Street
Philadelphia, PA 19103
(215) 875-3000

GARY B. BLUM
STEVEN W. KELLY
SILVER & DEBOSKEY, P.C.
The Smith Mansion
1801 York Street
Denver, CO 80206
(303) 399-3000

MARCY G. GLENN
HOLLAND & HART LLP
555 17th Street, Suite 3200
Denver, CO 80202
(303) 295-8000

JEFFREY A. LAMKEN
Counsel of Record
ROBERT K. KRY
MARTIN V. TOTARO
KELLY M. FALLS
MOLOLAMKEN LLP
The Watergate, Suite 660
600 New Hampshire Ave., NW
Washington, D.C. 20037
(202) 556-2000
jlamken@mololamken.com

LOUISE M. ROSELLE
PAUL M. DE MARCO
JEAN M. GEOPPINGER
WAITE, SCHNEIDER, BAYLESS & CHESLEY CO., L.P.A.
1513 Fourth & Vine Tower
Cincinnati, OH 45202
(513) 621-0267

Counsel for Petitioners Merilyn Cook, et al.

WILSON-EPES PRINTING CO., INC. – (202) 789-0096 – WASHINGTON, D.C. 20002

QUESTIONS PRESENTED

The Price-Anderson Act, Pub. L. No. 85-256, 71 Stat. 576 (1957), establishes a compensation regime for any "nuclear incident," a term that includes radioactive discharges causing "bodily injury, sickness, disease, or death, or loss of or damage to property, or loss of use of property." 42 U.S.C. §2014(q). Congress provided that, in suits covered by the Act, "the substantive rules for decision * * * shall be derived from the law of the State in which the nuclear incident involved occurs," unless state law is inconsistent with certain provisions of the Act. *Id.* §2014(hh).

The questions presented are:

1. Whether state substantive law controls the standard of compensable harm in suits under the Price-Anderson Act, or whether the Act instead imposes a federal standard.

2. Whether, even assuming a federal standard applies, a property owner whose land has been contaminated by radioactive plutonium, resulting in lost property value, must show some "physical injury" to the property beyond the contamination itself in order to recover for "damage to property."

PARTIES TO THE PROCEEDINGS BELOW

Petitioners Merilyn Cook, Lorren and Gertrude Babb, Richard and Sally Bartlett, and William and Delores Schierkolk were plaintiffs in the district court and appellees and cross-appellants in the court of appeals.

Respondents Rockwell International Corporation and The Dow Chemical Company were defendants in the district court and appellants and cross-appellees in the court of appeals.

Michael Dean Rice, Thomas and Rhonda Deimer, Stephen and Peggy Sandoval, and Bank Western were plaintiffs in the district court and are listed as parties in the caption in the court of appeals, but are not parties to the district court judgment under review.

The Boeing Company is identified in the district court judgment as a party bound by the judgment, as successor-in-interest to Rockwell International Corporation.

TABLE OF CONTENTS

TABLE OF CONTENTS—Continued

TABLE OF AUTHORITIES

TABLE OF AUTHORITIES—Continued

TABLE OF AUTHORITIES—Continued

STATUTES AND RULES

TABLE OF AUTHORITIES—Continued

TABLE OF AUTHORITIES—Continued

IN THE

Supreme Court of the United States

MERILYN COOK, *et al.*,

Petitioners,

v.

ROCKWELL INTERNATIONAL CORPORATION AND THE DOW CHEMICAL COMPANY,

Respondents.

On Petition for a Writ of Certiorari to the United States Court of Appeals for the Tenth Circuit

---

PETITION FOR A WRIT OF CERTIORARI

Merilyn Cook, *et al.*, respectfully petition for a writ of certiorari to review the judgment of the United States Court of Appeals for the Tenth Circuit in this case.

OPINIONS BELOW

The court of appeals' opinion (App., *infra*, 1a-43a) is reported at 618 F.3d 1127. The district court's post-trial opinion (App., *infra*, 44a-112a) is reported at 564 F. Supp. 2d 1189.

STATEMENT OF JURISDICTION

The court of appeals entered judgment on September 3, 2010, App., *infra*, 1a-43a, and denied rehearing on December 9, 2010, *id.* at 125a-126a. On March 1, 2011, Justice Sotomayor extended the time to file a petition for a

writ of certiorari to April 8, 2011. No. 10A845. On March 30, Justice Sotomayor further extended that time to May 6, 2011. *Ibid.* This Court has jurisdiction under 28 U.S.C. §1254(1).

STATUTORY PROVISIONS INVOLVED

Relevant provisions of the Atomic Energy Act of 1954, Pub. L. No. 83-703, 68 Stat. 919, as amended by the Price-Anderson Act, Pub. L. No. 85-256, 71 Stat. 576 (1957) (codified as amended at 42 U.S.C. §§2011 *et seq.*), are set forth in the Appendix (App., *infra*, 151a-183a).

INTRODUCTION

Congress passed the Price-Anderson Act in 1957 to promote development of the nuclear industry while preserving traditional state-law remedies for any resulting injuries. "Congress assumed that state-law remedies, in whatever form they might take, were available to those injured by nuclear incidents." *Silkwood* v. *Kerr-McGee Corp.*, 464 U.S. 238, 256 (1984). The courts of appeals, however, are now divided over whether the standard for compensable harm in suits subject to the Act is governed by state or federal law—and, if the latter, what that standard is.

In the decision below, the Tenth Circuit held that federal law establishes a minimum threshold of harm under which a property owner cannot recover for plutonium contamination that reduces his property's value absent proof of some additional "physical injury" to the property beyond the contamination itself. That decision deepens a conflict between the Sixth and Ninth Circuits over whether state or federal law determines the standard for compensable harm—a conflict in which a divided Fifth Circuit panel has also recently taken sides. It also conflicts with a Third Circuit decision holding that, even under federal law, no such "physical harm" is required. The

issues, moreover, are important: The decision below flouts Congress's intent to preserve a dominant role for state law. And it threatens to deny any remedy to landowners who have suffered "damage" to their property in any meaningful sense of the term.

In this case, for example, petitioners' property was repeatedly contaminated by radioactive plutonium from a nuclear weapons plant. Because of reckless safety violations, fires released plutonium into the air, and barrels leaked plutonium into the ground, which was then dispersed onto neighboring properties. After FBI and EPA agents raided the plant, its operator pled guilty to criminal charges. Following 15 years of litigation and a four-month trial, a jury found that petitioners had suffered $177 million in property damage from plutonium contamination. The Tenth Circuit, however, held that federal law precludes any redress absent some "physical injury" to the properties beyond the contamination itself.

STATEMENT

I. STATUTORY FRAMEWORK

A. The Price-Anderson Act

Congress initially thought nuclear power would be a government monopoly. *Duke Power Co.* v. *Carolina Envtl. Study Group, Inc.*, 438 U.S. 59, 63 (1978). But it soon concluded that "the national interest would be best served if the Government encouraged the private sector to become involved * * * under a program of federal regulation and licensing." *Ibid.* Accordingly, in 1957, Congress enacted the Price-Anderson Act, Pub. L. No. 85-256, 71 Stat. 576 (1957), "to protect the public and to encourage the development of the atomic energy industry," 42 U.S.C. §2012(i).

To those ends, the Act establishes a compensation system that includes mandatory insurance, government indemnification, and caps on liability. That regime applies to any "nuclear incident," a term defined as "any occurrence * * * causing * * * bodily injury, sickness, disease, or death, or loss of or damage to property, or loss of use of property, arising out of or resulting from the radioactive, toxic, explosive, or other hazardous properties of source, special nuclear, or byproduct material." 42 U.S.C. §2014(q). Plutonium—a toxic, radioactive carcinogen with a half-life of 24,000 years, Tr. 3633, 5747-5754—is explicitly defined to be "special nuclear material." 42 U.S.C. §2014(aa).[1]

To ensure compensation for those injured by nuclear incidents, the Act requires private nuclear facility operators to have specified amounts of insurance coverage. 42 U.S.C. §2210(a)-(b). It further provides for government indemnification up to other limits. *Id.* §2210(c)-(d). A defendant's liability, however, is limited to those insurance and indemnification amounts. *Id.* §2210(e).

Apart from that liability limit, the substantive rights of injured persons were to be governed by state law. Congress intended "no interference with * * * State law" unless "damages exceed the amount of financial responsibility required together with the amount of the indemnity." S. Rep. No. 85-296, at 9 (1957).

B. The 1966 Amendments

As originally enacted, Price-Anderson contained no provision for federal-court jurisdiction. In 1966, how-

[1] Citations to "Tr. __" are to the trial transcript, filed without separate pagination as volume 6 of the supplemental appendix in the court of appeals. Citations to "PX__" are to plaintiffs' trial exhibits, filed as volume 7.

ever, Congress amended the Act to provide for concurrent federal jurisdiction over "any public liability action arising out of or resulting from an extraordinary nuclear occurrence." Pub. L. No. 89-645, §3, 80 Stat. 891, 892 (1966). "Public liability" was defined as "any legal liability arising out of or resulting from a nuclear incident." 42 U.S.C. §2014(w). But the term "extraordinary nuclear occurrence" was limited to nuclear incidents "the [Atomic Energy] Commission determines to be substantial, and which the Commission determines ha[ve] resulted or will probably result in substantial damages to persons offsite or property offsite." Pub. L. No. 89-645, §1(a)(2), 80 Stat. at 891.

The 1966 amendments preserved the primary role of state law. As in the original Act, "the claimant's right to recover * * * [wa]s left to the tort law of the various States." S. Rep. No. 89-1605, at 6 (1966). Congress thus "assumed that state-law remedies, in whatever form they might take, were available to those injured by nuclear incidents." *Silkwood* v. *Kerr-McGee Corp.*, 464 U.S. 238, 256 (1984). While "there is tension between the conclusion that safety regulation is the exclusive concern of the federal law and the conclusion that a state may nevertheless award damages based on its own law of liability," Congress "intended to stand by both concepts and to tolerate whatever tension there was between them." *Ibid.*

C. The 1988 Amendments

For more than 20 years, no nuclear incident was ever declared an "extraordinary nuclear occurrence" sufficient to confer federal jurisdiction—not even the Three Mile Island partial core meltdown. See S. Rep. No. 100-218, at 13 (1987). In 1988, Congress responded by eliminating the "extraordinary nuclear occurrence" limitation and expanding the Act's jurisdictional provision to cover "any

public liability action arising out of or resulting from a *nuclear incident*." 42 U.S.C. §2210(n)(2) (emphasis added). Congress also clarified that it was sufficient merely to *allege* a nuclear incident: It defined "public liability action" as "any suit *asserting* public liability" (*i.e.*, asserting "legal liability arising out of or resulting from a nuclear incident"). *Id.* §2014(w), (hh) (emphasis added). The definition of "nuclear incident" remained unchanged—"any occurrence * * * causing * * * bodily injury, sickness, disease, or death, or loss of or damage to property, or loss of use of property, arising out of or resulting from the radioactive, toxic, explosive, or other hazardous properties of source, special nuclear, or byproduct material." *Id.* §2014(q). Congress clarified that such actions would be deemed to arise under federal law, providing that "[a] public liability action shall be deemed to be an action arising under section 2210 of this title." *Id.* §2014(hh).

Congress, however, expressly codified the primacy of substantive state law: "[T]he substantive rules for decision in [a public liability] action," it provided, "shall be derived from the law of the State in which the nuclear incident involved occurs, unless such law is inconsistent with the provisions of [Section 2210]." 42 U.S.C. §2014(hh). The legislative history explains that, "[r]ather than designing a new body of substantive law," Congress left liability to be "determined under applicable state tort law." H.R. Rep. No. 100-104, at 5, 18 (1987); see also S. Rep. No. 100-218, at 13. Thus, even after the 1988 amendments, "it is still accurate to state that '[s]ince its enactment by Congress in 1957, one of the cardinal attributes of the Price-Anderson Act has been its minimal interference with state law.'" John F. McNett, *Nuclear Indemnity for Government Contractors Under the*

Price-Anderson Act: 1988 Amendments, 19 Pub. Cont. L.J. 1, 7 (1989).

II. PROCEEDINGS BELOW

A. Background

Located near Denver, Colorado, the Rocky Flats nuclear weapons plant was once the "focal point" of the government's plutonium operations. PX1609, at 12 (Gen. Accounting Office, *DOE's Award Fees at Rocky Flats Do Not Adequately Reflect ES&H Problems* (Oct. 1989)). Respondent Dow Chemical Company operated the plant from 1952 to 1975, and respondent Rockwell International Corporation operated it from 1975 to 1989. App., *infra*, 2a.

Throughout that time, Rocky Flats was riddled with safety failures. There were "numerous problems in the plant's radiological protection program" and "a lack of commitment by the plant's management to improve overall safety and health conditions." PX1609, at 2-3 (GAO report). In 1957, a major plutonium fire erupted because an improperly designed building contained "several times" the amount of plutonium it was supposed to handle. PX1290, at 23. A second major plutonium fire occurred in 1969 in a building containing 8,000 pounds of plutonium. Tr. 3176, 3198. From 1966 to 1969 alone, there were 30 other reported plutonium fires. PX321, at 2. Thousands of barrels of plutonium-contaminated oil, many of them rusting and leaking, were left outside at the plant for almost a decade. PX64, at 74,879-80, 74,889, 74,928; PX223; Tr. 1530-1534. And over 2,600 pounds of weapons-grade plutonium and 680 pounds of enriched uranium went unaccounted for. PX1132, at 107-108; Tr. 5337. See generally Bryan Abas, *Rocky Flats: A Big Mistake from Day One*, Bull. Atomic Scientists, Dec. 1989, at 19.

By the mid-1980s, "serious environmental problems began to surface." PX1609, at 16 (GAO report). On June 6, 1989, FBI and EPA agents—in a joint action dubbed "Operation Desert Glow"—raided the plant. See App., *infra*, 2a; Abas, *supra*, at 19. Rockwell was charged with, and pled guilty to, environmental crimes. App., *infra*, 2a. By 1989, when Rockwell ceased operating the plant, the government faced "one of the most significant and challenging environmental clean-ups in the history of the United States." U.S. Dep't of Energy, *Rocky Flats Site, Colorado: Fact Sheet* 2-3 (Dec. 2010). The government identified some 178 "individual hazardous substance sites" left at the plant. PX1279, at ES-1 to -2. Kilograms of plutonium remained in the plant's exhaust ducts. Tr. 3243-3245. The EPA included the plant on its Superfund list in 1989, see *National Priorities List for Uncontrolled Hazardous Waste Sites*, 54 Fed. Reg. 41,015, 41,021 (Oct. 4, 1989), and identified contamination sources as "leaking storage drums, unlined disposal trenches, surface water impoundments, leaking pipelines and underground storage tanks, two landfills, and contaminated buildings," EPA, *Superfund Program: Rocky Flats Plant*, http://www.epa.gov/region8/superfund/co/rkyflatsplant/.

B. Proceedings Before the District Court

1. In 1990, several owners of property within the "plume" of plutonium released from Rocky Flats—including the former mayors of Golden and Arvada, Colorado—filed this class action for nuisance and trespass against Rockwell and Dow. App., *infra*, 3a; C.A. Supp. App. 1382; Tr. 1007-1008, 1949. They asserted federal jurisdiction under the Price-Anderson Act and 28 U.S.C. §§1331 and 1332. App., *infra*, 3a, 11a n.8. The operative complaint expressly asserts public liability by alleging

damage to or loss of use of property due to Rockwell and Dow's plutonium discharges. C.A. App. 310.

After more than 15 years of litigation, a four-month jury trial began in October 2005. App., *infra*, 4a. Petitioners presented substantial evidence of contamination. "[V]arious soil sampling studies had concluded that plutonium from Rocky Flats was deposited throughout the Class Area and beyond." C.A. Supp. App. 1386. Indeed, Rockwell and Dow admitted that "plutonium from Rocky Flats is present in the Class Area." C.A. App. 1646. A government study found "[e]levated levels of plutonium both on and off site * * * , in some places, more than 50 times background levels." PX1620, at 23. And plutonium left at the plant continued to migrate onto neighboring properties. Tr. 3998-4001, 4121-4126.

Petitioners proved that the plutonium contamination diminished their property values. Tr. 2654-2732, 4209-4273, 6329-6351, 6399-6496, 6509-6635. Experts analyzed real estate market research, reviewed analogous case studies, examined market sales data, and conducted regression analyses and public opinion surveys to measure the diminution in value. *Id.* at 2716-2718, 6406, 6416-6417. An expert also testified that the contamination posed a health hazard because "[e]ven small amounts of inhaled plutonium put people at risk of lung cancer." *Id.* at 3659-3663. Indeed, there were elevated cancer rates near the plant. *Id.* at 4812-4843. The district court rejected Rockwell and Dow's *Daubert* challenges to all that evidence, C.A. App. 1732-1871, and none of those rulings was challenged on appeal.

2. The district court instructed the jury that, to recover for nuisance under Colorado law, the property owners had to prove Rockwell or Dow interfered with their "use and enjoyment of their properties" either by "caus-

ing [them] to be exposed to plutonium and placing them at some increased risk of health problems" or by "causing objective conditions that pose a demonstrable risk of future harm." App., *infra*, 134a. The interference had to be "unreasonable" and "substantial." *Ibid.* "Evidence that the value of Class members' properties has diminished," the instructions explained, "is evidence that the interference is substantial." *Id.* at 139a.

With respect to trespass, the court instructed the jury that the property owners had to prove (1) plutonium from Rocky Flats was present on their properties; (2) Rockwell or Dow "intentionally undertook an activity or activities that in the usual course of events caused plutonium" to be present; and (3) the plutonium would likely continue to be present indefinitely. App., *infra*, 131a. The instructions elaborated on each element. *Id.* at 132a, 147a.

For both claims, the district court instructed the jury to calculate damages based on diminution in property value. App., *infra*, 147a-149a. The court made clear, however, that the jury could not "award any diminution in value caused solely by the proximity of the Class Area to Rocky Flats." *Id.* at 150a. Rather, damages had to be measured by "the difference between the actual value of the Class Properties and the value these Properties would have had if Dow or Rockwell or both of them had not committed the trespass and/or nuisance proved by Plaintiffs." *Id.* at 147a. At no time in the district court did Rockwell or Dow contend that Price-Anderson imposed a federal standard of compensable harm in addition to those state-law requirements.

3. The jury returned a verdict in favor of the property owners. App., *infra*, 44a. It found that Rockwell and Dow had caused "a reduction in the aggregate value of the Class Properties of $176,850,340"—approximately

$12,000 per residential property. *Id.* at 49a; C.A. App. 1620; Tr. 6422. It also awarded $200.2 million in punitive damages. App., *infra*, 54a. Rockwell and Dow moved for judgment as a matter of law or a new trial, but the district court denied those motions. *Id.* at 45a-81a. On June 2, 2008, the court entered a final judgment (including 18 years of prejudgment interest) of $926 million. *Id.* at 106a-107a, 113a-117a.

C. The Tenth Circuit's Decision

The Tenth Circuit reversed in relevant part. App., *infra*, 1a-43a.

1. On appeal, Rockwell and Dow claimed for the first time that Price-Anderson's definition of "nuclear incident" imposes a federal standard of compensable harm. See App., *infra*, 13a-21a. That definition's reference to "loss of or damage to property, or loss of use of property," they contended, imposes a federal threshold of harm, regardless of what state law requires. See *id.* at 13a, 15a. Rockwell and Dow urged that the district court had erred by not instructing the jury on that newfound federal element. *Id.* at 13a.

Because Rockwell and Dow had not requested such an instruction below, the court of appeals acknowledged that they may have "forfeited this argument." App., *infra*, 13a; cf. Fed. R. Civ. P. 51(d). But the court held that petitioners had "forfeited any forfeiture argument" by not adequately challenging Rockwell and Dow's preservation of the issue. App., *infra*, 13a-14a. The court conceded that petitioners had urged that Rockwell and Dow "fail[ed] to 'identify with clarity * * * the locations in the record where [their] points were raised.'" *Ibid.*; see also C.A. Supp. Br. 8 n.5; C.A. Supp. Reply 7-8. But it deemed that reference too "generic" to amount to a "forfeiture challenge." App., *infra*, 14a.

Turning to the merits, the court of appeals held that federal law imposes a threshold standard of compensable harm. "[T]he occurrence of a nuclear incident, and thus a sufficient injury under §2014(q)," the court held, "constitutes a threshold element of any [Price-Anderson] claim." App., *infra*, 16a. Relying on the fact that the Act defines "nuclear incident" to include "loss of or damage to property, or loss of use of property," 42 U.S.C. §2014(q), the court concluded that, "[i]n creating a federal cause of action under the [Act], * * * Congress made clear its intention to limit recovery to the discrete group of injuries enumerated in §2014(q)," App., *infra*, 16a. Accordingly, it held, "a plaintiff must establish an injury sufficient to constitute a nuclear incident as a threshold, substantive element of any [Price-Anderson] claim." *Ibid.*

The court of appeals rejected the argument that the relevant provisions established only the pleading requirements for federal jurisdiction and did not alter the substantive requirements for recovery under state law. See App., *infra*, 16a. Those provisions define "public liability action" as "any suit *asserting*" liability from a nuclear incident, 42 U.S.C. §2014(hh) (emphasis added), and the court acknowledged that the complaint *asserted* such liability here, App., *infra*, 3a. But the court did not believe Congress meant to "render the statute's nuclear incident requirement superfluous outside of the pleading stage." *Id.* at 16a. "Were a plaintiff only required to plead the presence of a nuclear incident, but never establish one," it opined, "a 'public liability action' would be completely indistinguishable from whichever state tort claim a particular [Price-Anderson] action incorporates." *Ibid.*

The court tried to reconcile its holding with the Act's express provision that "the substantive rules for decision in [a public liability] action shall be derived from the law

of the State in which the nuclear incident involved occurs." 42 U.S.C. §2014(hh). "Congress," the court acknowledged, "made clear its intention to * * * utiliz[e] state law to frame the 'substantive rules for decision.'" App., *infra*, 16a. But the court held that Congress "simultaneously" sought "to limit recovery to the discrete group of injuries enumerated" in Section 2014(q)'s "nuclear incident" definition. *Ibid.* Moreover, Section 2014(hh) by its terms does not apply if state law is "inconsistent with the provisions of [Section 2210]." 42 U.S.C. §2014(hh). Permitting recovery for injuries that do not satisfy some federal threshold of harm, the court claimed, would be "inconsistent" with the "nuclear incident" definition. App., *infra*, 16a n.10. The court thus held that "a plaintiff must establish an injury sufficient to constitute a nuclear incident as a threshold, substantive element of any [Price-Anderson] claim." *Id.* at 16a.

2. The court of appeals next turned to whether the jury had been adequately instructed on its new, federally defined "loss of or damage to property, or loss of use of property" element. 42 U.S.C. §2014(q). The court did not dispute that Rockwell and Dow had contaminated petitioners' property with plutonium, a hazardous radioactive carcinogen. See pp. 4, 9, *supra*. Nor did it dispute that property values were lower as a result. See p. 9, *supra*. Nonetheless, the court held that the jury had to find more.

The court explained that, in its earlier decision in *June* v. *Union Carbide Corp.*, 577 F.3d 1234 (10th Cir. 2009), it had held that subcellular damage from radiation exposure, absent any medical symptoms, does not qualify as "bodily injury" (a term that also appears in the "nuclear incident" definition). App., *infra*, 17a. "Just as an existing physical injury to one's body is necessary to establish

'bodily injury,'" the court reasoned, "so too is an existing physical injury to property necessary to establish 'damage to property.'" *Ibid.*

While the court did not elaborate on the sort of "physical injury" its new standard required, it did hold that plutonium contamination resulting in lost property value was not enough. Under the court's threshold requirement, "[d]iminution of value * * * cannot establish the fact of injury or damage." App., *infra*, 18a n.12. "Otherwise," the court reasoned, "reduced value stemming from factors unrelated to any actual property injury, such as unfounded public fear regarding the effects of minor radiation exposure, could establish 'damage to property' and 'loss of use of property.'" *Ibid.* Price-Anderson, the court held, "requires a showing of actual physical injury to the properties themselves rather than a mere decline in the properties' value." *Id.* at 19a n.12.

The court noted that petitioners "did present evidence relevant to a *loss of use*" of their property by showing "an increased risk of health problems." App., *infra*, 19a-20a (emphasis added). "[W]hen the presence of radioactive materials creates a sufficiently high risk to health," it conceded, "a loss of use may in fact occur." *Id.* at 20a. The court gave as examples "an increased risk to health so high that no reasonable person would freely choose to live on or work at the property" or contamination so severe that "the soil can no longer produce crops that are safe for consumption." *Ibid.* Because the jury was not instructed on the new threshold Price-Anderson element, however, the court set aside the verdict and remanded. *Id.* at 21a.[2]

---

[2] The court also addressed several other issues. It held that, whether or not Price-Anderson's jurisdictional provision applied, the district

3. The court of appeals denied rehearing en banc, with Judge Lucero dissenting. App., *infra*, 125a-129a. Judge Lucero urged that the panel had erred by requiring petitioners to "prove a 'nuclear incident' as an element of a [Price-Anderson] claim." *Id.* at 128a. The panel, he noted, "confuse[d] the [Act's] jurisdictional requirements with its substantive elements": While the Act "requires a showing of a 'nuclear incident' for jurisdictional purposes," "*state* law determines liability." *Id.* at 128a-129a (emphasis added). He urged the court to rehear the case "to undo the panel's damaging alchemy." *Id.* at 129a.

REASONS FOR GRANTING THE PETITION

The Tenth Circuit's decision in this case interpreted the Price-Anderson Act to impose a federal standard of compensable harm notwithstanding the Act's express declaration that "the substantive rules for decision * * * shall be derived from the law of the State in which the nuclear incident involved occurs." 42 U.S.C. §2014(hh). It then construed that federal standard to require "physical injury" to property beyond the fact that the property is contaminated with radioactive plutonium and

---

court had federal-question jurisdiction. App., *infra*, 6a-11a. It held that the district court's Rule 54(b) ruling was proper. *Id.* at 11a-13a. On remand, the court of appeals added, Rockwell and Dow should be given another opportunity to show that state standards conflict with specific federal statutes or regulations. *Id.* at 21a-26a. Moreover, although "[t]he jury was properly instructed on the elements of a nuisance claim as well as the definitions of 'substantial' and 'unreasonable,'" the court stated that a scientifically unfounded risk cannot rise to the level of an unreasonable and substantial interference. *Id.* at 26a-29a. The court held that petitioners had to show "actual physical damage" on their trespass claim. *Id.* at 31a-35a. It vacated the class certification order. *Id.* at 35a-36a. And it addressed the punitive damages instruction. *Id.* at 36a-42a.

diminished in value as a result. Those important holdings conflict with decisions of other circuits.

Like the court below, the Ninth Circuit has deemed the Act's "nuclear incident" definition to impose a federal standard of harm. But the Sixth Circuit has adopted the opposite view, holding that the Act imposes only a state-law standard. The Fifth Circuit recently sided with the Ninth and Tenth Circuits in a divided decision that reflects the broader circuit conflict.

Similarly, the Tenth Circuit's holding that federal law imposes a "physical injury" requirement conflicts with a Third Circuit decision holding that no such "physical harm" is required. It conflicts with half a century of administrative practice. And it conflicts with common sense: Any sensible definition of "damage to property" would include contaminating property with radioactive plutonium that impairs its value.

Both issues, moreover, are important. The Tenth Circuit's federalization of the compensable-harm standard flouts Congress's decision to respect traditional state authority. And the court's unreasonably stringent federal standard denies thousands of property owners compensation that any rational regime would afford. The Act does not require a disaster of Chernobylesque proportions before a property owner can recover proven losses from a convicted environmental criminal. The Court should grant review.

I. THE CIRCUITS ARE DIVIDED OVER WHETHER STATE OR FEDERAL LAW DETERMINES THE STANDARD FOR COMPENSABLE HARM IN A PRICE-ANDERSON SUIT

The Tenth Circuit's decision deepens a circuit conflict over whether the minimum standard for compensable harm in suits under the Price-Anderson Act derives from

state or federal law. The Sixth Circuit has held that state law controls. But the Ninth Circuit, like the court below, has held that the Act imposes a threshold federal standard. And the Fifth Circuit, in a divided decision, has agreed.

A. The Courts Are Squarely Divided

1. In *Rainer* v. *Union Carbide Corp.*, 402 F.3d 608 (6th Cir. 2005), the Sixth Circuit addressed whether workers exposed to plutonium and neptunium could recover under Price-Anderson. The workers claimed they had suffered compensable harm, even though no symptoms had surfaced, because subcellular damage itself was a "bodily injury" under the Act. *Id.* at 618.

Evaluating that claim, the Sixth Circuit noted that the Act "creates a private right of action for claims arising out of 'nuclear incidents,'" defined as "'any occurrence * * * causing * * * bodily injury, sickness, disease, or death, or loss of or damage to property'" due to radioactive discharges. 402 F.3d at 618 (quoting 42 U.S.C. §2014(q)). Whether a plaintiff has shown sufficient harm to meet that standard, the court held, depends on *state*, not federal, law. *Ibid.*

Under Price-Anderson, the Sixth Circuit observed, "[c]ourts are required to look to state law for the substantive rules to apply in deciding claims." 402 F.3d at 618. Because "the Act specifically calls for state law to provide the substantive foundations," plaintiffs "necessarily had to argue *on the basis of Kentucky law* in order to demonstrate the legitimacy of their 'bodily injury' claim." *Id.* at 617 (emphasis added). Thus, the "key question" was "whether *Kentucky caselaw* equates 'subcellular damage' with 'bodily injury.'" *Id.* at 618 (emphasis added). Reviewing state precedents, the court held that Kentucky law did not. *Id.* at 618-622.

2. The Ninth Circuit expressly rejected that approach in *Dumontier* v. *Schlumberger Technology Corp.*, 543 F.3d 567 (9th Cir. 2008). *Dumontier* likewise addressed whether subcellular damage from radiation exposure was "bodily injury" under Section 2014(q). *Id.* at 569. The plaintiffs claimed that, "under Montana law," it was. *Ibid.* State law governed, they urged, because the Act provides that "'substantive rules for decision * * * shall be derived from the law of the State in which the nuclear incident involved occurs.'" *Id.* at 569-570.

The Ninth Circuit acknowledged that, in *Rainer*, "the Sixth Circuit held that '[t]he key question * * * is whether *[state] caselaw* equates "sub-cellular damage" with "bodily injury."'" 543 F.3d at 570 (emphasis added; brackets in original). But the court rejected that approach: "Unlike the Sixth Circuit," it held, "we have never relied on state law to interpret bodily injury." *Ibid.*

The Ninth Circuit attempted to reconcile its view with the Act's directive that *state-law* "'substantive rules for decision'" govern. 543 F.3d at 570. That provision, the Ninth Circuit asserted, merely meant that "plaintiffs can bring such claims only if the state where the exposure occurred provides a cause of action." *Ibid.* "For example, if a state doesn't provide a cause of action for emotional distress, a plaintiff wouldn't have a cause of action for emotional distress under the Act." *Ibid.* But the court saw Section 2014(q)'s "nuclear incident" definition as imposing a separate *federal* threshold: "[T]he Act prohibits recovery when plaintiffs haven't suffered 'bodily injury, sickness, disease, or death'—even when the state cause of action doesn't have that limitation." *Ibid.* Section 2014(q), the court opined, is "a bar to claims that would otherwise be actionable under state law, *a bar im-*

posed by federal law and therefore interpreted as a matter of federal law." *Ibid.* (emphasis added).

3. The Tenth Circuit's decision in this case widens that conflict. Like the Ninth Circuit, but in conflict with the Sixth, the Tenth Circuit construed Price-Anderson to impose a federal standard for compensable harm. It held that, as a matter of *federal* law, "a plaintiff must establish an injury sufficient to constitute a nuclear incident as a threshold, substantive element." App., *infra*, 16a. Like the Ninth Circuit, the court tried to reconcile that federal mandate with the Act's explicit preservation of state law. Although "Congress made clear its intention to * * * utiliz[e] state law to frame the 'substantive rules for decision,'" the court posited, Congress "simultaneously" sought "to limit recovery to the discrete group of injuries enumerated in §2014(q)." *Ibid.* The Tenth Circuit invoked its earlier decision in *June* v. *Union Carbide Corp.*, 577 F.3d 1234 (10th Cir. 2009), see App., *infra*, 15a-16a, which had itself invoked the Ninth Circuit's decision in *Dumontier* for support, see 577 F.3d at 1250 (citing 543 F.3d at 570). As the Ninth Circuit had recognized, that federal-law approach is irreconcilable with the Sixth Circuit's holding in *Rainer*. *Dumontier*, 543 F.3d at 570 ("Unlike the Sixth Circuit, we have never relied on state law * * * ."). The Tenth Circuit's holding here is similarly irreconcilable.

4. The Fifth Circuit recently joined issue in a divided opinion that reflects the broader disagreement. In *Cotroneo* v. *Shaw Environment & Infrastructure, Inc.*, — F.3d —, 2011 WL 1420994 (5th Cir. Apr. 14, 2011), the Fifth Circuit held that workers exposed to radiation could not sue for battery, a tort that does not require "physical injury." *Id.* at *7. "[E]ven if [the claim] is actionable under state law," the majority concluded, the

"cause of action would be inconsistent with section 2210 because it would allow plaintiffs to recover on their public liability action without establishing 'public liability'"—*i.e.*, "an injury sufficient to make the occurrence a 'nuclear incident.'" *Id.* at *7-10. The majority repeatedly cited the Tenth Circuit's decision here as support. *Ibid.*

Judge Dennis dissented. "Had Congress intended to limit recovery to these categories of personal injury claims" in the "nuclear incident" definition, he explained, "it easily could have * * * said so." 2011 WL 1420994, at *10. "Instead, however, § 2014 of the [Act] clearly uses the bodily injury and property damage terms only for a specific federal *jurisdictional* purpose * * * ." *Ibid.* (emphasis added). Congress did not "intend[] for these jurisdictional terms to serve the additional purpose of limiting the types of claims that may be brought in a public liability action." *Ibid.* Besides, "§ 2014(hh) provides that 'the substantive rules for decision' in a public liability action 'shall be derived from the law of the State' in which a nuclear incident occurs." *Ibid.* While the Act qualifies that rule with an exception for state laws "'inconsistent with the provisions of' 42 U.S.C. § 2210," "[n]othing in § 2210 expressly excludes, abrogates or modifies any particular kind of claim." *Id.* at *10-11. Judge Dennis urged that the battery claims should have been "adjudicated in accordance with the substantive rules for decision derived from state law." *Id.* at *15.

B. The Tenth Circuit Erred in Holding That Price-Anderson Imposes a Federal Standard of Compensable Harm

The decision below does not merely exacerbate a circuit conflict. It also disregards Congress's plain intent.

1. Price-Anderson expressly states that "the substantive rules for decision in [a public liability] action

shall be derived from the law of the State in which the nuclear incident involved occurs, unless such law is inconsistent with the provisions of [Section 2210]." 42 U.S.C. §2014(hh) (emphasis added). Nothing in Section 2210 dictates the quantum of property damage a plaintiff must sustain to recover. The statute thus could not be more clear: State, not federal, law determines the substantive rule governing the compensable-harm standard. Nowhere does the Act impose a federal requirement of "physical injury" to property beyond contamination with hazardous plutonium that reduces the property's value.

The Tenth Circuit derived a contrary rule from the Act's definition of "nuclear incident." App., *infra*, 15a-16a. As already explained, see pp. 5-6, *supra*, the Act's jurisdictional provision covers "any public liability action arising out of or resulting from a nuclear incident," 42 U.S.C. §2210(n)(2), and the Act deems such actions to arise under federal law, *id.* §2014(hh). A "public liability action" is "any suit asserting public liability"—*i.e.*, "legal liability arising out of or resulting from a nuclear incident," *id.* §2014(w), (hh); and a "nuclear incident" includes, among other things, a radioactive discharge causing "damage to property," *id.* §2014(q). But the fact that the Act *lists* "damage to property" among the types of injuries to which the Act's jurisdictional grant, liability cap, indemnity clauses, insurance requirements, and other provisions apply does not mean Congress intended a newly minted federal standard to govern the *degree* of property damage necessary to support a claim. To the contrary, that is precisely the sort of "substantive rule[] for decision" governed by "the law of the State in which the nuclear incident involved occurs." *Id.* §2014(hh). Where Congress intends to displace state law, it must make that intent clear. See *Medtronic, Inc.* v. *Lohr*, 518

U.S. 470, 485 (1996). Here, it did the opposite, incorporating rather than supplanting state-law standards.

Nor are state-law standards superseded on the ground that they are "inconsistent with the provisions of [Section 2210]." 42 U.S.C. §2014(hh). Nothing in Section 2210 remotely addresses the degree or type of property damage an owner must suffer in order to recover. The reference to "damage to property," the definitions of "nuclear incident" and "public liability action," and the clause deeming such actions to arise under federal law are all found in Section 2014, not Section 2210. See 42 U.S.C. §2014(q), (hh). And even assuming those provisions are somehow "incorporate[d]" into Section 2210, as the court of appeals believed, App., *infra*, 16a n.10, a state law specifying a *standard* for compensable property damage is not "inconsistent" with a provision that merely *lists* "damage to property" as a type of injury to which other provisions of the Act apply.

The exception for state laws "inconsistent" with Section 2210 was obviously intended to refer to the substantive restrictions actually set forth in Section 2210 itself, such as the overall limits on liability, 42 U.S.C. §2210(e); the (post-August 20, 1988) limitation on punitive damages, *id.* §2210(s); the restriction on recovery of evacuation costs, *id.* §2210(q); and the limitation on lessor liability, *id.* §2210(r). Had Congress wanted to establish a federal minimum threshold of property damage, it would have included such a limit—along with the other restrictions—in Section 2210. The absence of any such provision speaks volumes.

2. The Tenth Circuit, moreover, ignored the fact that no provision of the Act requires a plaintiff to *prove* a "nuclear incident" as a substantive element of its claim. Instead, the Act merely defines "public liability action" as

a "suit *asserting* public liability" (*i.e.*, a suit asserting "legal liability arising out of or resulting from a nuclear incident") for purposes of its provision conferring concurrent federal *jurisdiction*. 42 U.S.C. §§2014(w), (hh), 2210(n)(2) (emphasis added). The Act likewise deems "suit[s] *asserting* public liability" to arise under federal law. *Id.* §2014(hh) (emphasis added). Petitioners' complaint undeniably "assert[ed]" public liability. See App., *infra*, 3a.

The court of appeals effectively rewrote the statute because it did not believe Congress intended to "render the statute's nuclear incident requirement superfluous outside of the pleading stage." App., *infra*, 16a. But it was hardly anomalous for Congress to define jurisdiction in terms of what a complaint "assert[s]," even though doing so renders the condition "superfluous outside of the pleading stage." See, *e.g.*, *Gwaltney of Smithfield, Ltd.* v. *Chesapeake Bay Found., Inc.*, 484 U.S. 49, 64 (1987) (plaintiffs need not "prove their allegations of ongoing noncompliance before jurisdiction attaches" where a statute requires only that "a defendant be '*alleged* to be in violation'"). Nor is it anomalous that a claim's substantive elements differ from the jurisdictional requirements: Price-Anderson's jurisdictional and substantive provisions have diverged throughout the Act's history. See pp. 3-7, *supra*; *e.g.*, *Stibitz* v. *Gen. Pub. Utils. Corp.*, 746 F.2d 993, 995-996 (3d Cir. 1984). Congress did not "intend[] for these jurisdictional terms to serve the additional purpose of limiting the types of claims that may be brought in a public liability action." *Cotroneo*, 2011 WL 1420994, at *10 (Dennis, J., dissenting).

The court below was troubled that, "[w]ere a plaintiff only required to plead the presence of a nuclear incident, but never establish one, a 'public liability action' would be

completely indistinguishable from whichever state tort claim a particular [Price-Anderson] action incorporates." App., *infra*, 16a. But that is exactly what Congress intended when it directed that "substantive rules for decision" derive from state, not federal, law. 42 U.S.C. §2014(hh).

3. Finally, even if Section 2014(q)'s reference to "damage to property" could somehow be read as a substantive element rather than a mere category of claims covered by the Act's jurisdictional provision, that element should be interpreted—as the Sixth Circuit did in *Rainer*—to incorporate applicable state law. See 402 F.3d at 618. "Congress sometimes intends that a statutory term be given content by the application of state law." *Miss. Band of Choctaw Indians* v. *Holyfield*, 490 U.S. 30, 43 (1989). While courts generally assume that Congress intends a federal definition, they look to state law when a statute's text, history, and purposes indicate Congress intended that result. See *id.* at 43-47.

That is the case here. Section 2014(hh) *expressly requires* courts to apply state-law substantive rules. 42 U.S.C. §2014(hh). The legislative history confirms Congress's intent. See pp. 3-7, *supra*. And the standard of compensable harm in a tort suit is a matter at the core of traditional state authority—an area where Congress should be particularly loath to tread. Cf. *Reconstruction Fin. Corp.* v. *Beaver County*, 328 U.S. 204, 209-210 (1946) (defining "real property" in a federal statute to incorporate state law because the subject was "deeply rooted in state traditions, customs, habits, and laws"). All those

considerations refute the notion that Congress intended to impose a federal standard of harm.[3]

II. The Circuits Are Divided Over Whether Contamination That Diminishes Property Value Constitutes "Damage To Property"

The courts of appeals also disagree over whether contamination resulting in lost property value amounts to "damage to property" under the Act's "nuclear incident" definition. The Third Circuit has correctly answered that question in the affirmative. The decision below, by contrast, answered it in the negative—and in doing so defied decades of settled administrative practice.

A. The Courts Are Squarely Divided

1. In *Pennsylvania* v. *General Public Utilities Corp.*, 710 F.2d 117 (3d Cir. 1983), the Commonwealth of Pennsylvania and two townships sued the owners, operators, designers, and builders of the Three Mile Island nuclear plant. They sought damages for economic losses, including personnel costs incurred responding to the accident and lost real estate taxes due to "'diminution of real estate values.'" *Id.* at 120-121; but cf. *id.* at 121 (rejecting tax claim on unrelated grounds). As the Third Circuit noted, "[t]he complaints *do not* contain any claim of damages for direct *physical damage* to any of plain-

[3] The court of appeals, offering guidance for remand, stated that the district court's state-law trespass instruction was erroneous and clarified the law of nuisance. See pp. 14-15 n.2, *supra*. Because the court had already vacated the verdict for failure to instruct on the purported federal-law element, however, it never addressed whether those state-law issues independently required reversal. Jury instructions are grounds for a new trial only if prejudicial. See *Staub* v. *Proctor Hosp.*, 131 S. Ct. 1186, 1194 (2011); Fed. R. Civ. P. 61. With respect to the nuisance claim in particular, it is highly unlikely that the issue clarified by the court of appeals had any effect on the verdict.

tiffs' property, such as *physical damage* to public buildings, parks, vehicles and equipment." *Id.* at 122 (emphasis added). Instead, the plaintiffs alleged only that "radioactive materials emitted during the nuclear incident permeated the entire area, and this rendered the public buildings unsafe for a temporary period of time, *and constituted a physical intrusion upon the plaintiffs' properties*." *Ibid.* (emphasis added).

Those allegations, the Third Circuit held, were sufficient to establish that "the events at Three Mile Island constituted a 'nuclear incident.'" 710 F.2d at 123. "By statutory definition," the court noted, a nuclear incident "must cause 'bodily injury, sickness, disease or death, or loss of or damage to property, or loss of use of property.'" *Ibid.* The plaintiffs "clearly claim[ed] temporary loss of use of property." *Ibid.* And, in addition, they adequately claimed "'damage to property' *as a result of the intrusion of radioactive materials upon plaintiffs' properties through the ambient air*." *Ibid.* (emphasis added). That contamination was sufficient to show "damage to property," the court held, "*irrespective* of any causally-related permanent *physical* harm to property." *Ibid.* (emphasis added). The court thus reinstated the claims. *Ibid.*[4]

2. By contrast, the decision below rejected the claim that plutonium contamination resulting in diminished property value qualifies as "damage to property" under Section 2014(q). Plaintiffs, it held, must "present evidence of *actual physical damage*" beyond the contamina-

---

[4] In *In re TMI Litigation*, 940 F.2d 832 (3d Cir. 1991), the Third Circuit held that other aspects of *Pennsylvania*'s reasoning did not survive the 1988 amendments. *Id.* at 857. But the court did not cast any doubt on the "nuclear incident" holding. Indeed, the definition of "nuclear incident" remained unchanged. See pp. 3-7, *supra*.

tion itself. App., *infra*, 19a (emphasis added). Proving "[d]iminution of value" is not enough. *Id.* at 18a n.12. Thus, while the Third Circuit has held that contamination can amount to "damage to property" "irrespective of any causally-related permanent physical harm" and despite the absence of any further "physical damage," 710 F.2d at 122-123, the Tenth Circuit held that Price-Anderson "requires a showing of actual physical injury * * * rather than a mere decline in the properties' value," App., *infra*, 19a n.12. Consequently, even if Section 2014(q)'s reference to "damage to property" did establish a federal standard for compensable harm, the circuits are squarely divided over what sort of harm is required.

B. The Tenth Circuit Erred in Requiring "Physical Injury" Beyond Contamination Resulting in Lost Property Value

The Tenth Circuit's decision does not merely create a circuit conflict. It also imposes an erroneous requirement that has no statutory basis and defies half a century of precedent and administrative construction.

1. Driving down property values by strewing radioactive plutonium across someone's land constitutes "damage to property" within any commonsense meaning of the term. See, *e.g.*, *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 796 (3d Cir. 1994) (contamination constitutes "damage to property" that allows owners to "recover for the diminution of value of their land"). Indeed, "[d]epreciation in the value" of land is the classic measure of recovery in suits for property damage. See *Restatement (Second) of Torts* § 930(3)(b) & cmt. d (1979).

The Tenth Circuit claimed that courts treat reduction in property value *solely* "as a measurement of damages rather than proof of the fact of damage." App., *infra*, 19a n.12. But numerous courts have held that lost property

value is recoverable when caused by physical intrusion of dangerous particles onto another's land. See, *e.g.*, *Stevenson* v. *E.I. DuPont de Nemours & Co.*, 327 F.3d 400, 408-409 (5th Cir. 2003); *Scribner* v. *Summers*, 84 F.3d 554, 555-558 (2d Cir. 1996); *Sterling* v. *Velsicol Chem. Corp.*, 855 F.2d 1188, 1212-1213 (6th Cir. 1988); *Borland* v. *Sanders Lead Co.*, 369 So. 2d 523, 527-531 (Ala. 1979); *Sheppard Envelope Co.* v. *Arcade Malleable Iron Co.*, 138 N.E.2d 777, 779-782 (Mass. 1956); *Md. Heights Leasing, Inc.* v. *Mallinckrodt, Inc.*, 706 S.W.2d 218, 221-226 (Mo. App. 1985); see also *Aetna Cas. & Sur. Co.* v. *Commonwealth*, 179 S.W.3d 830, 838-839 (Ky. 2006) (radioactive contamination is "property damage" for insurance purposes); *Whittaker Corp.* v. *Am. Nuclear Insurers*, 671 F. Supp. 2d 242, 249 (D. Mass. 2009) (same); *Towns* v. *N. Sec. Ins. Co.*, 964 A.2d 1150, 1161 (Vt. 2008); *Reese* v. *Travelers Ins. Co.*, 129 F.3d 1056, 1060 n.2 (9th Cir. 1997). And the one prior circuit case to address this issue under Price-Anderson held that "physical harm" beyond the contamination itself was *not* required. See pp. 25-26, *supra*.

2. Any doubt is erased by longstanding administrative practice. The "contemporaneous construction of a statute by the [agency] charged with the responsibility of setting its machinery in motion; of making the parts work efficiently and smoothly while they are yet untried and new," is entitled to "peculiar weight." *Norwegian Nitrogen Prods. Co.* v. *United States*, 288 U.S. 294, 315 (1933); see *Chevron U.S.A. Inc.* v. *Natural Res. Def. Council, Inc.*, 467 U.S. 837, 842-843 (1984). Here, that agency has long understood radioactive contamination to qualify as "property damage."

Shortly after Price-Anderson was enacted, the Atomic Energy Commission issued a form insurance policy,

modeled on policies already widely used in the industry, designed to satisfy the Act's insurance requirements. See *Financial Protection Requirements and Indemnity Agreements*, 25 Fed. Reg. 2948 (Apr. 7, 1960); see also 23 Fed. Reg. 6681 (Aug. 28, 1958) (proposed rule). That policy explicitly defined "property damage" to include "physical injury to or destruction *or radioactive contamination* of property." 25 Fed. Reg. at 2949 (emphasis added). That definition is still in use today. See 10 C.F.R. §140.91, app. A ("Property damage means physical injury to or destruction *or radioactive contamination* of property * * * ." (emphasis added)).

The agency thus made clear that—consistent with widespread industry understanding—the term "property damage" includes not only "physical injury" but also "radioactive contamination of property." 25 Fed. Reg. at 2949. And the whole point of those form policies was to satisfy the Act's requirements by tracking the statutory definition. See 10 C.F.R. §140.15(a). It would make no sense to define "property damage" one way in the statute but another way in the insurance contracts designed to comply with the statute. Congress has revisited the Act multiple times without altering that provision. It has thus acquiesced in the agency's longstanding, reasonable construction. See *Commodity Futures Trading Comm'n* v. *Schor*, 478 U.S. 833, 846 (1986).

3. The Tenth Circuit compared contamination resulting in lost property value to the asymptomatic subcellular damage it had previously held not to qualify as "bodily injury." App., *infra*, 17a. But that analogy fails. A person cannot sell himself, so it may well be that there is no present bodily "injury" from cell damage apart from its medical manifestations. But a landowner whose property is devalued because of plutonium contamination has suf-

fered both an invasion of his property and genuine, immediate economic harm.

The court of appeals also deemed lost property value insufficient because the "reduced value [could] stem[] from * * * unfounded public fear regarding the effects of minor radiation exposure." App., *infra*, 18a n.12. Under the *Restatement*, however, lost market value is the proper measure of damages whether or not the public's fear is justified. See *Restatement (Second) of Torts* § 821F cmt. f (1979); but cf. App., *infra*, 26a-29a. Besides, the mere possibility that a decline in market value *might* reflect irrational fears does not justify a rule that such declines are never recoverable *whether rational or not*. And the fears here were hardly irrational, given the expert evidence that the property owners suffered increased risks and rates of cancer. See p. 9, *supra*.

4. Finally, by denying property owners any recovery on otherwise valid state-law claims—even if the claims accrued before the 1988 amendments—the Tenth Circuit's decision raises serious constitutional concerns under the Due Process and Takings Clauses. See *Fein* v. *Permanente Med. Group*, 474 U.S. 892, 894-895 (1985) (White, J., dissenting); *In re Aircrash in Bali, Indonesia*, 684 F.2d 1301, 1312 (9th Cir. 1982). In *Duke Power Co.* v. *Carolina Environmental Study Group, Inc.*, 438 U.S. 59 (1978), this Court upheld the prior version of Price-Anderson against a due process challenge but expressly left open whether a "legislatively enacted compensation scheme" must "provide a reasonable substitute remedy." *Id.* at 88. The decision below threatens to deny large numbers of landowners any remedy at all. That does not merely aggravate the intrusion on state law. It creates profound constitutional issues that weigh dispositively against the Tenth Circuit's construction. See *Edward J.*

DeBartolo Corp. v. *Fla. Gulf Coast Bldg. & Constr. Trades Council*, 485 U.S. 568, 575 (1988).

III. The Questions Presented Are Matters Of National Importance

The Tenth Circuit's holdings are also important—both to state sovereigns and to injured landowners.

A. The Tenth Circuit's Decision Undermines the Federal-State Balance Congress Intended

As this Court has cautioned, "unless Congress conveys its purpose clearly, it will not be deemed to have significantly changed the federal-state balance." *United States* v. *Bass*, 404 U.S. 336, 349 (1971). That principle reflects the profound federalism values at stake when a federal statute is construed to undermine traditional state authority. The Tenth Circuit's holding that Price-Anderson imposes a federal standard of compensable harm—displacing States' authority to determine remedies for injured property owners—strikes at the heart of those federalism concerns.

Congress has repeatedly reaffirmed its purpose to preserve state law under the Act. In 1957, it made clear that the rights of injured persons would be "established by State law" and avowed "no interference with * * * State law" unless damages exceeded the liability cap. S. Rep. No. 85-296, at 9 (1957). In 1966, it observed that "one of the cardinal attributes of the Price-Anderson Act has been its minimal interference with State law" and confirmed it would "interfer[e] with State law to the minimum extent necessary." S. Rep. No. 89-1605, at 6, 9 (1966). The Atomic Energy Commission's general counsel explained: "It would appear eminently reasonable to avoid disturbing ordinary tort law remedies with respect to damage claims where the circumstances are not substantially different from those encountered in many ac-

tivities of life which cause damage to persons and property * * * ." *Proposed Amendments to Price-Anderson Act Relating to Waiver of Defenses: Hearings Before the Joint Comm. on Atomic Energy*, 89th Cong. 35 (1966). In 1988, Congress embedded that principle in the statutory text: "[T]he substantive rules for decision in [a public liability] action shall be derived from the law of the State in which the nuclear incident involved occurs, unless such law is inconsistent with the provisions of [Section 2210]." 42 U.S.C. §2014(hh). Congress thus "assumed that state-law remedies, in whatever form they might take, were available to those injured by nuclear incidents." *Silkwood* v. *Kerr-McGee Corp.*, 464 U.S. 238, 256 (1984).

The Tenth Circuit's ruling that *federal* law determines the threshold standard for compensable harm does not merely flout that design. It also invades a core attribute of traditional state authority, denying States the ability to make important policy decisions about the sorts of injuries that should be redressed. It does so, moreover, not on the basis of any express congressional command, but on the implausible theory that Congress—merely by listing "damage to property" among the types of injuries covered by the Act—federalized the substantive rules for determining what *sorts* of property damage are compensable. That gratuitous intrusion on traditional state authority warrants this Court's review.

B. The Tenth Circuit's Decision Abrogates Important Property Rights

The questions presented are also inordinately important to property owners. Nuclear incidents can affect large numbers of individuals—this case alone involves thousands. App., *infra*, 75a. The decision below threat-

ens to foreclose any redress except in the most extreme circumstances.

This case, for example, arises out of reckless safety violations that not only strewed radioactive particles across landowners' properties for decades but also left plutonium at the plant site that continues to threaten those properties. See pp. 7-9, *supra*. The violations were so egregious that FBI and EPA agents raided the plant (in an operation dubbed "Desert Glow") and Rockwell pled guilty to criminal charges. See p. 8, *supra*. Rockwell and Dow admitted that plutonium from Rocky Flats had contaminated the neighboring properties. C.A. App. 1646. And the property owners suffered concrete economic harm that the jury found to be in the hundreds of millions of dollars, as well as increased risks and rates of cancer. See pp. 9-11, *supra*.

The Tenth Circuit nonetheless reversed the judgment because the jury had not been asked whether the contamination was severe enough to qualify as "damage to property" under the court's new federal standard. It cannot be that Price-Anderson affords relief only for cataclysms such as "an increased risk to health so high that no reasonable person would freely choose to live on or work at the property," or contamination so severe that "the soil can no longer produce crops that are safe for consumption." App., *infra*, 20a. Such an extreme interpretation ignores the fact that Congress sought to create a balanced compensation regime grounded in state law—not to grant immunity for anything short of atomic blasts that level the countryside. The Tenth Circuit's decision abrogating those traditional state-law remedies warrants this Court's review.

CONCLUSION

The petition for a writ of certiorari should be granted.

Respectfully submitted.

MERRILL G. DAVIDOFF
DAVID F. SORENSEN
JENNIFER E. MACNAUGHTON
CAITLIN G. COSLETT
BERGER & MONTAGUE, P.C.
1622 Locust Street
Philadelphia, PA 19103
(215) 875-3000

GARY B. BLUM
STEVEN W. KELLY
SILVER & DEBOSKEY, P.C.
The Smith Mansion
1801 York Street
Denver, CO 80206
(303) 399-3000

MARCY G. GLENN
HOLLAND & HART LLP
555 17th Street, Suite 3200
Denver, CO 80202
(303) 295-8000

JEFFREY A. LAMKEN
Counsel of Record
ROBERT K. KRY
MARTIN V. TOTARO
KELLY M. FALLS
MOLOLAMKEN LLP
The Watergate, Suite 660
600 New Hampshire Ave., NW
Washington, D.C. 20037
(202) 556-2000
jlamken@mololamken.com

LOUISE M. ROSELLE
PAUL M. DE MARCO
JEAN M. GEOPPINGER
WAITE, SCHNEIDER, BAYLESS
& CHESLEY CO., L.P.A.
1513 Fourth & Vine Tower
Cincinnati, OH 45202
(513) 621-0267

Counsel for Petitioners Merilyn Cook, et al.

MAY 2011

APPENDIX A
UNITED STATES COURT OF APPEALS
FOR THE TENTH CIRCUIT

NOS. 08-1224, 08-1226, 08-1239

MERILYN COOK; WILLIAM SCHIERKOLK, JR.; DELORES SCHIERKOLK; RICHARD BARTLETT; LORREN BABB; GERTRUDE BABB; MICHAEL DEAN RICE; BANK WESTERN; THOMAS L. DEIMER; RHONDA J. DEIMER; STEPHEN SANDOVAL; PEGGY J. SANDOVAL; SALLY BARTLETT,
Plaintiffs-Appellees-Cross-Appellants,

v.

ROCKWELL INTERNATIONAL CORPORATION AND DOW CHEMICAL COMPANY,
Defendants-Appellants-Cross-Appellees.

AMERICAN NUCLEAR INSURERS; NUCLEAR ENERGY INSTITUTE, INC.,
Amici Curiae.

Appeal from the United States District Court
for the District of Colorado

SEPT. 3, 2010

Before MURPHY, ANDERSON, and HOLMES, Circuit Judges.

MURPHY, Circuit Judge.

I. INTRODUCTION

The owners of property near the former Rocky Flats Nuclear Weapons Plant ("Rocky Flats") filed a class action against the facility's operators under the Price-Anderson Act ("PAA"), alleging trespass and nuisance claims arising from the release of plutonium particles onto their properties. The district court conducted a lengthy trial, resulting in a jury verdict in favor of the plaintiff class. After a series of post-trial motions, the district court entered judgment in favor of Plaintiffs, awarding a total of just over $926 million, inclusive of compensatory damages, punitive damages, and prejudgment interest. Defendants, Dow Chemical Company ("Dow") and Rockwell International Corporation ("Rockwell"), timely appealed the judgment, and the class members filed a timely cross-appeal.

Exercising appellate jurisdiction pursuant to 28 U.S.C. § 1291, this court **REVERSES** and **REMANDS** the case to the district court. We **DIRECT** the district court to vacate the judgment and conduct further proceedings not inconsistent with this opinion.

II. BACKGROUND

Rocky Flats, located near Denver, Colorado, was established by the United States Government in the 1950s to produce nuclear weapon components. The government contracted with Dow to operate the facility from 1952 to 1975, and then with Rockwell from 1975 to 1989. Operations at Rocky Flats ceased in June 1989 after the Federal Bureau of Investigation and the Environmental Protection Agency searched the facility. Rockwell was subsequently charged with, and ultimately pleaded guilty to, certain environmental crimes at the site. The facility

has since undergone remediation efforts and is now designated as a wildlife refuge.

Property owners, whose properties lie within a thirty square mile area east of Rocky Flats, filed this class action on January 30, 1990, alleging a public liability action under the PAA involving trespass and nuisance claims against Dow and Rockwell. A public liability action is an action asserting legal liability arising from a nuclear incident.[1] Plaintiffs' most recent amended complaint alleged the release of plutonium at Rocky Flats resulted in the contamination of the class members' properties. Plaintiffs sought compensatory damages, measured by the diminution of property values, as well as punitive damages.

In October 1993, the district court certified a class consisting of "[a]ll persons and entities owning an interest (including mortgagee and other security interests) in real property situated within the Property Class Area, exclusive of governmental entities, defendants, and defendants' affiliates, parents, and subsidiaries" as of June 7, 1989. In May 2005, the district court split the certified class into two subclasses:

> The first sub-class shall consist of all Class members who owned property within the Class Area on the later of: (i) January 30, 1990, the date this action was filed; or (ii) the date on which the jury, per

[1] Though the PAA provides a federal cause of action, Congress has not eliminated considerations of state law in the PAA context. The PAA provides: "A public liability action shall be deemed to be an action arising under section 2210 of this title, and the substantive rules for decision in such action shall be derived from the law of the State in which the nuclear incident involved occurs, unless such law is inconsistent with the provisions of such section." 42 U.S.C. § 2014(hh).

> Restatement [(Second) of Torts] § 930(1), finds it appeared the trespass and/or nuisance asserted by Plaintiffs would continue indefinitely. . . . The second sub-class consists of all other Class members.

The district court generally referred to the first subclass as the "Prospective Damages Subclass" and the second as the "Non-Prospective Damages Subclass."

After over fifteen years of litigation, the district court conducted a four-month jury trial between October 2005 and January 2006. In accordance with the district court's construction of Colorado law,[2] the jury instructions did not require Plaintiffs to establish either an actual injury to their properties or a loss of use of their properties. With respect to the nuisance claims, the district court instructed the jury that Plaintiffs could establish Defendants' conduct interfered with the use and enjoyment of the class properties by proving Defendants' conduct exposed Plaintiffs to "some increased risk of health problems" or caused conditions "that pose a demonstrable risk of future harm to the Class Area." As to Plaintiffs' trespass claims, the district court instructed the jury, "Plaintiffs are *not* required to show that plutonium is present on the Class Properties at any particular level or concentration, that they suffered any bodily harm because of the plutonium or that the presence of plutonium on the Class Properties damaged these properties in some other way."

Plaintiffs' evidence regarding the effects of plutonium on their properties consisted of expert testimony indicating any plutonium exposure, no matter how small, increases the risk of cancer. Plaintiffs' experts did not testify, however, regarding the level of risk of developing

---

[2] *See supra* n.1.

cancer from exposure to plutonium released at Rocky Flats. Rather, they suggested any increased risk was small and unquantifiable.

The jury deliberated for three weeks and ultimately returned a verdict in favor of the plaintiff class on each of the trespass and nuisance claims. The jury awarded $176,850,340.00 in compensatory damages on the trespass claims and awarded the same amount on the nuisance claims, based on the diminution of the value of the properties. The jury also awarded punitive damages totaling $110,800,000.00 against Dow and $89,400,000.00 against Rockwell.

After a long series of post-trial motions, the district court entered a final judgment against Defendants on June 2, 2008, pursuant to Federal Rule of Civil Procedure 54(b). Including prejudgment interest, the court ordered compensatory damages against Dow in the amount of $653,313,678.05 and against Rockwell in the amount of $508,132,861.39. The judgment further stated, however, the total compensatory damages recovered by the plaintiff class shall not exceed $725,904,087.00. Punitive damages were ordered in the same amounts the jury awarded. Thus, the judgment awarded a total of just over $926 million to the plaintiff class, including prejudgment interest. The district court's judgment, however, did not allocate damages to individual class members.[3] Rather, the

[3] The parties indicated a desire to appeal prior to determining how damages should be distributed to individual class members. Plaintiffs sought a final appealable judgment under Federal Rule of Civil Procedure 54(b), while Defendants sought an interlocutory appeal as to certain orders only, pursuant to 28 U.S.C. § 1292. The district court opted to enter a final judgment under Rule 54(b). In doing so, it determined the total amount of compensatory and punitive damages, as well as the amount of prejudgment interest due from each Defendant. Execution of the judgment was stayed to permit Defen-

district court attached a Plan of Allocation to the judgment, which provides for the appointment of a claims administrator to make recommendations as to how the lump sum identified in the judgment should be distributed. The Plan of Allocation also provides a framework for calculating each class member's share and distributing any unclaimed funds. Dow and Rockwell timely appealed the district court's judgment and the class members filed a timely cross-appeal.

III. DISCUSSION

A. Jurisdiction

Before addressing the merits of an appeal, this court's first obligation is to assure itself of jurisdiction to do so. *1mage Software, Inc. v. Reynolds & Reynolds Co.*, 459 F.3d 1044, 1048 (10th Cir. 2006). This appeal involves two jurisdictional issues: whether the district court properly exercised subject matter jurisdiction over this action and whether the district court entered an appealable final judgment.

1. Subject Matter Jurisdiction

This court sua sponte raised the issue of whether the district court properly exercised subject matter jurisdiction over this action.[4] The court's concern arose from

---

dants to appeal. The judgment also includes the district court's Rule 54(b) certification that "there is no just reason for delay[ing]" entry of judgment.

[4] This court ordered the parties to submit supplemental briefing directed to the question of whether 42 U.S.C. § 2210(n)(2) imposes the jurisdictional requirement of establishing a "nuclear incident." *See* Fed. R. Civ. P. 12(h)(3) ("If the court determines at any time that it lacks subject-matter jurisdiction, the court must dismiss the action."); *Estate of Harshman v. Jackson Hole Mountain Resort Corp.*, 379 F.3d 1161, 1164 (10th Cir. 2004) ("Because lack of federal jurisdiction cannot be waived or be overcome by an agreement of the parties, we must satisfy ourselves not only of our own jurisdiction,

the language of 42 U.S.C. § 2210(n)(2), which provides: "With respect to any public liability action arising out of or resulting from a nuclear incident, the United States district court in the district where the nuclear incident takes place . . . shall have original jurisdiction without regard to the citizenship of any party or the amount in controversy." At first glance, the statute appears to require proof of a "nuclear incident"[5] to permit federal subject matter jurisdiction over a PAA action. Even assuming it imposes a jurisdictional requirement, however, closer inspection indicates 42 U.S.C. § 2210(n)(2) is not the sole source of federal jurisdiction over a PAA action.

Although the complete history of the PAA need not be repeated, a brief overview of its evolution, which this court described more fully in *Kerr-McGee Corp. v. Farley*, 115 F.3d 1498, 1503-04 (10th Cir. 1997), is helpful. *See also In re TMI Litig.*, 193 F.3d 613, 624 n.7 (3d Cir. 1999), *amended by* 199 F.3d 158 (3d Cir. 2000); *O'Conner v. Commonwealth Edison Co.*, 13 F.3d 1090, 1095-97 (7th Cir. 1994). In 1954, Congress enacted the Atomic Energy Act ("AEA") "to facilitate a transition from a federal

---

but also that of the lower courts in the cause under review." (quotations omitted)); *Citizens Concerned for Separation of Church & State v. City & County of Denver*, 628 F.2d 1289, 1301 (10th Cir. 1980) ("A federal court must in every case, and at every stage of the proceeding, satisfy itself as to its own jurisdiction, and the court is not bound by the acts or pleadings of the parties."). Supplemental briefing was also ordered on the state of the record and whether remand is necessary, assuming § 2210(n)(2) imposes a jurisdictional requirement.

[5] "Nuclear incident" is defined as "any occurrence . . . causing . . . bodily injury, sickness, disease, or death, or loss of or damage to property, or loss of use of property, arising out of or resulting from the radioactive, toxic, explosive, or other hazardous properties of source, special nuclear, or byproduct material." 42 U.S.C. § 2014(q).

government monopoly over the production and use of atomic materials to a regime in which private industry also would have a role in their production and use." *Kerr-McGee Corp.*, 115 F.3d at 1503. To further encourage private development in the nuclear energy field, Congress amended the AEA in 1957 by enacting the PAA, which "creat[ed] specific protections from tort liability for the nuclear industry." *Id.* At that time, however, Congress opted not to create a federal cause of action for nuclear torts, but instead permitted tort recovery under traditional state causes of action. *Id.* Accordingly, unless the diversity statute applied or the action resulted from an "extraordinary nuclear occurrence,"[6] nuclear-related tort claims typically could not proceed in federal court. *See In re TMI Litig. Cases Consol. II*, 940 F.2d 832, 853 n.18 (3d Cir. 1991).

The PAA was amended several times in subsequent years, most notably in 1988 when Congress created a federal cause of action for nuclear torts, thereby expanding federal jurisdiction over such claims. *Kerr-McGee Corp.*, 115 F.3d at 1503. 42 U.S.C. § 2210(n)(2) now provides:

> With respect to any public liability action arising out of or resulting from a nuclear incident, the Uni-

---

[6] "Extraordinary nuclear occurrence" is defined as:

> any event causing a discharge or dispersal of source, special nuclear, or byproduct material from its intended place of confinement in amounts offsite, or causing radiation levels offsite, which the Nuclear Regulatory Commission or the Secretary of Energy, as appropriate, determines to be substantial, and which the Nuclear Regulatory Commission or the Secretary of Energy, as appropriate, determines has resulted or will probably result in substantial damages to persons offsite or property offsite.

42 U.S.C. § 2014(j).

> ted States district court in the district where the nuclear incident takes place . . . shall have original jurisdiction without regard to the citizenship of any party or the amount in controversy. Upon motion of the defendant or of the [Nuclear Regulatory] Commission or the Secretary [of Energy], as appropriate, any such action pending in any State court (including any such action pending on August 20, 1988) or United States district court shall be removed or transferred to the United States district court having venue under this subsection.

Accordingly, the 1988 Amendments made it clear that any action asserting public liability can be originally filed in or removed to the appropriate federal district court. In doing so, Congress also designated the particular venue in which any such action must be tried if it is to proceed in federal court; i.e., "the United States district court in the district where the nuclear incident takes place." These Amendments, however, did not create exclusive federal jurisdiction over PAA actions. *Kerr-McGee*, 115 F.3d at 1504–05. Indeed, the express language of 42 U.S.C. § 2210(n)(2) makes it clear state courts are free to resolve PAA actions unless a defendant, the Nuclear Regulatory Commission, or the Secretary of Energy opts to remove the action to federal court.

As indicated, this court was concerned that 42 U.S.C. § 2210(n)(2) could be read as limiting federal jurisdiction to public liability actions "arising out of or resulting from a nuclear incident," thus requiring proof of a nuclear incident as a jurisdictional element. We see no indication, however, that Congress intended 42 U.S.C. § 2210(n)(2) to be the sole source of federal jurisdiction over PAA actions. Rather, Congress expanded federal jurisdiction to ensure that actions involving a "nuclear

incident" can proceed from their inception in federal court, even if the parties cannot otherwise establish the requirements of 28 U.S.C. § 1332. Congress did not, however, eliminate a party's right to proceed in federal court when other jurisdictional bases exist. Accordingly, a plaintiff need not establish a "nuclear incident" under 42 U.S.C. § 2210(n)(2) in order to proceed in federal court with a PAA action when another basis for federal jurisdiction is present.[7]

Indeed, jurisdictional grounds will always exist for a plaintiff's properly pleaded PAA claim. As we previously explained, Congress's 1988 Amendments created a new federal cause of action, known as a "public liability action." 42 U.S.C. § 2014(hh) provides:

> The term 'public liability action,' as used in section 2210 of this title, means any suit asserting public liability. A public liability action shall be deemed to be an action arising under section 2210 of this title, and the substantive rules for decision in such action

---

[7] Because any jurisdictional requirements in 42 U.S.C. § 2210(n)(2) only apply to federal courts, a remarkable anomaly would arise if § 2210(n)(2) was the sole source of federal jurisdiction, demanding proof of a nuclear incident as a jurisdictional prerequisite. If a plaintiff was unable to establish a nuclear incident, the federal district court would be compelled to dismiss for lack of subject matter jurisdiction. The jurisdictional dismissal would not, however, necessarily prevent a plaintiff from proceeding with their PAA action in state court, where any jurisdictional language in § 2210(n)(2) would be inapplicable and proof of a nuclear incident would have no jurisdictional relevance. The strange result would be that no federal court could exercise subject matter jurisdiction; only state courts could reach the merits of the plaintiff's federal cause of action under the PAA. Such a result would make no sense given Congress's intent to permit plaintiffs to pursue public liability actions in federal court. *Cf. infra* Section III(B) (holding a plaintiff must nonetheless always establish a nuclear incident as a threshold element of a PAA claim).

> shall be derived from the law of the State in which the nuclear incident involved occurs, unless such law is inconsistent with the provisions of such section.

As a result, any suit "asserting public liability" under 42 U.S.C. § 2210 is a civil action arising under the laws of the United States over which a federal court has subject matter jurisdiction pursuant to 28 U.S.C. § 1331.

Accordingly, we need not decide whether the district court had subject matter jurisdiction under 42 U.S.C. § 2210(n)(2), because the district court clearly had subject matter jurisdiction under 28 U.S.C. § 1331.[8]

2. Finality of the Judgment

Having concluded the district court's exercise of subject matter jurisdiction was proper, we now turn to Defendants' motion to dismiss this appeal for lack of subject matter jurisdiction. Specifically, Defendants argue the district court's judgment is not sufficiently final to warrant certification under Federal Rule of Civil Procedure 54(b). Rule 54(b) allows the district court to "direct entry of a final judgment as to one or more, but fewer than all, claims or parties" so long as "the district court expressly determines that there is no just reason for delay." The general rule, however, is that an order which "determines liability but leaves damages to be calculated is not final." *Harbert v. Healthcare Servs. Group,*

---

[8] Plaintiffs' complaint alleged subject matter jurisdiction under the PAA, 42 U.S.C. § 2210(n)(2), the federal question statute, 28 U.S.C. § 1331, and the diversity jurisdiction statute, 28 U.S.C. § 1332. Plaintiffs' complaint also alleged jurisdiction under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. § 9613(b). Plaintiffs make no argument on appeal that CERCLA is the source of federal jurisdiction, and they only presented their PAA trespass and nuisance claims to the jury.

Inc., 391 F.3d 1140, 1145 (10th Cir. 2004). Nonetheless, in *Strey v. Hunt International Resources Corp.*, this court explained that when damages are not allocated to specific class members, the resolution of class liability claims may warrant Rule 54(b) certification if "the district court establishes both the formula that will determine the division of damages among class members and the principles that will guide the disposition of any unclaimed funds." 696 F.2d 87, 88 (10th Cir. 1982).

Here, the district court purported to enter judgment under Rule 54(b), stating the total damages against each Defendant and determining there is no just reason for delaying entry of judgment. The judgment did not, however, distribute the aggregate class award among individual members. Instead the district court attached a Plan of Allocation to the judgment, which provides a thorough framework for determining each individual class member's damages. Having thoroughly reviewed the Plan of Allocation, we conclude it complies with the requirements of *Strey*.

The Plan of Allocation provides for the appointment of a claims administrator, who is directed to determine the proper allocation of damages based on specific data. The claims administrator must determine ownership of each class property as of the relevant dates as well as each property's assessed value based on county property and tax records. This value is to be expressed as a fraction of the total value of all properties within the same category, specifically residential, commercial, or vacant property. The class administrator is directed to use this fraction to determine the total damages to be allocated to each property and make recommendations to the district court based on this calculation. The Plan of Allocation also provides for the distribution of any unclaimed funds.

The Plan of Allocation simply requires the application of mathematical principles to a formula involving identifiable property records and the jury's verdict. In doing so, the Plan of Allocation directs the method of allocating damages among the individual class members, while also explaining how unclaimed funds shall be distributed. Contrary to Defendants' argument, the Plan of Allocation does not require resolution of complex issues or calculations. While it is true that certain class members may wish to challenge the ultimate allocation of damages to them, the guidelines provided by the Plan of Allocation are straightforward and mechanical. Moreover, any such challenges would not affect the total damages owed by Defendants, which are clearly identified in the judgment. Consequently, this court concludes the Plan of Allocation's basic formula for determining individual damages sufficiently complies with *Strey* and the Rule 54(b) judgment entered by the district court is final. Defendants' motion to dismiss for lack of appellate jurisdiction is therefore denied.

B. Threshold Elements of a PAA Claim

Turning to the merits of the appeal, Defendants argue the district court erred by refusing to instruct the jury that in order for Plaintiffs to prevail on their PAA claims, they must establish a "nuclear incident" occurred by showing "loss of or damage to property, or loss of use of property." As an initial matter, we note that an issue was raised at oral argument as to whether or not Defendants forfeited this argument. It is arguable Defendants failed to preserve the issue of whether a "nuclear incident" must be established as a threshold element of a plaintiff's PAA claim. Nonetheless, Plaintiffs themselves failed to adequately present any such forfeiture argument in their appellate brief. At oral argument, Plaintiffs admitted

they did not expressly raise a forfeiture argument, but instead asserted that their brief sufficiently presented the argument by generic references to Defendants' "novel Price-Anderson argument" and Defendants' failure to "identify with clarity the specific rulings of which [they] seek review, or the locations in the record where [their] points were raised." We disagree. Plaintiffs' brief only makes reference to Defendants' lack of citations to rulings below in explaining the difficulty they had in responding to certain arguments. The brief does not raise a forfeiture challenge. Accordingly, Plaintiffs have themselves forfeited any forfeiture argument they may have on this issue, and this court will consider the merits of Defendants' argument. *See United States v. Heckenliable*, 446 F.3d 1048, 1049 n.3 (10th Cir. 2006) (explaining the government "waived the waiver" by failing to argue defendant forfeited his challenge on appeal); *see also Soo Line R. Co. v. St. Louis Sw. Ry. Co.*, 125 F.3d 481, 483 n.2 (7th Cir. 1997) (holding plaintiff "waived any waiver defense it might have had" by failing to argue defendant forfeited its appellate argument due to a judicial admission).

This court "review[s] de novo whether, as a whole, the district court's jury instructions correctly stated the governing law and provided the jury with an ample understanding of the issues and applicable standards." *Martinez v. Caterpillar, Inc.*, 572 F.3d 1129, 1132 (10th Cir. 2009) (quotation omitted). As we previously mentioned, the 1988 Amendments to the PAA created a federal cause of action known as a "public liability action." A "public liability action . . . means any suit asserting public liability." 42 U.S.C. § 2014(hh). In turn, "public liability" is defined as "any legal liability arising out of or resulting from a nuclear incident." 42 U.S.C. § 2014(w).

In keeping with these definitions, Defendants argue Plaintiffs must establish that any liability does in fact arise out of or result from a nuclear incident. A "nuclear incident" is defined as "any occurrence . . . causing . . . bodily injury, sickness, disease, or death, or loss of or damage to property, or loss of use of property, arising out of or resulting from the radioactive, toxic, explosive, or other hazardous properties of source, special nuclear, or byproduct material." 42 U.S.C. § 2014(q). Consequently, Defendants argue Plaintiffs must prove as a threshold element of their PAA claims that they suffered one of the injuries enumerated in 42 U.S.C. § 2014(q).

This court analyzed a similar question in *June v. Union Carbide Corp.*, 577 F.3d 1234 (10th Cir. 2009). There, defendants' uranium mining and milling operations exposed nearby residents to radiation to such an extent that the community had to be evacuated and all structures were razed as part of the remediation effort. *Id.* at 1236-37. One-hundred-fifty-two plaintiffs claimed the mining and milling operations increased their risk of developing radiation-related illnesses and pursued medical monitoring claims to help detect the onset of disease. *Id.* at 1237. This court affirmed the dismissal of the medical monitoring claims because they did not implicate "bodily injury," which was the only potentially applicable injury under § 2014(q). *Id.* at 1248-52.

Though *June* did not expressly determine the circumstances in which a plaintiff must establish injury,[9] we now

---

[9] In *June*, the district court dismissed the medical monitoring claims without prejudice for lack of subject matter jurisdiction under 42 U.S.C. § 2210(n)(2). *See June v. Union Carbide Corp.*, 577 F.3d 1234, 1248 (10th Cir. 2009). On appeal, defendants argued dismissal should have been with prejudice because "bodily injury" is an element of a PAA claim rather than a jurisdictional requirement. *Id.* at

confirm that the occurrence of a nuclear incident, and thus a sufficient injury under § 2014(q), constitutes a threshold element of any PAA claim. Consequently, we reject Plaintiffs' suggestion that they need only *assert* liability arising out of a nuclear incident. The presence of a nuclear incident is the hallmark of a public liability action. Were a plaintiff only required to plead the presence of a nuclear incident, but never establish one, a "public liability action" would be completely indistinguishable from whichever state tort claim a particular PAA action incorporates. In creating a federal cause of action under the PAA, however, Congress made clear its intention to limit recovery to the discrete group of injuries enumerated in § 2014(q) while simultaneously utilizing state law to frame the "substantive rules for decision."[10] 42 U.S.C. § 2210(hh). Plaintiffs provide no reason why we should render the statute's nuclear incident requirement superfluous outside of the pleading stage. *See* 42 U.S.C. § 2014(w). Accordingly, we conclude a plaintiff must establish an injury sufficient to constitute a nuclear incident as a threshold, substantive element of any PAA claim.

The only injuries listed in § 2014(q) which can establish a nuclear incident in the case at hand are "loss of or

---

1248 n.8. This court, however, did not resolve whether "bodily injury" is a jurisdictional requirement because defendants had not cross-appealed with respect to that issue. *Id.* Additionally, this court noted the standard of appellate review is the same regardless of whether "bodily injury" is treated as a jurisdictional requirement or an element of a plaintiff's PAA claim. *Id.*

[10] Indeed, 42 U.S.C. § 2014(hh) provides that state law provides the substantive rules for decision, "unless such law is inconsistent with the provisions of [42 U.S.C. § 2210]." A "public liability action" arising under § 2210, however, incorporates definitions provided by § 2014, including § 2014(q) which defines "nuclear incident."

damage to property" and "loss of use of property."[11] This court has never defined these terms either individually or in a manner that would differentiate one from the other. Our recent decision in *June*, however, provides significant guidance. As we previously noted, the plaintiffs in *June* claimed the defendants' uranium operations increased their risk of developing health problems and thus pursued medical monitoring claims. 577 F.3d at 1237. The district court determined medical monitoring claims do not involve a "bodily injury" and dismissed the action. *Id.* at 1248. This court affirmed and held "DNA damage and cell death" do not constitute a bodily injury in the absence of the manifestation of an actual disease or injury, despite the increased risk of developing disease in the future. *Id.* at 1248-49. In short, *June* makes clear that only an existing physical injury constitutes "bodily injury" under the PAA; the mere subclinical effects of radiation exposure are insufficient. *Id.* at 1249.

Our characterization of "damage to property" is informed by the analysis in *June*, as the logic applies equally to the issue before us in this appeal. Just as an existing physical injury to one's body is necessary to establish "bodily injury," so too is an existing physical injury to property necessary to establish "damage to property." Without a demonstrable manifestation of injury, the presence of plutonium can, at best, only establish a risk of future damage to property. As this court indicated in *June*, however, mere risk of future damage is insufficient. *Id.* at 1249. Rather, the physical damage must actually be manifest at the time the PAA claim is assert-

---

[11] Plaintiffs have never argued their claims involve "bodily injury." Indeed, their decision to pursue classic property tort claims, trespass and nuisance, makes it clear they seek recovery for injuries to a property interest rather than "bodily injury."

ed. This requirement does not heighten a plaintiff's burden of proof, but simply provides that a plaintiff wishing to sue under the PAA for a nuclear-related property injury involving "damage to property" must first establish actual damage to the property in question.

Here, Plaintiffs argue the mere presence of radioactive plutonium particles on their property establishes the requisite damage. In their supplemental brief, Plaintiffs point out a "nuclear incident" is defined as any enumerated injury "arising out of or resulting from the radioactive, toxic, explosive, or other hazardous properties of . . . special nuclear . . . material." 42 U.S.C. § 2014(q). Without question, "special nuclear material" includes plutonium. 42 U.S.C. § 2014(aa). According to Plaintiffs, this compels the conclusion that plutonium contamination itself is enough to establish "damage to property." This argument misses the point. The statute does not indicate that the mere presence of plutonium is per se injurious to property. If mere contamination without actual damage were enough, Congress could have easily listed "contamination" as an injury falling within 42 U.S.C. § 2014(q)'s definition of "nuclear incident." Instead, Congress required a showing of "damage to property."

In order to prove plutonium-related "damage to property," Plaintiffs must necessarily establish that plutonium particles released from Rocky Flats caused a detectable level of actual damage to the class properties.[12] Jury

---

[12] In their supplemental brief, Plaintiffs also suggest that diminution of their property values establishes "damage to property" or "loss of use of property." Diminution of value, however, cannot establish the fact of injury or damage. Otherwise, reduced value stemming from factors unrelated to any actual property injury, such as unfounded public fear regarding the effects of minor radiation exposure, could establish "damage to property" and "loss of use of property." Public

Instruction No. 3.3 confirmed that Plaintiffs must prove the presence of plutonium on class properties to prevail on their trespass claim. The language of Instruction No. 3.3, however, underscored the limited nature of that proof: "Plaintiffs are not required to show that plutonium is present on the Class Properties at any particular level or concentration, that they suffered any bodily harm because of the plutonium or that the presence of plutonium on the Class Properties damaged these properties in some other way." Accordingly, Plaintiffs were never required to, and did not, present evidence of actual physical damage to the property.

"Damage to property" is not, however, the only property injury that a plaintiff can prove to establish the PAA threshold element of a nuclear incident; a plaintiff who establishes a "loss of use of property" may also recover under the PAA. The express statutory language indicates that more than a mere interference with an owner's use is necessary; a particular use of the property must actually be lost.

Plaintiffs did present evidence relevant to a loss of use. Specifically, they tried their nuisance claims under the theory that the presence of plutonium particles on their properties places them at an increased risk of

---

perception and the stigma it may attach to the property in question can drastically affect property values, regardless of the presence or absence of any actual injury or health risk. Instead, courts have traditionally utilized diminution of value as a measurement of damages rather than proof of the fact of damage. *See, e.g.*, Restatement (Second) of Torts § 929(1)(a); *Smith v. Kan. Gas Serv. Co.*, 285 Kan. 33, 169 P.3d 1052, 1061-62 (2007) (collecting cases in the nuisance context). Plaintiffs have cited no cases from any jurisdiction suggesting a different approach should apply here. We conclude the PAA requires a showing of actual physical injury to the properties themselves rather than a mere decline in the properties' value.

health problems. We agree that when the presence of radioactive materials creates a sufficiently high risk to health, a loss of use may in fact occur. For instance, a residential or business use may be lost due to an increased risk to health so high that no reasonable person would freely choose to live on or work at the property. Similarly, agricultural use may be lost where the soil can no longer produce crops that are safe for consumption due to the presence of the radioactive substance. In short, where the evidence indicates the property has been affected by the radioactive material to such an extent that an otherwise appropriate use of the property is lost, a plaintiff has established the threshold injury element of his PAA claim.[13]

Here, Plaintiffs were never required to establish a "loss of use of property." Instead, Jury Instruction No. 3.6 only required the jury to find that Defendants "interfered with Class members' use and enjoyment of their properties" in one of two ways: (1) "[b]y causing Class members to be exposed to plutonium and placing them at some increased risk of health problems" or (2) "[b]y causing objective conditions that pose a demonstrable risk of future harm to the Class Area." Plaintiffs' experts merely testified that *any* exposure to plutonium whatsoever increases the risk of health problems to some degree. Without an accompanying estimate or calculation of the increased risk, however, this evidence is insufficient to establish a loss of use under 42 U.S.C. § 2014(q). Plaintiffs must instead prove that the particular level of risk created by Defendants' conduct had the effect of actually depriving them of a specific use.

---

[13] We note the instant case does not require, and the examples provided do not necessarily represent, development of a complete list of circumstances in which a plaintiff can establish a "loss of use."

During supplemental briefing, this court directed Plaintiffs to identify any evidence presented at trial that could establish a loss of use of property.[14] Plaintiffs' supplemental brief confirms they attempted to make out their PAA claims solely by establishing an increased health risk. Plaintiffs' submissions, however, do not reveal evidence of an increased health risk that would be sufficient to permit a reasonable fact-finder to find a loss of use. Indeed, Plaintiffs' experts testified only that the actual dosage of radiation to which Plaintiffs have been exposed creates a small and unquantifiable increased risk of health problems. Nonetheless, we need not review the sufficiency of the evidence, as the jury was never properly instructed on the threshold elements of Plaintiffs' PAA claims. On remand, Plaintiffs will be tasked with producing additional evidence that could support a jury's finding that a nuclear incident occurred, in the form of "loss of or damage to property, or loss of use of property" under 42 U.S.C. § 2014(q).

Because the jury was not properly instructed on an essential element of Plaintiffs' PAA claims, the verdict must be set aside and the case remanded for further proceedings not inconsistent with this opinion.

C. Federal Preemption

Defendants also challenge the district court's ruling that federal nuclear safety standards do not preempt state tort standards of care under the PAA.[15] Essentially,

---

[14] Though the purpose of this inquiry pertained to the related jurisdictional issue, *see supra* n.4, the ultimate question of whether Plaintiffs suffered a loss of use is the same.

[15] While this court's ruling that Plaintiffs must establish the existence of a nuclear incident as a threshold element of their claims independently warrants remand, it is proper to nonetheless decide questions of law raised in this appeal that are certain to arise again

Defendants argue they are exempt from liability if their conduct complied with federal nuclear safety standards, even if they could be held liable under a more restrictive state tort standard of care. Whether federal law preempts state tort law is a question of law which this court reviews de novo. *Dobbs v. Anthem Blue Cross & Blue Shield*, 475 F.3d 1176, 1177 (10th Cir. 2007).

Plaintiffs argue the language of § 2014(hh) makes it clear state tort standards of care apply to a PAA action. Defendants argue, on the other hand, that because state tort standards of care conflict with the PAA scheme, they are preempted by federal nuclear safety regulations.

42 U.S.C. § 2014(hh) provides:

> A public liability action shall be deemed to be an action arising under section 2210 of this title, and the substantive rules for decision in such action shall be derived from the law of the State in which the nuclear incident involved occurs, unless such law is inconsistent with the provisions of such section.

We agree with the district court that § 2014(hh) does not expressly preempt state law. The clear meaning of this section is that state law is only expressly preempted when it is inconsistent with the provisions of § 2210. *See June*, 577 F.3d at 1237; *Lujan v. Regents of Univ. of Cal.*, 69 F.3d 1511, 1518 (10th Cir. 1995). The parties agree § 2210 itself contains no federal safety standards that could provide the standard of care in a PAA action. Instead, § 2210 primarily addresses the indemnification and

---

in the event of a re-trial in order to guide the district court on remand. *See Colo. Visionary Acad. v. Medtronic, Inc.*, 397 F.3d 867, 876 (10th Cir. 2005).

limitation of liability components of the PAA. Accordingly, § 2014(hh) does not expressly preempt state tort law.

Defendants' remaining preemption arguments focus on conflict preemption.[16] State law is preempted due to its conflict with federal law "where it is impossible for a private party to comply with both state and federal requirements, or where state law stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress." *English v. Gen. Elec. Co.*, 496 U.S. 72, 79, 110 S. Ct. 2270, 110 L. Ed. 2d 65 (1990) (citation and quotations omitted). Defendants argue the federal government's regulation of nuclear safety conflicts with the application of state tort law in a public liability action. While the Supreme Court has indicated only the federal government can directly regulate nuclear safety, neither this court nor the Supreme Court has analyzed whether state tort standards of care, which may have some indirect effect on nuclear safety, are preempted by federal law. *See Pac. Gas & Elec. Co. v. State Energy Res. Conservation & Dev. Comm'n*, 461 U.S. 190, 208, 103 S. Ct. 1713, 75 L. Ed. 2d 752 (1983).

Because Defendants advocate preemption, they bear the burden of showing that federal and state law conflict. *See Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238, 255, 104 S. Ct. 615, 78 L. Ed. 2d 443 (1984). The court is sympathetic to Defendants' generic argument that directing a nuclear facility to comply with federal safety regulations, while also permitting tort recovery under a generic state tort standard of care, may lead to confusion regarding

---

[16] Defendants allude to field preemption in their brief, but never develop the issue. At oral argument, counsel was given an opportunity to clarify the nature of Defendants' argument and expressly stated their argument is premised on conflict preemption only. Accordingly, this court does not address field preemption.

the levels at which the facility must operate to avoid liability.[17] The existence of such a conflict could defeat one of the PAA's primary purposes, the encouragement of private nuclear development. The record, however, is not clear as to the particular federal regulations or statutes Defendants believe actually conflict with any applicable state tort standards of care during the relevant periods. Nor do Defendants pinpoint any state tort standards of care in the trespass and nuisance context they believe have been displaced by federal nuclear safety regulations.

The district court's orders shed no additional light on this issue. The district court never fully conducted this analysis because it believed the Supreme Court's decision in *Silkwood* established Congress's intent that state tort law broadly govern public liability actions. In *Silkwood*, the Supreme Court concluded punitive damages could be awarded against the operator of a nuclear facility because under the then-existing statutory scheme, including the pre-1988 PAA, Congress intended to permit any tort remedies available under the applicable state law. *Id.* at 256, 104 S. Ct. 615. Applying that principle here, the district court determined the 1988 Amendments did not alter this regime, but rather expressly maintained the applicability of state tort law in PAA actions. *See* 42 U.S.C. § 2014(hh).

But the PAA's requirement that "the substantive rules for decision in . . . [a public liability action] shall be derived from the law of the State in which the nuclear inci-

---

[17] We note, however, *Silkwood* recognized Congress's willingness to accept the tension between the federal government's exclusive regulation of nuclear safety and the pre-1988 PAA's incorporation of state-law remedies. *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238, 255-56, 104 S. Ct. 615, 78 L. Ed. 2d 443 (1984).

dent involved occurs" does not displace otherwise applicable federal law. 42 U.S.C. § 2014(hh). It merely provides that the PAA itself does not displace state law, unless there is a conflict with § 2210. There are other possible sources of federal law that might preempt state law, and the PAA does not expressly make these standards irrelevant to resolving a plaintiff's PAA action. If Defendants are able to identify federal statutes, regulations, or other binding safety standards that controlled their conduct with respect to the class properties during the relevant time period, the district court must determine whether those particular standards are in conflict with any applicable state tort standard of care.[18]

On remand, the district court shall permit Defendants to identify the particular federal regulations or statutes they believe preempt state law. Specifically, the district court shall consider whether the federal standards Defendants identify carry the force of law or controlled Defendants' conduct with respect to the off-site contamination that occurred here. Defendants must also indicate the particular standards of care applicable to a state law trespass or nuisance claim they believe are in conflict with any such regulations. Finally, the district court must determine whether any such federal standards ac-

---

[18] Plaintiffs' brief describes the documents which Defendants presented to the district court. These documents appear to reference the applicable safety standards Defendants believe control. The documents include various letters, handbooks, manuals, memos, and Department of Energy Orders. Although it is not clear that any of the standards mentioned in these documents have the force of law or would have controlled the sort of off-site contamination that occurred here, these issues have not been adequately presented to this court. Without a thorough analysis of the statutes or regulations Defendants believe governed their conduct, this court cannot determine whether any conflict exists.

tually conflict with the relevant state tort standards of care.[19]

D. Plaintiffs' Nuisance Claims

Defendants next argue the district court's instructions on Plaintiffs' nuisance claims were legally incorrect. Specifically, Defendants argue Colorado law does not permit a risk-based theory of nuisance which lacks scientific foundation. Defendants also argue that in order to prove they substantially and unreasonably interfered with Plaintiffs' use and enjoyment of their property, Colorado law requires Plaintiffs to show Defendants' emissions exceeded any relevant federal or state safety standards. The court reviews these questions of law de novo. *Martinez*, 572 F.3d at 1132.

1. Irrational Fear as a "Substantial" and "Unreasonable" Interference

Under Colorado law, a plaintiff asserting a nuisance claim must establish an interference with the use and enjoyment of his property that is both "substantial" and

---

[19] This court is aware that at least five other circuits have concluded federal nuclear safety standards control in a PAA action, rather than traditional state tort standards of care. *See In re Hanford Nuclear Reservation Litig.*, 534 F.3d 986, 1003 (9th Cir. 2008); *Roberts v. Fla. Power & Light Co.*, 146 F.3d 1305, 1308 (11th Cir. 1998); *Nieman v. NLO, Inc.*, 108 F.3d 1546, 1552-53 (6th Cir. 1997); *O'Conner v. Commonwealth Edison Co.*, 13 F.3d 1090, 1100 (7th Cir. 1994); *In re TMI Litig. Cases Consol. II*, 940 F.2d 832, 859-60 (3d Cir. 1991). In these cases, however, it appears the courts' holdings were responsive to arguments involving field preemption. As previously mentioned, *supra* n.16, Defendants have not presented a field preemption argument in this appeal. Rather, they have presented only a conflict preemption argument. This court is unable to find any circuit decision based on the conflict preemption argument Defendants present in this appeal.

"unreasonable."[20] *Public Serv. Co. of Colo. v. Van Wyk*, 27 P.3d 377, 391 (Colo. 2001). The district court instructed the jury that Plaintiffs could meet their burden of establishing an interference with the use and enjoyment of their properties if they proved plutonium contamination from the activities at Rocky Flats exposed them to either "some increased risk of health problems" or "a demonstrable risk of future harm." We agree with the district court that a jury may find the presence of radioactive contamination creates an actual risk to health and thereby interferes with a plaintiff's use or enjoyment of his land if the contamination disturbs the plaintiff's comfort and convenience, including his peace of mind, with respect to his continued use of the land. *See Cook v. Rockwell Int'l Corp.*, 273 F. Supp. 2d 1175, 1203-04 (D. Colo. 2003). But that is not the end of the inquiry. Any interference with a plaintiff's use and enjoyment of his property must be both "substantial" and "unreasonable." Under Colorado law, an interference is deemed "substantial" if "it would have been offensive or caused inconvenience or annoyance to a reasonable person in the community." *Saint John's Church in Wilderness v. Scott*, 194 P.3d 475, 479 (Colo. App. 2008). In determining whether an interference is "unreasonable," the jury "must weigh the gravity of the harm and the utility of the conduct causing that harm." *Van Wyk*, 27 P.3d at 391.

---

[20] On its face, the state-law "interference with use" standard presents a lower threshold than the PAA's "loss of use" standard. Accordingly, if a plaintiff establishes a "loss of use" under the PAA, he necessarily establishes an "interference with use" under Colorado law. This does not, however, relieve a plaintiff of his burden of establishing the additional nuisance requirements under Colorado law that any interference must also be "substantial" and "unreasonable."

The jury was properly instructed on the elements of a nuisance claim as well as the definitions of "substantial" and "unreasonable." While the resolution of these issues typically involves questions of fact, a scientifically unfounded risk cannot rise to the level of an unreasonable and substantial interference. To the extent Plaintiffs rely on anxiety from an increased risk to their health as an interference with the use and enjoyment of their properties, that anxiety must arise from scientifically verifiable evidence regarding the risk and cannot be wholly irrational. The district court concluded otherwise in light of its review of Restatement (Second) of Torts § 821F, cmt. f, which states:

> In determining whether the harm would be suffered by a normal member of the community, fears and other mental reactions common to the community are to be taken into account, even though they may be without scientific foundation or other support in fact. Thus the presence of a leprosy sanatarium in the vicinity of a group of private residences may seriously interfere with the use and enjoyment of land because of the normal fear that it creates of possible contagion, even though leprosy is in fact so rarely transmitted through normal contacts that there is no practical possibility of communication of the disease.

This court previously cast doubt on whether Colorado would follow this rule, given the potential for anachronistic results. *Boughton v. Cotter Corp.*, 65 F.3d 823, 832 n.13 (10th Cir. 1995). Instead, we suggested in *Boughton* that Colorado courts would "require[ ] some evidence to substantiate the fears." *Id.* Otherwise, a plaintiff could state a viable nuisance claim any time neighboring prop-

erty owners contracted a misunderstood disease, whether contagious or not. Such a result would be absurd.

Plaintiffs are unable to point to any Colorado case in the fifteen years since *Boughton* that has endorsed the Restatement's position. More importantly, the Restatement conflicts with Colorado's "unreasonableness" requirement, which expressly requires the trier of fact to "weigh the gravity of the harm and the utility of the conduct causing that harm." *Van Wyk*, 27 P.3d at 391. No reasonable jury could find that irrational anxiety about a risk that cannot be scientifically verified tips this balance so as to render the interference unreasonable. Accordingly, we now confirm what we previously suggested in *Boughton* and predict that the Colorado Supreme Court would not permit recovery premised on a finding that an interference, in the form of anxiety or fear of health risks, is "substantial" and "unreasonable" unless that anxiety is supported by some scientific evidence. The district court erred in concluding otherwise.

2. The Role of Federal and State Safety Standards

Defendants also argue the district court erred in trying the nuisance claims without reference to applicable federal and state safety regulations. Specifically, Defendants argue the jury should have been instructed that if plutonium contamination in the property class area falls within the applicable federal or state safety levels, it cannot be deemed "unreasonable." The Defendants point to the Colorado Supreme Court's decision in *Van Wyk*, where the plaintiffs claimed the defendant's upgrades to electrical lines created an intentional nuisance due to increased noise, electromagnetic fields, and radiation particles invading the property. *Id.* at 382. The defendant argued the relevant agency's approval of the voltage involved in the upgrades rendered any interference per se

reasonable. *Id.* at 393. The Colorado Supreme Court indicated that to the extent an agency's regulations actually quantify the standard of reasonableness for the particular conduct involved, this determination controls in the nuisance context. *Id.* Under the facts of *Van Wyk*, however, the court concluded the agency's determination of reasonableness "lacked any specificity with respect to electromagnetic fields and noise" such that the complaint stated a viable nuisance claim because it alleged the defendant's conduct was unreasonable to the extent it exceeded the noise and electromagnetic fields the agency anticipated might occur. *Id.* at 393-94. Under the circumstances, the court concluded the plaintiffs sufficiently pleaded a nuisance claim.

In light of *Van Wyk*, Defendants proposed jury instructions stating Defendants' release of plutonium could only be found unreasonable if the release did not comply with controlling state and federal standards. The district court rejected this instruction, concluding *Van Wyk* dealt with quasi-judicial determinations that differ in nature from the federal and state regulations identified in Defendants' proposed jury instructions. The district court believed the safety regulations offered by Defendants were more akin to zoning regulations and ordinances and, under Colorado case law, compliance with zoning statutes does not insulate a defendant from nuisance liability. *Hobbs v. Smith*, 177 Colo. 299, 493 P.2d 1352, 1354-55 (1972).

This court need not decide whether *Van Wyk* applies here because we agree with the district court's alternative ruling that none of the regulations referenced in Defendants' proposed jury instructions are on point. For instance, Defendants rely on a regulation issued by the Colorado State Board of Health which states, "Contami-

nation of the soil in excess of 2.0 disintegrations per minute (0.03 Bq) of plutonium per gram of dry soil . . . presents a sufficient hazard to the public health to require the utilization of special techniques of construction upon property so contaminated." 6 Colo. Code Regs. 1007-1:4.60. This regulation says nothing about the minimum level at which such contamination becomes unreasonable. It merely indicates special care must be taken for construction on property contaminated at the particular level indicated. Similarly, Defendants point to documents issued by the Atomic Energy Commission and the Department of Energy. It is not clear whether any of these documents have the force of law or apply to safety levels outside a nuclear facility, and the issue is inadequately briefed for resolution here.[21]

Accordingly, Defendants have failed to establish that any of the state or federal standards referenced in their proposed jury instructions overcome the general rule that the jury must determine whether a given interference is "unreasonable" by weighing the harm against the utility of the interference.

E. Plaintiffs' Trespass Claims

Defendants next argue the district court erred in failing to require Plaintiffs to prove physical damage to the property as part of their trespass claims. According to Defendants, this is because Plaintiffs can only pursue intangible trespass claims, given the nature of the contamination at issue. The court reviews this question of law de novo. *Martinez*, 572 F.3d at 1132.

---

[21] As we previously noted, it is unclear whether Defendants seek to rely on these particular documents as preempting state law. As the issue has not been briefed, the court declines to address the question of whether these documents create a conflict between federal and state law.

We note Defendants' position that Plaintiffs must establish physical damage to the property as an element of their trespass claims overlaps with the PAA's "damage to property" standard. A plaintiff, however, is not limited to proving damage to property in order to proceed with a PAA claim. Rather, a plaintiff may establish any of the injuries listed in 42 U.S.C. § 2014(q) to meet the PAA's threshold requirement of proving a nuclear incident occurred. For instance, a plaintiff who establishes a loss of use of their property has met his threshold requirement under § 2014(q), but must still prove physical damage to the property in order to prevail on a Colorado intangible trespass claim. Accordingly, we proceed to the issue of whether Plaintiffs' trespass claims must be tried under an intangible trespass theory.

The parties agree that to prevail under a traditional Colorado trespass claim, a plaintiff must establish only "a physical intrusion upon the property of another without the proper permission from the person legally entitled to possession." *Van Wyk*, 27 P.3d at 389. A plaintiff need not establish any injury to his legally protected interest in the land or damage to the land itself. *Id.* In *Van Wyk*, the Colorado Supreme Court recognized the viability of trespass claims involving invasions that are intangible, such as noise, radiation, or electromagnetic fields. *Id.* at 390. Unlike a traditional trespass claim, however, the court made it clear an intangible trespass claim requires "an aggrieved party . . . to prove physical damage to the property [was] caused by such intangible intrusion." *Id.* Defendants argue the instant case can only proceed as an intangible trespass claim, requiring the plaintiff class to establish the existence of physical damage to their properties in order to prevail. Consequently, we must determine whether the Colorado Supreme Court would re-

quire a trespass claim involving the invasion of plutonium particles onto real property to proceed as a traditional or intangible trespass claim.

In *Van Wyk*, the Colorado Supreme Court defined "intangible invasion" in the context of the plaintiffs' inverse condemnation claim, and the court held that invasions in the forms of noise, electromagnetic fields, and radiation waves are intangible invasions. *Id.* at 387. The court explained:

> The meaning of the term "intangible" is something that is impalpable, or incapable of being felt by touch. . . . We conclude that noise, despite being perceptible through hearing, is impalpable, and thus, intangible.
>
> Similarly, we also conclude that electromagnetic fields and radiation waves emitted by powerlines are intangible. Neither electromagnetic fields nor radiation waves produced by electric lines can be perceived by *any* of the senses. Instead, they are both similar to television and radio waves, which surround us at all times but which are completely imperceptible. . . . While such waves and fields *might* have some sort of physical effect upon the body, electromagnetic fields and radiation waves of the type at issue here are ubiquitous and our senses are incapable of perceiving them. As such, we agree . . . that electromagnetic fields and radiation waves emitted by powerlines are intangible intrusions upon land.

Id. at 387-88 (citations omitted).

In recognizing that other jurisdictions permitted trespass claims involving intangible intrusions to proceed, the Colorado Supreme Court did more than examine

cases involving non-physical intrusions such as noise, electromagnetic fields, and radiation waves. The court also examined cases involving the deposit of particulate not visible to the human eye, as well as the deposit of radioactive materials. *Id.* at 390. At no time did the court in *Van Wyk* draw a distinction excepting these impalpable intrusions from its general analysis.

It is clear from the Colorado Supreme Court's discussion of this issue in *Van Wyk* that, under Colorado law, whether a trespass claim falls under the traditional rubric or must be pursued as an intangible trespass is determined by whether the intrusion is palpable. Plaintiffs do not dispute that the plutonium particles present on their properties are impalpable and imperceptible by the senses. Although we recognize the particles in question have mass and are physically present on the land, our interpretation of Colorado law compels us to conclude that because the particles are impalpable, the trespass alleged here must be tried as an intangible trespass. Consequently, Plaintiffs are required to prove actual physical damage to their properties in order to prevail on their trespass claims.

Plaintiffs argue the discussion of intangible invasions in *Van Wyk* should not control because a more recent case, *Hoery v. United States (In re Hoery)*, 64 P.3d 214 (Colo. 2003), recognized that contamination physically present within property supports a traditional trespass claim. In *Hoery*, the Colorado Supreme Court's decision addressed only the two narrow questions certified by the Tenth Circuit pertaining to whether the contamination of the property constituted a continuing trespass or nuisance. We agree with Defendants that, in *Hoery*, the Colorado Supreme Court treated the presence of contaminants as if it were not in dispute. Indeed, the deci-

sion explains, "For purposes of answering the certified questions before us, no dispute exists about whether the United States released TCE into the ground and by doing so, invaded Ho[e]ry's property." *Id.* at 222. Because no dispute existed, the *Hoery* court only examined whether the facts in question could support a claim that the trespass or nuisance was continuing. The case does not stand for the proposition that impalpable contamination of property constitutes a tangible invasion that can be tried as a traditional trespass claim. In fact, it is not clear from *Hoery* whether the contamination in question was impalpable. The Colorado Supreme Court never discussed the issue because it was not presented.

Jury Instruction No. 3.3 directed that to prove their trespass claims,

> Plaintiffs are *not* required to show that plutonium is present on the Class Properties at any particular level or concentration, that they suffered any bodily harm because of the plutonium or that the presence of plutonium on the Class Properties damaged these properties in some other way.

This was erroneous as a matter of Colorado law and on remand, Plaintiffs shall be required to prove the plutonium contamination caused "physical damage to the property" in order to prevail on their trespass claims. *Van Wyk*, 27 P.3d at 390.

F. Class Certification

As the district court's class certification analysis failed to consider whether Plaintiffs could establish various elements of their PAA claims, supplied both by federal and state law, this court must reverse the district court's class certification ruling. Upon remand, the district court shall revisit the class certification question to determine whether Plaintiffs can establish the elements of their

claims, including the PAA threshold requirements, on a class-wide basis. Because we now reverse the district court's class certification ruling, we need not reach the question of whether the district court's subdivision of the class for damages purposes was proper.

G. Punitive Damages

Defendants also argue the district court erred in instructing the jury that it could award punitive damages in the instant action. Defendants argue the PAA precludes punitive damages against them because their agreement with the federal government requires the government to indemnify them for any such damages. The court reviews this question of law de novo. *Martinez*, 572 F.3d at 1132.

In 1988, the PAA was amended to preclude awards of punitive damages when a defendant in a PAA action will be indemnified by the federal government for damages.[22] It states:

> No court may award punitive damages in any action with respect to a nuclear incident . . . against a person on behalf of whom the United States is obligated to make payments under an agreement of indemnification covering such incident. . . .

42 U.S.C. § 2210(s). The district court concluded this provision applied only as to nuclear incidents occurring on or after August 20, 1988, the date the amendments took effect, and permitted Plaintiffs to pursue punitive damages with respect to nuclear incidents on or after that date.

---

[22] There is no dispute that Defendants have entered into indemnification agreements with the government.

This court agrees that § 2210(s) is only applicable to nuclear incidents occurring on or after August 20, 1988. Defendants do not dispute that Congress opted not to make § 2210(s) retroactive. Consequently, the bar against punitive damages in this section does not apply to any conduct occurring before the 1988 Amendments took effect. The Supreme Court's decision in *Silkwood* recognized the availability of punitive damages under the PAA, prior to the 1988 Amendments, without reference to an exception in the presence of an indemnity agreement. 464 U.S. at 255-56, 104 S. Ct. 615. Rather, the Court recognized that "in enacting and amending the [PAA], Congress assumed that state-law remedies, in whatever form they might take, were available to those injured by nuclear incidents." *Id.* at 256, 104 S. Ct. 615. The *Silkwood* decision made it clear that prior to the enactment of the 1988 Amendments, federal law included no prohibition whatsoever on the availability of punitive damages.

Defendants argue, however, that § 2210(s) merely codified the law as it already existed prior to the 1988 Amendments. But Defendants cite to no binding legal authority suggesting punitive damages were always barred when an indemnification agreement was in place. Nor do Defendants point to any pre-1988 Amendments case prohibiting punitive damages in such an instance. Additionally, the Defendants never explain why the federal government is not entitled to enter into a binding agreement to indemnify a party for punitive damages.

Instead, Defendants rely on two sentences from a Senate Report which states, "The bill clarifies that an award of punitive damages is prohibited if the award would result in any obligation of the United States to make any payments for public liability. This reflects the longstanding policy that the Federal government should

not be liable for punitive damages." S. Rep. No. 100-218, at 11 (1987), *reprinted in* 1988 U.S.C.C.A.N. 1476, 1487. The Senate Report cited by the Defendants, however, could just as easily be read to conflict with Defendants' position, because after describing the provisions relating to punitive damages, the Report states, "The bill does not otherwise affect current law regarding punitive damages." *Id.* This suggests those portions of the 1988 Amendments dealing with punitive damages did alter the law as it existed at that time, and the bar against punitive damages for post-1988 Amendments conduct is the only alteration to the then-existing scheme. Absent any indication punitive damages against an indemnified party were prohibited prior to the 1988 Amendments, we cannot agree with Defendants' position.[23]

Defendants also argue that even if punitive damages are recoverable under the pre-1988 PAA, the district court's instruction was erroneous as a matter of law. Specifically, Defendants argue the district court erred by permitting the jury to award punitive damages based on conduct occurring prior to August 20, 1988, even if Plaintiffs sustained no injury prior to that date. In issuing its ruling, the district court noted that the definition of "nuclear incident" refers to "any occurrence within the United States causing . . . damage to property . . . arising out of or resulting from the radioactive, toxic, explosive or other hazardous properties of source, special nuclear, or byproduct material." 42 U.S.C. § 2014(q). Focusing on "occurrence," the district court reasoned, "It is the date of such occurrences, not the date on which the rele-

[23] The parties do not dispute that punitive damages have always been, and continue to be, available against defendants who have no indemnification agreement with the government. *See Silkwood*, 464 U.S. at 251 n.12 & 256, 104 S. Ct. 615.

vant occurrences caused property damage, that determines application of the section's bar on punitive damages awards." *Cook*, 273 F. Supp. 2d at 1212. As a result, the court instructed the jury:

> For Plaintiffs to recover punitive damages, they must prove beyond a "reasonable doubt" that the conduct of the Defendant that committed the trespass and/or nuisance was "wilful and wanton." In deciding this question with respect to any conduct relating to plutonium or other radioactive materials, you can only consider the Defendant's conduct up to August 20, 1988, including conduct occurring before this date that resulted in harm on or after that date.

Defendants argue this instruction was error, because it is undisputed the 1988 Amendments bar punitive damages against indemnified parties with respect to any "nuclear incident" occurring after August 20, 1988. Because any occurrence deemed a nuclear incident must cause some injury, Defendants suggest that no nuclear incident can exist until the date of the injury. In other words, Defendants believe the jury should not have been permitted to consider any conduct unless it actually caused a PAA injury under 42 U.S.C. § 2014(q) prior to August 20, 1988. According to Defendants, by instructing the jury it could consider conduct occurring prior to August 20, 1988, which did not result in a PAA injury until after August 20, 1988, the district court equated "conduct" with "nuclear incident" and allowed the jury to consider nuclear incidents for which punitive damages are expressly barred by the PAA's 1988 Amendments.

Defendants confuse the findings necessary to establish a compensable injury, however, with the findings necessary to support a punitive damages award. As explained earlier, a plaintiff cannot proceed with a PAA claim un-

less it first establishes a nuclear incident occurred. 42 U.S.C. § 2210(n)(2). A plaintiff must establish that the occurrence in question actually caused a PAA injury. 42 U.S.C. § 2014(q). All elements of the PAA claim must be proved to recover compensatory damages for the injury. With respect to punitive damages, however, once a plaintiff establishes a nuclear incident, the jury's focus must turn to the conduct of the defendant rather than the injury sustained by the plaintiff. The purpose of punitive damages is to punish the defendant's willful and wanton conduct and deter others from engaging in similar conduct. *Lira v. Shelter Ins. Co.*, 913 P.2d 514, 517 (Colo. 1996). The injury resulting from the conduct is compensated separately.

As the district court ruled, the statutory definition makes it clear the relevant date of any nuclear incident is the date of the "occurrence," not the date of the injury. Section 2014(q) defines a "nuclear incident" as "any occurrence . . . causing . . . bodily injury, sickness, disease, or death, or loss of or damage to property, or loss of use of property, arising out of or resulting from the radioactive, toxic, explosive, or other hazardous properties of source, special nuclear, or byproduct material." In determining whether a particular occurrence is a nuclear incident, the jury must simply determine whether that occurrence ultimately caused one of the specified injuries. If so, the occurrence constitutes a nuclear incident. Had Congress intended for the injury to control the timing of the nuclear incident, it could have defined nuclear incident as "the infliction of an injury upon person or property arising from the use of nuclear substances." Instead, Congress focused the definition on an "occurrence," the event which sets the causal chain in motion. Therefore, the date of the occurrence controls when determining

whether the nuclear incident took place prior to August 20, 1988.

For instance, if a defendant's release of plutonium in 1985 caused an injury in 1990, a proper explanation of that event in light of the statutory definition would be that the 1985 occurrence was a nuclear incident because it ultimately caused a PAA injury. It would be nonsensical to say the 1990 injury constitutes the nuclear incident even though the conduct occurred years before. The definition directly ties the "occurrence" to the "nuclear incident."

While the district court's decision to focus on the date of the occurrence was correct, its instruction failed to instruct the jury how to identify the date of the occurrence. Here, the "occurrence" constituting a nuclear incident in a PAA action must arise from Defendants' release of plutonium onto Plaintiffs' properties. The jury instruction ultimately given, however, permits consideration of Defendants' conduct prior to August 20, 1988, regardless of whether an "occurrence" causing Plaintiffs' injury took place prior to that date. This is an important distinction, because certain conduct prior to August 20, 1988, might contribute to a nuclear incident, even though the release of plutonium might not have occurred until after August 20, 1988. For instance, if a defendant began improperly storing drums containing nuclear waste in 1987 and consistently failed to maintain them, but no waste leaked from the drums until after August 21, 1988, a jury could not find the "occurrence" took place prior to August 20, 1988.

The district court's jury instruction should have required the jury to determine whether any nuclear incident occurred prior to August 20, 1988. If so, the jury could then consider whether the conduct causing any

nuclear incident occurring before August 20, 1988, was wilful and wanton beyond a reasonable doubt. In the event this case is re-tried, the jury should be instructed that in deciding whether to award punitive damages, it may consider Defendants' conduct that contributed to a release of plutonium only if the release of plutonium *both* occurred prior to August 20, 1988, *and* ultimately caused Plaintiffs' injury, regardless of whether the injury manifested itself before or after that date. If the jury finds beyond a reasonable doubt that such conduct was willful and wanton, the jury is permitted to award punitive damages against Defendants.

H. Defendants' Remaining Challenges

The court declines to reach Defendants' evidentiary challenges to Plaintiffs' trial references to the government's indemnity obligations or the Department of Energy's failure to fully comply with discovery. Because the case must be remanded on other grounds, the court need not address whether the district court abused its discretion with respect to evidentiary issues that may not arise during a new trial. Likewise, the court will not address Defendants' challenge to the district court's post-trial award of prejudgment interest. This issue may not arise on remand, and if it does, any error can easily be rectified in a future appeal without necessitating a new trial.

I. Plaintiffs' Cross-Appeal

Plaintiffs have presented their cross-appeal on conditional issues to be raised only if they lose related issues presented in Defendants' primary appeal. As to a number of these issues, Defendants argue Plaintiffs cannot present their cross-appeal in a conditional manner. Defendants are incorrect. A party who prevails in the district court is permitted to conditionally raise issues in a

cross-appeal because if the appellate court decides to vacate or modify the trial court's judgment, the judgment may become adverse to the cross-appellant's interests. *United States ex rel. Burlbaw v. Orenduff*, 548 F.3d 931, 942 (10th Cir. 2008).

Some, but not all, of Plaintiff[s'] cross-appeal issues are challenges this court could address in order to guide the district court on remand. Nevertheless, any issues raised on cross-appeal must be adequately presented. *See Berna v. Chater*, 101 F.3d 631, 632 (10th Cir. 1996). As Plaintiffs have failed to do so, we decline to consider the cross-appeal.

IV. CONCLUSION

For the foregoing reasons, this court **DENIES** Defendants' motion to dismiss for lack of subject matter jurisdiction and **DENIES** all other motions pending before this court as moot. Additionally, this court **REVERSES** and **REMANDS** the case to the district court. We **DIRECT** the district court to vacate the judgment and conduct further proceedings not inconsistent with this opinion.

APPENDIX B
UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO

CIVIL ACTION NO. 90-CV-00181-JLK

MERILYN COOK, *ET AL.*,
Plaintiffs,

v.

ROCKWELL INTERNATIONAL CORPORATION
AND THE DOW CHEMICAL COMPANY,
Defendants.

MEMORANDUM OPINION AND ORDER ON PENDING MOTIONS

MAY 20, 2008

Judge John L. Kane.

On February 14, 2006, the jury returned a verdict in the class trial on Plaintiffs' trespass and property claims finding for Plaintiffs and against Defendants on both claims and awarding Plaintiffs compensatory and exemplary damages. This matter is now before me on Defendants' renewed motion for judgment as a matter of a law pursuant to Rule 50(b) and their motion for new trial or, in the alternative, for remittitur of damages pursuant to Rule 59. For the reasons stated below, I deny both motions.

Both parties have also submitted motions directed at putting the claims and issues decided in the course of the

class trial in a posture for immediate appeal. Upon consideration of their competing proposals, I have determined that final judgment on the claims decided in the class trial shall be entered pursuant to Federal Rule of Civil Procedure 54(b). The substance of the final judgment and related plan of allocation to be entered is set out in Section III below.

Discussion

I. Defendants' Renewed Motion for Judgment as a Matter of Law

Defendants moved for judgment as a matter of law under Rule 50(a) at the close of Plaintiffs' case and again at the close of evidence. I review Defendants' latest Rule 50 motion under the same standard as their previous motions.

Under Rule 50, judgment as a matter of law in favor of Defendants is warranted "only if the evidence points but one way and is susceptible to no reasonable inferences supporting [Plaintiffs]." *Snyder v. City of Moab*, 354 F.3d 1179, 1184 (10th Cir. 2003); *see* Fed. R. Civ. P. 50(a). In making this determination, I must view the evidence and any inferences to be drawn from it most favorably to the Plaintiffs, as the non-moving party. *Baty v. Willamette Indus., Inc.*, 172 F.3d 1232, 1241 (10th Cir. 1999), *overruled on other grounds*, *Nat'l R.R. Passenger Corp. v. Morgan*, 536 U.S. 101 (2002). I also must "refrain from weighing the evidence, passing on the credibility of witnesses or substituting [my] judgment for that of the jury." *Brown v. Wal-Mart Stores, Inc.*, 11 F.3d 1559, 1563 (10th Cir. 1993); *see Baty*, 172 F.3d at 1241.

I denied Defendants' first and second Rule 50 motions based on my determination that, viewing the evidence and all reasonable inferences therefrom in the light most favorable to Plaintiffs, there was a sufficient basis for a

reasonable jury to find for Plaintiffs on each of the issues identified by Defendants in their motions. In their most recent Rule 50 motion, Defendants seek judgment on the same issues as in their previous motions relying on much the same arguments as before. Having carefully considered these renewed arguments and Plaintiffs' response under the standard for decision stated above, I again find that there was a legally sufficient evidentiary basis for a reasonable jury to find for Plaintiffs on each of the issues challenged by Defendants. Accordingly, I deny Defendants' Renewed Motion for Judgment as a Matter of Law.

II. Defendants' Motion for New Trial and Alternative Motion for Remittitur of Damages

Defendants have also moved pursuant to Rule 59(a) for the jury's verdicts to be set aside and a new trial ordered based on alleged inconsistencies and excesses in the jury's verdicts and other alleged errors committed before, during and after trial. In the alternative, Defendants seek remititur of the jury's compensatory and exemplary damages verdicts.

Rule 59 of the Federal Rules of Civil Procedure provides that a court may grant a new trial after a jury trial "for any reason for which a new trial has heretofore been granted in an action at law in federal court." Fed. R. Civ. P. 59(a)(1)(A). Granting a new trial is only appropriate, however, where the claimed error substantially and adversely affects the rights of a party. *See Sanjuan v. IBP, Inc.*, 160 F.3d 1291, 1297 (10th Cir. 1998); Fed. R. Civ. P. 61. The burden of showing an error having this prejudicial effect rests on the party seeking the new trial. *See Streber v. Hunter*, 221 F.3d 701, 736 (5th Cir. 2000); *Clarksville-Montgomery County Sch. Sys. v. U.S. Gypsum Co.*, 925 F.2d 993, 1002 (6th Cir. 1991); *see generally* 11 Charles Alan Wright, Arthur R. Miller & Mary Kay

Kane, Federal Practice & Procedure Civil § 2803, at 47 (2d ed. 1995 & Supp. 2007) (collecting cases). The decision of whether to grant a new trial rests within the sound discretion of the district court. *See Shugart v. Cent. Rural Elec. Co-op.*, 110 F.3d 1501, 1506 (10th Cir. 1997); *York v. Am. Tel. & Tel. Co.*, 95 F.3d 948, 958 (10th Cir. 1996). While federal law governs the procedural aspects of a motion for new trial or remittitur, state law sets the substantive standards in this action, see 42 U.S.C. § 2014(hh); *Gasperini v. Ctr. for Humanities, Inc.*, 518 U.S. 415, 426-39 (1996), except to the extent that a federal constitutional challenge is raised.

Defendants devote nearly three-fourths of their voluminous Rule 59 motion to rearguing my decisions to proceed with a class trial, to admit certain lay and expert evidence, to reject certain of Defendants' proposed jury instructions and overrule their objections to other instructions, and to deny Defendants' multiple motions for mistrial. Each of the challenged decisions was reached after reasoned consideration of extensive written and/or oral argument from both parties. After careful review of Defendants' most recent arguments regarding these matters, I find no basis for reconsidering these decisions. Accordingly, I deny Defendants' motion for new trial based on the claimed errors in my previous decisions.[1]

The remainder of Defendants' arguments for new trial are based on alleged inconsistencies or excesses in the jury's compensatory and exemplary damages verdicts. I

---

[1] In so holding, I did not find it necessary to make findings on whether Defendants have waived any of the arguments now asserted by failing to raise them at the appropriate time before or during trial or on whether any of the errors claimed by Defendants substantially and adversely affected their rights as would be required for a new trial to be ordered.

examine each of these arguments in turn, as well as Defendants' alternative motion for remittitur of damages.

A. Request for New Trial Based on Alleged Inconsistencies in the Jury's Damages Verdicts

Defendants assert a new trial is required because the jury's answers to the damages interrogatories in the jury verdict form are inconsistent in various respects. In order for a new trial to be ordered on this basis, Defendants must "show that any verdict inconsistency demonstrates either confusion or abuse on the jury's part." *Domann v. Vigil*, 261 F.3d 980, 983 (10th Cir. 2001) (internal quotation omitted). Special interrogatory answers that are "irreconcilably inconsistent" because they are "logically incompatible" indicate such jury confusion or abuse of power. *See Loughridge v. Chiles Power Supply Co.*, 431 F.3d 1268, 1275 (10th Cir. 2005). In determining whether there is any inconsistency meeting this standard, I "must accept any reasonable view of the case that makes the jury's answers consistent," and consider the verdict in light of the instructions given to the jury, among other factors. *Id.* (internal quotations omitted).

The jury answers challenged by Defendants are not "logically incompatible" or even inconsistent. Far from indicating that the jury was confused or abused its power in determining damages, these answers indicate a diligent effort by the jury to follow the instructions they received regarding determination of damages. Defendants' complaints, as a result, are more properly directed to the jury instructions and verdict form than to any inconsistency in the jury's verdicts.[2]

---

[2] As discussed below, in many instances Defendants failed to object to the jury instructions and portions of the jury verdict form that they now challenge.

There is no inconsistency, for example, in the jury's determination of identical compensatory damages for the trespass and nuisance claims. The jury was instructed to determine any compensatory damages resulting from a trespass or nuisance committed by the Defendants separately, and informed that the court would apply the rule prohibiting multiple recovery of the same damages when it issued judgment on the jury's verdict. Notice of Final Jury Instructions (Doc. 2121) [hereinafter "Final Jury Instructions"], No. 3.26 ("Multiple Recovery Prohibited").[3] Following this and other instructions and the corresponding interrogatories in the verdict form, the jury found both Defendants liable on both theories of liability and determined that the aggregate damages to the Class[4] on each claim were $176,850,340. Jury Verdict Form (Doc. 2117) at 15, 24. All concede, and I found following the jury's verdict, *see* 2/14/06 Tr. at 10800-01, that these responses reflect the jury's determination that Defendants' proven trespass and nuisance caused the same damages: a reduction in the aggregate value of the Class Properties of $176,850,340.[5]

The damages verdicts on each claim reflect the jury's determination that the Defendants' trespass and nuisance each bore the requisite causal relationship to the

---

[3] Defendants proposed this instruction. *See* Defs.' Submission of Phase III Jury Instructions and Jury Verdict Forms (Doc. 1271) at 64-65 (Defs.' Proposed Damages Instruction No. 3.14—Multiple Recovery Prohibited).

[4] The jury instructions defined the "Class" as "persons who owned property in a specific, defined area, known as the 'Class Area,' near the Rocky Flats Nuclear Weapons Plant on June 7, 1989." Final Jury Instructions, No. 1.1.

[5] The jury instructions defined "Class Properties" as properties owned by Class members as of June 7, 1989 that are located in the Class Area. Final Jury Instructions, No. 3.2.

entire diminution in value suffered by the Class Properties. This determination is consistent with the evidence presented indicating that some conduct by each Defendant contributed to both the continuing trespass and nuisance, and with authority recognizing that the same conduct can contribute to liability under both theories. *See, e.g.*, *Borland v. Sanders Lead Co.*, 369 So. 2d 523, 527 (Ala. 1979) ("trespass and nuisance are separate torts for the protection of different interest invaded," but "the same conduct on the part of a defendant may, and often does, result in actionable invasion of both interests."). It is also consistent with the evidence presented on damages and with the jury instructions and legal rule setting the same measure of damages for both types of tortious invasions. *See* Final Jury Instructions, No. 3.22; Restatement (Second) of Torts § 930(3)(b) (1979) (measure of damages for continuing tortious invasions of land is the decrease in the value of land caused by the prospect of invasion continuing).[6] There is, therefore, no inconsistency in the jury's answers concerning the aggregate damages to the Class caused by the Defendants' continuing trespass and nuisance. Defendants' concern about multiple recovery of the same damages will, as I stated in the relevant jury instruction and when the jury's verdict was announced, be addressed in the final judgment on the jury's verdict.

Nor is there any inconsistency in the jury's allocation of fault in the verdict form between Dow and Rockwell for their trespass and nuisance. Under the evidence presented, the jury could reasonably apportion fault differently between the Defendants for the trespass through

---

[6] Unless otherwise noted, all references to the Restatement in this memorandum opinion and order are to the Restatement (Second) of Torts (1979).

contamination of the Class Properties and for the Defendants' unreasonable and substantial interference in the use and enjoyment of these Properties as found in the nuisance claim. In particular, the jury's apportionment to Dow of 90% fault for the trespass and 30% for the nuisance and to Rockwell of 10% fault for the trespass and 70% fault for the nuisance is reasonable and consistent under the evidence presented.

Defendants' attempt to create an inconsistency in the verdict by characterizing the jury's apportionment of fault as an allocation of loss causation or damages is unavailing. Colorado's pro rata liability statute required that the jury separately determine the total damages sustained by Plaintiffs and the percentage "fault" attributable to each Defendant. Colo. Rev. Stat. § 13-21-111.5(2). The jury instruction for the latter determination is titled "Apportioning Fault Between the Defendants." Final Jury Instructions, No. 3.19A. This instruction and the corresponding interrogatories in the verdict form are modeled on language approved by the Colorado Supreme Court for this jury determination. See Colo. Jury Instructions (Fourth) Civ. §§ 9:29-9:29B. The jury followed these instructions and apportioned fault for the trespass and for the nuisance between the Defendants. It is the duty of the Court, not the jury, to prorate each Defendant's liability based on the jury's allocation of fault between them. *See Lira v. Davis*, 832 P.2d 240, 242 (Colo. 1992) (after jury determines total compensatory damages, court applies pro rata liability statute and enters judgment against each defendant for compensatory damages "apportioned in accordance with the percentage of fault attributable to that defendant" found by the jury). The jury was not charged with determining loss allocation and did not do so.

It appears Defendants' true complaint here is not that the jury's apportionment of fault on the two claims is irreconcilably inconsistent but rather that the jury's answers in the verdict form did not sufficiently fix the compensatory damages to be awarded against each Defendant. In fact, the jury made the factual findings on compensatory damages that were required of it, leaving to the Court the task of applying the rule against multiple recovery and the pro rata liability statute. As described in Section III, this task is readily accomplished without disregarding any of the jury's factual findings or engaging in speculation regarding what the jury actually determined. As a result, there is no cause for a new trial on the ground that the jury did not make sufficient findings for judgment on compensatory damages to be entered against each Defendant.

I also note that Defendants' complaints about what they perceive as the jury's uncertain allocation of compensatory damages between them is of little practical significance if, as Defendants have maintained throughout this action, they are both fully indemnified here by the U.S. Department of Energy (DOE) pursuant to their contracts to operate Rocky Flats Nuclear Weapons Plant for the federal government. That the DOE has controlled the joint defense of its indemnitees[7] may also explain Defendants' failure throughout the long history of this action to raise the comparative fault of the other as a defense or to take other action to protect their interests

---

[7] In their memorandum opposing Defendants' Rule 59 motion, Plaintiffs cite statements to this effect by Rockwell in a Form 10-Q filing with the United States Securities and Exchange Commission. *See* Pls.' Mem. of Law in Opp'n to Defs.' Mot. for New Trial or Remittitur (Doc. 2239) at 6-7 & n.4. Defendants do not dispute these statements in their reply brief.

as against the other, even when invited to do so by this Court. Thus, while I find no inconsistency in the jury's allocation of fault between the Defendants as required by the jury instructions and Colorado law, I also am dubious that any error on this point would substantially and adversely affect either Defendant's rights as a result of their joint indemnification by the DOE and their or the DOE's apparent decision not to protect the interests of each Defendant against the other in this action.

Defendants also claim that inconsistencies in the jury's determination of exemplary damages require a new trial. Specifically, they contend the jury's award of these damages is irreconcilably inconsistent with its determination of compensatory damages, because the total amount of exemplary damages awarded exceeds the amount of compensatory damages found by the jury. This result is internally inconsistent, Defendants argue, because it violates the jury instructions and Colorado's statutory cap on exemplary damages awards.

Defendants' complaint does not state an inconsistency in the jury's verdicts, but rather a claimed "violation" in the jury's determination of exemplary damages. Even if Defendants were correct that the jury "violated" the jury instructions or the statutory cap on exemplary damages as claimed, this would not be cause for a new trial. Resolution of this issue would require no more than a judicial adjustment of the exemplary damages award in entering judgment in accordance with Colorado law. *See Lira*, 832 P.2d at 246 (applying Colorado exemplary damages statute to limit amount of jury's exemplary damage award to amount of compensatory damages due after pro rata apportionment); *see also id.* (remanding for entry of judgment consistent with opinion, rather than for new trial,

after determining that jury's award of exemplary damages exceeded statutorily permitted amount).

In fact, Defendants are incorrect that the jury's exemplary damages award violated Instruction No. 3.27, and its direction that any exemplary damages "you award may not be more than the amount you awarded as actual damages against the Defendant or Defendants." From the jury's perspective, its verdict assessed compensatory damages of $353.7 million, the sum of the $176.8 million in actual damages it found on the trespass claim and on the nuisance claim, with the result that the sum of exemplary damages awarded against Dow and Rockwell, $200.2 million, did not exceed the amount of compensatory damages stated in the verdict. It is only upon application of the prohibition on multiple recovery to the jury's compensatory damages determinations, a task reserved for the court under Instruction No. 3.26, that the total amount of compensatory damages due from Defendants, $176.8 million, becomes less than the aggregate exemplary damages determined by the jury.

Further, for the reasons stated in Section III below, I find the jury's exemplary damages awards against each Defendant do not exceed Colorado's statutory cap on exemplary damages. *See infra* Section III.B.1.

B. Request for New Trial or Remittitur Based on Excessive Compensatory and Exemplary Damages

Defendants assert a new trial or remittitur is also required because the jury's compensatory and exemplary damages determinations are excessive on one or more grounds. I review each of Defendants' contentions in turn.

1. Compensatory damages award

I begin with Defendants' contention that the jury's compensatory damages determinations must be set aside because they are clearly unsupported by the evidence. As support for this contention, Defendants incorporate the legal and evidentiary arguments asserted in support of their Renewed Motion for Judgment as a Matter of Law (Doc. 2220).

Under both Colorado and federal law, a jury's determination of damages is inviolate unless the damages award is so excessive or inadequate "as to shock the judicial conscience." *Higgs v. Dist. Court*, 713 P.2d 840, 860-61 (Colo. 1985) *Dodoo v. Seagate Tech., Inc.*, 235 F.3d 522, 531 (10th Cir. 2000); *Palmer v. City of Monticello*, 31 F.3d 1499, 1508 (10th Cir. 1994). If the trial court determines the damages award is excessive under this test, then it may reduce or remit the jury's damages verdict by the amount of the damages found to be excessive, or, alternatively, set aside the verdict and order a new trial on damages alone if the plaintiff refuses to accept the remittitur. *Higgs*, 713 P.2d at 861; *Malandris v. Merrill Lynch, Pierce, Fenner & Smith, Inc.*, 703 F.2d 1152, 1168 (10th Cir. 1981); *see Mason v. Texaco, Inc.*, 948 F.2d 1546, 1560 (10th Cir. 1991). If, however, the court finds further that the damages awarded are so excessive as to raise "an irresistible inference" that "passion, prejudice, corruption or other improper cause invaded the trial," then the court must order a new trial on all issues because it is impossible to determine the degree to which these factors affected the jury generally and therefore influenced the determination of liability. *Higgs*, 713 P.2d at 861; *Malandris*, 703 F.2d at 1168; *see Mason*, 948 F.2d at 1560.

I find the jury's compensatory damages verdicts are not excessive. The question of what damages, if any, were caused by Defendants' wrongful conduct was vigorously litigated at trial. Plaintiffs presented ample evidence, including both expert and lay witness testimony, that, if credited, established the fact and amount of compensatory damages caused by this conduct. Defendants countered with their own array of expert and lay witness testimony that, if credited by the jury, would have caused it to find that no actual damages had resulted from any trespass or nuisance committed by Defendants. The jury's compensatory damages determination, therefore, turned on its assessment of conflicting evidence and the credibility of the parties' numerous experts and other witnesses. After several weeks of deliberations, the jury returned a verdict assessing $176.8 million in compensatory damages on each claim, some $70 million less than the $248 million in compensatory damages Plaintiffs had requested the jury find on each claim based on the evidence before it. *See* 1/18/06 Tr. at 10,350 (trespass), 10,352 (nuisance). Having considered the evidence presented and the jury's verdicts, I find the jury's determination of compensatory damages is neither against the weight of the evidence nor otherwise a shock to this judicial conscience. As a result, I find neither a new trial nor remittitur is warranted on the ground the compensatory damages verdicts are excessive under the evidence presented.

Defendants next contend the jury's determinations of compensatory damages must be set aside and a new trial ordered because these determinations improperly include damages to properties that were not owned by Class members on January 30, 1990, the date this action was filed. This contention invokes my Order of May 17,

2005 (Doc. 1338) [hereinafter "May 2005 Order"], which was one of a series of pretrial orders delineating the issues to be tried and decided in the class trial.

In the May 2005 Order, I addressed a number of issues, including whether and how compensatory damages would be addressed in the class trial. *See* May 2005 Order at 14-20. Based on the parties' extensive submissions on the subject, I ruled that while liability for the entire Class would be determined in the class trial, the only compensatory damages to be tried would be damages caused by the prospect of any proven trespass or nuisance continuing indefinitely, as set forth in Restatement § 930(3)(b).[8] *Id.* at 15. As relevant here, this Restatement section provides that the measure of damages for such "future" or "prospective invasions" is "the decrease in the value of the land caused by the prospect of the continuance of the invasion measured at the time when the injurious situation became complete and comparatively enduring." *Id.*

Restatement § 930 further provides that a property owner injured by a continuing tortious invasion, such as the trespass and nuisance found here by the jury, may elect to recover this type of damage for continuing tortious invasions if "it appears that the invasions will continue indefinitely." Restatement § 930(1) (cited in May 2005 Order at 15). In this case, Plaintiffs elected to seek damages for the decrease in property values caused by Defendants' continuing tortious invasions on January 30, 1990, when they filed suit seeking to recover these damages on behalf of a Class defined as persons owning

---

[8] Consideration of whether and how Class members might seek to recover damages for past or present invasions pursuant to Restatement §§ 930(3)(a) and/or 929 was deferred until sometime after the class trial. May 2005 Order at 15.

property in the Class Area as of June 7, 1989. *See* May 2005 Order at 15-16; Order re: Instruction No. 3.28 (Doc. 2064) at 1-8 (regarding application of Restatement § 30(1) and § 930(3)(b) to this action). Whether this election is valid depends (in part) on Plaintiffs' subsequent demonstration of if and when it appeared that Defendants' wrongful invasions "will continue indefinitely." *See* Restatement § 930(1).

An additional consideration here is that some number of Class members, reportedly representing approximately 10% of the Class Properties, sold the property they owned in the Class Area between the June 7, 1989 date used to define the Class and January 30, 1990, when Plaintiffs filed this suit and elected to recover prospective damages on the Class's behalf. As a result, these Class members could not participate in the election to recover prospective damages that occurred upon the filing of this action.

Based on this consideration and others stated in the May 2005 Order, I declared in that Order that the Class would be divided into two subclasses for purposes of determining the "prospective damages" that could be recovered for any continuing trespass or nuisance found by the jury at the class trial. The first subclass, which I will refer to as the "Prospective Damages Subclass" or just the "Damages Subclass," consists of all Class members who owned property in the Class Area on January 30, 1990 or the date on which the jury, pursuant to Restatement § 30(1), found that Defendants' continuing tortious invasions would continue indefinitely, whichever was later. May 2005 Order at 15. This subclass, I found, was authorized to recover damages for these prospective or future tortious invasions, that is, the decrease in the value of their Class Properties, as provided in Restatement

§ 930(3)(b). *Id.* at 15-16. I further found that "[t]he compensatory damages, if any, to be awarded to this subclass, will be determined *based on the jury's findings* in the class trial."[9] *Id.* at 16 (emphasis added). I stated that the availability and means of determining any compensatory damages due to the second subclass, consisting of all other Class members, would be decided at some point after the class trial. *Id.*

Defendants now argue that the jury's assessment of compensatory damages at the class trial was improper and must be set aside because the jury was instructed to determine the decrease in value of the Class Properties as a whole, without distinguishing between properties corresponding to the two subclasses set out in the May 2005 Order.

I find no merit to Defendants' argument for two reasons. First, assuming that the jury should not have been instructed to determine the aggregate decrease in value for all Class Properties, Defendants failed to object to this instruction and, in fact, actively sought for the jury to be instructed in just this manner at the close of trial. The relevant background here is that after considering the parties' briefing and proposed instructions on the jury's determination of damages at the class trial, I prepared instructions directing the jury to determine the aggregate decrease in the value of properties within the Class Area and percentage decrease in property values, if any, caused by any continuing trespass and/or nuisance

---

[9] In the May 2005 Order, I also set out the findings to be made by the jury, *see id.* at 16-17, but later determined that these findings were unnecessarily complicated and that the process and findings set out in Instruction No. 3.22 were sufficient and consistent with the May 2005 Order. *See* Mem. Op. re: Jury Instructions (Doc. 2205) at 61-62.

by one or both Defendants. *See* Final Jury Instructions, Nos. 3.20-3.23. As is my practice, I provided these and other substantive instructions to the parties and the jury before opening arguments began, with notice that the instructions would be revised if necessary as the trial progressed. *See generally* Mem. Op. re: Jury Instructions (Doc. 2205) at 3 & n.4 (describing jury instruction process). Neither party objected at this time to the instructions directing the jury to assess any decrease in property values for all properties in the Class Area.

Near the end of trial, I directed the parties to submit any proposed revisions to the jury instructions of record and a proposed jury verdict form. Defendants submitted extensive proposed revisions and objections to these instructions, including those regarding determination of compensatory damages. Defendants did not, however, object to the compensatory damages instructions on the ground that they improperly failed to limit the jury's damages determination to the decrease in value of Class Properties owned by members of the Damages Subclass. To the contrary, Defendants requested that the key damages instruction, No. 3.22 ("Measure of Actual Damages") be revised to emphasize and reemphasize that the jury was to decide any decrease in value for "all of" the properties in the Class Area. *See* Defs.' Proposed Changes to Prelim. Jury Instructions (Doc. 1958), Ex. A at 89-92 (requesting that "all" be inserted before every reference to properties in the Class Area).[10] Defendants also submitted proposed jury verdict forms that required the jury to determine compensatory damages for all Class Properties, using the same language as in their

---

[10] I did not adopt these proposed revisions because the damages and other instructions already adequately communicated this concept. *See* Mem. Op. re: Jury Instructions at 75.

proposed revisions to Instruction No. 3.22. *See* Defs.' Proposed Jury Verdict Forms (Doc. 1963), Exs. A & B at 3-4, 5-6 (asking whether Plaintiffs proved Defendants' trespass or nuisance "caused the actual value of all of the Class Properties to be less than what the value of these properties would have been" but for the trespass or nuisance).[11] Nor did Defendants object to the final jury instructions and verdict form on the ground that they failed to limit the jury's compensatory damages determination to the Damages Subclass. In short, Defendants did nothing from the initial presentation of the jury instructions at the start of trial through the end of trial to call this alleged error to my attention, and, in fact, invited this approach by pressing for damages to be determined for "all of" the properties in the Class Area.[12]

---

[11] Defendants argue they cannot be held accountable for the compensatory damages portion of this proposed Jury Verdict Form because I had directed the parties to prepare their proposed forms "consistent with the current jury instructions." *See* Order on Jury Instruction Submissions (Doc. 1929) at 2. Defendants are correct that the then current jury instructions directed the jury to determine the decrease in property values for the Class as a whole. Defendants' concurrence with this approach, however, is demonstrated by their separate proposed revisions to these instructions, which sought to emphasize this approach, not revise it. *See* Defs.' Proposed Changes to Prelim. Jury Instructions (Doc. 1958), Ex. A at 89-92. The order cited by Defendants also placed no restrictions on the parties' proposed revisions to the jury instructions, and Defendants in fact proposed any number of instruction revisions that were not consistent with the instructions then of record.

[12] Defendants cite their objection throughout the pretrial period to compensatory damages being determined on anything other than an individual basis as preserving their right to object to the jury's determination of damages for the Class as a whole as opposed to just the Damages Subclass. This general objection, however, is patently insufficient for this purpose. *See Bitler v. A.O. Smith Corp.*, 391 F.3d 1114, 1127-28 (10th Cir. 2004) (party must raise an objection

The second difficulty with Defendants' argument here is that the jury instructions, the verdict form and the jury's verdict on compensatory damages, are not, in fact, at odds with the plan for deciding compensatory damages set forth in the May 2005 Order. In this Order I held that: (1) damages for prospective invasions, *i.e.*, any decrease in property value caused by Defendants' continuing tortious invasions, would be decided at the class trial; (2) per Restatement § 930(1), only Class members who owned property within the Class Area on the later of January 30, 1990, when this action was filed, or the date on which the jury found it appeared the tortious invasions would continue indefinitely, were entitled to recover damages for prospective invasions; and (3) any damages for prospective invasions to be awarded to this subclass

---

"distinctly" and "make abundantly clear the grounds and basis for its objection"); *Unit Drilling Co. v. Enron Oil & Gas Co.*, 108 F.3d 1186, 1190 (10th Cir. 1997) (party "waived its right to claim error in the instructions by failing to object specifically at trial to the defect in the jury instructions of which it now complains"); Fed. R. Civ. P. 51. For the same reasons, Defendants' criticism of Plaintiffs' proposed compensatory damages plan in July, 2004, on the ground that some portion of the Class would not be entitled to recover damages for prospective invasions under the plan, is also insufficient. This criticism was made in a lengthy memorandum filed more than a year before trial commenced, before any jury instructions on damages had even been proposed, and in the context of opposing any kind of class trial on compensatory damages. *See* Defs.' Resp. to Pls.' Proposed Plan for Determination of Compensatory Damages (Doc. 1247) at 11-14; *see also Abuan v. Level 3 Commc'ns, Inc.*, 353 F.3d 1158, 1172-73 (10th Cir. 2003) (arguments made in connection with summary judgment motion did not constitute specific objection to subsequent jury instructions). Even if this were not the case, Defendants' subsequent actions during the class trial seeking to have compensatory damages determined for "all of" the Class Properties waived the right to complain that the jury instructions were erroneous for doing so and that the verdict must be set aside as a result.

would "be determined based on the jury's findings in the class trial." May 2005 Order at 15-16. Pursuant to the jury instructions and verdict form, the jury at the class trial made all of the findings necessary to award damages to the Damages Subclass under this plan.

First, the jury was directed to decide whether it appeared on or before January 30, 1990, or on some other date, that the trespass or nuisance by Dow or Rockwell would continue indefinitely. *See* Final Jury Instructions, No. 3.28. The jury found that this condition existed on or before January 30, 1990. *See* Jury Verdict Form at 28-29. Pursuant to Restatement § 930(1) and the May 2005 Order, this determination establishes that the right to recover prospective damages existed on January 30, 1990, when the election to seek these damages was made by the filing of this action, and thereby defines the "Prospective Damages Subclass" entitled to recover these damages as the Class members who owned properties in the Class Area on this date. From this jury finding, identification of the members of this subclass and their corresponding properties within the Class Area is a ministerial task to be accomplished as part of the damages allocation plan based on county real estate records. *See infra* Section III.B.

Second, the jury was asked to and did determine any decrease in the value of all properties in the Class Area caused by any continuing trespass or nuisance by Defendants, and, as directed, expressed their findings by property category (residential properties, commercial properties and vacant land) and in the aggregate and by percentage. See Final Jury Instructions, No. 3.23; Jury Verdict Form at 15, 24. As described in Section III below, these factual findings are sufficient to allocate the aggregate damages found by the jury to individual Class Prop-

erties based on county property records. This allocation can be applied to properties owned by members of the Prospective Damages Subclass as well as those owned by the second subclass. The compensatory damages to be awarded and distributed to the Prospective Damages Subclass, therefore, can be readily determined from the jury's verdict, just as contemplated by the May 2005 Order, and no additional factual findings by the jury are required.[13] As a result, even if Defendants had preserved a right to object to the jury's verdict because it determined prospective damages for all Class Properties, no grounds would exist for setting aside the jury's compensatory damages verdict and ordering a new trial on this basis.

Defendants next contend that a new trial is required because the jury was not instructed to determine the exact date on which the injurious situation caused by Defendants became complete and comparatively enduring or that it must limit its damages assessment to properties owned by Class members on this date. This contention suffers from a number of flaws, beginning with its misreading of the Restatement. Restatement § 930(3)(b) does not, as Defendants assert, require that damages for prospective invasions be "awarded" as of a specific date. *See* Defs.' Mem. in Supp. of Mot. for New Trial (Doc. 2225) at 20; Defs.' Reply in Supp. of Mot. for New Trial (Doc. 2249) at 5. Rather, it states clearly that when an injured party is empowered to and does elect to recover damages for continuation of an invasion into the future, such as occurred here, these damages are to be "measured" at the "time" when the injurious situation became

---

[13] The question of what disposition should be made of the damages caused by Defendants' continuing trespass and nuisance to properties in the Class Area that were owned by Class members not in the Damages Subclass is addressed in Section III below.

complete and comparatively enduring. Restatement § 930(3)(b). This is precisely what the jury was instructed to do, *see* Final Jury Instructions, No. 3.22, and what it did do, *see* Jury Verdict Form at 15, 24.

Nor can Defendants be heard to complain at this late date about this supposed error in the jury instructions and verdict form. Although the Defendants made many challenges to the instructions and verdict form presented to the jury, nowhere did they assert that the jury's deliberations and verdict on compensatory damages must be limited to Class members who owned their Class Property on a specific date the jury determined the injurious situation caused by Defendants became complete and comparatively enduring. To the contrary, as described earlier, Defendants affirmatively pressed near the close of trial for instructions directing the jury to determine compensatory damages for "all of the Class Properties" and to measure any "diminution in all Class property values" as of the time the injurious situation caused by Defendants became complete and comparatively enduring. *See* Defs.' Proposed Changes to Prelim. Jury Instructions (Doc. 1958), Ex. A at 89-92. In this same submission, they also did not request that the jury be directed to decide a specific date on which this condition came into existence, and made no argument that this finding was required for any reason. *See id.*, Ex. A at 91, 93 (requesting only that jury be instructed to determine whether injurious situation became complete and comparatively enduring at all, before being asked to decide whether it became so during the time period alleged by Plaintiffs).

Defendants did include a question on this point in their January 11, 2006 proposed jury verdict form, but they offered no objection or rationale for requesting that the "CCE date" be specifically determined, and instead rep-

resented (consistent with my order) that their proposed verdict form was prepared in view of the current jury instructions. Defs.' Proposed Jury Verdict Forms (Doc. 1963) at 1 n.1. Those instructions (as well as Defendants' proposed revisions to them) did not require such a finding. Nor did Defendants assert in connection with this proposed interrogatory, or otherwise, that the jury was required to limit its damages assessment to Class members who owned Class Properties on this date. As a result, Defendants did not make the specific objection to the jury instructions and verdict form necessary to assert the error now claimed. *See Bitler*, 391 F.3d at 1127-28 (objecting party must make position "abundantly clear" and state grounds in terms that are "obvious, plain or unmistakable") (citations and internal quotations omitted).

I find no greater merit in Defendants' contention that the jury's verdict on compensatory damages must be set aside "to account for Class Members who decline to accept an easement on their properties." Defs.' Mem. in Supp. of Mot. for New Trial (Doc. 2225) at 22. This contention is raised for the first time in Defendants' post-trial motions and is thus subject to waiver for the same reasons stated above.

This untimely objection also elevates a comment to Restatement § 930(3)(b) and dicta in a prior decision in this case to a rule of law that, Defendants insist, requires that a formal easement be granted and recorded for each Class property that authorizes Defendants' continuing trespass and nuisance on it. Based on this premise, Defendants further assert the verdict must be set aside because some Class members may refuse to grant or accept the necessary easement. Defendants, who provide no other authority for the alleged easement requirement, read too much into both of the cited statements.

The referenced Restatement comment discusses an injured party's right to elect to be compensated "once and for all" for an indefinitely continuing invasion. Restatement § 930 cmt. b. It concludes that "[t]he exercise of the power of election, followed by satisfaction of a judgment for damages for prospective invasions, confers an easement or privilege to continue the invasions thus paid for in advance." *Id.* In *Cook X*, I referred to this concept in even more summary fashion, noting that if the Class prevailed in its election to recover for prospective damages, satisfaction of its judgment would confer "an easement" for the tortious invasions to continue without payment of additional compensation. *See Cook v. Rockwell Int'l Corp. ("Cook X")*, 358 F. Supp. 2d 1003, 1013-14 (D. Colo. 2004). Other courts have used the terms "license," "grant," "consent" or waiver to refer to this concept. *See Severt v. Beckley Coals, Inc.*, 170 S.E.2d 577, 582-83 (W. Va. 1969) (license or grant); *Slater v. Shell Oil Co.*, 137 P.2d 713, 715-16 (Cal. Ct. App. 1943) (consent and waiver); *Strange v. Cleveland, C., C. & St. L. Ry. Co.*, 91 N.E. 1036, 1038 (Ill. 1910) (consent). No doubt other courts and commentators have described this concept in other terms and by reference to other legal theories as well.

No matter the term or language used, the common principle behind all of these expressions is that damages for continuation of a tortious invasion into the future can only be demanded and received once, and that satisfaction of a judgment for such damages precludes successors to the affected properties from recovering these same damages. *Cf. Severt*, 170 S.E.2d at 583 (once future damages are recovered "there can be no second recovery for [the nuisance's] continuance;" internal quotation omitted). Thus, the governing rule here is the familiar doctrine of res judicata or claim preclusion. Application

of that doctrine to the judgment in this action does not require or rely on some formal or theoretical process based on the grant or acceptance of an easement or like interest by members of the Class.

Defendants' concern that successive owners of the Class Properties, as nonparties to this action, will not be bound by this judgment is belied by the general rule that a successor to an interest in property that is the subject of a pending or completed action at the time of transfer is bound by the judgment to the same degree as the parties. *See* Restatement (Second) of Judgments §§ 43-44 (1982 & Supp. 2007). As a practical matter, I also think it is highly unlikely that any persons who have acquired or may acquire property in the Class Area since the commencement of this action will be inspired by the example of this long and hard-fought suit to bring their own claims for continuation of the invasion against Defendants. Were any to do so, Defendants are fully capable of defending their interests in such a suit by, among other things, asserting the satisfaction of judgment in this case as a defense. The conveyance of an easement is not required for this purpose, and none is required by the cited Restatement comment or any prior decision in this case.

Defendants also argue the jury's verdict on compensatory damages must be set aside because its determination of aggregate Class damages improperly includes Class members who suffered no damages or less than average damages. This is a reprise of arguments previously made by Defendants in support of their long-standing objections to a class trial of any kind on compensatory damages. I have considered and rejected these arguments on numerous occasions before, during and after trial, *see, e.g.*, May 2005 Order at 19-20; Mem. Op. re:

Jury Instructions (Doc. 2205) at 62-65, and Defendants provide no grounds for me to reconsider these decisions.

Finally, Defendants assert the jury's compensatory damages verdict must be set aside or reduced, because the jury improperly included damages incurred by Class members who previously released their claims against Defendants. The only Class members cited by Defendants in this regard are Charles and Perry McKay, who in the mid-1980's executed a release of certain claims against Defendants in settlement of *McKay v. United States* and related litigation, 540 F. Supp. 519 (D. Colo. 1982) (collectively "the *Church* litigation").

Although Defendants have been aware for many years that the McKays were members of the Class in this action, they do not point to any instance in the pretrial planning process or during trial in which they asserted a defense based on the release of claims by the McKays or any other Class member or otherwise raised the issue of such releases in connection with the damages sought by Plaintiffs. Nor do Defendants identify any instance in which they requested a jury instruction or verdict form question on this subject or objected to the Court's jury instructions or verdict form on this basis. In fact, this contention should have been raised before trial, *see, e.g.*, Mem. and Order of Feb. 12, 2001 (Doc. 1176) at 10 (requiring Defendants to state each defense to Plaintiffs' claims they intended to try); Order of Sept. 11, 2003 (Doc. 1212) at 2 (requiring parties to specify all claims and defenses to be tried); or (assuming the issue was preserved for trial) through the presentation of evidence regarding the McKays' release and property holdings in the Class Area and argument that compensatory damages should

be reduced as a result.[14] Defendants did none of these things and may not now assert that their failure to present this issue requires a new trial or a reduction in the jury's compensatory damages verdicts.

2. Exemplary damages awards

Defendants argue that the jury's determination of exemplary damages is excessive and must be set aside because it is not supported by the evidence, is unconstitutional, is not permitted by the Price-Anderson Act and/or is improper as a result of Defendants' alleged compliance with standards. If these arguments are not successful, Defendants request that I exercise my discretion under Colorado law to disallow or reduce the jury's exemplary damages verdict because the exemplary damages will not have a deterrent effect on Defendants or others. After careful consideration of these arguments, I find they present no basis for vacating or reducing the jury's verdict.

Sufficiency of the evidence

Defendants' challenge in this motion to the sufficiency of the evidence to support the jury's exemplary damages award constitutes another after-the-fact challenge to the court's instructions to the jury on this subject. In connection with Plaintiffs' claim for exemplary damages, I instructed the jury, as pertinent here, that it could only award exemplary damages against Dow or Rockwell if it found beyond a reasonable doubt that the company's conduct in committing the trespass and/or nuisance was "willful and wanton." Final Jury Instructions, No. 3.27; Jury Verdict Form at 26-27. "Willful and wanton" conduct was defined as "an act or omission purposefully com-

---

[14] Defendants included Charles McKay in their witness lists during trial, but did not call him. Defendants do not deny that he was available, and within the range of a subpoena, to testify.

mitted by the Defendant in question, who must have realized that the conduct was dangerous, and which conduct was done heedlessly and recklessly, either without regard to the consequences, or without regard to the rights and safety of others, particularly the Plaintiff Class." This language is drawn almost verbatim from the standard Colorado Jury Instruction on this subject, *see* Colo. Jury Instructions (Fourth) Civ. § 9:30; *see also id.*, § 5:3, Notes on Use (directing that Instruction 9:30 be used to define "willful and wanton" in instruction on exemplary damages), which itself closely tracks the definition for this term provided in Colorado's exemplary damages statute. *See* Colo. Rev. Stat. § 13-21-102(1)(b) (defining "willful and wanton conduct"). There was ample evidence supporting the jury's award of exemplary damages against both Dow and Rockwell under this standard.

Defendants now contend, however, that Colorado law required Plaintiffs to prove something more before exemplary damages could be awarded against them: that each Defendant had an "evil intent" or "wrongful motive" or acted with the purpose of injuring the Plaintiffs. Because Plaintiffs failed to prove this element beyond a reasonable doubt, Defendants assert, the jury's award of exemplary damages is contrary to law and must be set aside.

Defendants cite to no instance in which they proposed that the jury be instructed that "evil intent," "wrongful motive" or their equivalent was part of Plaintiffs' burden of proof, or objected that the Court's instructions to the jury did not include this requirement. In fact, Defendants' own proposed instruction defining "willful and wanton conduct" is functionally the same as the instruction ultimately given. *Compare* Defs.' Submission of Phase III Jury Instructions (Doc. 1271) at 66 (Proposed

Damages Instruction No. 3.15) *with* Final Jury Instructions, No. 3.27. Defendants' challenge to the instruction on Plaintiffs' burden of proof is, therefore, untimely at minimum. *See* Fed. R. Civ. P. 51(c), (d).

If Defendants had made a timely objection on this basis, it would have been overruled. In Colorado, exemplary damages are only available pursuant to Colo. Rev. Stat. § 13-21-102. *See Tri-Aspen Constr. Co. v. Johnson*, 714 P.2d 484, 485 (Colo. 1986). The primary authority Defendants cite in support of this statute requiring proof of "evil intent" or "wrongful motive," the just referenced *Tri-Aspen* decision, considered an earlier version of this statute, one that did not include the term "willful and wanton conduct" or the statutory definition of this term employed in the jury instructions in this case. Instead, Colorado's exemplary damages statute at the time of the *Tri-Aspen* decision authorized an award of exemplary damages when the injury complained of was attended by "circumstances of fraud, malice or insult, or a wanton and reckless disregard of the injured party's rights and feelings." *See id.* at 486 (quoting applicable statute). The Colorado Legislature amended Colo. Rev. Stat. § 13-21-102 shortly after this decision to delete "or insult, or a wanton and reckless disregard of the injured party's rights and feelings" from the statute and replace it with the current "or willful and wanton conduct." 1986 Colo. Sess. Laws 675 (H.B. 1197), § 1. It also added a new provision defining "willful and wanton conduct" at this time. *Id.* It is this statutory provision, and not the *Tri-Aspen* court's discussion of the prior statute and case law interpreting it, that governed the jury's determination of exemplary damages in this action.

Even if this were not the case, the *Tri-Aspen* decision still fails to support Defendants' argument. The Colo-

rado Supreme Court declared in *Tri-Aspen* that an award of exemplary damages under the prior statute was justified if the plaintiff proved beyond a reasonable doubt that the defendant acted with evil intent and with the purpose of injuring the plaintiff *or* with a wanton and reckless disregard of the plaintiff's rights. *See* 714 P.2d at 486; *see also id.* at 488 (claim for exemplary damages requires proof that the defendant "acted with an evil intent or wrongful motive *or* created and then purposefully disregarded a substantial risk of harm") (emphasis added, internal citation omitted). The court also specifically disapproved language from a prior Colorado decision, relied upon by Defendants, that incorporated the concept of "wrongful motive" into the definition of "wanton and reckless disregard." *Id.* at 486 n.3 (rejecting this "more demanding requirement").[15] As a result, even if *Tri-Aspen* and related authority regarding the meaning of "wanton and reckless disregard" is relevant to the current Colorado exemplary damages statute and its definition of "willful and wanton conduct," it does not support Defendants' contention that "evil motive" or "wrongful purpose" must be proved to establish this conduct and to recover exemplary damages.

Constitutionality

Defendants' assertion that the jury's exemplary damages verdicts are unconstitutional fares no better. A punitive damages award is unconstitutional if it is "grossly

---

[15] Instead, the Colorado court declared that the most accurate definition of "wanton and reckless disregard" for purposes of the exemplary damages statute then in effect was "conduct that creates a substantial risk of harm to another and is purposefully performed with an awareness of the risk in disregard of the consequences." *Id.* at 486 (quoting *Palmer v. A.H. Robins Co.*, 684 P.2d 187, 215 (Colo. 1984)).

excessive" in relation to a State's legitimate interests in punishing unlawful conduct and deterring its repetition. *BMW of N. Am. v. Gore*, 517 U.S. 559, 568 (1996). To determine whether this is the case, the court must determine if the defendant received "fair notice not only of the conduct that will subject him to punishment, but also of the severity of the penalty that a State may impose." *Id.* at 574; *United Int'l Holdings, Inc. v. Wharf (Holdings) Ltd.*, 210 F.3d 1207, 1232 (10th Cir. 2000). Three factors guide analysis of whether adequate notice was provided: (1) the degree of reprehensibility of the defendant's conduct; (2) the ratio of the punitive damages award to the actual or potential harm inflicted on the plaintiff; and (3) a comparison of the punitive damages award with the civil or criminal penalties that could be imposed for comparable misconduct. *Wharf*, 210 F.3d at 1232; *see BMW*, 517 U.S. at 574-75. The absence of one of these guideposts, however, is not determinative of whether the defendant received adequate notice of the magnitude of the punitive damages award that could be imposed for its misconduct. *Wharf*, 210 F.3d at 1233.

As to the first guidepost, the Supreme Court has noted a number of factors that bear on the reprehensibility of the defendant's conduct and whether the nature of that conduct provided the defendant with adequate notice of the punitive damages that could be awarded against it. These factors include: whether any physical harm resulted from the conduct, *BMW*, 517 U.S. at 576; if the harm was only economic, whether it was done intentionally through affirmative acts of misconduct or was suffered by a financially vulnerable target, *id.*; whether the defendant acted intentionally or with reckless disregard for the health and safety of others, *id*; whether the defendant's misconduct was repeated, *id.* at 577; whether

the harm suffered resulted from some form of malice, trickery or deceit as opposed to mere accident, *State Farm Mut. Auto. Ins. Co. v. Campbell*, 538 U.S. 408, 419 (2003); and whether the conduct risked harm to many as opposed to a few, *Philip Morris USA v. Williams*, 127 S. Ct. 1057, 1065 (2007).

Viewed in the light most favorable to Plaintiffs and the jury's verdict, the evidence in this case shows the presence of a number of the factors the Supreme Court has identified as indicating reprehensible conduct that would provide a defendant with notice of the magnitude of punitive damages that could be awarded against it. The harm involved was not purely economic, but rather physical contamination of Class members' properties and substantial interference with Class members' right to use and enjoy their properties. There was ample evidence that the conduct by each Defendant that caused this harm was intentional and/or undertaken with conscious disregard of the Class members' health and safety. Defendants' misconduct affected approximately 15,000 individual properties and hence thousands of landowners, who suffered a decrease in the value of properties that oftentimes represented their single largest economic asset. Defendants' misconduct was not the result of a single incident, but rather a series of incidents and also routine practices over decades of operating Rocky Flats, some of which were attended by circumstances of dishonesty, subterfuge and deceit. All of these factors indicate Defendants' conduct was reprehensible to a degree that should have put Defendants on notice of the magnitude of punitive damages that could be awarded against them.

As for the ratio of punitive damages to the actual or potential harm, that ratio is capped by statute at one-to-one for each defendant, far below the ratios that have

raised constitutional concerns. *See, e.g.*, *BMW*, 517 U.S. at 582 (500 to 1 ratio); *State Farm*, 538 U.S. at 424-25 (finding 145 to 1 ratio of constitutional concern and stating "single-digit multipliers are more likely to comport with due process").

As for the final guidepost noted by the Supreme Court, it is difficult to predict what amount of civil and criminal penalties could be assessed against each Defendant for comparable misconduct. While the federal environmental laws can impose very substantial fines against corporations that knowingly or improperly release or dispose of hazardous substances, *see, e.g.*, 33 U.S.C. § 1319(c), (d) (authorizing criminal fines of up to $50,000/day for knowing violations and civil penalties of up to $25,000/day for violations of the Clean Water Act); 42 U.S.C. § 6928(d), (g) (authorizing criminal penalties of up to $50,000/day for knowing violations and civil penalties of up to $25,000/day for violations of RCRA's hazardous waste management requirements), the many instances of misconduct considered by the jury cannot be easily compared to the various environmental statutes that might apply. The difficulty in making this comparison, however, or even the possible existence of a disparity between the potentially available fines and the amount of exemplary damages awarded here, does not compel the conclusion that the jury's exemplary damages awards are unconstitutional. As the Tenth Circuit has noted, the comparison between available civil and criminal penalties and an exemplary damages award "is only one of the indicators of whether a defendant is on notice of the magnitude of the award that may be imposed based on the defendant's misconduct." *Wharf*, 210 F.3d at 1233. The Colorado exemplary damages statute, Colo. Rev. Stat. § 13-21-102, puts a defendant on notice that exemplary

damages may be imposed in an amount up to the actual harm caused. *Wharf*, 210 F.3d at 1233 (discussing § 13-21-102(1)(a)). This notice, combined with the magnitude of actual harm caused by Defendants' misconduct and the reprehensible nature of that conduct, provided the Defendants with fair notice of the severity of the penalty that might be imposed. The jury's exemplary damages awards were not, therefore, unconstitutional under the standard enunciated in *BMW* and *Wharf*.

In their reply in support of their Rule 59 motion, Defendants raise an additional, entirely new challenge to the constitutionality of the exemplary damages award in this action: that Instruction No. 3.27 is unconstitutional under *Philip Morris USA v. Williams*, 127 S. Ct. 1057 (2007) because it defines "willful and wanton conduct" in part as "conduct that was done heedlessly and recklessly, either without regard to the consequences, or without regard to the rights and safety of others, particularly the Plaintiff Class." The reference to "the rights and safety of others," Defendants argue, renders this instruction and the exemplary damages awards based on it unconstitutional because, under *Philip Morris*, a jury may not consider harm to others in deciding whether to impose punitive damages. Defs.' Reply (Doc. 2249) at 25-26.

The reference to "the rights and safety of others" in Instruction No. 3.27 is a quotation from the definition of "willful and wanton conduct" provided in Colorado's exemplary damages statute. Colo. Rev. Stat. § 13-21-102(1)(b) Defendants are thus inviting me to hold this statute unconstitutional, an invitation that I decline.[16] I

---

[16] In addition, a party challenging the constitutionality of a state statute in an action to which the state is a nonparty must file written notice with the court identifying the challenged statute and describing the grounds on which unconstitutionality is asserted. D.C. Colo.

do not read *Philip Morris* as broadly as Defendants, and do not agree that either Instruction No. 3.27 or the evidence and argument at trial created a significant risk that the jury based its exemplary damages determination on a desire to punish Defendants for causing injury to anyone not before the court. *Cf. Philip Morris*, 127 S. Ct. at 1065 (when the evidence or argument presented raises a "significant" risk that the jury will seek to punish the defendant for causing harm to others, the court should, upon request, take action to protect against this risk). The jury's exemplary damages determination was not unconstitutional on this or any other basis.

Discretion to disallow or reduce exemplary damages awards

I also decline Defendants' invitation that I exercise my discretion under Colo. Rev. Stat. § 13-21-102(2) to disallow or reduce the jury's exemplary damages awards. This provision authorizes the court to reduce an exemplary damages award "to the extent that: (a) The deterrent effect of the damages has been accomplished; or (b) The conduct which resulted in the award has ceased; or (c) The purpose of such damages has otherwise been served." *Id.* While Defendants' operation of the Rocky Flats plant has obviously ceased, the effects of their conduct there, the continuing trespass and nuisance found by the jury, has not. I also cannot agree with Defendants that the deterrent effect of the damages has been accomplished or the purposes of the damages has been served. At minimum, the damages award will deter Defendants

---

LCivR 24.1.B. It must also serve a copy of this notice on the state attorney general and file proof of this service. *Id.* The state is then provided an opportunity to intervene and to present evidence and argument regarding the constitutionality of the challenged statute. *See* 28 U.S.C. § 2403(b).

and other corporations that presently or may in the future operate hazardous manufacturing facilities from managing their facilities and the risks they pose in the manner that led to the trespass and nuisance the jury found was committed here.

Compliance with standards

Defendants also contend the jury's exemplary damages awards must be set aside as a result of their compliance with "applicable standards" during their operation of Rocky Flats. I disagree. The only legal authority Defendants cite in support of this contention, *Alley v. Gubser Development Co.*, 785 F.2d 849 (10th Cir. 1986), held only that a manufacturer's mere use of wood products containing formaldehyde, in a manner consistent with prevailing industry practice and without evidence that the manufacturer knew or should have known of the potential harm that could result, was not enough to sustain an exemplary damages award in an action arising from exposure to formaldehyde gas released from these products. *Id.* at 856. This holding does not establish a legal rule that exemplary damages are barred whenever a defendant shows it has complied with industry practice or "applicable standards."

In addition, even if such a rule existed, the jury heard extensive evidence from which it could have found Defendants' conduct violated any reasonable standard of industrial care. Further, Defendants do not specify the "standards" with which they allegedly complied, and the jury was not asked to and did not make any findings that the Defendants complied with standards. In fact, the jury heard evidence from which it could have concluded Defendants did not comply with some potentially applicable standards and/or that the environmental monitoring that Defendants conducted was not designed or im-

plemented in a manner that would allow Defendants' compliance with environmental standards to be determined. In short, there is no basis for setting aside the jury's exemplary damages awards on the basis of Defendants' alleged compliance with standards.

Price-Anderson Act

Defendants' final challenge to the exemplary damages awards, that they are barred by the 1988 Amendments to the Price-Anderson Act, has been considered and rejected on multiple occasions in this action and need not be addressed again. *See, e.g.*, *Cook v. Rockwell Int'l Corp. ("Cook IX")*, 273 F. Supp. 2d 1175, 1211-12 (D. Colo. 2003); *Cook v. Rockwell Int'l Corp. ("Cook I")*, 755 F. Supp. 1468, 1479-81 (D. Colo. 1991).

C. Remittitur of Damages

As an alternative to their motion for new trial, Defendants request remittitur of the jury's compensatory and exemplary damages awards. Remittitur is the process by which a court reduces or proposes to reduce the damages awarded in a jury verdict upon finding that the award is grossly and manifestly excessive or inadequate. *See Garhart ex rel. Tinsman v. Columbia/Healthone, L.L.C.*, 95 P.3d 571, 582 (Colo. 2004) (citing, among other sources, Black's Law Dictionary 1298 (7th ed. 1999)); *Foradori v. Harris*, 523 F.3d 477, 504 (5th Cir. 2008). It is an alternative to ordering a new trial on these grounds, and the successful claimant may decline the offer of remittitur and receive a new trial instead. *See, e.g.*, *Foradori*, at 504; *Lightfoot v. Union Carbide Corp.*, 110 F.3d 898, 914-915 (2d Cir. 1997); *O'Gilvie v. Int'l Playtex, Inc.*, 821 F.2d 1438, 1447-48 (10th Cir. 1987). Thus, a necessary prerequisite to remittitur is a finding that grounds exist to order a new trial if remittitur is not accepted. *Foradori*, at 504.

For the reasons described in the preceding section, I find no grounds that require the jury's damages awards to be set aside and either a new trial or remittitur in lieu of a new trial be ordered. Accordingly, I deny Defendants' alternative motion for remittitur of damages.

This does not mean, however, that the jury's verdict is not subject to judicial adjustment. As described earlier, three legal rules or statutes must be applied to the jury's verdict before judgment may be entered. They are the rule against multiple recovery, Colorado's pro rata liability statute and Colorado's statutory cap on the amount of exemplary damages. Judicial adjustment of the verdict through application of these rules is a matter of law determined by the court in the course of entering judgment. *See Lira*, 832 P.2d at 242 (court applies pro rata liability statute before entering judgment); *id.* at 244 n.4 (describing process as one of "judicial adjustment"). These potential adjustments are discussed in the following section.

III. Post-Trial Motions Regarding Posture for Appeal

The class trial and jury verdict at its close resolved many but not all of the issues presented by this action. For example, the medical monitoring claims of the individual Plaintiffs were bifurcated from the class trial and remain to be decided. *See Cook IX*, 273 F. Supp. 2d at 1179. The allocation and distribution of the jury's property damage verdicts to the Class as appropriate also must be accomplished. All parties agree, nonetheless, that the most efficient manner for this action to proceed, if possible, is to put the claims decided in the property class trial in a posture for appeal before the parties and the court invest additional time and resources in this action. Accordingly, following the close of trial, I invited the parties to state their views on the best method by

which to put the matters decided in the class trial in a posture for appeal.

Defendants responded by requesting that I certify four orders in this action for interlocutory appeal pursuant to 28 U.S.C. § 1292(b). Plaintiffs oppose this approach and propose instead that I direct entry of judgment on the property class claims pursuant to Rule 54(b) of the Federal Rules of Civil Procedure. Plaintiffs also proposed a form of judgment and plan of allocation in connection with their motion. For the reasons set forth below, I deny Defendants' motion for interlocutory appeal and grant in part and deny in part Plaintiffs' Rule 54(b) motion.

A. Defendants' Motion for Interlocutory Appeal

Defendants propose that this matter be presented to the Tenth Circuit through certification of four orders for interlocutory appeal pursuant to 28 U.S.C. § 1292(b): (1) the Memorandum Opinion and Order of July 24, 2003 (Doc. 1210) (published as *Cook IX*); and (2) the Memorandum Opinion and Order of December 17, 2004 (Doc. 1312) (*Cook X*), both of which addressed various longstanding legal disputes between the parties in order to clarify the scope of trial on the property class claims; (3) the Order of May 17, 2005 on Scheduling and Jury Instruction Issues (Doc. 1338), which further addressed the scope of the upcoming property class trial; and (4) the Memorandum Opinion Regarding Jury Instructions of December 7, 2006 (Doc. 2205), which reported the basis of jury instruction decisions issued before, during and at the close of the property class trial.

Section 1292(b) provides that an order that is otherwise not appealable may be appealed if the district judge states in writing that: (1) the order "involves a controlling question of law as to which there is substantial ground

for difference of opinion" and (2) "an immediate appeal from the order may materially advance the ultimate termination of the litigation." 28 U.S.C. § 1292(b). If such certification is made, the Tenth Circuit then has discretion to permit the appeal upon timely application by one of the parties. *See id.*

I find interlocutory appeal of the pretrial orders and decisions identified by Defendants meet neither of the statutory criteria. A number of the issues addressed in the orders and cited by Defendants are not, in my view, issues on which there is a substantial ground for a difference of opinion. More importantly, interlocutory appeal of any or all of these orders at this point in the action is highly unlikely to materially advance the ultimate termination of this litigation.[17] The class trial on Plaintiffs' property claims has already occurred. The four orders address some but by no means all of Defendants' many complaints about the court's legal, evidentiary and other rulings related to this trial, *see, e.g.*, Defs.' Renewed Mot. for J. as a Matter of Law (Doc. 2220); Mot. for New Trial or Remittitur (Doc. 2224), and so it is highly doubtful that affirmation of these orders would do anything more than set the stage for an additional round of appeals by Defendants. Nor is it at all clear that success by Defendants on appeal of these orders might materially advance the termination of this litigation because remand for a new trial, rather than dismissal of the property class claims, would be the likely result. In addition, if Defendants

---

[17] For the same reason, the orders do not involve "controlling questions of law," at this point in the litigation at least. *See* 16 Charles A. Wright et al., Federal Practice & Procedure: Jurisdiction § 3930, at 426 (2d ed. 1996) ("a question is controlling . . . if interlocutory reversal might save time for the district court, and time and expense for the litigants.").

truly believed that interlocutory appeal of these orders might materially advance the ultimate termination of this litigation, they should have sought interlocutory appeal when the decisions were issued, not years later, after trial defined in part by the principles set forth in these pretrial decisions has been concluded and a verdict entered against Defendants.

B. Plaintiffs' Motion for Entry of Judgment

Rule 54(b) permits me to direct entry of final judgment as to fewer than all claims or parties in an action upon an express determination that the judgment on these matters is final and that there is no just reason to delay entry of judgment. *Stockman's Water Co., LLC v. Vaca Partners, L.P.*, 425 F.3d 1263, 1265 (10th Cir. 2005); *see* Fed. R. Civ. P. 54(b). The purpose of this provision is to make an immediate appeal available when the rule's requirements are met. *See Okla. Tpk. Auth. v. Bruner*, 259 F.3d 1236, 1241 (10th Cir. 2001). In making the required determinations, I must weigh "Rule 54(b)'s policy of preventing piecemeal appeals against the inequities that could result from delaying an appeal." *Stockman's*, 425 F.3d at 1265. Factors to consider include "'whether the claims under review [are] separable from the others remaining to be adjudicated and whether the nature of the claims already determined [are] such that no appellate court would have to decide the same issues more than once even if there were subsequent appeals.'" *Id.* (quoting *Curtiss-Wright Corp. v. Gen. Elec. Co.*, 446 U.S. 1, 8 (1980)).

A decision is final and subject to appeal if it "'leaves nothing for the court to do but execute judgment.'" *Copeland v. Toyota Motor Sales U.S.A., Inc.*, 136 F.3d 1249, 1252 (10th Cir. 1998) (quoting *Catlin v. United States* 324 U.S. 229, 233 (1945)). In addition, a judgment

is final "even if it does not reduce the damages to a sum certain if [it] sufficiently disposes of the factual and legal issues and any unresolved issues are sufficiently ministerial that there would be no likelihood of further appeal." *Id.* at 1252 (internal quotations and citations omitted). In the class action context, a judgment that awards damages in favor of the plaintiff class is final when it "establishes both the formula that will determine the division of damages among class members and the principles that will guide the disposition of any unclaimed funds." *Strey v. Hunt Int'l Res. Corp.*, 696 F.2d 87, 88 (10th Cir. 1982).

1. Plaintiffs' proposed form of judgment

Plaintiffs contend a judgment meeting these finality requirements can be entered in this action and have proposed a form of judgment to this end. *See* [Pls.' Corrected Proposed] Final Judgment, Ex. A to Pls.' Statement re: Corrected Proposed Form of J. (Doc. 2243). Defendants oppose Plaintiffs' proposed form of judgment, and dispute that any judgment can be entered at this time because a "host of complicated issues" must be decided before judgment can be entered on the jury's verdict. These issues, however, relate to matters such as a plan for allocating the class damages award to class members, the disposition of unclaimed funds and the availability and amount of pre- and post-judgment interest, all of which have now been extensively argued by the parties in the context of this and the parties' other post-trial motions. Accordingly, these matters are now ripe for decision so that final judgment on the claims tried and decided at the property class trial can be entered. My decision on these matters and Defendants' other objections to Plaintiffs' proposed form of judgment is as follows:

Amount of damages awarded against each Defendant

As described earlier in this decision, the jury's compensatory and exemplary damages awards are subject to judicial adjustment before entry of judgment in accordance with the rule against multiple recovery, Colorado's pro rata liability statute and Colorado's statutory cap on the amount of exemplary damages. I have previously stated, and Plaintiffs do not dispute, that application of the rule against multiple recovery reduces the total compensatory damages owed by Dow and Rockwell to $176.8 million, the aggregate damages to the Class found by the jury on both the trespass and nuisance claims. Application of the two statutory limits on damages is disputed, however.

As required by Colorado's pro rata liability statute, the jury determined each Defendant's fault for the trespass and nuisance it found the Defendants had committed. The jury found Dow 90% at fault for the trespass on Class Properties and 30% at fault for the nuisance Defendants committed, and Rockwell 10% at fault for the trespass and 70% at fault for the nuisance.

Based on these findings, Plaintiffs propose that the judgment award compensatory damages of $176,850,340 plus prejudgment interest. The proposed judgment states that Dow is responsible for $159,165,306 (90% of the $176.8 million in trespass damages found by the jury) plus prejudgment interest, and Rockwell for $123,795,238 (70% of the $176.8 million in nuisance damages found by the jury) plus prejudgment interest, while also providing, as just stated, that the total amount recovered from the two Defendants is limited to the $176.8 million found by the jury, plus prejudgment interest. The exact amount of compensatory damages to be recovered from each Defendant within these parameters would not be set forth in

the judgment, allowing Plaintiffs to decide whether to collect the maximum amount due from one Defendant and the remainder of the $176.8 million total judgment (plus prejudgment interest) from the other, or to collect the total amount owed by Dow and Rockwell on some other basis consistent with the judgment's requirements.

Plaintiffs' proposal complies with the rule against multiple recovery and also Colorado's pro rata liability statute. Defendants dispute the latter conclusion, arguing that no judgment can be entered consistent with the statute because the jury assigned different percentages of fault to the Defendants on the trespass and nuisance claims. As discussed earlier in this opinion, however, the jury's allocation of fault on the two claims is not inconsistent and is supported by the evidence. In addition, Colorado's pro rata liability statute requires only that the jury return a special verdict "determining the percentage of . . . fault attributable to each of the parties . . . and the total amount of damages sustained by each claimant," and then directs the court to enter judgment "based on the jury's special findings." Colo. Rev. Stat. § 13-21-111.5(2). The statute further directs that "no defendant shall be liable for an amount greater than that represented by the degree or percentage of the . . . fault attributable to such defendant that produced the claimed . . . damage." *Id.* § 13-21-111.5(1). The judgment to be entered under Plaintiffs' proposal meets all of these requirements, as it is based on the jury's special findings allocating fault between Dow and Rockwell on each claim, and ensures that neither Defendant is liable for an amount greater than that represented by the degree of fault found by the jury on one of the two claims decided.

Defendants also protest that the proposed judgment fails to state with specificity a sum certain that each De-

fendant must pay, and that such specificity is required in order for final judgment to enter. The authority Defendants cite in support of this proposition, however, states only that a final judgment sets out a sum certain to be recovered by the prevailing party, *see Albright v. UNUM Life Ins. Co.*, 59 F.3d 1089, 1092 (10th Cir. 1995), a condition that is met here by reference to the $176.8 million in actual damages found by the jury that is to be recovered by Plaintiffs. Judgments in cases involving joint and several liability similarly state the amount to be recovered by the plaintiff without specifying a sum certain to be paid by each liable party and yet are routinely entered and approved. I see no reason why the flexibility allowed in these forms of judgment is not also available here to enter final judgment based on the jury's special findings. In addition, Defendants' concern on this point appears more technical than real, given the practical consideration that DOE, as indemnitor for both Defendants, presumably will pay the entire $176.8 million in compensatory damages found by the jury regardless of how this amount is allocated between the Defendants. For all of these reasons, I will adopt Plaintiffs' proposed form of judgment as to compensatory damages.[18]

---

[18] If it were necessary to declare in the judgment a sum certain owed by each Defendant, this sum could be calculated based on the jury's allocation of fault on both the trespass and nuisance claims and the determination that the trespass and nuisance caused $176.8 million in damages (after application of the rule against multiple recovery). Under this approach, the 90% fault the jury found for Dow's contribution to the trespass and the 30% fault the jury attributed to Dow for the nuisance would yield an overall fault allocation of 60% (90%+30% divided by 2) for the wrongdoing by Dow that caused the $176.8 million in total damages found by the jury. The same calculation yields an allocation of 40% (10% trespass fault+70% nuisance fault divided by 2) for Rockwell's wrongdoing. Under this approach,

As for exemplary damages, Colo. Rev. Stat. § 13-21-102, as interpreted by the Colorado Supreme Court in *Lira v. Davis*, 832 P.2d 240 (Colo. 1992), limits liability for exemplary damages to the amount of actual or compensatory damages owed by the defendant after application of the pro rata liability statute.[19] *See id.* at 245-46. Thus, where application of the pro rata liability statute results in a reduction of the compensatory damages owed by a defendant, it is this reduced compensatory amount that is considered in setting the limit on the exemplary damages that can be recovered from that defendant. *Id.* at 246.

Plaintiffs contend that, under this authority, the cap on exemplary damages recoverable from Dow is $159.1 million, representing Dow's 90% fault for the trespass, and $123.8 million for Rockwell, representing its 70% fault for the nuisance. If this position is correct, Plaintiffs are entitled to recover the full amount of exemplary damages assessed by the jury against each Defendant, $110.8 million against Dow and $89.4 million against Rockwell, because both amounts are less than the individual caps posited by Plaintiffs. Defendants object, arguing that this outcome would violate § 13-21-102 because the total amount of exemplary damages awarded under this approach ($110.8 million + $89.4 million =

---

therefore, the sum certain owed by Dow for the harm the jury found it caused would be $106,110,204 (60% of the total compensatory damages of $176,850,340) and Rockwell's share would be $70,740,136 (40% of the total compensatory damages of $176,850,340). This approach takes full account of the jury's findings and requires no speculation as to them.

[19] The Colorado Supreme Court uses the terms "actual damages" and "compensatory damages" interchangeably in discussing the statutory cap on exemplary damages set by Colo. Rev. Stat. § 13-21-102. *See Lira*, 832 P.2d at 241 n.1.

$200.2 million) would exceed the $176.8 million in total compensatory damages to be recovered from Dow and Rockwell after application of the rule against multiple recovery.

As relevant here, § 13-21-102 provides:

> In all civil actions in which damages are assessed by a jury for a wrong done to the person or to personal or real property, and the injury complained of is attended by circumstances of fraud, malice, or willful and wanton conduct, the jury, in addition to the actual damages sustained by such party, may award him reasonable exemplary damages. The amount of such reasonable exemplary damages shall not exceed an amount which is equal to the amount of the actual damages awarded to the injured party.

Colo. Rev. Stat. § 13-21-102(1)(a).

On its face, the statute does not address the question presented, which is whether the amount of exemplary damages awarded against an individual defendant must be reduced on the ground that the total exemplary damages awarded against all defendants exceeds the total compensatory damages awarded against these defendants.

The Colorado Supreme Court's decision in *Lira* provides guidance on this issue. In *Lira*, the court considered whether exemplary damages awards are subject to reduction under Colorado's comparative negligence statute, Colo. Rev. Stat. § 13-21-111.5. The court first determined that exemplary damages are not subject to reduction by application of the comparative negligence statute. *Lira*, 832 P.2d at 243. Its rationale was that reducing an exemplary damages award by the plaintiff's percentage of comparative negligence would be inconsistent with the

focus of exemplary damages, which is the defendant's misconduct, and with the purpose of exemplary damages, which is to punish the defendant and deter the misconduct. *Id.* at 242-43. It also emphasized that the amount of an exemplary damages award "should be based on a consideration of the 'severity of the injury perpetrated on the injured party by the wrongdoer.'" *Id.* at 243 (quoting *Kirk v. Denver Pub. Co.*, 818 P.2d 262, 266 (Colo. 1991)).

The court continued its focus on the wrongdoer's conduct in determining that the pro rata liability statute limits its exemplary damages to the compensatory damages awarded against an individual defendant after application of the jury's fault determinations for that defendant. The court concluded this result effectuated the legislature's intent to "effectively double[] the potential liability of a wrongdoing party." *Id.* at 245-46 (quoting remarks by Representative Grant, one of the bill's sponsors). It stated further that "[The legislation sponsor's] statements focused on the liability of the tortfeasor. Since under the comparative negligence and pro rata liability statutes, one of several negligent persons is only responsible for damages in accordance with his determined percentage of fault, that party's liability for punitive damages should be no greater than the amount of actual damages he owes." *Id.* at 246.

In this case, the jury found Dow 90% at fault for the trespass and Rockwell 70% at fault for the nuisance. As stated above, Colorado's pro rata liability statute limits actual damages owed by each of these defendant[s] to these percentages of the actual damages found by the jury. Setting the statutory cap established in § 13-21-102(1)(a) at the amounts calculated based on the jury's allocation of fault to each Defendant on each claim is consistent with *Lira*'s emphasis on the wrongdoing commit-

ted by the individual tortfeasor and its concern that the purpose of exemplary damages—to punish and deter a defendant's wrongdoing—be served.[20] Providing an individual defendant with some additional reduction in the exemplary damages awarded, as Defendants propose, based on the total compensatory damages awarded against all defendants, would shift the focus of the exemplary damages cap away from the individual defendant's wrongdoing and weaken the punitive and deterrent purposes of exemplary damages awards.

My conclusion that the jury's exemplary damages awards are within the statutory cap on exemplary damages is bolstered by considering another component of compensatory damages that is included in determining the amount of the cap: prejudgment interest.[21] Colorado courts have repeatedly held that prejudgment interest is an element of compensatory damages. *See, e.g.*, *Seaward Const. Co. v. Bradley*, 817 P.2d 971, 976 (Colo. 1991); *Allstate Ins. Co. v. Starke*, 797 P.2d 14, 19 (Colo. 1990); *Witt v. State Farm Mut. Auto. Ins. Co.*, 942 P.2d 1326, 1327 (Colo. Ct. App. 1997). The Tenth Circuit and other courts are in accord with this view. *Webco Indus., Inc. v. Thermatool Corp.*, 278 F.3d 1120, 1134 (10th Cir. 2002); *John-*

---

[20] This result is also consistent with Colorado case law finding that the Colorado legislature's intent in § 13-21-102(1)(a) was "to limit the punitive damages awarded on a particular tort claim to the amount of actual damages awarded on that same claim." *Hensley v. Tri-QSI Denver Corp.*, 98 P.3d 965, 968 (Colo. Ct. App. 2004).

[21] Defendants cite Instruction No. 3.27 and statements regarding this instruction in the Memorandum Opinion Regarding Jury Instructions as amounting to a legal ruling that prejudgment interest cannot be considered in determining the statutory cap on exemplary damages. Not so. This issue was not raised in connection with Instruction No. 3.27 and hence is addressed here for the first time.

son v. Cont'l Airlines Corp. 964 F.2d 1059, 1062 (10th Cir. 1992) (collecting cases).

In *James v. Coors Brewing Co.*, 73 F. Supp. 2d 1250 (D. Colo. 1999), Judge Babcock considered this case law and Colo. Rev. Stat. § 13-21-102 and concluded that prejudgment interest on damages is part of "actual damages" to be considered in determining the one-to-one actual damages to exemplary damages cap set by the Colorado statute. *Id.* at 1255. This analysis is sound and has been followed by this and other courts. *Mower v. Century I Chevrolet, Inc.*, No. 02-cv-01632-MSK-MEH, 2006 WL 2729265, *23 (D. Colo. June 16, 2006); *see also Tait v. Hartford Underwriters Ins. Co.*, 49 P.3d 337, 340 (Colo. Ct. App. 2001) (noting without comment that the district court calculated the statutory cap on exemplary damages as the amount of compensatory damages awarded plus prejudgment interest). Accordingly, I find that the statutory cap on each Defendant's liability for exemplary damages in this case includes the prejudgment interest each Defendant is required to pay on the compensatory damages recovered from it. Given the substantial prejudgment interest award to be included in the judgment, as discussed below, the sum of prejudgment interest and the amount due and ultimately recovered from each Defendant will exceed the amount of exemplary damages awarded by the jury against Dow and Rockwell under any reasonably conceivable scenario. Accordingly, no reduction of these damages awards is required, and judgment will be entered on the jury's exemplary damages verdicts.

Allocation of damages

Plaintiffs propose a Plan of Allocation that provides for the appointment of a Claims Administrator, defines the duties and authorities of the Claims Administrator

and sets forth the procedures and principles for determining the disposition of the compensatory and exemplary damages, attorney fees, expenses, costs and pre- and post-judgment interest awarded in the final judgment ("Judgment Fund"), including the substantive principles and procedures that will govern distribution of the "Net Class Award" (the Judgment Fund less certain fees, expenses, costs and awards).

In summary, Plaintiffs propose that the Claims Administrator begin the allocation process by consulting appropriate records and data from Jefferson County and other suitable and reliable sources to identify the properties and property owners satisfying the Class definition and to sort them into the three property categories set forth in the jury's verdict: commercial, residential and vacant.[22] Pls.' Reply in Supp. of Mot. for Entry of J. (Doc. 2240), Ex. B (Pls.' Rev. Proposed Plan of Allocation), ¶ 8. For each of these three property categories, the Claims Administrator would then compute the category's share of the Net Class Award, with the total sum allocable to each category bearing the same ratio to the Net Class Award as the jury's determination of compensatory damages for that category bears to the total of all compensatory damages found by the jury for the three combined categories. *Id.*, ¶ 9. Based on Jefferson County tax assessment records, the Claims Administrator would then determine, for each property in the Prospective Damages Subclass, the property's assessed value and from it calculate the fraction of this value relative to the total assessed value of all properties in the Damages Subclass within the same category (the property's "Fractional Allocable

[22] Both parties have relied on records such as these for this purpose in the course of this litigation.

Share"). *Id.*, ¶ 10. Subject to such equitable adjustments as the Claims Administrator might recommend and I might adopt, the Claims Administrator would then compute an award for each property in the Damages Subclass, based on the property's Fractional Allocable Share of the Net Class Award for the relevant property category. *Id.*, ¶ 11. The Proposed Allocation based on these principles and procedures would then be submitted to the Court for approval, along with a proposed process for notifying members of the Class of their awards (if any) under the Proposed Allocation, granting them an opportunity to seek adjustment of these awards, and making payment. *Id.*, ¶ 12. Plaintiffs' proposed Plan of Allocation further provides that any funds that remain unclaimed, after a due allowance period for late claims, would be distributed to members of the Damages Subclass on a pro rata basis to assist in making them whole notwithstanding payment of attorney fees, expenses and administrative costs from the Judgment Fund. *Id.*, ¶ 13. Plaintiffs do not expect the amount of these unclaimed funds to be substantial.[23] Plaintiffs submit the Declaration of Wayne L. Hunsperger, one of their real estate experts from the property class trial, to attest that this process is feasible and reasonable.

Having reviewed Plaintiffs' proposed plan and Defendants' objections to it, I adopt the plan with the following adjustment. As described earlier in this opinion, only Class members who owned property within the Class Area on January 30, 1990, when this action was filed and the date on which the jury found it appeared the tortious

---

[23] Given the long and litigious history of this case, the charge against the Judgment Fund for attorney fees and expenses alone is likely to exceed the amount of unclaimed funds to be distributed to the Prospective Damages Subclass in this manner.

invasions would continue indefinitely, are entitled to recover damages for prospective invasions to Class Properties. *See supra* Section II.B.1. In identifying the members of the Class and their corresponding properties, as described above, the Claims Administrator shall identify and categorize members of this subclass, the "Prospective Damages Subclass," and the other subclass ("Non-Prospective Damages Subclass"), which consists of Class members who sold their Class Properties before January 30, 1990. This identification shall be based on Jefferson County records or other appropriate, reliable records that are used to identify the members of the Class as a whole. The distinction between these two subclasses and the prospective damages allocable to the Class Properties corresponding to members of each subclass shall be maintained throughout development of the allocation plan described above.

This process will result in some portion of the Net Class Award being allocated to properties once owned by members of the Non-Prospective Damages Subclass, who cannot claim these prospective damages under the Court's prior rulings. *See supra* Section II.B.1. Nonetheless, there is no question under the jury's verdicts that these damages exist and were caused by the Defendants' continuing trespass and nuisance.

Courts and commentators have recognized a variety of methods for disposing of unclaimed portions of class damage awards. *See Brewer v. S. Union Co.*, No. 83-F-1174, 1987 U.S. Dist. LEXIS 15940, *7-18 (D. Colo. Aug. 13, 1987); *see generally* 3 Alba Conte & Herbert B. Newberg, Newberg on Class Actions §§ 10:13-25 (4th ed. 2002). After considering these options, the substantive purposes of the claims of this action and the equities involved, I have determined that the portion of the Net

Class Award allocable to the Non-Prospective Damages Class will be distributed to the indirect benefit of the Class in accordance with *cy pres* principles. Although the Tenth Circuit has not spoken on *cy pres* distributions of class damages, there is precedent for this approach in this court. *See Brewer*, at *17-19. Once the amount of monies subject to this distribution has been determined under the approved allocation plan, I shall direct the Plaintiffs to identify options for the distribution of these monies in accordance with *cy pres* principles. These principles envision that the monies will be put to their "next best use" in keeping with the intent of the statutes and other law upon which the Plaintiffs' property class claims are based. *See id* at *13-16.

The Plan of Allocation described herein will be entered by separate order. Execution of this Plan, and of the judgment as a whole, will be stayed until such time as either Defendant files a timely notice of appeal from the judgment or the time allowed for filing any such appeal has expired.

Prejudgment interest

Plaintiffs request that the judgment on the jury's verdicts include prejudgment interest. Whether prejudgment interest may be recovered is a matter of Colorado law.[24] In Colorado, the right to prejudgment interest is governed by statute, and it must be awarded in cases to which the statute applies. *See* Colo. Rev. Stat. § 5-12-102(1) (covered parties "shall receive" prejudgment in-

[24] This is so because the trespass and nuisance claims decided by the jury were brought pursuant to the Price-Anderson Act ("Act"), which directs that state law provide the substantive rules of decision in the action. 42 U.S.C. § 2014(hh). The entitlement to prejudgment interest is a substantive matter, *see Webco Indus.*, 278 F.3d at 1134, and is therefore governed by Colorado law under the Act.

terest); *id.* § 13-21-101(1) ("it is the duty of the court" to award prejudgment interest in cases falling within the statute); *see also Todd v. Bear Valley Village Apts.*, 980 P.2d 973, 981 (Colo. 1999) (trial court's award of prejudgment interest under Colorado statute is "a ministerial act that is mandatory and does not require the exercise of judgment or discretion;" internal quotation omitted). The purpose of this mandatory award, under Colorado law, is to compensate the plaintiff for the loss of earnings on the actual damages due to their delayed payment and also to encourage the settlement of cases both before and after trial. *See Allstate Ins. Co.*, 797 P.2d at 19 ("prejudgment interest is an element of compensatory damages in actions for personal injuries, awarded to compensate the plaintiff for the time value of the award eventually obtained against the tortfeasor."); *Mesa Sand & Gravel Co. v. Landfill, Inc.*, 776 P.2d 362, 364 (Colo. 1989) (purpose of prejudgment interest "is to discourage a person responsible for payment of a claim to stall and delay payments until judgment or settlement"); *Stevens v. Humana of Delaware, Inc.*, 832 P.2d 1076, 1081 (Colo. Ct. App. 1992) ("prejudgment interest serves not only the purpose of compensating a party for the loss of use of money but is also used to encourage the settlement of cases both pre- and post-trial"); *Voight v. Colo. Mountain Club*, 819 P.2d 1088, 1092-93 (Colo. Ct. App. 1991) (same).

Defendants argue Plaintiffs are not entitled to recover prejudgment interest on the jury's verdict on three grounds. First, they contend that prejudgment interest is precluded because the jury, at Plaintiffs' request, awarded damages that included an inflation adjustment, based on the Consumer Price Index ("CPI"), through 2005. This inflation adjustment, Defendants contend, is

the equivalent of prejudgment interest prescribed by Colorado statute, with the result that an award of prejudgment interest would amount to a duplicate, and improper, payment to Plaintiffs.

Defendants cite no Colorado authority, or authority from other jurisdictions for that matter, holding that prejudgment interest is not available when the damages awarded by a jury include an adjustment for inflation.[25] The premise underlying Defendants' argument, that a CPI-adjustment is equivalent to the statutorily-directed award of prejudgment interest, is also incorrect. Colorado courts have repeatedly held that prejudgment interest is intended to compensate the plaintiff for the "loss of earnings," "loss of use," and "time value" of the money due from the defendant. *See, e.g.*, *Coale v. Dow Chem. Co.*, 701 P.2d 885, 890 (Colo. Ct. App. 1985); *Stevens*, 832 P.2d at 1081; *Allstate Ins. Co.*, 797 P.2d at 19. That this concept is more than mere inflation is obvious on its face, as has been recognized by other courts. *See United*

---

[25] The case law Defendants cite for this proposition does not address this question and often is, at best, tangentially related to it. Defendants' attempt to portray the Tenth Circuit's decision in *Lowell Staats Mining Co. v. Pioneer Uravan, Inc.*, 878 F.2d 1259 (10th Cir. 1989), as supporting their position is particularly strained. In the passage relied upon by Defendants, the court merely held that the district court did not err in reserving the issue of interest computation to itself. *Id.* at 1268-69. Nor does the quotation from the 1925 Colorado Supreme Court case the Tenth Circuit cited in support of this holding establish or support the proposition that a plaintiff cannot recover prejudgment interest under Colorado law if the damages awarded include an inflation adjustment. *See id.* (quoting *Wood v. Hazelet*, 237 P. 151, 152 (Colo. 1925)). In fact, the *Lowell* decision, which reversed the district court's decision not to award prejudgment interest, actually supports the proposition that a district court must award prejudgment interest where required by Colorado statute. *See id.* at 1270.

States v. City of Warren, 138 F.3d 1083, 1096 (6th Cir. 1998) (district court abused its discretion in utilizing CPI to assess prejudgment interest because "merely adjusting the dollars the plaintiff would have earned to compensate for diminished purchasing power because of inflation does not compensate for the lost use of the money"); *Chandler v. Bombardier Capital, Inc.*, 44 F.3d 80, 84 (2d Cir. 1994) (award of prejudgment interest for loss of use of inflation-adjusted damages did not constitute double recovery because the inflation adjustment did not compensate for the lost use of the money); *Clinchfield Coal Co. v. Fed. Mine Safey & Health Review Comm'n*, 895 F.2d 773, 780 (D.C. Cir. 1990) (rejecting award of prejudgment interest that provided "compensation for losses through inflation but none for the capacity of wealth to generate more wealth"); *Evans v. Connecticut*, 967 F. Supp. 673, 684 n.15 (D. Conn. 1997) (awarding prejudgment interest on damages award that had been adjusted to compensate for inflation because inflation adjustment did "not calculat[e] the value of the money as if it had been given to [plaintiff] for his use or for investment"), *aff'd*, 24 Fed. Appx. 35 (2d Cir. 2001).[26] It is also undisputed that the CPI inflation rate for the period in question was generally far below the 8% and 9% prejudgment interest rates set by statute, which further indicates the Colorado legislature did not intend for prejudgment interest to compensate only for inflation. Defendants' contention also gives no weight to the second

---

[26] Defendants' attempt to discredit this authority based on the Supreme Court's earlier decision in *Library of Congress v. Shaw*, 478 U.S. 310 (1986), is not persuasive. The Court in *Shaw* did not address the question presented here, and its statements regarding the bar sovereign immunity imposes on recovery of prejudgment interest on Title VII attorney fee awards against the federal government is not inconsistent with the authority cited above.

purpose served by an award of prejudgment interest, which is to encourage settlement. Finally, Defendants cite no case law indicating that I have authority under Colorado law *not* to award prejudgment interest if it is required by statute.

Defendants next contend that Plaintiffs are not entitled to recover prejudgment interest because neither of the Colorado statutes providing for an award of prejudgment interest applies here. While I agree that the Colorado statute governing prejudgment interest in personal injury actions does not apply,[27] I find the second potentially applicable statute, Colo. Rev. Stat. § 5-12-102, applies here and mandates that the judgment include prejudgment interest at the statutory rate of 8% per annum, compounded annually. *See id.* § 5-12-102(1)(b).

Section 5-12-102(1), titled "Statutory Interest," provides as relevant here:

> Except as provided in section 13-21-101, C.R.S., when there is no agreement as to the rate thereof, creditors shall receive interest as follows:

---

[27] Plaintiffs argue this statute, Colo. Rev. Stat. § 13-21-101, and its provision for prejudgment interest at a rate of 9% per annum, applies here because the Colorado Court of Appeals has determined that nuisance awards affording compensation for annoyance and discomfort are governed by this statute. *See Miller v. Carnation Co.*, 564 P.2d 127, 132 (1977). The *Miller* case and other Colorado authority, however, also establish that a nuisance award for annoyance and discomfort is distinct from an award for diminution in a property's value as a result of the nuisance. *See id.* at 130; *Bd. of County Comm'rs v. Slovek*, 723 P.2d 1309, 1318 (Colo. 1986); *Webster v. Boone*, 992 P.2d 1183, 1185 (Colo. Ct. App. 1999); *see also Cook IX*, 273 F. Supp. 2d at 1206-07 & n.33 (recognizing distinction). In this case, the only nuisance damages sought by Plaintiffs, and awarded by the jury, were for the diminished value of the Class Properties caused by Defendants' nuisance.

> (a) When money or property has been wrongfully withheld, interest shall be an amount which fully recognizes the gain or benefit realized by the person withholding such money or property from the date of wrongful withholding to the date of payment or to the date judgment is entered, whichever first occurs; or, at the election of the claimant,
>
> (b) Interest shall be at the rate of eight percent per annum compounded annually for all moneys or the value of all property after they are wrongfully withheld or after they become due to the date of payment or to the date judgment is entered, whichever first occurs.

Defendants assert this statute applies only in actions arising from consumer credit transactions, basing this contention on their analysis of the statute and its legislative history and the erroneous contention that the statute is part of Colorado's Consumer Credit Code.[28] In so doing, Defendants dismiss the long line of Colorado Supreme Court and other cases that, contrary to Defendants' position, have construed § 5-12-102 liberally to apply to all types of cases not involving personal injuries.[29] For example, in *Mesa Sand & Gravel Co. v. Landfill, Inc.*, 776 P.2d 362 (Colo. 1989), the Colorado Supreme Court stated that "[i]n cases other than in 'actions

---

[28] The Consumer Credit Code consists of Articles 1 through 9 of Title 5 of the Colorado Revised Statutes. Colo. Rev. Stat. § 5-1-101. The prejudgment interest statute is found in Article 12 of Title 5. *See id.* § 5-12-102.

[29] "The term 'creditors' used in the statute [Colo. Rev. Stat. § 5-12-102] has been construed broadly to include all claimants who have been damaged by the actions of another." *Stansbury v. Comm'r Internal Revenue Serv.*, 102 F.3d 1088, 1093 n.6 (10th Cir. 1996) (internal quotation omitted).

brought to recover damages for personal injuries sustained by any person resulting from or occasioned by the tort of any other person, corporation, association, or partnership' under [Colo. Rev. Stat.] § 13-21-101, a prevailing party may recover prejudgment interest under section 5-12-102." *Id.* at 363. The court further declared § 5-12-102 "was not designed to distinguish between classes of prevailing parties in permitting recovery of prejudgment interest" and approved the statute's application to a breach of contract claim. *Id.* at 365. In subsequent decisions, the Colorado Supreme Court has affirmed this broad construction of the statute, including its application in property damage cases. *See Westfield Dev. Co. v. Rifle Inv. Assocs.*, 786 P.2d 1112, 1122 (Colo. 1990) (approving award of prejudgment interest under statute to pecuniary damages caused by intentional interference with contract because liberal construction of statute was necessary "to effectuate the legislative purpose of compensating parties for the loss of money or property to which they are entitled."); *Ballow v. PHICO Ins. Co.*, 878 P.2d 672, 683 (Colo. 1994) ("In cases other than 'actions brought to recover damages for personal injuries' under [Colo. Rev. Stat.] § 13-21-101, a prevailing party may recover prejudgment interest under section 5-12-102"); *Farmers Reservoir & Irrigation Co. v. Golden*, 113 P.3d 119, 133 (Colo. 2005) (holding § 5-12-102(1)-(3) codifies the doctrine of moratory interest in contract and property damage cases, so that "[t]he right to recover prejudgment interest for damages other than those resulting from personal injuries is a matter of law determined under section 5-12-102.").

The Tenth Circuit has also recognized that § 5-12-102 applies to claims for property damages and other actions not involving consumer credit transactions. *See, e.g.*,

Loughridge v. Chiles Power Supply Co., 431 F.3d 1268, 1288-89 (10th Cir. 2005) (recognizing that "prejudgment interest in non-personal injury actions is available" under § 5-12-102(1) and applying statute to determine prejudgment interest to be awarded in property damage case); *Estate of Korf v. A.O. Smith Harvestore Prods., Inc.*, 917 F.2d 480, 486 (10th Cir. 1990) (applying § 5-12-102 to claim for property damages because, under the Colorado Supreme Court's decisions in *Mesa Sand* and *Westfield*, "victims of tortious conduct are clearly entitled to prejudgment interest under the statute."); *Lowell Staats Mining Co. v. Pioneer Uravan, Inc.*, 878 F.2d 1259, 1270 (10th Cir. 1989) (holding § 5-12-102 entitled plaintiff to prejudgment interest on breach of contract claim).

Defendants essentially argue that these cases were wrongly decided because they rely, directly or indirectly, on an alleged mistranscription of a statement by the sponsor of the legislation that became § 5-12-102. I disagree that Defendants' report of this sponsor statement, even if accurate, supports Defendants' narrow reading of the statute or casts doubt on the Colorado courts' construction of it.[30] Even if this were not the case, "it is the duty of the [federal court] to ascertain from all the available data what the state law is and apply it rather than to prescribe a different view, however superior it may appear." *Lowell*, 878 F.2d at 1269 (quoting *West v. Am. Tel.*

---

[30] The chief difference between the transcription cited by the Colorado Supreme Court and that asserted by Defendants is that the Colorado Supreme Court reports the legislation's sponsor stated "*All* plaintiffs, or defendants who counterclaim, for that matter, are entitled to interest," *Mesa Sand*, 776 P.2d at 365 (emphasis added), while Defendants contend he actually stated "a plaintiff, or for that matter a defendant who counterclaims, is entitled to interest." Defs.' Resp. to Pls.' Mot. for Entry of J. (Doc. 2226) at 45 (emphasis added).

& Tel. Co., 311 U.S. 223, 237 (1940)). I am not at liberty, therefore, to depart from the Colorado Supreme Court's construction of § 5-12-102, even if I were inclined to do so.

Defendants conclude their challenge to the award of any prejudgment interest in this action by contending that the compensatory damages awarded by the jury were for "future losses," and as such have not been "withheld" as required for prejudgment interest to be awarded under § 5-12-102. Defendants' argument confuses the basis for liability in this action, that Defendants' tortious invasions will continue into the future, with the measure of damages for Defendants' ongoing invasions. Pursuant to Restatement § 930(3)(b), the jury determined damages for "the decrease in the value of the land caused by the prospect of the continuance of the invasion measured at the time when the injurious situation became complete and comparatively enduring." Restatement § 930(3)(b); *see* Jury Verdict Form at 14-15, 23-24. The jury's verdict, therefore, determined the damages caused by Defendants' continuing invasions that existed at the time the injurious situation became complete and comparatively enduring. In other words, the damages found by the jury were to remedy an existing wrong. As a result, Plaintiffs are entitled to an award of prejudgment interest under § 5-12-102. *See Loughridge*, 431 F.3d at 1290-91 (rejecting assertion that prejudgment interest was not available under Colorado law for award of future repair costs, finding these damages were "to remedy [plaintiffs'] past, not future injury" arising from defendant's wrong); *see also Wharf*, 210 F.3d at 1233-34 (rejecting argument that § 5-12-102 was inapplicable because contract damages characterized as "right to future income" could not be "wrongfully withheld" within meaning of statute).

Plaintiffs' entitlement to prejudgment interest under § 5-12-102 is also supported by Colorado authority holding that prejudgment interest "accrues in a property damage case from the time the cause of action accrued; in other words, from the date on which the injured party was wronged." *Fed. Ins. Co. v. Ferrellgas, Inc.*, 961 P.2d 511, 514 (Colo. Ct. App. 1997); *see Isbill Assocs., Inc. v. City & County of Denver*, 666 P.2d 1117, 1122 (Colo. Ct. App. 1983) (upholding prejudgment interest award from time property was damaged). By statute, prejudgment interest is awarded "from the date of wrongful withholding." Colo. Rev. Stat. § 5-12-102(1)(a). Thus, the Colorado courts deem damages to be "wrongfully withheld" as of the date on which the wrong occurred. *See Seaward*, 817 P.2d at 975 ("addition of prejudgment interest to a judgment for compensatory damages recognizes that the loss caused by the tortious conduct occurred at the time of the resulting injury but that the damages paid to compensate for that loss are not received by the injured party until later."). There is no question that the wrong here, Defendants' continuing tortious invasions, has occurred and that the damages attributable to this wrong have been wrongfully withheld since then.

The jury found that it appeared on or before January 30, 1990 that any trespass or nuisance by Rockwell and Dow would continue indefinitely. Jury Verdict Form at 28-29. This finding, coupled with the jury's determination that both Dow and Rockwell were liable for continuing trespass and nuisance, establishes that Plaintiffs' trespass and nuisance claims accrued, and the wrongs occurred, no later than January 30, 1990. Accordingly, pursuant to § 5-12-102(1), Plaintiffs are entitled to recover prejudgment interest on the compensatory damages awarded by the jury, at a rate of 8% per annum com-

pounded annually, from January 30, 1990 through the date of payment or the date judgment is entered, whichever occurs first. Colo. Rev. Stat. § 5-12-102(1)(b).

In their Motion for Entry of Judgment, Plaintiffs also requested an award of prejudgment interest on the jury's exemplary damages award, measured from the date of the jury's verdict awarding these damages. This start date was an attempt to accommodate Colorado case law declaring that prejudgment interest is not available on exemplary damages in part because these damages are not "wrongfully withheld" until they are awarded by a jury. *See Seaward*, 817 P.2d at 975-76; *Coale*, 701 P.2d at 890. Plaintiffs subsequently acknowledged that the Colorado Court of Appeals' decision in *Fail v. Community Hospital*, 946 P.2d 573 (Colo. Ct. App. 1997), which noted that a jury verdict is not conclusive until final judgment is entered on it, *id.* at 582, called this attempted accommodation into question. I agree and therefore deny Plaintiffs' request for an award of prejudgment interest on exemplary damages.

Postjudgment interest

There is no question that Plaintiffs are entitled to recover postjudgment interest, but the parties dispute whether the applicable rate is set by federal or Colorado law. In *Transpower Constructors v. Grand River Dam Authority*, 905 F.2d 1413 (10th Cir. 1990), the Tenth Circuit considered whether federal or state law governed the determination of postjudgment interest in a diversity action, in which the substantive rules of decision were drawn from state law. The Tenth Circuit determined that the federal statute, 28 U.S.C. § 1961, applied, because the imposition of postjudgment interest, while "rationally capable of classification as either" substantive or procedural, was most properly viewed as a procedural

rule. *Transpower*, 905 F.2d at 1424. Here, the Price-Anderson Act directs only that "the substantive rules for decision" shall be derived from state law. 42 U.S.C. § 2014(hh). As a procedural rule, therefore, postjudgment interest is not subject to this provision, with the result that the federal statute, 28 U.S.C. § 1961, governs the entitlement to, and rate of, postjudgment interest in this action.

Defendants' additional objections to Plaintiffs' proposed judgment

I have considered Defendants' additional objections to Plaintiffs' proposed judgment and find them to be without merit. In particular, I find the references to The Boeing Company in Paragraph 4 of Plaintiffs' Corrected Proposed Final Judgment (Doc. 2243-2) to be consistent with the representation made to this Court by Rockwell and The Boeing Company that The Boeing Company, as the successor-in-interest to Rockwell, is answerable for any judgment rendered against Rockwell in this suit. *See* Joint Submission re: Pls.' Mot. to Amend Caption or Compl. or to Substitute Rockwell's Successor Cos. as Parties in Interest (Doc. 2193); *id.*, Ex. A (Doc. 2193-2) (Statement/Description of Successor Interest by Rockwell and Boeing).

2. Entry of final judgment under Rule 54(b)

I further find that judgment, as described above, shall be entered pursuant to Rule 54(b) of the Federal Rules of Civil Procedure.

In so holding, I specifically find that the judgment to be entered is a final order under Rule 54(b). This is so because it is the ultimate disposition of Plaintiffs' claims to recover prospective damages for the continuing trespass and nuisance the jury found Dow and Rockwell had committed. *See Okla. Tpk.*, 259 F.3d at 1242 (stating

standard). These claims are distinct and separable from the remaining claims in this case. Defendants' liability and the total prospective damages owed on these claims has been decided on the merits, leaving only the amount due to each member of the Class entitled to recover these damages (the Prospective Damages Subclass as defined herein) to be determined.

As required to establish finality under *Strey v. Hunt International Resources Corp.*, 696 F.2d 87 (10th Cir. 1987), I have approved a Plan of Allocation that sets forth the procedures and formula for the division of damages among members of the Prospective Damages Subclass and the principles that will guide disposition of unclaimed funds. Even if issues and disputes arise in computing each member's damages entitlement under this Plan, these issues are not similar to, and in fact are separable from, the trespass, nuisance and prospective damages claims decided by the judgment to be entered. In addition, while it is very unlikely that the issues Defendants have indicated they will seek to appeal as a result of the judgment will be mooted or altered by the allocation and disbursement of these damages in accordance with the Plan of Allocation, the judgment also stays execution of the Plan until after any appeal of the judgment is decided. Accordingly, the judgment is final under Rule 54(b). *See Parks v. Pavkovic*, 753 F.2d 1397, 1401-02 (7th Cir. 1985) (Posner, J.) (describing circumstances in which finality is achieved when damages due to individual class members remain to be decided); *see also Strey*, 696 F.2d at 88 (order deciding liability and class damages not a final judgment until it also states formula for dividing damages among class members and principles guiding disposition of any unclaimed funds).

I have also determined, as required by Rule 54(b), that there is no just reason to delay entry of this final judgment. No one can seriously dispute that the class trial determined the central claims and issues in this action: each Defendants' liability for continuing trespass and nuisance and the decrease in the value of Class Properties caused by these continuing tortious invasions. The class trial was the product of an extraordinarily long and contentious pretrial process that consumed substantial private and judicial resources and required a number of hotly disputed legal, factual and evidentiary issues to be decided. Substantial additional time and resources will be required to execute the Plan of Allocation approved in this memorandum opinion and to resolve the remaining claims in this action. It would be inefficient and uneconomical for the parties and the court to proceed with this allocation and other claims before the parties have an opportunity to appeal the jury's verdicts on the claims decided in the class trial.

Immediate appeal of the final judgment also does not pose a risk of piecemeal appeals. Although Plaintiffs' medical monitoring claims, and perhaps claims for additional damages for the proven trespass and nuisance pursuant to Restatement § 929, in theory remain pending, these claims are distinct and separate from those decided in the final judgment to be entered on the jury's verdicts. In addition, even if there are subsequent appeals from adjudication of these claims or from the allocation of the damages awarded as a result of the class trial, it is highly unlikely they would present the same issues that the parties have indicated they may raise on appeal from the class trial. Nor can I conceive of a situation (other than settlement) in which appellate review of the issues raised

by the class trial would be mooted by any future developments in this case.

Finally, this action has been pending now for 18 years. The parties, and especially the members of the Plaintiff Class, deserve as speedy a resolution of this case as is possible under the Federal Rules. The opportunity for immediate appeal of the jury's verdicts under Rule 54(b), which would allow all of the parties' concerns regarding the class trial to be heard and decided once and for all, is by far the best means of achieving this end. There is simply no just reason to delay this action further by continuing proceedings in this court when appeal is virtually certain and may affect the nature of these additional proceedings.

Conclusion

For the reasons stated above:

1. Defendants' Renewed Motion for Judgment as a Matter of Law (Doc. 2220) is denied.
2. Defendants' Motion for a New Trial or, in the Alternative, for a Remittitur of Damages (Doc. 2224) is denied.
3. Defendants' Motion for Certification of Interlocutory Appeal (Doc. 2222) is denied.
4. Plaintiffs' Motion for Entry of Judgment (Doc. 2169) is granted in part and denied in part as follows:
   A. Final judgment on the jury's verdicts in the property class trial, in a form consistent with this Memorandum Opinion, shall be entered under Federal Rule of Civil Procedure 54(b);
   B. A Plan of Allocation, in a form consistent with this Memorandum Opinion, shall be entered for

the sum of all compensatory and exemplary damages awarded in this judgment, inclusive of such attorney fees, expenses, costs and pre- and post-judgment interest as have been or may be awarded to Plaintiffs and the Class;

C. Plaintiffs shall prepare and submit to the Court a revised proposed Final Judgment and Plan of Allocation that reflects the rulings set forth in this Memorandum Opinion;

D. Execution of the Final Judgment and Plan of Allocation entered by the Court, as well as proceedings to recover attorney fees, costs and expenses, is stayed until such time as a party files a timely notice of appeal of the Final Judgment or the time for doing so expires. An additional stay of execution may also be obtained upon proper application under Federal Rule of Civil Procedure 62(d).

IT IS SO ORDERED.

Dated this 20th day of May, 2008.

s/John L. Kane
John L. Kane, Senior District Judge
United States District Court

APPENDIX C
UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO

CIVIL ACTION NO. 90-CV-00181-JLK

MERILYN COOK, LORREN AND GERTRUDE BABB, RICHARD AND SALLY BARTLETT, AND WILLIAM AND DELORES SCHIERKOLK,
Plaintiffs,

v.

ROCKWELL INTERNATIONAL CORPORATION AND THE DOW CHEMICAL COMPANY,
Defendants.

FINAL JUDGMENT

JUNE 2, 2008

Judge John L. Kane.

A jury trial was held in this matter beginning October 6, 2005, and ending February 14, 2006, when the jury returned its verdict. Among the matters tried were claims by the Representative Plaintiffs (as defined below) and the Prospective Damages Subclass (as defined below) arising from prospective invasions of their interests in land, pursuant to the Price-Anderson Act, 42 U.S.C. § 2210, Colorado law, and *Restatement (Second) of Torts* § 930. The Representative Plaintiffs and the Prospective Damages Subclass have moved for entry of judgment on the verdict on those claims pursuant to 28 U.S.C. § 1291

and Fed. R. Civ. P. 54(b). As more fully explained in the Court's Memorandum Opinion and Order on Pending Motions dated May 20, 2008 (Doc. 2261), the Court has determined that the relevant claims for relief have been finally adjudicated and that there is no just reason for delay in entry of judgment on those claims. Accordingly, the Court hereby renders final judgment for the Representative Plaintiffs and the Prospective Damages Subclass, as more fully set forth below.

PARTIES

1. The Representative Plaintiffs are plaintiffs Merilyn Cook, Lorren and Gertrude Babb, Richard and Sally Bartlett, and William and Delores Schierkolk, suing on their own behalf and for a Property Class previously certified by this Court in *Cook v. Rockwell Int'l Corp.*, 151 F.R.D. 378 (D. Colo. 1993).

2. The Property Class includes all persons and entities not having opted out of the class who owned, as of June 7, 1989, an interest (other than mortgagee and other security interests) in real property situated within the Property Class Area, exclusive of governmental entities, defendants, and defendants' affiliates, parents, and subsidiaries. The Property Class Area is a geographic area near the former Rocky Flats Nuclear Weapons Plant in Colorado; its boundary is portrayed in the map attached to this Final Judgment as Appendix A. The Prospective Damages Subclass includes all members of the Property Class who still owned their properties as of January 30, 1990.

3. The term "Plaintiffs" is used in this Final Judgment to refer to the Representative Plaintiffs and the Prospective Damages Subclass, collectively.

4. The defendants are Dow Chemical Company ("Dow") and Rockwell International Corporation. The

Boeing Company, a Delaware corporation headquartered in Chicago, Illinois, is successor-in-interest to Rockwell International Corporation and has represented to the Court that it is answerable for any judgment rendered against Rockwell International Corporation in this matter. Accordingly, execution may proceed against The Boeing Company under this Final Judgment as though against Rockwell International Corporation and to the same extent. As used in this Final Judgment, the term "Rockwell" includes both Rockwell International Corporation and The Boeing Company, and the term "Defendants" includes both Dow and Rockwell.

CLAIMS

5. The claims for relief as to which final judgment is hereby entered include all claims by Plaintiffs in this action arising from prospective invasions of their interests in land pursuant to the Price-Anderson Act, 42 U.S.C. § 2210, Colorado law, and *Restatement (Second) of Torts* § 930 and only such claims.

AMOUNT OF JUDGMENT

Compensatory Damages

6. The Court orders that Plaintiffs recover compensatory damages from Dow in the amount of $653,313,678.05, inclusive of prejudgment interest.

7. The Court orders that Plaintiffs recover compensatory damages from Rockwell in the amount of $508,132,861.39, inclusive of prejudgment interest.

8. The total compensatory damages collected by Plaintiffs from all Defendants pursuant to this Final Judgment shall not exceed the sum of $725,904,087.00, inclusive of prejudgment interest.

Exemplary Damages

9. In addition to the sums recoverable by Plaintiffs under Paragraphs 6-8 of this Final Judgment, the Court orders that Plaintiffs recover exemplary damages from Dow in the amount of $110,800,000.00

10. In addition to the sums recoverable by Plaintiffs under Paragraphs 6-9 of this Final Judgment, the Court orders that Plaintiffs recover exemplary damages from Rockwell in the amount of $89,400,000.00

Costs, Fees, and Expenses

11. The Court orders that Plaintiffs recover their costs of suit herein. Further proceedings on costs, attorneys' fees, and related non-taxable expenses pursuant to Fed. R. Civ. P. 54(d)(2) shall be stayed until such time as the Court may later direct, except that plaintiffs may submit a bill of costs at any time after this Final Judgment is entered.

Post-Judgment Interest

12. Post-judgment interest is payable on all the above amounts at the rate prescribed in 28 U.S.C. § 1961, from the date this Final Judgment is entered until the date this Final Judgment is paid.

STAY OF EXECUTION

13. Execution on this Final Judgment against Dow is STAYED until: (a) such time as Dow files a timely notice of appeal, in which case Dow may secure an additional stay of execution pursuant to Fed. R. Civ. P. 62(d) and effective upon the Court's approval of Dow's supersedeas bond or such alternative security as the Court may approve; or (b) expiration of the time allowed for filing any appeal from this Final Judgment, if Dow files no timely notice of appeal.

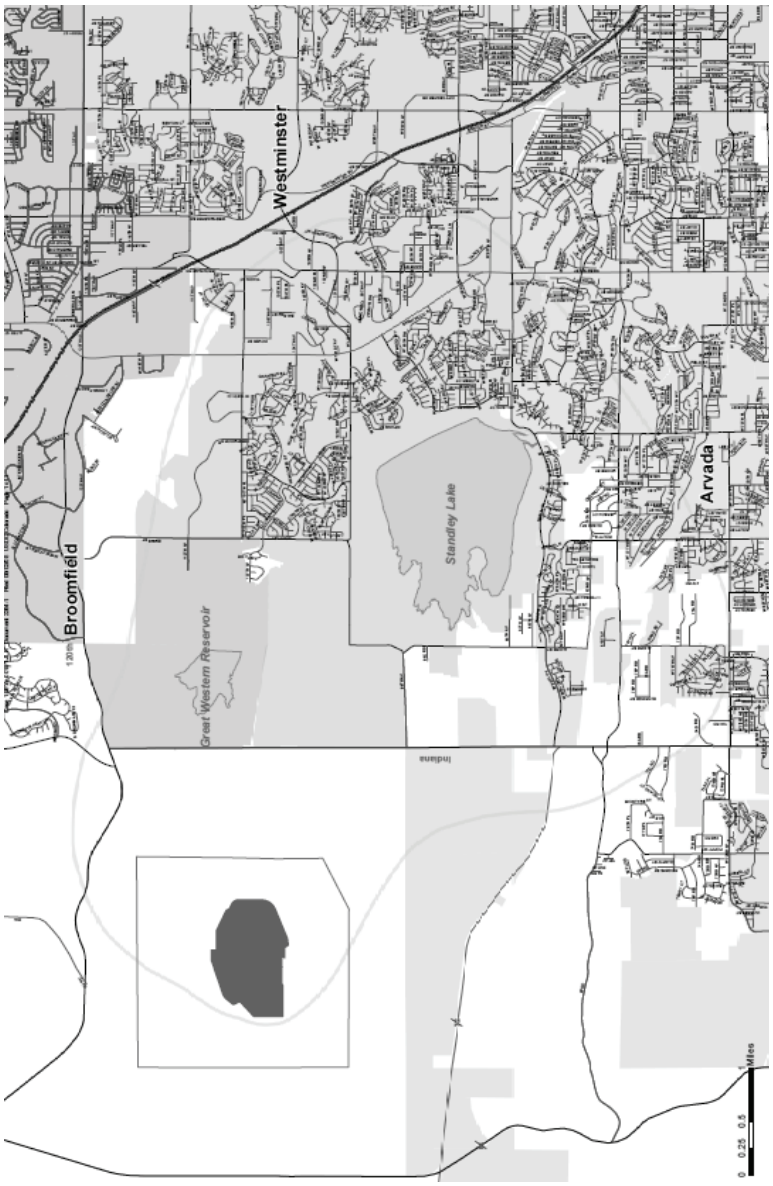
14. Execution on this Final Judgment against Rockwell in STAYED until: (a) such time as Rockwell files a timely notice of appeal, in which case Rockwell may secure an additional stay of execution pursuant to Fed. R. Civ. P. 62(d) and effective upon the Court's approval of Rockwell's supersedeas bond or such alternative security as the Court may approve; or (b) expiration of the time allowed for filing any appeal from this Final Judgment, if Rockwell files no timely notice of appeal.

DEPOSIT OF FUNDS

15. Subject to further order of the Court, any funds recovered under this Final Judgment shall be deposited in United States government treasury bills or notes, and/or in such other investments as may be approved by the Court from time to time, pending implementation of the Plan of Allocation as approved by the Court and attached to this Final Judgment as Appendix B. Merrill G. Davidoff of Berger & Montague, P.C., is hereby appointed as escrow agent.

Dated this 2nd day of June, 2008.

s/John L. Kane
John L. Kane, Senior District Judge
United States District Court


Westminster
Broomfield
Arvada
Standley Lake
Great Western Reservoir
Indiana
0 0.25 0.5
Miles

FINAL JUDGMENT – APPENDIX B

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO

CIVIL ACTION NO. 90-CV-00181-JLK

MERILYN COOK, LORREN AND GERTRUDE BABB, RICHARD AND SALLY BARTLETT, AND WILLIAM AND DELORES SCHIERKOLK,
Plaintiffs,
v.
ROCKWELL INTERNATIONAL CORPORATION AND THE DOW CHEMICAL COMPANY,
Defendants.

PLAN OF ALLOCATION

JUNE 2, 2008

Judge John L. Kane.

Before the Court is plaintiffs' proposed plan of allocation. The Court being fully advised in the premises, and for good cause shown, the Court hereby ORDERS as follows:

A. Definition of Terms

1. For purposes of this Order:

a. The term "Class" means the Property Class certified by the Court.

b. The term "Class Area" means the geographic area bounding the Property Class as certified by the Court.

c. The "Prospective Damages Subclass" includes all Class members who: (i) owned a property within the Class Area on June 7, 1989; and (ii) still owned the property as of January 30, 1990.

d. The "Non-Prospective Damages Subclass" includes all Class members who: (i) owned a property within the Class Area on June 7, 1989; but (ii) no longer owned the property as of January 30, 1990.

e. The term "Judgment Fund" means the sum of all compensatory and exemplary damages awarded in the trial of the Class claims in this matter and allowed after defendants' appeal (or after the expiration of time allowed for filing such appeal, if no appeal is filed within that time), inclusive of such attorneys' fees, expenses, costs, and pre- and post-judgment interest as have been or may be awarded to plaintiffs and the Prospective Damages Subclass, and inclusive of any interest earned through such investments as the Court may direct following defendants' payment of the judgment.

f. The term "Claims Administrator" means the officer appointed by the Court pursuant to this Order to recommend an allocation of damages and to perform such incidental and additional duties as are set forth in this Order or as the Court may subsequently direct.

g. The term "Net Class Award" means the Judgment Fund, less: (i) service awards to the representative plaintiffs; (ii) fees, expenses, and costs awarded from the Judgment Fund to counsel for plaintiffs and the Class; (iii) compensation and expenses paid or reimbursed to the Claims Administrator; and (iv) any additional admin-

istrative expenses that may be charged against the Judgment Fund at the Court's direction.

h. The term "Net Class Commercial Property Award" means the portion of the Net Class Award allocable to the commercial property category under the formula set forth in paragraph 9 of this Order.

i. The term "Net Class Residential Property Award" means the portion of the Net Class Award allocable to the residential property category under the formula set forth in paragraph 9 of this Order.

j. The term "Net Class Vacant Property Award" means the portion of the Net Class Award allocable to the vacant property category under the formula set forth in paragraph 9 of this Order.

B. Appointment of Claims Administrator

2. The Claims Administrator shall be appointed following remand from defendants' appeal, or upon expiration of defendants' time to file an appeal, whichever occurs first.

C. Duties of the Claims Administrator

3. The Claims Administrator shall be responsible for developing a recommended allocation ("Proposed Allocation") of the Net Class Award. The Proposed Allocation shall be developed under the guidelines set forth in this Order, under supervision from the Court, and subject to ultimate approval by the Court.

4. The Claims Administrator shall have such additional duties in connection with the allocation of damages and administration of claims as are set forth in this Order or in subsequent directives from this Court.

5. The Claims Administrator shall report to the Court from time to time to advise the Court of its progress in discharging its responsibilities under this Order, on such

occasions and at such intervals as the Claims Administrator may deem appropriate or as the Court may direct.

6. The Claims Administrator is authorized to make reasonable expenditures to secure the resources and assistance reasonably necessary to the performance of its duties. Such expenses, and the compensation of the Claims Administrator at its usual and customary hourly rates, will be paid and reimbursed from the Judgment Fund periodically, as incurred.

7. The Claims Administrator shall not commence the performance of its duties under this Order until such time as the case is remanded to this Court from defendants' appeal (or until after the expiration of the time allowed for filing such appeal, if no appeal is filed within that time).

D. Procedures and Principles for the Proposed Allocation

8. For each Class property, the Claims Administrator shall consult appropriate records and data, from Jefferson County, Colorado, and such other sources as the Claims Administrator may reasonably determine to be suitable and reliable, for the purposes of: (a) determining ownership of the property as of June 7, 1989, and January 30, 1990; (b) associating the property, and its owner(s) as of June 7, 1989, with the Prospective Damages Subclass or the Non-Prospective Damages Subclass; and (c) assigning the property to one of the three property categories from the jury's verdict form (i.e., commercial, residential, and vacant).

9. For each of the three property categories, the Claims Administrator shall compute the category's share of the Net Class Award. The total sum allocable to each category shall bear the same ratio to the Net Class

Award as the jury's award of compensatory damages for that category bears to the total of all compensatory damages awarded by the jury for all three categories combined. Thus the total sum allocable to commercial properties (the Net Class Commercial Property Award) will be 3.196% ($5,651,252 ÷ $176,850,340) of the Net Class Award; the total sum allocable to residential properties (the Net Class Residential Property Award) will be 81.537% ($144,199,088 ÷ $176,850,340) of the Net Class Award; and the total sum allocable to properties in the vacant land category (the Net Class Vacant Land Award) will be 15.267% ($27,000,000 ÷ $176,850,340) of the Net Class Award.

10. Based on Jefferson County tax assessment records and such other sources as the Claims Administrator may reasonably determine to be suitable and reliable, the Claims Administrator shall determine, for each Class property, the property's assessed value, expressed as a fraction of the total assessed value of all Class properties within the same category (the property's "Fractional Allocable Share").

11. Subject to such equitable adjustments as the Claims Administrator may recommend and the Court may adopt, the Proposed Allocation shall compute an award for each property in the Prospective Damages Subclass, based on the property's Fractional Allocable Share of the Net Class Award apportioned to that category. For example, for a residential property, the Proposed Allocation will present an award based on the property's Fractional Allocable Share multiplied by the Net Class Residential Property Award. The Claims Administrator shall memorialize a similar calculation for each property associated with the Non-Prospective Damages Subclass (see paragraph 14, *infra*).

E. Procedures for Payment of Claims

12. Prior to disbursement of any funds to members of the Prospective Damages Subclass, the Court will establish appropriate procedures for approval of the Proposed Allocation, for notifying Prospective Damages Subclass members of their awards under the Proposed Allocation, and for proceedings through which Prospective Damages Subclass members have an opportunity to seek adjustment of their awards under the Proposed Allocation.

F. Disposition of Unclaimed Funds

13. Subject to further order of the Court, any funds allocable to the Prospective Damages Subclass that remain unclaimed, after due allowance of a period for late claims, shall be distributed to members of the Prospective Damages Subclass on a pro rata basis.

G. *Cy Pres* Award

14. That portion of the Net Class Award allocable to properties in the Non-Prospective Damages Subclass, as computed pursuant to paragraph 11, *supra*, shall be assigned to a *cy pres* fund, for such subsequent distribution as the Court may later direct. In aid of such distribution, the Court will direct plaintiffs, at or near the time that approval is sought for the Proposed Allocation, to identify options and recommendations for disbursing the *cy pres* fund in a manner consistent with *cy pres* principles, as set forth at pages 55-57 of this Court's Memorandum Opinion and Order on Pending Motions dated May 20, 2008 (Doc. 2261).

Dated this 2nd day of June, 2008.

s/John L. Kane
John L. Kane, Senior District Judge
United States District Court

APPENDIX D
UNITED STATES COURT OF APPEALS
FOR THE TENTH CIRCUIT

NOS. 08-1224, 08-1226, 08-1239

MERILYN COOK; WILLIAM SCHIERKOLK, JR.; DELORES SCHIERKOLK; RICHARD BARTLETT; LORREN BABB; GERTRUDE BABB; MICHAEL DEAN RICE; BANK WESTERN; THOMAS L. DEIMER; RHONDA J. DEIMER; STEPHEN SANDOVAL; PEGGY J. SANDOVAL; SALLY BARTLETT,
Plaintiffs-Appellees-Cross-Appellants,

v.

ROCKWELL INTERNATIONAL CORPORATION AND DOW CHEMICAL COMPANY,
Defendants-Appellants-Cross-Appellees.

AMERICAN NUCLEAR INSURERS; NUCLEAR ENERGY INSTITUTE, INC.,
Amici Curiae.

ORDER

DECEMBER 9, 2010

Before BRISCOE, Chief Judge, TACHA, KELLY, LUCERO, MURPHY, HARTZ, O'BRIEN, TYMKOVICH, GORSUCH, and HOLMES, Circuit Judges.

These matters are before the court on plaintiffs-appellees' *Petition For Rehearing En Banc*. We also have a response from the defendants-appellants.

The implicit request for panel rehearing contained in the en banc suggestion is denied by the panel that rendered the decision.

The request for rehearing en banc was also transmitted to all of the judges of the court who are in regular active service. A poll was requested and a majority of the active judges voted to deny rehearing en banc. Judge Lucero would grant the request for en banc rehearing. His dissent from the denial of rehearing is attached to this order.

Entered for the Court,

/s/

ELISABETH A. SHUMAKER
Clerk of Court

Cook v. Rockwell International Corp.,
08-1224, 08-1226 & 08-1239
LUCERO, J., Dissent to the Denial of En Banc Review

After eighteen years of litigation, a four-month trial, and three weeks of deliberation, a jury verdict favoring owners of approximately 15,000 Colorado properties has been set aside by the panel on the basis of three declarations of error. In my opinion each proposition is worthy of reconsideration. Particularly so because the panel's decision becomes the law of the case.

The three points of declared error are: (1) that the fear of cancer from a small but proven presence of plutonium on an owner's land is a "scientifically unfounded risk," is irrational, and inadequate as a matter of Colorado law for a nuisance claim, *Cook v. Rockwell Int'l Corp.*, 618 F.3d 1127, 1134, 1145 (10th Cir. 2010); (2) that plutonium cannot support tangible trespass under Colorado law because plutonium is "impalpable and imperceptible by the senses," *id.* at 1148; and (3) that plaintiffs must prove a "nuclear incident" as a threshold requirement to the initiation of any action, including one for plutonium contamination, under the Price-Anderson Act ("PAA"), *id.* at 1138, 1140.

Federal and Colorado law require neither the reversal of this jury verdict, nor the high barrier the panel has set for its mandated retrial. Under the present status of this case, fair retrial of the case becomes impossible. I respectfully dissent from the denial of en banc review.

First, Colorado law provides that nuisance is the substantial interference with use and enjoyment of a plaintiff's property, *Public Service Co. of Colorado v. Van Wyk*, 27 P.3d 377, 391 (Colo. 2001), and that interference is substantial if "it would have been offensive or caused inconvenience or annoyance to a reasonable person in the

community," *Saint John's Church in the Wilderness v. Scott*, 194 P.3d 475, 479 (Colo. App. 2008). Evidence was presented in the cases at bar of the presence of plutonium, including scientific testimony that "any plutonium exposure, no matter how small, increases the risk of cancer." *Cook*, 618 F.3d at 1134. Nevertheless, the panel opinion unilaterally voids the jury's acceptance of the evidence and declares as a matter of law that the evidence presents "a scientifically unfounded risk" upon which reasonable fear may be based. *Id.* at 1145.

Second, in *Van Wyk*, 27 P.3d 377, the Colorado Supreme Court ruled that "noise, . . . electromagnetic fields and radiation waves" coming from electrical lines constitute an intangible invasion of property. *Id.* at 387. Relying on *Van Wyk*, the panel opinion holds that plutonium cannot be the subject of a tangible trespass because it is "impalpable and imperceptible by the senses." *Cook*, 618 F.3d at 1148. This is scientifically unsupportable. Plutonium is an element with mass and dimensions. It is not an electromagnetic wave. Science will not come to the aid of such conclusions.

Third, the panel requires that plaintiffs prove a "nuclear incident" as an element of a PAA claim. The problem with this conclusion is twofold. A. The panel applies the incorrect standard of review. Because the defendants did not present an instruction or object to the lack of an instruction defining a "nuclear incident," the district court's failure to instruct should have been reviewed for plain error at best. *See* Fed. R. Civ. P. 51(d)(2). B. By any standard, there was no error. The panel confuses the PAA's jurisdictional requirements with its substantive

elements.[1] PAA requires a showing of a "nuclear incident" for jurisdictional purposes. *See* 42 U.S.C. § 2014(hh) (referring to the jurisdictional requirements of § 2210(n)); *see also June v. Union Carbide Corp.*, 577 F.3d 1234, 1248 (10th Cir. 2009) (affirming the dismissal of PAA claims which did not allege a "nuclear incident" for lack of jurisdiction); *Gilberg v. Stepan Co.*, 24 F. Supp. 2d 325, 340 (D.N.J. 1998) ("Without a nuclear incident, there is no claim for public liability, and without a claim for public liability, there is no federal jurisdiction under Price-Anderson."). However, state law determines liability for PAA claims. *See* 42 U.S.C. § 2014(hh). The panel does not decide the jurisdictional question; instead, it improperly applies a jurisdictional statute to impute an instructional error on the merits. A jurisdictional requirement cannot be changed into a substantive element of a PAA claim.

Because the en banc court ought to undo the panel's damaging alchemy, I respectfully **DISSENT**.

---

[1] The panel has found jurisdiction properly exists under 28 U.S.C. § 1331. *Cook*, 618 F.3d at 1137. Even if the panel's analysis did apply to the jurisdictional question, because there was proven damage in the form of nuisance and trespass, there was also a "nuclear incident," making jurisdiction proper.

APPENDIX E
UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO

CIVIL ACTION NO. 90-CV-181-JLK

MERILYN COOK, *ET AL.*,
Plaintiffs,

v.

ROCKWELL INTERNATIONAL CORPORATION
AND THE DOW CHEMICAL COMPANY,
Defendants.

NOTICE OF FINAL JURY INSTRUCTIONS

FEBRUARY 16, 2006

Judge John L. Kane.

* * * * *

INSTRUCTION NO. 3.2

Trespass Claim

Elements of the Claim of Trespass

The tort of trespass protects a landowner's right to exclusive possession and control of his property, which includes the right to keep the property free from contamination deposited there by others without the landowner's consent.

In this case, Plaintiffs and Defendants have stipulated that Plaintiffs and other Class members owned property

in the Class Area as of June 7, 1989. I will sometimes refer to these properties collectively as the "Class Properties." Plaintiffs and Defendants have also stipulated that Plaintiffs and the other Class members do not consent to plutonium being on their properties.

Given these stipulations, in order for the Plaintiffs and the other Class members to recover from either Dow or Rockwell or both of them on their claim of trespass, you must find Plaintiffs have proved each of the following elements by a preponderance of the evidence:

1. Plutonium from Rocky Flats is present on the Class Properties (see Instruction No. 3.3).
2. Dow or Rockwell or both of them intentionally undertook an activity or activities that in the usual course of events caused plutonium from Rocky Flats to be present on the Class Properties (see Instruction No. 3.18).
3. It appears this plutonium will continue to be present on the Class Properties indefinitely (see Instruction No. 3.4).

You must consider whether the Plaintiffs have proved each of these elements against each Defendant. If you find that an element has not been proved as to a particular Defendant, then your verdict on the trespass claim must be for that Defendant. On the other hand, if you find Plaintiffs have proved all three elements as to a particular Defendant, then your verdict must be for Plaintiffs and against that Defendant.

INSTRUCTION NO. 3.3

Trespass Claim

First Element: Presence of Plutonium

The first element of the trespass claim requires that Plaintiffs prove that plutonium is present on the Class Properties. To prove this element, Plaintiffs are not required to show that plutonium is present on the Class Properties at any particular level or concentration, that they suffered any bodily harm because of the plutonium or that the presence of plutonium on the Class Properties damaged these properties in some other way.

INSTRUCTION NO. 3.4

Trespass Claim

Third Element: Continuing Trespass

In deciding the third element of Plaintiffs' trespass claim, which is whether it appears that plutonium will continue to be present on Class Properties indefinitely, it is not necessary for you to find that the plutonium will be there forever. Instead, in deciding this element, you should consider whether there is any reason to expect that the plutonium present on Class Properties will be removed at any definite time in the future. If you find there is no reason to expect it will be removed by a definite time, then you must find it appears that plutonium will continue to be present on the Class Properties indefinitely.

INSTRUCTION NO. 3.5

Trespass Claim

Matters That Are Not Relevant to
Deciding the Trespass Claim

A trespass may exist even though the conduct that originally caused the invasion of the plaintiff's land has ceased. Accordingly, in considering whether Plaintiffs have proved the elements of their trespass claim as stated in Instruction No. 3.2, it is irrelevant that Dow and/or Rockwell ceased any such activities before Plaintiffs brought this suit or that the Rocky Flats plant itself is now shut down.

That Plaintiffs or Class members knew or could have known that plutonium was present on their properties when they purchased them is also irrelevant to determining whether Dow or Rockwell are liable for trespass as stated in Instruction No. 3.2.

You have also heard argument that plutonium has been removed from properties in the Class Area as a result of bulldozing, soil excavation and other disturbance during real estate construction and development activities in the Class Area. You are to disregard all such argument because I recently ruled that it cannot be presented or considered in deciding the trespass claims. For purposes of deciding the trespass claims, therefore, the notion that plutonium has been removed from the Class Area through development and construction activities is irrelevant.

None of the irrelevant matters described in this instruction should be considered in determining the trespass claim.

INSTRUCTION NO. 3.6

Nuisance Claim

Elements of the Nuisance Claim

Plaintiffs claim that Defendants, through their operation of the Rocky Flats plant, caused a nuisance. In order for the Plaintiff Class to recover from either Dow or Rockwell or both of them on their claim of nuisance, you must find Plaintiffs have proved each of the following elements by a preponderance of the evidence:

1. Dow or Rockwell or both of them interfered with Class members' use and enjoyment of their properties in the Class Area in one or both of these two ways:
   A. By causing Class members to be exposed to plutonium and placing them at some increased risk of health problems as a result of this exposure (see Instruction Nos. 3.7, 3.18); and/or
   B. By causing objective conditions that pose a demonstrable risk of future harm to the Class Area (see Instruction Nos. 3.7, 3.18);
2. This interference with Class members' use and enjoyment of their properties was both "unreasonable" and "substantial" (see Instruction Nos. 3.8 – 3.12);
3. The activity or activities causing the unreasonable and substantial interference were either "intentional" or "negligent" (see Instruction Nos. 3.13 – 3.16); and
4. It appears the unreasonable and substantial interference with the use and enjoyment of property caused by Dow and/or Rockwell's intentional or negligent conduct will continue indefinitely (see Instruction No. 3.17).

You must consider whether the Plaintiffs have proved these elements against each Defendant. If you find that any one of these elements has not been proved as to a particular Defendant, then your verdict on the nuisance claim must be for that Defendant. On the other hand, if you find Plaintiffs have proved each of these elements as to a particular Defendant, then your verdict on the nuisance claim must be for Plaintiffs and against that Defendant.

INSTRUCTION NO. 3.7

Nuisance Claim

First Element: Interference with Use and Enjoyment of Property

The purpose of a nuisance claim is to protect a landowner's right to use and enjoy his property. Although there are countless ways that a person or company can interfere with this right, for purposes of deciding the first element of the Plaintiff Class' nuisance claim, you may only consider the two possible forms of interference with Class members' use and enjoyment of their property that I stated in Instruction No. 3.6 and will describe further here.

The first possible form of class-wide interference is whether one or both of Defendants' activities at Rocky Flats interfered with Class members' use and enjoyment of their properties by causing Class members to be exposed to plutonium and placing them at some increased risk of health problems as a result of this exposure. To find that Plaintiffs proved this form of interference, you do not need to find that all Class members were exposed to plutonium at the same time or by the same methods or to the same degree or that they all incurred the same level of health risk as a result of exposure to plutonium.

It is enough to find for purposes of this form of interference with use and enjoyment of property that the Class members were exposed to plutonium in some way as a result of one or both Defendants' activities and incurred some increment of increased health risk as a result.

There may be some nonresident Class members—that is, Class members who owned property within the Class Area but without living there. If you find that occupancy of their properties *would* have resulted in exposure to plutonium in some way, causing some increment of increased health risk, as a result of one or both Defendants' activities, then you should find that the Class members too suffered an interference with the use and enjoyment of their properties.

The second possible form of interference you must consider in deciding this first element of the Plaintiff Class' nuisance claim is whether one or both of Defendants' activities at Rocky Flats interfered with Class members' use and enjoyment of their properties by creating objective conditions that pose a demonstrable risk of future harm to the Class Area. For example, if plutonium or other hazardous substances present on or in the vicinity of Rocky Flats is at risk of being released to the Class Area—through natural forces, cleanup activity, the conduct of others and/or accidents—and could cause harm to properties in the Class Area by increasing the health risk to residents or impairing the future use of their land in some way, then this would be an objective condition that poses a demonstrable risk of future harm to the Class Area.

In order for you to find interference based on the threat or risk of future harm, you also need not find that the future harm *will* occur and affect the whole of the

Class Area. You need only find that conditions exist that present the *potential* for such class-wide harm to occur.

You need not find that all Class members were subject to the same form of interference with use and enjoyment of their properties. It is enough if you find the Class members were all subject to at least one form of interference described in this instruction, even if some Class members were subject only to the first form of interference, others only to the second, and still others to both.

In deciding whether either or both forms of possible class-wide interference exists, you should not consider whether individual Plaintiffs or Class members are or might be fearful, anxious or otherwise disturbed by any real or perceived risks relating to Rocky Flats and the Defendants' activities there or the conditions they left behind. Individual reactions to these matters are not relevant to the question of whether a class-wide interference exists.

You also should not consider in deciding this element of the nuisance claim whether Defendants' activities caused any decrease in the value of Class members' properties. The law does not consider a decrease in property value to be an interference with the use and enjoyment of property.

If you find that Plaintiffs have proved either Dow or Rockwell or both of them interfered with Class members' use and enjoyment of property in one or both of the ways I described in Instruction No. 3.6 and in this instruction, then you must find that Plaintiffs have proved the first element of their nuisance claim with respect to the Defendant or Defendants who caused or contributed to the proven interference. If, however, you find that neither Defendant interfered with Class members' use and enjoyment of property in at least one of these ways, then

you must find Plaintiffs have not proved this element of their nuisance claim against either Defendant.

INSTRUCTION NO. 3.8

Nuisance Claim

Second Element: "Substantial" and "Unreasonable" Interference—Introduction

Practically all human activities interfere to some extent with other people or involve some risk of interference. One such possible interference is with another person's right to use and enjoy his property. The law of nuisance does not attempt to hold an actor liable for all interferences with this right, but rather only for those interferences that are both "substantial" and "unreasonable." That is why this is an element of Plaintiffs' nuisance claim. The definitions of these terms are set out in Instruction Nos. 3.9 and 3.10.

In deciding whether Plaintiffs have proven that the interference they claim is substantial and unreasonable, you may only consider any interference with Class members' use and enjoyment of property you find based on Instruction Nos. 3.6 and 3.7. Thus, if you find Plaintiffs proved that Dow and/or Rockwell interfered with Class members' use and enjoyment of property in only one of the ways stated in these instructions, you may only consider this proven form of interference in deciding whether Plaintiffs have proved a substantial and unreasonable interference. If, however, you find Plaintiffs proved that Dow and/or Rockwell interfered with Class members' use and enjoyment of property in both of the ways stated in these instructions, you should consider these two forms of interference together to decide whether the total interference caused by each Defendant was substantial and unreasonable.

INSTRUCTION NO. 3.9

Nuisance Claim

Second Element: "Substantial" Interference—Defined

An interference with a person's right to use and enjoy their land is "substantial" if the interference is significant enough that a normal person in the community would find it offensive, annoying or inconvenient. In this case, that means you must determine whether a reasonable landowner of normal sensibilities would find the proven interference caused by Dow or Rockwell to be offensive, annoying or inconvenient. "Normal sensibilities" for these purposes means a person who is neither unusually sensitive nor unusually insensitive to the interference you are considering.

In deciding whether any interference proven by Plaintiffs is substantial under this test, you must consider only the magnitude or level of interference that is common to the Class as a whole, and not any more severe level of interference that may have been suffered by some Class members but not by others.

Evidence that the value of Class members' properties has diminished because of any interference proven by Plaintiffs is evidence that the interference is substantial under the test stated in this instruction. This is so because normal members of the community are part of the market that determines the value of properties, and if they consider an interference with the use and enjoyment of these properties to be offensive, annoying or inconvenient, they may place a lower value on the property than they would if the interference did not exist. Evidence that Class Properties have a lower value because of any proven interference is not necessary, however, for you to find that the interference is substantial under the test I just described to you.

INSTRUCTION NO. 3.10

Nuisance Claim

Second Element: "Unreasonable" Interference—
Balancing Test

In an action for damages, such as this case, an interference with a person's right to use and enjoy their land is "unreasonable" if the gravity of the harm outweighs the utility of the conduct that caused it. Accordingly, to determine whether a proven interference is unreasonable in this case, you must consider and balance the gravity of the harm to Class members against the utility of [ ] Dow and Rockwell's conduct at Rocky Flats and determine whether the gravity of this harm outweighs the utility of this conduct.

I will tell you more about this balancing test in my next instructions, but I want to caution you now that it does not mean that Dow and Rockwell can interfere with Class members' use and enjoyment of their properties as long as their activities at Rocky Flats served an important purpose or these activities are deemed more valuable or profitable than Class members' use of their land. Instead, you must consider a number of factors as part of the balancing test to decide whether any interference Defendants caused was unreasonable. I will describe those factors for you in a moment. (See Instruction Nos. 3.11 and 3.12.)

In considering these factors and deciding whether any interference by Dow or Rockwell was unreasonable, you must also use an objective perspective. In other words, the question is not how Plaintiffs, Class members or the Defendants would consider the gravity of the harm or the utility of Defendants' conduct, or the judgment they would make about whether any proven interference is unreasonable. Instead, the question is whether reason-

able persons generally, looking at the whole situation impartially and objectively, would consider the interference to be unreasonable.

INSTRUCTION NO. 3.11

Nuisance Claim

Second Element: Unreasonable Interference:
Factors Regarding Gravity of the Harm

The gravity of the harm refers to the gravity of the proven interference with Class members' use and enjoyment of their property. The factors you should consider in assessing the gravity of this harm are:

1. The extent of the harm involved.

   The extent of the harm depends on both the degree of the harm and its duration. You can consider both harm that has actually been incurred and the risk of future harm. In assessing the extent of the harm, you must also consider only harm that is common to the class as a whole, and not any more severe harm that may have been suffered by some Class members but not by others.

2. The character of the harm involved.

   This factor refers to the kind of harm suffered by the Class members.

3. The social value of the type of use or enjoyment of property that has been [ ] harmed.

   This factor considers the social value of the use to which the Class members' lands are being put. The social value of a particular type of use depends on the extent to which the use or uses advances or protects the general public good.

4. The suitability of the particular use or enjoyment harmed to the character of the locality.

   This factor considers whether the particular use or enjoyment the Class members make of their land in the Class Area is suitable to this area.

5. The burden on the Class members of avoiding the harm.

   This factor is considered when it is possible for the landowner to take some action to avoid the harm.

INSTRUCTION NO. 3.12

Nuisance Claim

Second Element: Unreasonable Interference: Factors Regarding Utility of the Conduct

There are also certain factors you must consider in assessing the utility of the conduct that caused the harm, that is, any proven interference. Some of these factors focus directly on the conduct causing the harm, while other factors focus on any actions Dow or Rockwell have taken to avoid or compensate others for any interference they caused.

The factors focusing on the conduct causing the harm include:

1. The social value of the primary purpose of this conduct.

   It is undisputed that the primary purpose of the conduct that allegedly interfered with Class members' right to use and enjoy their properties was to manufacture nuclear weapons components. The social value of this purpose depends on the extent to which it advanced or protected the general public good. The parties agree that the manufacture of

nuclear weapons at Rocky Flats, as a general matter, advanced the public good by protecting national security.

2. The suitability of the conduct to the character of the locality.

   This factor considers whether the Defendants' conduct is suitable to the area in which it occurred.

In evaluating the utility of the conduct causing the harm, you must also consider whether and to what extent the actor causing the harm took steps to address the consequences of its conduct. Thus, you must consider the following factors focusing on any actions Dow or Rockwell have taken to avoid or compensate others for any interference they caused:

3. The impracticability of preventing or avoiding the interference.

   If it was practicable for Dow or Rockwell to avoid causing any interference with Class members' use and enjoyment of property, and they did not take the necessary measures to do so, then the law considers their conduct to have no utility, regardless of its social value. Any interference caused by Dow and/or Rockwell was practicably avoidable if by some means the company could have substantially reduced the harm without incurring prohibitive expense or hardship in its operation of Rocky Flats. If you find it was practicable for Dow or Rockwell to avoid any harm they caused under this test, then you must find the gravity of the harm outweighed the utility of Dow or Rockwell's conduct, and that any interference proved by Plaintiffs was unreasonable.

4. The financial burden to compensate others for any interference caused by Dow and/or Rockwell's activities.

   A nuisance action for damages seeks to place the financial burden for any interference with the use and enjoyment of property on the actor that caused this harm. The financial burden of this cost is therefore a significant factor in determining whether the conduct of causing the harm without paying for it is unreasonable. You may find that Dow or Rockwell's conduct lacks sufficient utility to outweigh any interference it caused if you find it would be unreasonable for Class members to bear this cost without compensation.

INSTRUCTION NO. 3.13

Nuisance Claim

Third Element: "Intentional" or "Negligent" Conduct

As stated in Instruction No. 3.6, the third element Plaintiffs must prove to prevail on their nuisance claim is that the activity or activities causing the unreasonable and substantial interference were either "intentional" (see Instruction No. 3.14) or "negligent" (see Instruction No. 3.15). Thus, Plaintiff[s] must do more than show that the existence of Rocky Flats interfered with Class members' use and enjoyment of their properties. They must show that either Defendant or both of them engaged in intentional or negligent conduct at Rocky Flats that caused such an interference.

You do not need to find that all of the conduct that caused any substantial and unreasonable interference was intentional or that all of it was negligent in order to find that Plaintiffs proved this element of their nuisance

claim. Proof that a substantial and unreasonable interference resulted from a combination of intentional conduct and negligent conduct is sufficient to prove this element.

INSTRUCTION NO. 3.14

Nuisance Claim

Third Element: Definition of "Intentional" Conduct

The conduct that results in an interference with another's use and enjoyment of property is considered "intentional" if it meets any of the following three tests:

(1) The defendant knew that its conduct would interfere with others' use and enjoyment of their property; or

(2) The defendant knew it was substantially certain that its conduct would interfere with others' use and enjoyment of their property; or

(3) The defendant learned that its conduct was interfering with or was substantially certain to interfere with others' use and enjoyment of their property and yet continued this conduct.

INSTRUCTION NO. 3.15

Nuisance Claim

Third Element: Definition of "Negligent" Conduct

The generation, use, storage and disposal of plutonium and other hazardous radioactive and non-radioactive substances as part of the operation of a nuclear weapons plant are inherently dangerous activities. As a result, Dow and Rockwell were required to exercise the highest possible degree of skill, care, diligence, and foresight in conducting these activities, according to the best technical, mechanical and scientific knowledge and methods

that were practical and available at the time. If either Dow or Rockwell or both of them did not fulfill this duty when they performed any activities that caused or contributed to a substantial and unreasonable interference (as defined in these instructions), then their conduct was negligent.

INSTRUCTION NO. 3.16

Nuisance Claim

Third Element: Accident Not Presumptive Negligence

The occurrence of an accident does not raise any presumption of negligence on the part of a defendant. Negligence may be established, however, by the facts and circumstances surrounding an accident.

INSTRUCTION NO. 3.17

Nuisance Claim

Fourth Element: Continuing Nuisance

As stated in Instruction No. 3.6, the fourth element Plaintiffs must prove to prevail on their nuisance claim is that it appears that the unreasonable and substantial interference with the use and enjoyment of property caused by Dow and/or Rockwell's intentional or negligent conduct will continue indefinitely. In deciding this element, it is not necessary for you to find that the interference meeting these requirements will last forever. Instead, you should consider whether there is any reason to expect that this interference will end at any definite time in the future. If you find there is no reason to expect this interference to end by a definite time, then you must find it appears the interference will continue indefinitely.

INSTRUCTION NO. 3.18

Both Claims

Causation

The word "cause" as used in these instructions means an act or failure to act that in natural and probable sequence produced the claimed effect. It is a cause without which the claimed effect would not have happened.

* * * * *

INSTRUCTION NO. 3.22

Both Claims

Measure of Actual Damages

Plaintiffs seek an award of actual damages based on the decrease in the value of properties in the Class Area caused by the trespass and/or nuisance committed by Dow or Rockwell or both of them. This type of actual damages is sometimes called diminution in property value.

The diminution in property value that Plaintiffs may recover here is measured by the difference between the actual value of the Class Properties and the value these Properties would have had if Dow or Rockwell or both of them had not committed the trespass and/or nuisance proved by Plaintiffs. In other words, you must compare the actual value of the Class Properties to what their value would have been "but for" the trespass and/or nuisance, and the difference is the diminution in property value that Plaintiffs can recover as actual damages in this case.

In a case like this, the law requires that you measure the amount of any such diminution in Class property values at a particular point in time. That point is the time or time period when the injurious situation became "com-

plete" and "comparatively enduring." The injurious situation is "complete" when the effects of the trespass or nuisance are known to their full extent. It is "comparatively enduring" when there is no reason to expect that these effects will end at a definite time in the future. When the injurious situation became "complete" and "comparatively enduring" in this case is a question you will decide as I will describe in just a moment.

Plaintiffs contend that the diminution in the value of Class properties should be measured as of the period between June 6, 1989, when the FBI and U.S. Environmental Protection Agency searched Rocky Flats as part of their investigation into alleged wrongdoing by Rockwell, and March 26, 1992, when Rockwell pled guilty to certain environmental crimes at Rocky Flats. Plaintiffs allege this is the right time period to measure their actual damages because this is when the injurious effects of Defendants' alleged trespass and nuisance became "complete" and "comparatively enduring."

Plaintiffs have also presented evidence, however, of the injurious effects of the alleged trespass and nuisance in the larger period of 1988 through 1995. If you find these effects became "complete" and "comparatively enduring" at any time during this period, therefore, you may award actual damages to Plaintiffs measured as of the time you find the effects became "complete" and "comparatively enduring." If you do not find the injurious effects of the alleged trespass and/or nuisance became "complete" and "comparatively enduring" some time during the 1988-1995 period, then you should not award actual damages to Plaintiffs.

Accordingly, to decide whether Plaintiffs are entitled to the actual damages they seek in this case, you must

determine whether Plaintiffs have proved by a preponderance of the evidence that:

1. The injurious situation became "complete" and "comparatively enduring" (as defined in this instruction) sometime between January 1, 1988 and December 31, 1995; and
2. As of the time you find the injurious situation became "complete" and "comparatively enduring," the actual value of the Class Properties was less than the value these Properties would have had but for the trespass and/or nuisance committed by Dow or Rockwell or both of them; and
3. As of the time you find the injurious situation became "complete" and "comparatively enduring," the amount of the difference between the actual value of Class Properties and what their value would have been but for the trespass and/or nuisance (see Instruction No. 3.23).

INSTRUCTION NO. 3.23

Both Claims

Aggregate Damages and Percentage Diminution

If you find Plaintiffs have proved actual damages as described in instruction No. 3.22, you will be asked to report your findings regarding the amount of their actual damages in several ways. First, you will be asked to decide both the total amount of damages suffered by the entire Class as a whole (called "aggregate" Class damages), and the percentage diminution in property values in the Class Area as a whole.

Additionally, you will be asked to decide the amount of actual damages and percentage diminution in Class property values for three different types of property in the

Class: vacant land, commercial property and residential property.

You will not be asked to determine the amount of actual damages suffered by any individual Class member. Individual Class members' share of any damages you award will be determined in later proceedings. Therefore, you must only concern yourselves with the total, class-wide measures of actual damages I just described.

INSTRUCTION NO. 3.24

Both Claims

Matters Not Relevant to Determining Actual Damages

In determining any actual damages to be awarded in this case, you should not consider or award any diminution in value caused solely by the proximity of the Class Area to Rocky Flats. Instead, you must follow my directions in Instruction No. 3.22 to award damages for diminution in value you find was caused by any trespass or nuisance you find Dow or Rockwell or both of them committed.

In determining whether Plaintiffs have proved actual damages, you also should remember that Plaintiffs are not required to prove that any diminution in value caused by Dow or Rockwell's activities at Rocky Flats came into existence before or after the FBI raid or some other specific event. Instead, as stated in Instruction No. 3.22, the measure of damages to be proved by Plaintiffs is the value the Class Properties would have had "but for" any trespass or nuisance by Dow and/or Rockwell.

APPENDIX F
STATUTORY PROVISIONS

The Atomic Energy Act of 1954, Pub. L. No. 83-703, 68 Stat. 919, as amended by the Price-Anderson Act, Pub. L. No. 85-256, 71 Stat. 576 (1957) (codified as amended at 42 U.S.C. §§2011 *et seq.*), provides in relevant part as follows:

§ 2014. Definitions

The intent of Congress in the definitions as given in this section should be construed from the words or phrases used in the definitions. As used in this chapter:

* * * * *

(q) The term "nuclear incident" means any occurrence, including an extraordinary nuclear occurrence, within the United States causing, within or outside the United States, bodily injury, sickness, disease, or death, or loss of or damage to property, or loss of use of property, arising out of or resulting from the radioactive, toxic, explosive, or other hazardous properties of source, special nuclear, or byproduct material: *Provided*, *however*, That as the term is used in section 2210(*l*) of this title, it shall include any such occurrence outside the United States: *And provided further*, That as the term is used in section 2210(d) of this title, it shall include any such occurrence outside the United States if such occurrence involves source, special nuclear, or byproduct material owned by, and used by or under contract with, the United States: *And provided further*, That as the term is used in section 2210(c) of this title, it shall include any such occurrence outside both the United States and any other nation if such occurrence arises out of or results from the radioactive, toxic, explosive, or other hazardous properties of source, special nuclear, or byproduct material li-

censed pursuant to subchapters V, VI, VII, and IX of this division, which is used in connection with the operation of a licensed stationary production or utilization facility or which moves outside the territorial limits of the United States in transit from one person licensed by the Nuclear Regulatory Commission to another person licensed by the Nuclear Regulatory Commission.

* * * * *

(w) The term "public liability" means any legal liability arising out of or resulting from a nuclear incident or precautionary evacuation (including all reasonable additional costs incurred by a State, or a political subdivision of a State, in the course of responding to a nuclear incident or a precautionary evacuation), except: (i) claims under State or Federal workmen's compensation acts of employees of persons indemnified who are employed at the site of and in connection with the activity where the nuclear incident occurs; (ii) claims arising out of an act of war; and (iii) whenever used in subsections (a), (c), and (k) of section 2210 of this title, claims for loss of, or damage to, or loss of use of property which is located at the site of and used in connection with the licensed activity where the nuclear incident occurs. "Public liability" also includes damage to property of persons indemnified: *Provided*, That such property is covered under the terms of the financial protection required, except property which is located at the site of and used in connection with the activity where the nuclear incident occurs.

* * * * *

(aa) The term "special nuclear material" means (1) plutonium, uranium enriched in the isotope 233 or in the isotope 235, and any other material which the Commission, pursuant to the provisions of section 2071 of this

title, determines to be special nuclear material, but does not include source material; or (2) any material artificially enriched by any of the foregoing, but does not include source material.

* * * * *

(hh) The term "public liability action", as used in section 2210 of this title, means any suit asserting public liability. A public liability action shall be deemed to be an action arising under section 2210 of this title, and the substantive rules for decision in such action shall be derived from the law of the State in which the nuclear incident involved occurs, unless such law is inconsistent with the provisions of such section.

* * * * *

§ 2210. Indemnification and limitation of liability

(a) Requirement of financial protection for licensees

Each license issued under section 2133 or 2134 of this title and each construction permit issued under section 2235 of this title shall, and each license issued under section 2073, 2093, or 2111 of this title may, for the public purposes cited in section 2012(i) of this title, have as a condition of the license a requirement that the licensee have and maintain financial protection of such type and in such amounts as the Nuclear Regulatory Commission (in this section referred to as the "Commission") in the exercise of its licensing and regulatory authority and responsibility shall require in accordance with subsection (b) of this section to cover public liability claims. Whenever such financial protection is required, it may be a further condition of the license that the licensee execute and maintain an indemnification agreement in accordance with subsection (c) of this section. The Commission may

require, as a further condition of issuing a license, that an applicant waive any immunity from public liability conferred by Federal or State law.

(b) Amount and type of financial protection for licensees

(1) The amount of primary financial protection required shall be the amount of liability insurance available from private sources, except that the Commission may establish a lesser amount on the basis of criteria set forth in writing, which it may revise from time to time, taking into consideration such factors as the following: (A) the cost and terms of private insurance, (B) the type, size, and location of the licensed activity and other factors pertaining to the hazard, and (C) the nature and purpose of the licensed activity: *Provided*, That for facilities designed for producing substantial amounts of electricity and having a rated capacity of 100,000 electrical kilowatts or more, the amount of primary financial protection required shall be the maximum amount available at reasonable cost and on reasonable terms from private sources (excluding the amount of private liability insurance available under the industry retrospective rating plan required in this subsection). Such primary financial protection may include private insurance, private contractual indemnities, self-insurance, other proof of financial responsibility, or a combination of such measures and shall be subject to such terms and conditions as the Commission may, by rule, regulation, or order, prescribe. The Commission shall require licensees that are required to have and maintain primary financial protection equal to the maximum amount of liability insurance available from private sources to maintain, in addition to such primary financial protection, private liability insurance available under an industry retrospective rating plan providing for

premium charges deferred in whole or major part until public liability from a nuclear incident exceeds or appears likely to exceed the level of the primary financial protection required of the licensee involved in the nuclear incident: *Provided*, That such insurance is available to, and required of, all of the licensees of such facilities without regard to the manner in which they obtain other types or amounts of such primary financial protection: *And provided further*, That the maximum amount of the standard deferred premium that may be charged a licensee following any nuclear incident under such a plan shall not be more than $95,800,000 (subject to adjustment for inflation under subsection (t) of this section), but not more than $15,000,000 in any 1 year (subject to adjustment for inflation under subsection (t) of this section), for each facility for which such licensee is required to maintain the maximum amount of primary financial protection: *And provided further*, That the amount which may be charged a licensee following any nuclear incident shall not exceed the licensee's pro rata share of the aggregate public liability claims and costs (excluding legal costs subject to subsection (*o*)(1)(D) of this section, payment of which has not been authorized under such subsection) arising out of the nuclear incident. Payment of any State premium taxes which may be applicable to any deferred premium provided for in this chapter shall be the responsibility of the licensee and shall not be included in the retrospective premium established by the Commission.

(2)(A) The Commission may, on a case by case basis, assess annual deferred premium amounts less than the standard annual deferred premium amount assessed under paragraph (1)—

(i) for any facility, if more than one nuclear incident occurs in any one calendar year; or

(ii) for any licensee licensed to operate more than one facility, if the Commission determines that the financial impact of assessing the standard annual deferred premium amount under paragraph (1) would result in undue financial hardship to such licensee or the ratepayers of such licensee.

(B) In the event that the Commission assesses a lesser annual deferred premium amount under subparagraph (A), the Commission shall require payment of the difference between the standard annual deferred premium assessment under paragraph (1) and any such lesser annual deferred premium assessment within a reasonable period of time, with interest at a rate determined by the Secretary of the Treasury on the basis of the current average market yield on outstanding marketable obligations of the United States of comparable maturities during the month preceding the date that the standard annual deferred premium assessment under paragraph (1) would become due.

(3) The Commission shall establish such requirements as are necessary to assure availability of funds to meet any assessment of deferred premiums within a reasonable time when due, and may provide reinsurance or shall otherwise guarantee the payment of such premiums in the event it appears that the amount of such premiums will not be available on a timely basis through the resources of private industry and insurance. Any agreement by the Commission with a licensee or indemnitor to guarantee the payment of deferred premiums may contain such terms as the Commission deems appropriate to carry out the purposes of this section and to assure reimbursement to the Commission for its payments made due to the failure of such licensee or indemnitor to meet any of its obligations arising under or in connection with fi-

nancial protection required under this subsection including without limitation terms creating liens upon the licensed facility and the revenues derived therefrom or any other property or revenues of such licensee to secure such reimbursement and consent to the automatic revocation of any license.

(4)(A) In the event that the funds available to pay valid claims in any year are insufficient as a result of the limitation on the amount of deferred premiums that may be required of a licensee in any year under paragraph (1) or (2), or the Commission is required to make reinsurance or guaranteed payments under paragraph (3), the Commission shall, in order to advance the necessary funds—

(i) request the Congress to appropriate sufficient funds to satisfy such payments; or

(ii) to the extent approved in appropriation Acts, issue to the Secretary of the Treasury obligations in such forms and denominations, bearing such maturities, and subject to such terms and conditions as may be agreed to by the Commission and the Secretary of the Treasury.

(B) Except for funds appropriated for purposes of making reinsurance or guaranteed payments under paragraph (3), any funds appropriated under subparagraph (A)(i) shall be repaid to the general fund of the United States Treasury from amounts made available by standard deferred premium assessments, with interest at a rate determined by the Secretary of the Treasury on the basis of the current average market yield on outstanding marketable obligations of the United States of comparable maturities during the month preceding the date that the funds appropriated under such subparagraph are made available.

(C) Except for funds appropriated for purposes of making reinsurance or guaranteed payments under paragraph (3), redemption of obligations issued under subparagraph (A)(ii) shall be made by the Commission from amounts made available by standard deferred premium assessments. Such obligations shall bear interest at a rate determined by the Secretary of the Treasury by taking into consideration the average market yield on outstanding marketable obligations to the United States of comparable maturities during the month preceding the issuance of the obligations under this paragraph. The Secretary of the Treasury shall purchase any issued obligations, and for such purpose the Secretary of the Treasury may use as a public debt transaction the proceeds from the sale of any securities issued under chapter 31 of Title 31 and the purposes for which securities may be issued under such chapter are extended to include any purchase of such obligations. The Secretary of the Treasury may at any time sell any of the obligations acquired by the Secretary of the Treasury under this paragraph. All redemptions, purchases, and sales by the Secretary of the Treasury of obligations under this paragraph shall be treated as public debt transactions of the United States.

(5)(A) For purposes of this section only, the Commission shall consider a combination of facilities described in subparagraph (B) to be a single facility having a rated capacity of 100,000 electrical kilowatts or more.

(B) A combination of facilities referred to in subparagraph (A) is two or more facilities located at a single site, each of which has a rated capacity of 100,000 electrical kilowatts or more but not more than 300,000 electrical kilowatts, with a combined rated capacity of not more than 1,300,000 electrical kilowatts.

(c) Indemnification of licensees by Nuclear Regulatory Commission

The Commission shall, with respect to licenses issued between August 30, 1954, and December 31, 2025, for which it requires financial protection of less than $560,000,000, agree to indemnify and hold harmless the licensee and other persons indemnified, as their interest may appear, from public liability arising from nuclear incidents which is in excess of the level of financial protection required of the licensee. The aggregate indemnity for all persons indemnified in connection with each nuclear incident shall not exceed $500,000,000 excluding costs of investigating and settling claims and defending suits for damage: *Provided*, *however*, That this amount of indemnity shall be reduced by the amount that the financial protection required shall exceed $60,000,000. Such a contract of indemnification shall cover public liability arising out of or in connection with the licensed activity. With respect to any production or utilization facility for which a construction permit is issued between August 30, 1954, and December 31, 2025, the requirements of this subsection shall apply to any license issued for such facility subsequent to December 31, 2025.

(d) Indemnification of contractors by Department of Energy

(1)(A) In addition to any other authority the Secretary of Energy (in this section referred to as the "Secretary") may have, the Secretary shall, until December 31, 2025, enter into agreements of indemnification under this subsection with any person who may conduct activities under a contract with the Department of Energy that involve the risk of public liability and that are not subject to financial protection requirements under subsection (b) of

this section or agreements of indemnification under subsection (c) or (k) of this section.

(B)(i)(I) Beginning 60 days after August 20, 1988, agreements of indemnification under subparagraph (A) shall be the exclusive means of indemnification for public liability arising from activities described in such subparagraph, including activities conducted under a contract that contains an indemnification clause under Public Law 85-804 [50 U.S.C. 1431 et seq.] entered into between August 1, 1987, and August 20, 1988.

(II) The Secretary may incorporate in agreements of indemnification under subparagraph (A) the provisions relating to the waiver of any issue or defense as to charitable or governmental immunity authorized in subsection (n)(1) of this section to be incorporated in agreements of indemnification. Any such provisions incorporated under this subclause shall apply to any nuclear incident arising out of nuclear waste activities subject to an agreement of indemnification under subparagraph (A).

(ii) Public liability arising out of nuclear waste activities subject to an agreement of indemnification under subparagraph (A) that are funded by the Nuclear Waste Fund established in section 10222 of this title shall be compensated from the Nuclear Waste Fund in an amount not to exceed the maximum amount of financial protection required of licensees under subsection (b) of this section.

(2) In an agreement of indemnification entered into under paragraph (1), the Secretary—

(A) may require the contractor to provide and maintain financial protection of such a type and in such amounts as the Secretary shall determine to be appro-

priate to cover public liability arising out of or in connection with the contractual activity; and

(B) shall indemnify the persons indemnified against such liability above the amount of the financial protection required, in the amount of $10,000,000,000 (subject to adjustment for inflation under subsection (t) of this section), in the aggregate, for all persons indemnified in connection with the contract and for each nuclear incident, including such legal costs of the contractor as are approved by the Secretary.

(3) All agreements of indemnification under which the Department of Energy (or its predecessor agencies) may be required to indemnify any person under this section shall be deemed to be amended, on August 8, 2005, to reflect the amount of indemnity for public liability and any applicable financial protection required of the contractor under this subsection.

(4) Financial protection under paragraph (2) and indemnification under paragraph (1) shall be the exclusive means of financial protection and indemnification under this section for any Department of Energy demonstration reactor licensed by the Commission under section 5842 of this title.

(5) In the case of nuclear incidents occurring outside the United States, the amount of the indemnity provided by the Secretary under this subsection shall not exceed $500,000,000.

(6) The provisions of this subsection may be applicable to lump sum as well as cost type contracts and to contracts and projects financed in whole or in part by the Secretary.

(7) A contractor with whom an agreement of indemnification has been executed under paragraph (1)(A) and

who is engaged in activities connected with the underground detonation of a nuclear explosive device shall be liable, to the extent so indemnified under this subsection, for injuries or damage sustained as a result of such detonation in the same manner and to the same extent as would a private person acting as principal, and no immunity or defense founded in the Federal, State, or municipal character of the contractor or of the work to be performed under the contract shall be effective to bar such liability.

(e) Limitation on aggregate public liability

(1) The aggregate public liability for a single nuclear incident of persons indemnified, including such legal costs as are authorized to be paid under subsection (*o*)(1)(D) of this section, shall not exceed—

(A) in the case of facilities designed for producing substantial amounts of electricity and having a rated capacity of 100,000 electrical kilowatts or more, the maximum amount of financial protection required of such facilities under subsection (b) of this section (plus any surcharge assessed under subsection (*o*)(1)(E) of this section);

(B) in the case of contractors with whom the Secretary has entered into an agreement of indemnification under subsection (d) of this section, the amount of indemnity and financial protection that may be required under paragraph (2) of subsection (d) of this section; and

(C) in the case of all other licensees of the Commission required to maintain financial protection under this section—

(i) $500,000,000, together with the amount of financial protection required of the licensee; or

(ii) if the amount of financial protection required of the licensee exceeds $60,000,000, $560,000,000 or the amount of financial protection required of the licensee, whichever amount is more.

(2) In the event of a nuclear incident involving damages in excess of the amount of aggregate public liability under paragraph (1), the Congress will thoroughly review the particular incident in accordance with the procedures set forth in subsection (i) of this section and will in accordance with such procedures, take whatever action is determined to be necessary (including approval of appropriate compensation plans and appropriation of funds) to provide full and prompt compensation to the public for all public liability claims resulting from a disaster of such magnitude.

(3) No provision of paragraph (1) may be construed to preclude the Congress from enacting a revenue measure, applicable to licensees of the Commission required to maintain financial protection pursuant to subsection (b) of this section, to fund any action undertaken pursuant to paragraph (2).

(4) With respect to any nuclear incident occurring outside of the United States to which an agreement of indemnification entered into under the provisions of subsection (d) of this section is applicable, such aggregate public liability shall not exceed the amount of $500,000,000, together with the amount of financial protection required of the contractor.

(f) Collection of fees by Nuclear Regulatory Commission

The Commission or the Secretary, as appropriate, is authorized to collect a fee from all persons with whom an indemnification agreement is executed under this section.

This fee shall be $30 per year per thousand kilowatts of thermal energy capacity for facilities licensed under section 2133 of this title: *Provided*, That the Commission or the Secretary, as appropriate, is authorized to reduce the fee for such facilities in reasonable relation to increases in financial protection required above a level of $60,000,000. For facilities licensed under section 2134 of this title, and for construction permits under section 2235 of this title, the Commission is authorized to reduce the fee set forth above. The Commission shall establish criteria in writing for determination of the fee for facilities licensed under section 2134 of this title, taking into consideration such factors as (1) the type, size, and location of facility involved, and other factors pertaining to the hazard, and (2) the nature and purpose of the facility. For other licenses, the Commission shall collect such nominal fees as it deems appropriate. No fee under this subsection shall be less than $100 per year.

(g) Use of services of private insurers

In administering the provisions of this section, the Commission or the Secretary, as appropriate, shall use, to the maximum extent practicable, the facilities and services of private insurance organizations, and the Commission or the Secretary, as appropriate, may contract to pay a reasonable compensation for such services. Any contract made under the provisions of this subsection may be made without regard to the provisions of section 5 of title 41 upon a showing by the Commission or the Secretary, as appropriate, that advertising is not reasonably practicable and advance payments may be made.

(h) Conditions of agreements of indemnification

The agreement of indemnification may contain such terms as the Commission or the Secretary, as appropriate, deems appropriate to carry out the purposes of this

section. Such agreement shall provide that, when the Commission or the Secretary, as appropriate, makes a determination that the United States will probably be required to make indemnity payments under this section, the Commission or the Secretary, as appropriate, shall collaborate with any person indemnified and may approve the payment of any claim under the agreement of indemnification, appear through the Attorney General on behalf of the person indemnified, take charge of such action, and settle or defend any such action. The Commission or the Secretary, as appropriate, shall have final authority on behalf of the United States to settle or approve the settlement of any such claim on a fair and reasonable basis with due regard for the purposes of this chapter. Such settlement shall not include expenses in connection with the claim incurred by the person indemnified.

(i) Compensation plans

(1) After any nuclear incident involving damages that are likely to exceed the applicable amount of aggregate public liability under subparagraph (A), (B), or (C) of subsection (e)(1) of this section, the Secretary or the Commisison,[1] as appropriate, shall—

(A) make a survey of the causes and extent of damage; and

(B) expeditiously submit a report setting forth the results of such survey to the Congress, to the Representatives of the affected districts, to the Senators of the affected States, and (except for information that will cause serious damage to the national defense of the United States) to the public, to the parties involved, and to the courts.

---

[1] So in original. Probably should be "Commission,".

(2) Not later than 90 days after any determination by a court, pursuant to subsection (*o*) of this section, that the public liability from a single nuclear incident may exceed the applicable amount of aggregate public liability under subparagraph (A), (B), or (C) of subsection (e)(1) of this section the President shall submit to the Congress—

(A) an estimate of the aggregate dollar value of personal injuries and property damage that arises from the nuclear incident and exceeds the amount of aggregate public liability under subsection (e)(1) of this section;

(B) recommendations for additional sources of funds to pay claims exceeding the applicable amount of aggregate public liability under subparagraph (A), (B), or (C) of subsection (e)(1) of this section, which recommendations shall consider a broad range of possible sources of funds (including possible revenue measures on the sector of the economy, or on any other class, to which such revenue measures might be applied);

(C) 1 or more compensation plans, that either individually or collectively shall provide for full and prompt compensation for all valid claims and contain a recommendation or recommendations as to the relief to be provided, including any recommendations that funds be allocated or set aside for the payment of claims that may arise as a result of latent injuries that may not be discovered until a later date; and

(D) any additional legislative authorities necessary to implement such compensation plan or plans.

(3)(A) Any compensation plan transmitted to the Congress pursuant to paragraph (2) shall bear an identification number and shall be transmitted to both Houses of

Congress on the same day and to each House while it is in session.

(B) The provisions of paragraphs (4) through (6) shall apply with respect to consideration in the Senate of any compensation plan transmitted to the Senate pursuant to paragraph (2).

(4) No such compensation plan may be considered approved for purposes of subsection (e)(2) of this section unless between the date of transmittal and the end of the first period of sixty calendar days of continuous session of Congress after the date on which such action is transmitted to the Senate, the Senate passes a resolution described in paragraph 6[2] of this subsection.

(5) For the purpose of paragraph (4) of this subsection—

(A) continuity of session is broken only by an adjournment of Congress sine die; and

(B) the days on which either House is not in session because of an adjournment of more than three days to a day certain are excluded in the computation of the sixty-day calendar period.

(6)(A) This paragraph is enacted—

(i) as an exercise of the rulemaking power of the Senate and as such it is deemed a part of the rules of the Senate, but applicable only with respect to the procedure to be followed in the Senate in the case of resolutions described by subparagraph (B) and it supersedes other rules only to the extent that it is inconsistent therewith; and

---

[2] So in original. Probably should be paragraph "(6)".

(ii) with full recognition of the constitutional right of the Senate to change the rules at any time, in the same manner and to the same extent as in the case of any other rule of the Senate.

(B) For purposes of this paragraph, the term "resolution" means only a joint resolution of the Congress the matter after the resolving clause of which is as follows: "That the approves the compensation plan numbered submitted to the Congress on , 19 .", the first blank space therein being filled with the name of the resolving House and the other blank spaces being appropriately filled; but does not include a resolution which specifies more than one compensation plan.

(C) A resolution once introduced with respect to a compensation plan shall immediately be referred to a committee (and all resolutions with respect to the same compensation plan shall be referred to the same committee) by the President of the Senate.

(D)(i) If the committee of the Senate to which a resolution with respect to a compensation plan has been referred has not reported it at the end of twenty calendar days after its referral, it shall be in order to move either to discharge the committee from further consideration of such resolution or to discharge the committee from further consideration with respect to such compensation plan which has been referred to the committee.

(ii) A motion to discharge may be made only by an individual favoring the resolution, shall be highly privileged (except that it may not be made after the committee has reported a resolution with respect to the same compensation plan), and debate thereon shall be limited to not more than one hour, to be divided equally between those favoring and those opposing the resolution. An amendment to the motion shall not be in order, and it shall not

be in order to move to reconsider the vote by which the motion was agreed to or disagreed to.

(iii) If the motion to discharge is agreed to or disagreed to, the motion may not be renewed, nor may another motion to discharge the committee be made with respect to any other resolution with respect to the same compensation plan.

(E)(i) When the committee has reported, or has been discharged from further consideration of, a resolution, it shall be at any time thereafter in order (even though a previous motion to the same effect has been disagreed to) to move to proceed to the consideration of the resolution. The motion shall be highly privileged and shall not be debatable. An amendment to the motion shall not be in order, and it shall not be in order to move to reconsider the vote by which the motion was agreed to or disagreed to.

(ii) Debate on the resolution referred to in clause (i) of this subparagraph shall be limited to not more than ten hours, which shall be divided equally between those favoring and those opposing such resolution. A motion further to limit debate shall not be debatable. An amendment to, or motion to recommit, the resolution shall not be in order, and it shall not be in order to move to reconsider the vote by which such resolution was agreed to or disagreed to.

(F)(i) Motions to postpone, made with respect to the discharge from committee, or the consideration of a resolution or motions to proceed to the consideration of other business, shall be decided without debate.

(ii) Appeals from the decision of the Chair relating to the application of the rules of the Senate to the procedures relating to a resolution shall be decided without debate.

(j) Contracts in advance of appropriations

In administering the provisions of this section, the Commission or the Secretary, as appropriate, may make contracts in advance of appropriations and incur obligations without regard to sections 1341, 1342, 1349, 1350, and 1351, and subchapter II of chapter 15, of title 31.

(k) Exemption from financial protection requirement for nonprofit educational institutions

With respect to any license issued pursuant to section 2073, 2093, 2111, 2134(a), or 2134(c) of this title, for the conduct of educational activities to a person found by the Commission to be a nonprofit educational institution, the Commission shall exempt such licensee from the financial protection requirement of subsection (a) of this section. With respect to licenses issued between August 30, 1954, and December 31, 2025, for which the Commission grants such exemption:

(1) The Commission shall agree to indemnify and hold harmless the licensee and other persons indemnified, as their interests may appear, from public liability in excess of $250,000 arising from nuclear incidents. The aggregate indemnity for all persons indemnified in connection with each nuclear incident shall not exceed $500,000,000, including such legal costs of the licensee as are approved by the Commission;

(2) such contracts of indemnification shall cover public liability arising out of or in connection with the licensed activity; and shall include damage to property of persons indemnified, except property which is located at the site of and used in connection with the activity where the nuclear incident occurs; and

(3) such contracts of indemnification, when entered into with a licensee having immunity from public liabil-

ity because it is a State agency, shall provide also that the Commission shall make payments under the contract on account of activities of the licensee in the same manner and to the same extent as the Commission would be required to do if the licensee were not such a State agency.

Any licensee may waive an exemption to which it is entitled under this subsection. With respect to any production or utilization facility for which a construction permit is issued between August 30, 1954, and December 31, 2025, the requirements of this subsection shall apply to any license issued for such facility subsequent to December 31, 2025.

(*l*) Presidential commission on catastrophic nuclear accidents

(1) Not later than 90 days after August 20, 1988, the President shall establish a commission (in this subsection referred to as the "study commission") in accordance with the Federal Advisory Committee Act (5 U.S.C. App.) to study means of fully compensating victims of a catastrophic nuclear accident that exceeds the amount of aggregate public liability under subsection (e)(1) of this section.

(2)(A) The study commission shall consist of not less than 7 and not more than 11 members, who—

(i) shall be appointed by the President; and

(ii) shall be representative of a broad range of views and interests.

(B) The members of the study commission shall be appointed in a manner that ensures that not more than a mere majority of the members are of the same political party.

(C) Each member of the study commission shall hold office until the termination of the study commission, but may be removed by the President for inefficiency, neglect of duty, or malfeasance in office.

(D) Any vacancy in the study commission shall be filled in the manner in which the original appointment was made.

(E) The President shall designate one of the members of the study commission as chairperson, to serve at the pleasure of the President.

(3) The study commission shall conduct a comprehensive study of appropriate means of fully compensating victims of a catastrophic nuclear accident that exceeds the amount of aggregate public liability under subsection (e)(1) of this section, and shall submit to the Congress a final report setting forth—

(A) recommendations for any changes in the laws and rules governing the liability or civil procedures that are necessary for the equitable, prompt, and efficient resolution and payment of all valid damage claims, including the advisability of adjudicating public liability claims through an administrative agency instead of the judicial system;

(B) recommendations for any standards or procedures that are necessary to establish priorities for the hearing, resolution, and payment of claims when awards are likely to exceed the amount of funds available within a specific time period; and

(C) recommendations for any special standards or procedures necessary to decide and pay claims for latent injuries caused by the nuclear incident.

(4)(A) The chairperson of the study commission may appoint and fix the compensation of a staff of such per-

sons as may be necessary to discharge the responsibilities of the study commission, subject to the applicable provisions of the Federal Advisory Committee Act (5 U.S.C. App.) and title 5.

(B) To the extent permitted by law and requested by the chairperson of the study commission, the Administrator of General Services shall provide the study commission with necessary administrative services, facilities, and support on a reimbursable basis.

(C) The Attorney General, the Secretary of Health and Human Services, and the Administrator of the Federal Emergency Management Agency shall, to the extent permitted by law and subject to the availability of funds, provide the study commission with such facilities, support, funds and services, including staff, as may be necessary for the effective performance of the functions of the study commission.

(D) The study commission may request any Executive agency to furnish such information, advice, or assistance as it determines to be necessary to carry out its functions. Each such agency is directed, to the extent permitted by law, to furnish such information, advice or assistance upon request by the chairperson of the study commission.

(E) Each member of the study commission may receive compensation at the maximum rate prescribed by the Federal Advisory Committee Act (5 U.S.C. App.) for each day such member is engaged in the work of the study commission. Each member may also receive travel expenses, including per diem in lieu of subsistence under sections 5702 and 5703 of title 5.

(F) The functions of the President under the Federal Advisory Committee Act (5 U.S.C. App.) that are appli-

cable to the study commission, except the function of reporting annually to the Congress, shall be performed by the Administrator of General Services.

(5) The final report required in paragraph (3) shall be submitted to the Congress not later than the expiration of the 2-year period beginning on August 20, 1988.

(6) The study commission shall terminate upon the expiration of the 2-month period beginning on the date on which the final report required in paragraph (3) is submitted.

(m) Coordinated procedures for prompt settlement of claims and emergency assistance

The Commission or the Secretary, as appropriate, is authorized to enter into agreements with other indemnitors to establish coordinated procedures for the prompt handling, investigation, and settlement of claims for public liability. The Commission or the Secretary, as appropriate, and other indemnitors may make payments to, or for the aid of, claimants for the purpose of providing immediate assistance following a nuclear incident. Any funds appropriated to the Commission or the Secretary, as appropriate, shall be available for such payments. Such payments may be made without securing releases, shall not constitute an admission of the liability of any person indemnified or of any indemnitor, and shall operate as a satisfaction to the extent thereof of any final settlement or judgment.

(n) Waiver of defenses and judicial procedures

(1) With respect to any extraordinary nuclear occurrence to which an insurance policy or contract furnished as proof of financial protection or an indemnity agreement applies and which—

(A) arises out of or results from or occurs in the course of the construction, possession, or operation of a production or utilization facility,

(B) arises out of or results from or occurs in the course of transportation of source material, byproduct material, or special nuclear material to or from a production or utilization facility,

(C) during the course of the contract activity arises out of or results from the possession, operation, or use by a Department of Energy contractor or subcontractor of a device utilizing special nuclear material or byproduct material,

(D) arises out of, results from, or occurs in the course of, the construction, possession, or operation of any facility licensed under section 2073, 2093, or 2111 of this title, for which the Commission has imposed as a condition of the license a requirement that the licensee have and maintain financial protection under subsection (a) of this section,

(E) arises out of, results from, or occurs in the course of, transportation of source material, byproduct material, or special nuclear material to or from any facility licensed under section 2073, 2093, or 2111 of this title, for which the Commission has imposed as a condition of the license a requirement that the licensee have and maintain financial protection under subsection (a) of this section, or

(F) arises out of, results from, or occurs in the course of nuclear waste activities.[3]

the Commission or the Secretary, as appropriate, may incorporate provisions in indemnity agreements with li-

---

[3] So in original. The period probably should be a comma.

censees and contractors under this section, and may require provisions to be incorporated in insurance policies or contracts furnished as proof of financial protection, which waive (i) any issue or defense as to conduct of the claimant or fault of persons indemnified, (ii) any issue or defense as to charitable or governmental immunity, and (iii) any issue or defense based on any statute of limitations if suit is instituted within three years from the date on which the claimant first knew, or reasonably could have known, of his injury or damage and the cause thereof. The waiver of any such issue or defense shall be effective regardless of whether such issue or defense may otherwise be deemed jurisdictional or relating to an element in the cause of action. When so incorporated, such waivers shall be judicially enforcible in accordance with their terms by the claimant against the person indemnified. Such waivers shall not preclude a defense based upon a failure to take reasonable steps to mitigate damages, nor shall such waivers apply to injury or damage to a claimant or to a claimant's property which is intentionally sustained by the claimant or which results from a nuclear incident intentionally and wrongfully caused by the claimant. The waivers authorized in this subsection shall, as to indemnitors, be effective only with respect to those obligations set forth in the insurance policies or the contracts furnished as proof of financial protection and in the indemnity agreements. Such waivers shall not apply to, or prejudice the prosecution or defense of, any claim or portion of claim which is not within the protection afforded under (i) the terms of insurance policies or contracts furnished as proof of financial protection, or indemnity agreements, and (ii) the limit of liability provisions of subsection (e) of this section.

(2) With respect to any public liability action arising out of or resulting from a nuclear incident, the United States district court in the district where the nuclear incident takes place, or in the case of a nuclear incident taking place outside the United States, the United States District Court for the District of Columbia, shall have original jurisdiction without regard to the citizenship of any party or the amount in controversy. Upon motion of the defendant or of the Commission or the Secretary, as appropriate, any such action pending in any State court (including any such action pending on August 20, 1988) or United States district court shall be removed or transferred to the United States district court having venue under this subsection. Process of such district court shall be effective throughout the United States. In any action that is or becomes removable pursuant to this paragraph, a petition for removal shall be filed within the period provided in section 1446 of title 28 or within the 30-day period beginning on August 20, 1988, whichever occurs later.

(3)(A) Following any nuclear incident, the chief judge of the United States district court having jurisdiction under paragraph (2) with respect to public liability actions (or the judicial council of the judicial circuit in which the nuclear incident occurs) may appoint a special caseload management panel (in this paragraph referred to as the "management panel") to coordinate and assign (but not necessarily hear themselves) cases arising out of the nuclear incident, if—

(i) a court, acting pursuant to subsection (*o*) of this section, determines that the aggregate amount of public liability is likely to exceed the amount of primary financial protection available under subsection (b) of this section (or an equivalent amount in the case of a

contractor indemnified under subsection (d) of this section); or

(ii) the chief judge of the United States district court (or the judicial council of the judicial circuit) determines that cases arising out of the nuclear incident will have an unusual impact on the work of the court.

(B)(i) Each management panel shall consist only of members who are United States district judges or circuit judges.

(ii) Members of a management panel may include any United States district judge or circuit judge of another district court or court of appeals, if the chief judge of such other district court or court of appeals consents to such assignment.

(C) It shall be the function of each management panel—

(i) to consolidate related or similar claims for hearing or trial;

(ii) to establish priorities for the handling of different classes of cases;

(iii) to assign cases to a particular judge or special master;

(iv) to appoint special masters to hear particular types of cases, or particular elements or procedural steps of cases;

(v) to promulgate special rules of court, not inconsistent with the Federal Rules of Civil Procedure, to expedite cases or allow more equitable consideration of claims;

(vi) to implement such other measures, consistent with existing law and the Federal Rules of Civil Procedure, as will encourage the equitable, prompt, and

efficient resolution of cases arising out of the nuclear incident; and

(vii) to assemble and submit to the President such data, available to the court, as may be useful in estimating the aggregate damages from the nuclear incident.

(*o*) Plan for distribution of funds

(1) Whenever the United States district court in the district where a nuclear incident occurs, or the United States District Court for the District of Columbia in case of a nuclear incident occurring outside the United States, determines upon the petition of any indemnitor or other interested person that public liability from a single nuclear incident may exceed the limit of liability under the applicable limit of liability under subparagraph (A), (B), or (C) of subsection (e)(1) of this section:

(A) Total payments made by or for all indemnitors as a result of such nuclear incident shall not exceed 15 per centum of such limit of liability without the prior approval of such court;

(B) The court shall not authorize payments in excess of 15 per centum of such limit of liability unless the court determines that such payments are or will be in accordance with a plan of distribution which has been approved by the court or such payments are not likely to prejudice the subsequent adoption and implementation by the court of a plan of distribution pursuant to subparagraph (C); and

(C) The Commission or the Secretary, as appropriate, shall, and any other indemnitor or other interested person may, submit to such district court a plan for the disposition of pending claims and for the distribution of remaining funds available. Such a plan shall in-

clude an allocation of appropriate amounts for personal injury claims, property damage claims, and possible latent injury claims which may not be discovered until a later time and shall include establishment of priorities between claimants and classes of claims, as necessary to insure the most equitable allocation of available funds. Such court shall have all power necessary to approve, disapprove, or modify plans proposed, or to adopt another plan; and to determine the proportionate share of funds available for each claimant. The Commission or the Secretary as appropriate, any other indemnitor, and any person indemnified shall be entitled to such orders as may be appropriate to implement and enforce the provisions of this section, including orders limiting the liability of the persons indemnified, orders approving or modifying the plan, orders staying the payment of claims and the execution of court judgments, orders apportioning the payments to be made to claimants, and orders permitting partial payments to be made before final determination of the total claims. The orders of such court shall be effective throughout the United States.

(D) A court may authorize payment of only such legal costs as are permitted under paragraph (2) from the amount of financial protection required by subsection (b) of this section.

(E) If the sum of public liability claims and legal costs authorized under paragraph (2) arising from any nuclear incident exceeds the maximum amount of financial protection required under subsection (b) of this section, any licensee required to pay a standard deferred premium under subsection (b)(1) of this section shall, in addition to such deferred premium, be charged such an amount as is necessary to pay a pro

rata share of such claims and costs, but in no case more than 5 percent of the maximum amount of such standard deferred premium described in such subsection.

(2) A court may authorize the payment of legal costs under paragraph (1)(D) only if the person requesting such payment has—

(A) submitted to the court the amount of such payment requested; and

(B) demonstrated to the court—

(i) that such costs are reasonable and equitable; and

(ii) that such person has—

(I) litigated in good faith;

(II) avoided unnecessary duplication of effort with that of other parties similarly situated;

(III) not made frivolous claims or defenses; and

(IV) not attempted to unreasonably delay the prompt settlement or adjudication of such claims.

(p) Reports to Congress

The Commission and the Secretary shall submit to the Congress by December 31, 2021, detailed reports concerning the need for continuation or modification of the provisions of this section, taking into account the condition of the nuclear industry, availability of private insurance, and the state of knowledge concerning nuclear safety at that time, among other relevant factors, and shall include recommendations as to the repeal or modification of any of the provisions of this section.

(q) Limitation on awarding of precautionary evacuation costs

No court may award costs of a precautionary evacuation unless such costs constitute a public liability.

(r) Limitation on liability of lessors

No person under a bona fide lease of any utilization or production facility (or part thereof or undivided interest therein) shall be liable by reason of an interest as lessor of such production or utilization facility, for any legal liability arising out of or resulting from a nuclear incident resulting from such facility, unless such facility is in the actual possession and control of such person at the time of the nuclear incident giving rise to such legal liability.

(s) Limitation on punitive damages

No court may award punitive damages in any action with respect to a nuclear incident or precautionary evacuation against a person on behalf of whom the United States is obligated to make payments under an agreement of indemnification covering such incident or evacuation.

(t) Inflation adjustment

(1) The Commission shall adjust the amount of the maximum total and annual standard deferred premium under subsection (b)(1) of this section not less than once during each 5-year period following August 20, 2003, in accordance with the aggregate percentage change in the Consumer Price Index since—

(A) August 20, 2003, in the case of the first adjustment under this subsection; or

(B) the previous adjustment under this subsection.

(2) The Secretary shall adjust the amount of indemnification provided under an agreement of indemnification

under subsection (d) of this section not less than once during each 5-year period following July 1, 2003, in accordance with the aggregate percentage change in the Consumer Price Index since—

(A) that date, in the case of the first adjustment under this paragraph; or

(B) the previous adjustment under this paragraph.

(3) For purposes of this subsection, the term "Consumer Price Index" means the Consumer Price Index for all urban consumers published by the Secretary of Labor.