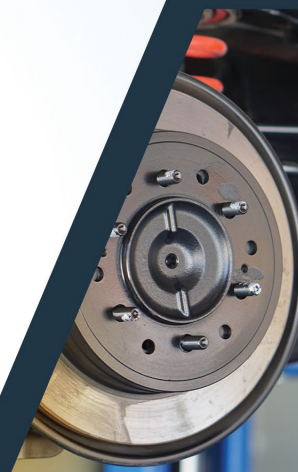


Federal Government Affairs Update

Jeff Hannapel
The Policy Group

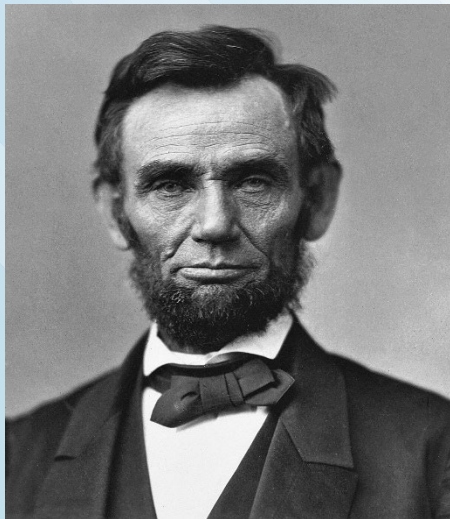
Los Angeles County Sanitation District's
Industry Advisory Council
November 14, 2023



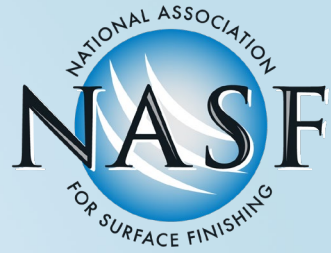
Time in Perspective

Joe Biden was born closer to Abraham Lincoln's second inauguration than to his own

- Biden was 78 years and 61 days old at his inauguration
- Lincoln was inaugurated 77 years and 261 days before Joe Biden's birth



In fact, there have only been 6 presidents since Lincoln who were born closer to their own presidencies than to Lincoln's.



| | | Lincoln term ended | 1865 | | | | |
|---|------------------------------|---|------------|------------|------------------------------------|----------------------------|--|
| <u>All presidents born since Lincoln's presidency</u> | | | | | | | |
| Index | "Name" | Born closer on Lincoln's presidency or to own presidency? | Birth year | Term start | Birth distance from Lincoln's term | Age at start of presidency | |
| 46 | "Joe Biden" | Lincoln | 1942 | 2021 | 77 | 79 | |
| 45 | "Donald Trump" | Own | 1946 | 2017 | 81 | 71 | |
| 44 | "Barack Obama" | Own | 1961 | 2009 | 96 | 48 | |
| 43 | "George Walker Bush" | Own | 1946 | 2001 | 81 | 55 | |
| 42 | "William Jefferson Clinton" | Own | 1946 | 1993 | 81 | 47 | |
| 41 | "George Herbert Walker Bush" | Lincoln | 1924 | 1989 | 59 | 65 | |
| 40 | "Ronald Wilson Reagan" | Lincoln | 1911 | 1981 | 46 | 70 | |
| 39 | "James Earl Carter" | Own | 1924 | 1977 | 59 | 53 | |
| 38 | "Gerald Rudolph Ford" | Lincoln | 1913 | 1974 | 48 | 61 | |
| 37 | "Richard Milhous Nixon" | Lincoln | 1913 | 1969 | 48 | 56 | |
| 36 | "Lyndon Baines Johnson" | Lincoln | 1908 | 1963 | 43 | 55 | |
| 35 | "John Fitzgerald Kennedy" | Own | 1917 | 1961 | 52 | 44 | |
| 34 | "Dwight David Eisenhower" | Lincoln | 1890 | 1953 | 25 | 63 | |
| 33 | "Harry S. Truman" | Lincoln | 1884 | 1945 | 19 | 61 | |
| 32 | "Franklin Delano Roosevelt" | Lincoln | 1882 | 1933 | 17 | 51 | |
| 31 | "Herbert Hoover" | Lincoln | 1874 | 1929 | 9 | 55 | |
| 30 | "Calvin Coolidge" | Lincoln | 1872 | 1923 | 7 | 51 | |
| 29 | "Warren G. Harding" | Lincoln | 1865 | 1921 | 0 | 56 | |

It is unlikely that get another president born closer to Lincoln than their own presidency. Some remote possibilities would be if Bernie Sanders or Elizabeth Warren became president. We are truly moving into a post-Lincoln era.

President -- Approval Rating

President Biden

Approval rating – 38.8% (November 13, 2023)

Disapproval rating – 55.5%

Former President Trump

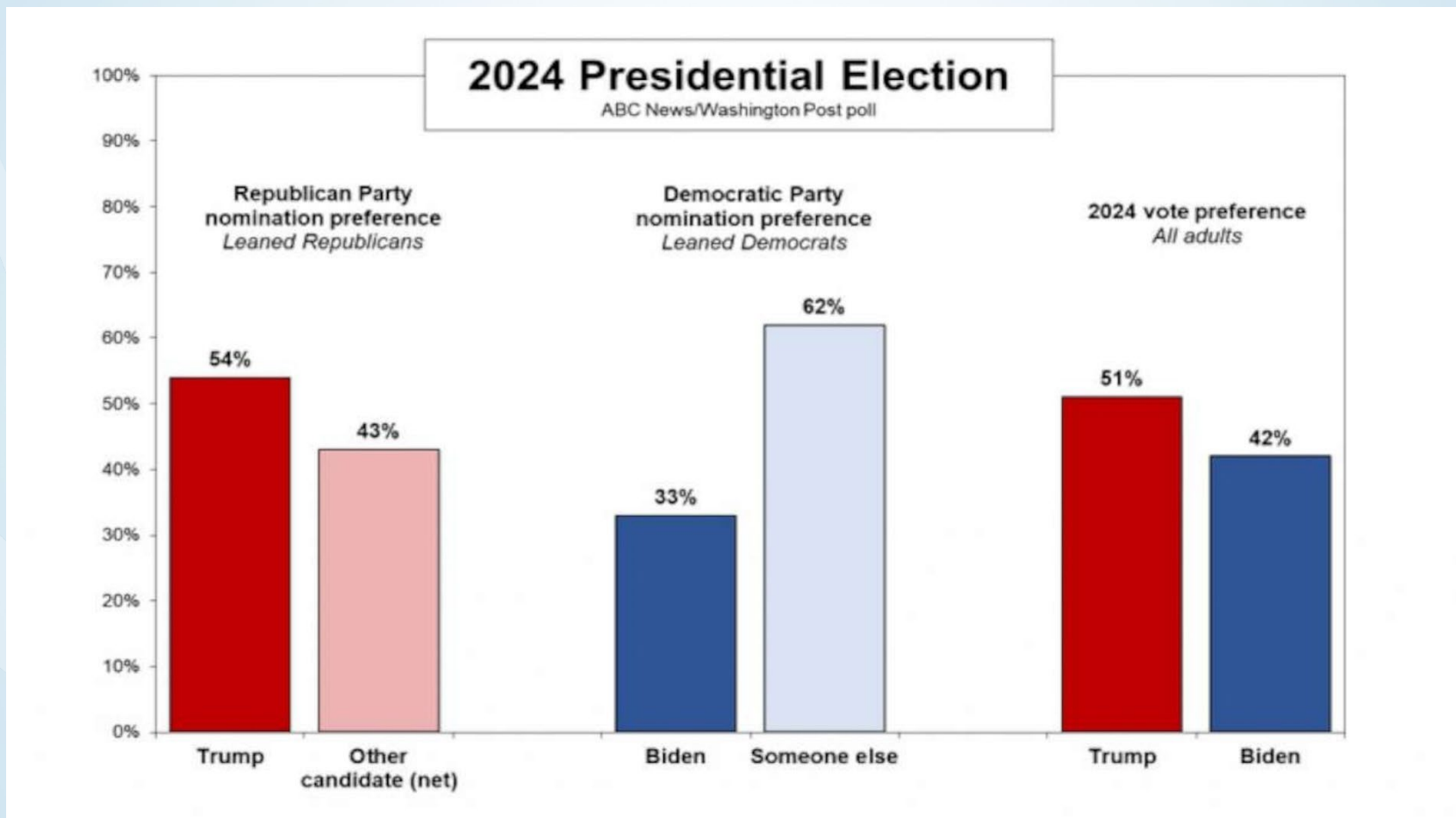
Approval rating – 40.9% (November 13, 2023)

Disapproval rating – 54.9%

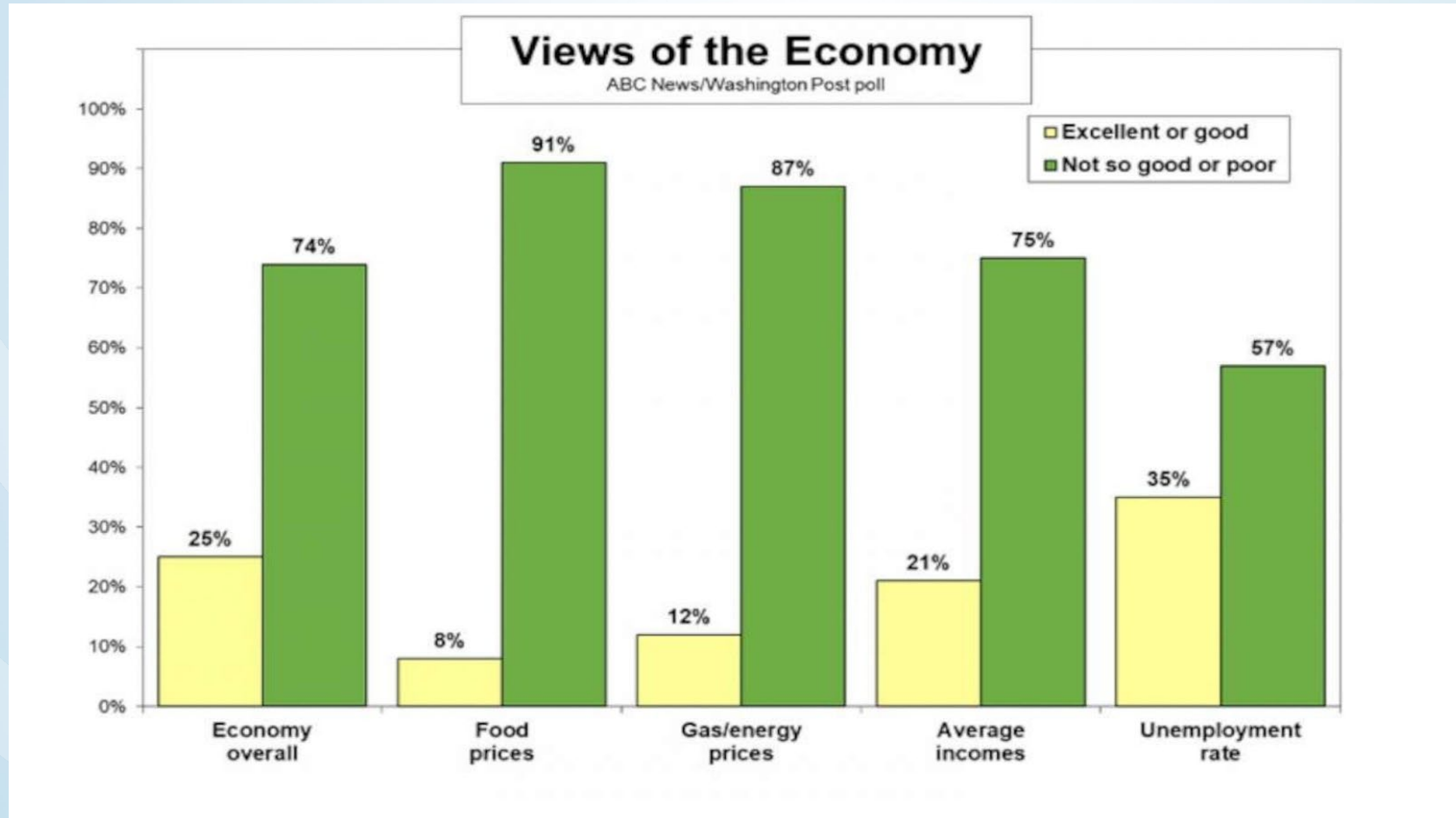
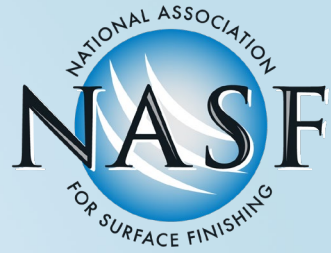
Congressional Approval Is Less than 20%



ABC Poll – September 24, 2023



ABC Poll – September 24, 2023



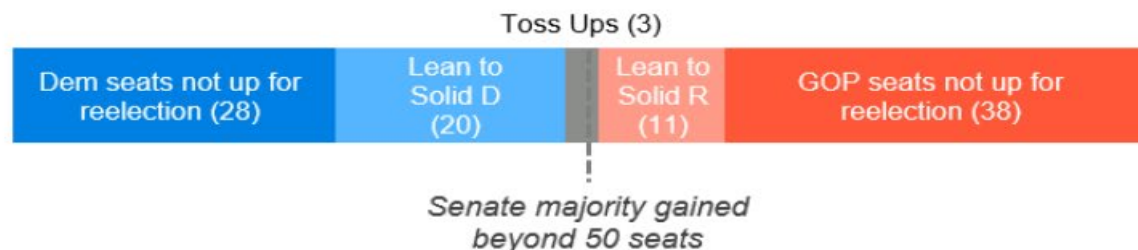
Cook Political Report Race Ratings of 2024 Senate seats

Democrat-held seat

Republican-held seat

Independent-held seat*

Incumbent not seeking reelection



13 Dem, 2 Independent

- Feinstein (CA)
- Murphy (CT)
- Carper (DE)
- Hirono (HI)
- Warren (MA)
- Cardin (MD)
- Klobuchar (MN)
- Menendez (NJ)
- Heinrich (NM)
- Gillibrand (NY)
- Whitehouse (RI)
- Kaine (VA)
- Cantwell (WA)
- King (ME)
- Sanders (VT)

5 Dem

- Stabenow (MI)
- Tester (MT)
- Rosen (NV)
- Casey Jr. (PA)
- Baldwin (WI)

2 Dem, 1 Independent

- Brown (OH)
- Manchin (WV)
- Sinema (AZ)

9 GOP

- Braun (IN)
- Hawley (MO)
- Wicker (MS)
- Cramer (ND)
- Fischer (NE)
- Ricketts (NE)
- Blackburn (TN)
- Romney (UT)
- Barrasso (WY)



Cook Political Report Race Ratings of competitive 2024 House seats

Democrat held seat

Republican held seat

Freshman member

17 Dem, 1 GOP

| | |
|-------|------------|
| CA-09 | Harder |
| CA-49 | Levin |
| FL-09 | Soto |
| FL-23 | Moskowitz |
| KS-03 | Davids |
| MD-06 | Open |
| MI-03 | Scholten |
| MI-08 | Kildee |
| MN-02 | Craig |
| NH-01 | Pappas |
| NH-02 | Kuster |
| NV-01 | Titus |
| NV-04 | Horsford |
| OR-04 | Hoyle |
| TX-28 | Spanberger |
| VA-07 | Spanberger |
| WA-08 | Schrier |
| AL-02 | Moore |

Likely Democrat

14 Dem, 1 GOP

| | |
|-------|----------|
| AK-AL | Peltola |
| CA-47 | Open |
| CT-05 | Hayes |
| IL-17 | Sorenson |
| IN-01 | Mrvan |
| ME-02 | Golden |
| NC-01 | Davis |
| NV-03 | Lee |
| NY-18 | Ryan |
| OH-01 | Landsman |
| OH-09 | Kaptur |
| OR-06 | Salinas |
| PA-17 | Deluzio |
| TX-34 | Gonzalez |
| NY-03 | Santos |

Lean Democrat

10 Dem, 13 GOP

| | |
|-------|----------------|
| CO-08 | Caraveo |
| MI-07 | Open |
| NC-06 | Manning |
| NC-13 | Nickel |
| NC-14 | Jackson |
| NM-02 | Vasquez |
| OH-13 | Sykes |
| PA-07 | Wild |
| PA-08 | Cartwright |
| WA-03 | Perez |
| AZ-01 | Schweikert |
| AZ-06 | Ciscomani |
| CA-13 | Duarte |
| CA-27 | Garcia |
| CA-41 | Calvert |
| CO-03 | Boebert |
| LA-05 | Letlow |
| NJ-07 | Kean Jr. |
| NY-04 | D'Esposito |
| NY-17 | Lawler |
| NY-19 | Molinaro |
| NY-22 | Williams |
| OR-05 | Chavez-DeRemer |

Toss Up

6 GOP

| | |
|-------|---------|
| CA-22 | Valadao |
| CA-45 | Steel |
| IA-03 | Nunn |
| MI-10 | James |
| NE-02 | Bacon |
| VA-02 | Kiggans |

Lean Republican

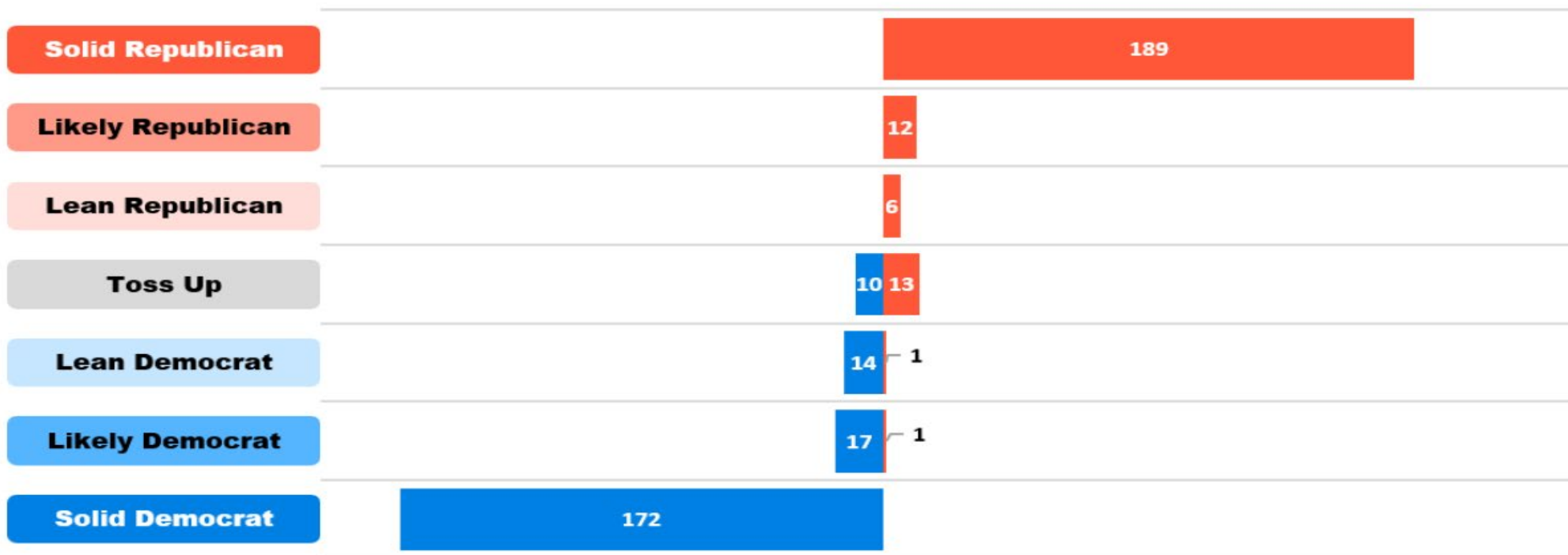
12 GOP

| | |
|-------|--------------|
| CA-03 | Kiley |
| CA-40 | Kim |
| FL-13 | Luna |
| IA-01 | Miller-Meeks |
| LA-06 | Graves |
| MT-01 | Zinke |
| NY-01 | LaLota |
| PA-01 | Fitzpatrick |
| PA-10 | Perry |
| SC-01 | Mace |
| TX-15 | De La Cruz |
| WI-03 | Van Orden |

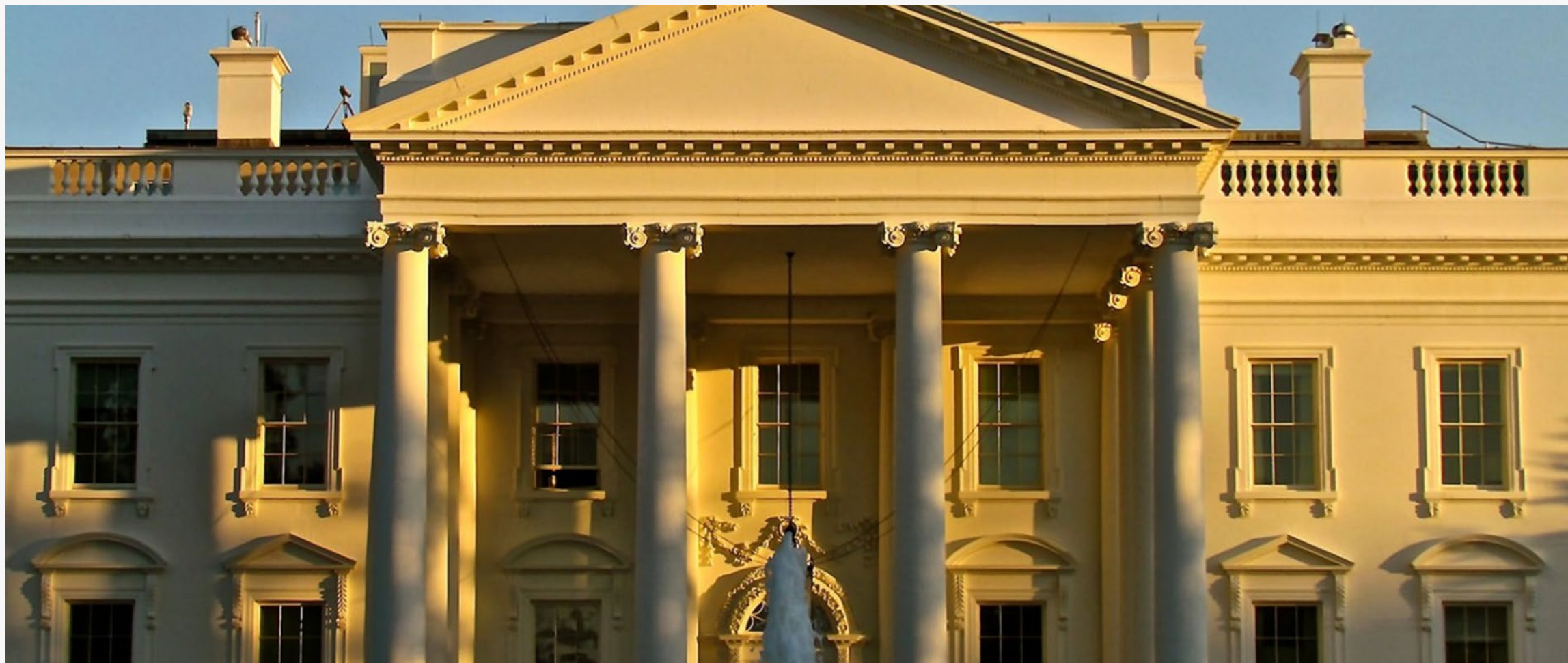
Likely Republican

Cook Political Report 2024 House race ratings

As of August 8, 2023, ratings have been released for all 435 House districts.



Year 3 of the Biden Administration: Regulatory Actions are Accelerating

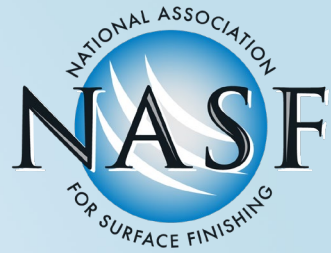


Tracking Biden's environmental actions

As Biden unwinds dozens of Trump's energy and environmental policies, he's forging his own.



Recent Trends in Federal Rulemaking: Over the Last 10 Years



343
New
Rules
Added
Since
January

197
Rules
W/
Significant
Economic
Impact on
small
business

Trends in Rulemaking Volume Across Spring Unified Agendas

| <i>Year</i> | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Active Items | 2389 | 2323 | 2239 | 1731 | 2224 | 2597 | 2697 | 2551 | 2673 | 2617 |
| Long-Term Items | 441 | 460 | 502 | 696 | 647 | 610 | 575 | 623 | 574 | 582 |
| <u>Total Prospective Items</u> | <u>2830</u> | <u>2783</u> | <u>2741</u> | <u>2427</u> | <u>2871</u> | <u>3207</u> | <u>3272</u> | <u>3174</u> | <u>3247</u> | <u>3199</u> |
| “Major” Active Items | 122 | 141 | 125 | 49 | 88 | 123 | 155 | 170 | 217 | 236 |
| “Major” Long-Term Items | 27 | 33 | 43 | 51 | 34 | 30 | 40 | 47 | 38 | 44 |
| <u>Total “Major” Items</u> | <u>149</u> | <u>174</u> | <u>168</u> | <u>100</u> | <u>122</u> | <u>153</u> | <u>195</u> | <u>217</u> | <u>255</u> | <u>280</u> |
| “Significant” Active Items | 934 | 905 | 800 | 429 | 707 | 919 | 974 | 945 | 1055 | 1042 |
| “Significant” Long-Term Items | 170 | 200 | 208 | 299 | 222 | 218 | 218 | 262 | 263 | 284 |
| <u>Total “Significant” Items</u> | <u>1104</u> | <u>1105</u> | <u>1008</u> | <u>728</u> | <u>929</u> | <u>1137</u> | <u>1192</u> | <u>1207</u> | <u>1318</u> | <u>1326</u> |

Regulatory Activity

Number of Federal Register Pages

- **2023 – 75,226** (11/1) **90,000** (projected)
- **2022 – 80,756**
- 2021 – 74,532 (Biden)
- 2020 – 66,675
- 2019 – 72,564
- 2018 – 68,082
- 2017 – 61,949 (Trump)
- **2016 – 97,110**
- **2015 – 82,035**
- 2014 – 79,066
- **2013 – 80,462**
- 2012 – 77,249
- **2011 – 82,419**
- **2010 – 82,589** (Obama)

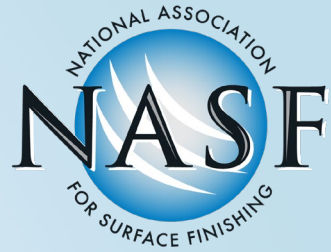


24

Cr

Chromium

EPA Has Issued a New Assessment of Hexavalent Chromium Health Impacts Science Document will Drive Future Regulatory Decisions – October 2022



ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–ORD–2014–0313; FRL–10128–01–
ORD]

Availability of the Draft IRIS Toxicological Review of Hexavalent Chromium

AGENCY: Environmental Protection
Agency (EPA).

ACTION: Notice of public comment
period.

SUMMARY: The Environmental Protection
Agency (EPA) is announcing a 60-day
public comment period associated with
release of the draft Integrated Risk
Information System (IRIS) Toxicological
Review of Hexavalent Chromium. The
draft document was prepared by the
Center for Public Health and
Environmental Assessment (CPHEA)
within EPA’s Office of Research and
Development (ORD).



EPA/635/R-22/191a
External Review Draft
www.epa.gov/iris

IRIS Toxicological Review of Hexavalent Chromium [Cr(VI)]

[CASRN 18540-29-9]

October 2022

Integrated Risk Information System
Center for Public Health and Environmental Assessment
Office of Research and Development
U.S. Environmental Protection Agency
Washington, DC

Long-Anticipated Agency Action

- EPA issued new draft human health assessment for Cr6 (1000 pages) on October 22, 2022
- Agency draft now being reviewed by panel of scientific experts
- Expert panel meeting March 29-31 – **recommended approval of EPA’s draft**

Importance to Industry

- **More stigmatization, regulatory pressure** on Cr6 processes and uses
- **New toxicity values** will inform federal drinking water standard, remediation levels under Superfund, use restrictions

EPA's Draft Health Assessment for Hexavalent Chromium

How does it compare with current drinking water standards?

EPA's new
"safe"
concentration



35
parts per trillion

This level is nearly
3,000 times lower
than EPA's current
drinking water
standard

Drinking Water Standards by Agency



50 ppb



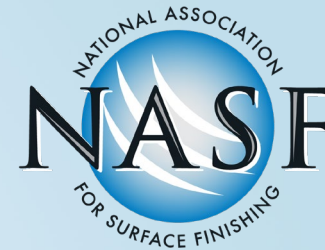
100 ppb



* Background levels in U.S. are 1-5 parts per billion

IRIS Health Assessments Inform All EPA Regulations

Impacts of the Evolving Federal Approach to Hexavalent Chromium



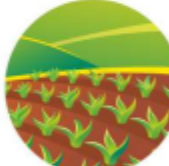


Integrated Risk Information System (IRIS)

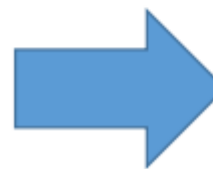
IRIS assessments contribute to Agency decisions such as:

- Health-based national standards
- Health-based clean-up levels at local sites
- Health-based advisory levels
- Ranking across chemicals
- Information for the general public
- Cost-benefit analyses

↑
IRIS Supports
↓

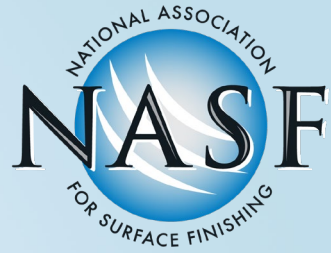
- Clean Air Act (CAA) 
- Safe Drinking Water Act (SDWA) 
- Food Quality Protection Act (FQPA) 
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
- Toxic Substances Control Act (TSCA)
- Resource Conservation and Recovery Act (RCRA)

Broad
Input to



- Agency Strategic Goals
- Regions and States
- Children's Health
- Environmental Justice

EPA's Proposed Reconsideration of PM_{2.5} National Ambient Air Quality Standards (NAAQS)



- Current Standard – 12 $\mu\text{g}/\text{m}^3$ (annual) 35 $\mu\text{g}/\text{m}^3$ (24 hour)
- **EPA proposed to lower current annual standard to a range of 9.0 to 10.0 $\mu\text{g}/\text{m}^3$**
- EPA proposed to retain current 24-hour standard
- EPA solicited comments on lower annual standard and revising 24-hour standard as low as 25 $\mu\text{g}/\text{m}^3$
- NGOs, health organizations, community groups, and religious groups advocated for more stringent standard
 - Environmental and health advocates argue for 8 $\mu\text{g}/\text{m}^3$ (annual) 25 $\mu\text{g}/\text{m}^3$ (24 hour)
 - WHO recommends 5 $\mu\text{g}/\text{m}^3$ (annual) 15 $\mu\text{g}/\text{m}^3$ (24 hour)



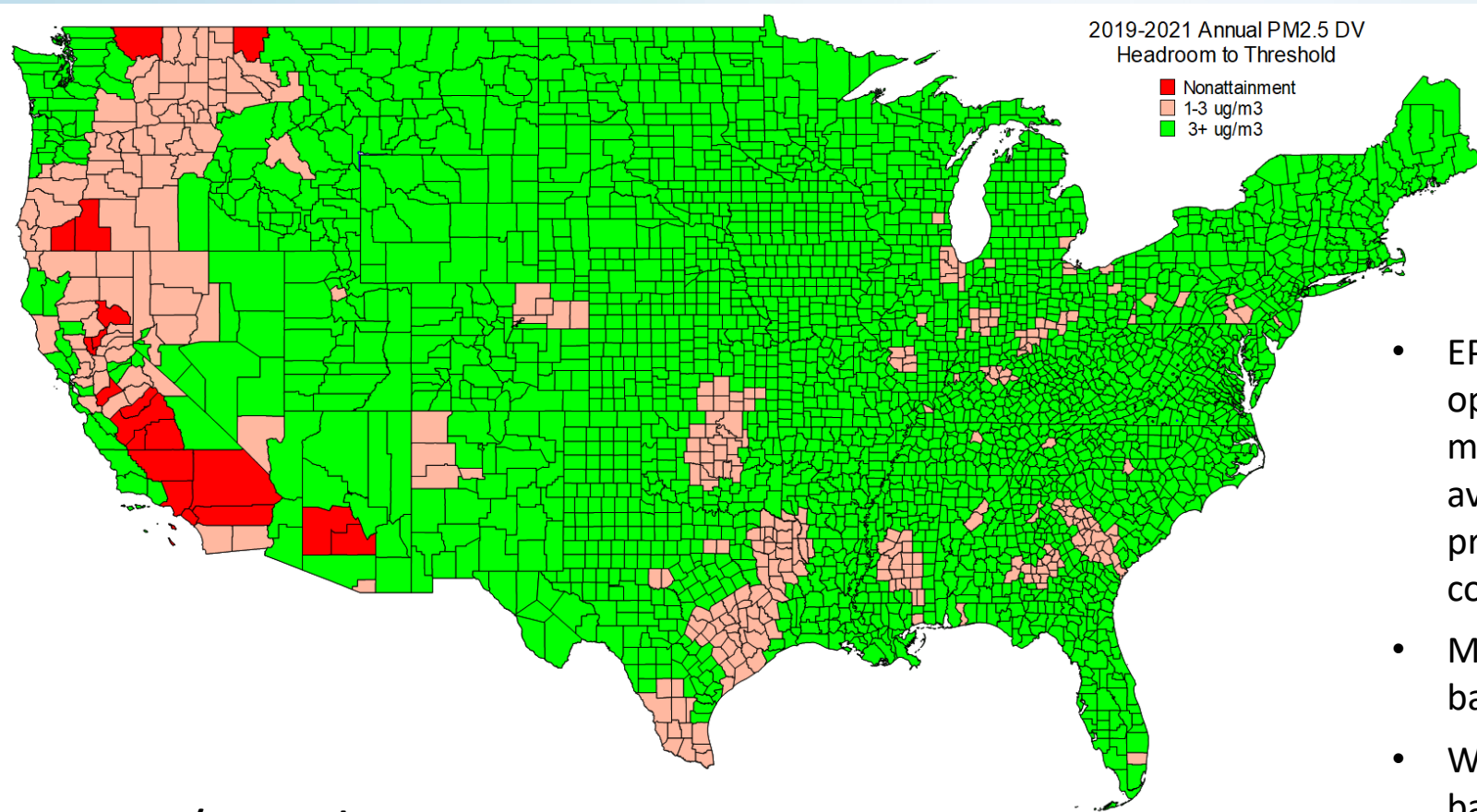
U.S. PM_{2.5} Concentrations (ug/m³)

(Seasonally-Weighted Annual Average)



Source: U.S. EPA's Particulate Matter (PM_{2.5}) Trends: <https://www.epa.gov/air-trends/particulate-matter-pm25-trends>

Current PM_{2.5} NAAQS (12 µg/m³) leaves room for economic growth



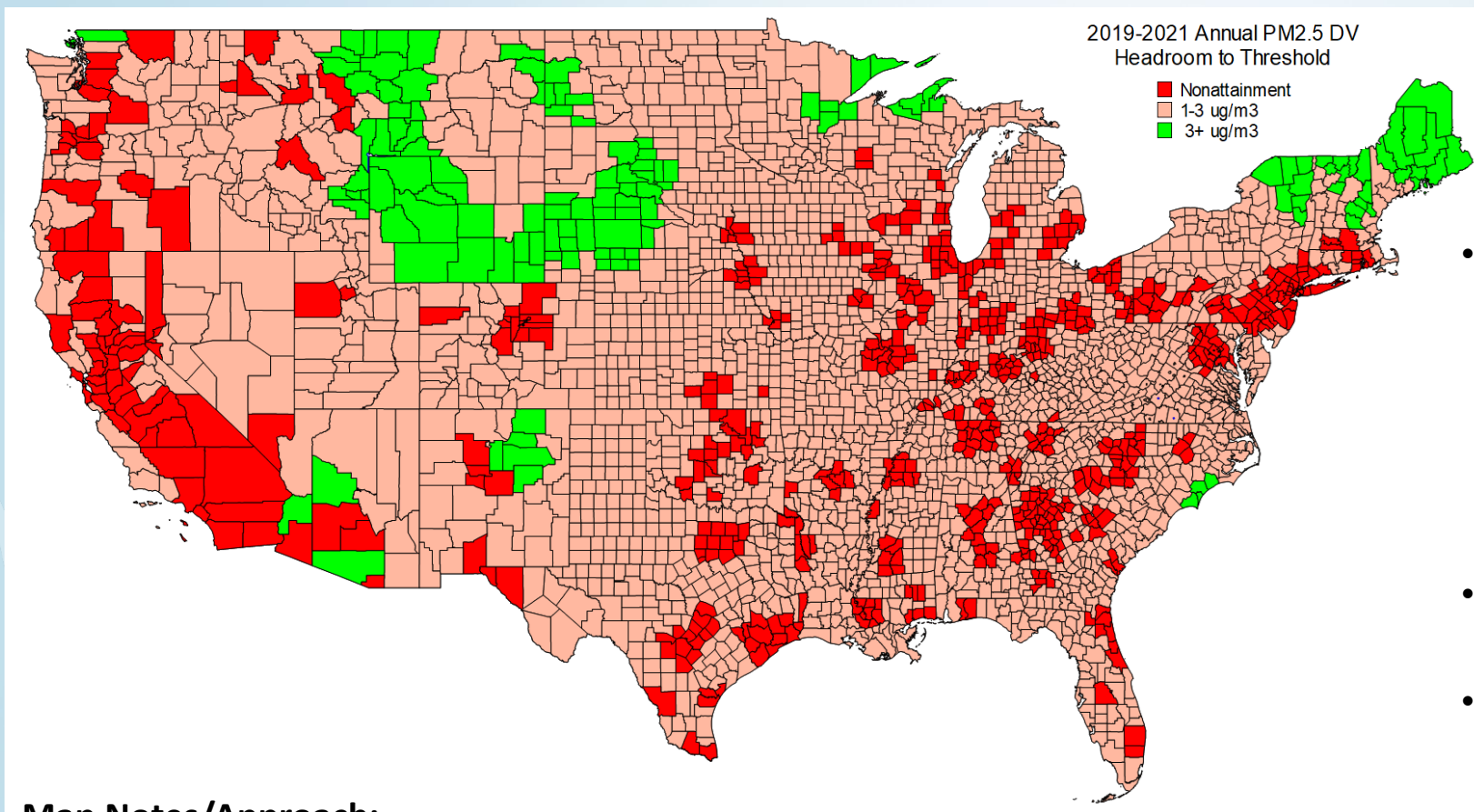
Map Notes/Approach:

- Used maximum PM_{2.5} Design Values (DVs) for each monitored county
- Calculated non-monitored counties values using geospatial statistical interpolation (“kriging”) “fills-in” estimates for locations between the monitors.
- Five (5) closest monitored values used to estimate non-monitored county values using inverse-distance weighted averaging method.

- Projects in non-attainment areas (red) will require LAER, offsets/alternatives NSR analysis, and SIPs with RACT.
- Before construction is permitted, new projects must use EPA models to show attainment with NAAQS.
- EPA’s modeling guidelines represent continuous operation of all new and modified sources at the maximum allowable emission rate after best available controls and typically simulated a project’s future annual PM_{2.5} ambient contribution to be 1-3 ug/m³.
- Many areas of the country (green) have background levels of 6 to 9 ug/m³.
- With a standard of 12 ug/m³, areas with background of 9 ug/m³ or less will have enough “headroom” to accommodate the typical contribution from the project (e.g., 3 ug/m³).
- **Currently:** Most projects can be built.

Immediate Impact of PM_{2.5} NAAQS at 8.0 µg/m³

New or expanded manufacturing projects may become too costly or unachievable in red/pink colored areas



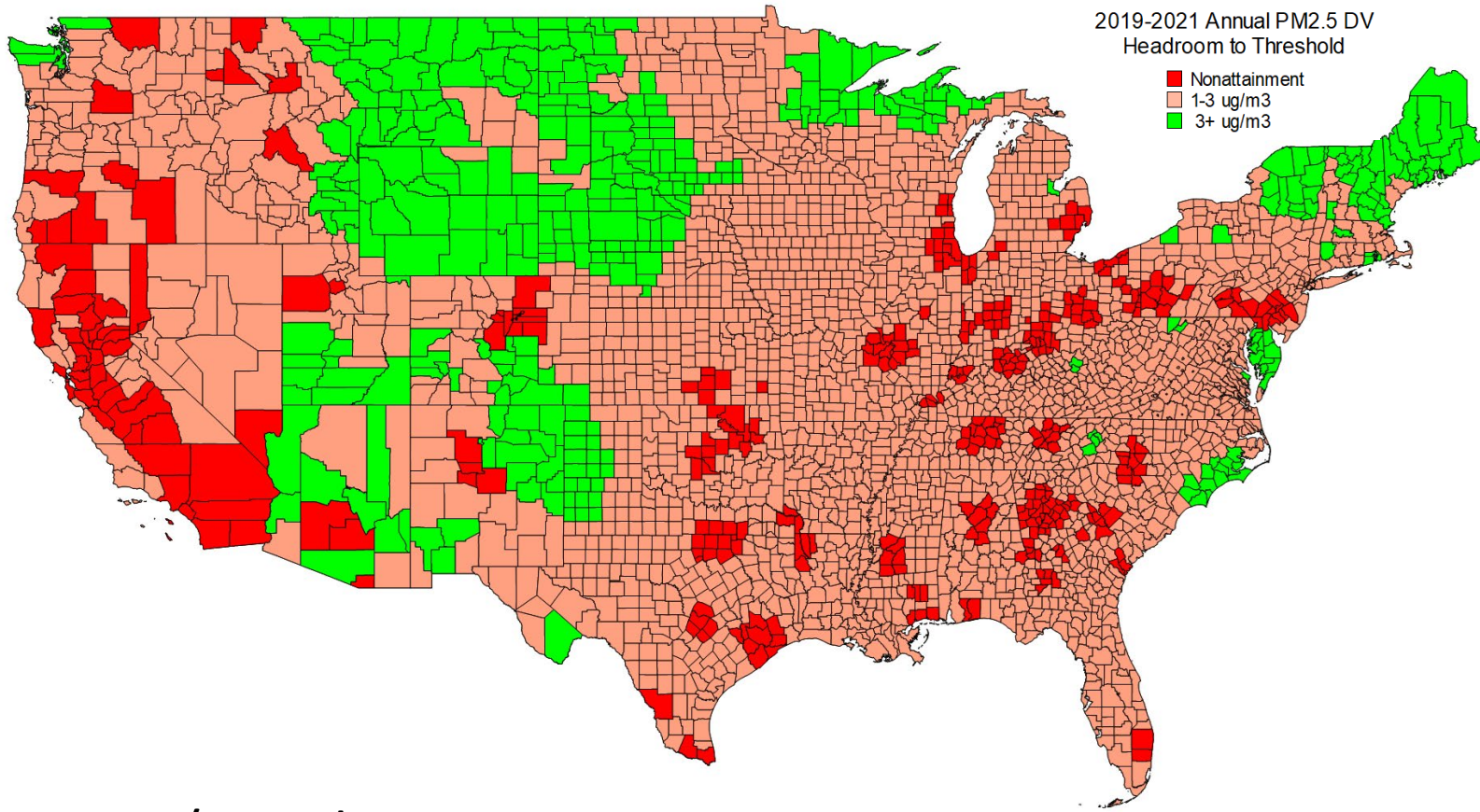
Map Notes/Approach:

- Used maximum PM_{2.5} Design Values (DVs) for each monitored county
- Calculated non-monitored counties values using geospatial statistical interpolation (“kriging”) “fills-in” estimates for locations between the monitors.
- Five (5) closest monitored values used to estimate non-monitored county values using inverse-distance weighted averaging method.

- Before construction is permitted, new projects must use EPA models to show attainment with the NAAQS.
- EPA’s modeling guidelines require assuming **continuous** operation of **all** new and modified sources at the **maximum** allowable emission rate using best available controls and typically simulate a project’s future annual average PM_{2.5} ambient concentration to be 1-3 ug/m³.
- Many PM_{2.5} “attainment” areas have background levels of 6 to 9 ug/m³.
- With a standard of 8 ug/m³, areas with background as low as 5 ug/m³ will not have enough “headroom” to accommodate the ambient concentration conservatively simulated for the project (e.g., 3 ug/m³).
- **Impact:** A violation of the NAAQS is predicted which effectively stops the project.

Immediate Impact of PM_{2.5} NAAQS at 9.0 µg/m³

New or expanded manufacturing projects may become too costly or unachievable in red/pink colored areas



Map Notes/Approach:

- Used maximum PM_{2.5} Design Values (DVs) for each monitored county
- Calculated non-monitored counties values using geospatial statistical interpolation (“kriging”) “fills-in” estimates for locations between the monitors.
- Five (5) closest monitored values used to estimate non-monitored county values using inverse-distance weighted averaging method.

- Before construction is permitted, new projects must use EPA models to show attainment with the NAAQS.
- EPA’s modeling guidelines require assuming **continuous** operation of **all** new and modified sources at the **maximum** allowable emission rate using best available controls and typically simulate a project’s future annual average PM_{2.5} ambient concentration to be 1-3 ug/m³.
- Many PM_{2.5} “attainment” areas have background levels of 6 to 9 ug/m³.
- With a standard of 9 ug/m³, areas with background as low as 6 ug/m³ will not have enough “headroom” to accommodate the ambient concentration conservatively simulated for the project (e.g., 3 ug/m³).
- **Impact:** A violation of the NAAQS is predicted which effectively stops the project.

Potential Impact of PM_{2.5} NAAQS Proposal

- Much of the US will be impacted by lower standards
 - More **Non-Attainment** Areas
 - More than half of the country would be in nonattainment areas for proposed standards
 - Proposed limits are at or below background levels for many industrial facilities
- States required to impose restrictions on facilities in nonattainment areas
 - More complex permitting, costly emission controls, and production restrictions
 - New facilities and expansions of existing operations may be difficult
 - Could stifle production and economic growth for many metalcasting operations
- Contributions from smaller uncontrolled nonpoint sources are increasingly significant
 - Wildfires, prescribed fires, dirt roads, and bare agricultural soils account for more than 30% of PM_{2.5} emissions
 - States many still impose restrictions on stationary and mobile point sources
- States will need to determine how to address nonpoint sources of
 - Help communities impacted by PM_{2.5} from wildfires, prescribed fires, unpaved roads, and bare soils
- EPA's proposed reconsideration is discretionary
 - It is reconsideration of 2020 Trump Administration decision not to revise PM_{2.5} NAAQS
 - Not part of statutorily required five-year review
 - Cost and economic factors could be used to support withdrawal of proposal
 - Obama Administration set precedent with withdrawal of ozone reconsideration based on these factors



Air Emissions Reporting Requirements (AERR) Proposed Rule

- Proposed August 9, 2023
- Significant changes in emissions reporting requirements
 - Improve National Emissions Inventory (NEI)
 - Allow EPA to have readily available data to identify and address air quality and exposure issues
 - Ensure communities have data needed to understand sources of air emissions and potential impacts
 - Title V Permit or Emit over Threshold Levels
- Starts with the 2026 Inventory and is due by March 31, 2027
- Includes reporting to EPA
 - HAP Emissions
 - Criteria pollutant and precursors (e.g., PM10, PM2.5 and condensable PM)
 - Fuel use from combustion sources
 - Facility level v. stack level
- Combined Air Emission Reporting System (CAERS)
- Could pose a significant burden – \$50,000 -- \$190,000/facility
- Comments Due November 17, 2023



WOTUS Supreme Court Decision



- May 25, 2023 -- U.S. Supreme Court narrows definition of WOTUS in *Sackett v. EPA*
- Wetlands must have a “continuous surface connection” to water bodies that are WOTUS in their own right
 - such that there is no clear demarcation between the “waters” and the “wetlands”
- The Court rejected the broader “significant nexus” standard that would regulate nearby wetlands that had any connection to jurisdictional water bodies

New WOTUS Regulation



- September 8, 2023 -- EPA and the Army Corps of Engineers issued direct final rule in response to *Sackett*
- New rule provides most narrow definition of WOTUS
 - Even more narrow than Trump Administration
- CWA jurisdiction only if no clear demarcation between navigable water and the adjacent wetland
- New rule still lacks clear definition of key terms, i.e., “relatively permanent” and “continuous surface connection”
 - Further clarification needed to ensure federal agencies do not have more interpretive flexibility than Supreme Court intended
- Possible legal challenge
 - Is “direct final rule” with no opportunity to comment justified?
 - Stay or revocation of new rule would result in replacing new narrow rule with broader, existing version of WOTUS
 - No legal challenge would allow broader “jurisdictional determinations” by federal agencies
 - Will not resolve all of the disagreements of what should be covered as an adjacent wetland
 - Fact-specific, case-by-case determinations will still be needed
 - Further clarifications are needed

Used Drum Management & Reconditioning

ANPRM

- August 11, 2023 – EPA issued ANPRM to ***solicit comments on regulatory and non-regulatory options to manage used plastic and metal drums to protect human health and the environment***
- Prompted by September 2022 Drum Reconditioning Damage Case Report
 - Many drums received by reconditioners are not RCRA empty
 - Large volumes of “RCRA empty” drums equates to significant amounts of hazardous waste residues from empty containers that are not effectively regulated as RCRA hazardous waste
 - Significant number of damage cases reported from reconditioner facilities



Used Drum Management & Reconditioning

ANPRM

Existing Definition of RCRA “Empty Container” Not Subject to Hazardous Waste Requirements

- All wastes have been removed that can be removed using “practices commonly employed” to remove materials from that type of container, AND
- No more than 2.5 cm (1 in) of residue remains or no more than 3% by weight remains in the container
- Container that contained an acute hazardous waste is tripled rinsed with a solvent or other equivalent removal procedure



Regulatory and Non-Regulatory Options



Non-Regulatory

- Increase compliance assistance and enforcement of existing requirements
- Develop “Standard Operating Procedures” (SOPs) to achieve better compliance
- Advancements in drum handling and cleaning technologies

Regulatory -- Generators

- Reduce 2.5 cm (1 in) regulatory limits for residues
- Require drums to meet structural integrity requirements before shipping
- Clarify “commonly employed practices”
- Triple rinse all containers
- Track and/or keep records of shipments of all empty drums
- Require drum labeling to identify hazard posed by the residue in the drum
- Containers must be empty (not just RCRA empty) before going to scrap recycling or disposal
- Container with any amount of residue to meet treatment standards prior to land disposal

Regulatory and Non-Regulatory Options

Regulatory – Reconditioners

- Waste analysis plans for characterizing rinsate
- Regular inspections of drum inventory
- Facilities must obtain financial assurance
- Emission controls for drum furnaces
- Permits for wastewater discharges from rinsing containers
- RCRA Subtitle C (hazardous waste) permits
- Containers must be empty (not just RCRA empty) before going to scrap recycling or disposal
- Container with any amount of residue to meet treatment standards prior to land disposal



Used Drum Management & Reconditioning

ANPRM

- EPA soliciting comments on these issues and others regarding the management of used drums under RCRA
- EPA identified significant environmental justice impacts from used drum management and reconditioning
- All drums could be subject to hazardous waste regulations
- Comment deadline extended to November 22, 2023



Priority Federal Actions:

PFAS

One of the Most Expansive US Regulatory Efforts in the History of EPA

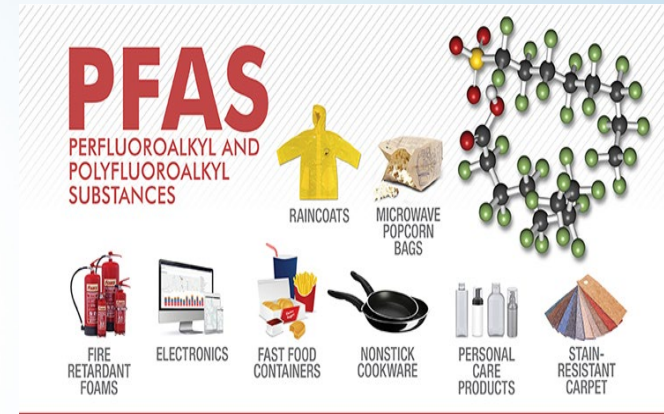


PFAS
The Forever Chemicals

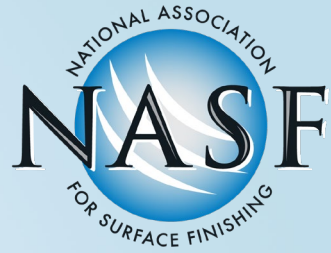
PFAS – Why Surface Finishers Should Care



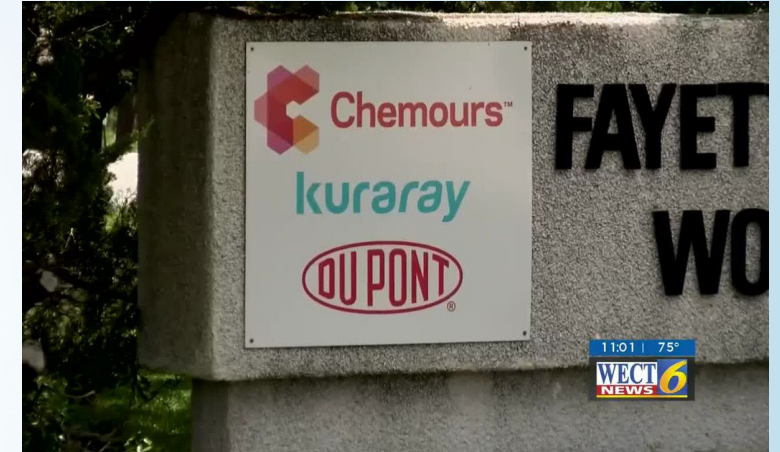
- Broad Class of Chemicals
 - Approximately 8,000 PFAS & only 600 used in commerce
 - Regulatory definition is key
 - Polymers v. non-polymer
 - Analyte list: 400 (Academic Labs) & 40 (Commercial Labs)
- PFAS Products Are Ubiquitous
 - Fire fighting foams
 - Surface and fabric treatments
 - Lubricants, seals, wire and cable coatings
 - Hydraulic fluids
 - Can be difficult to identify PFAS in products
- Uncertain Health and Environmental Impacts
 - Can be persistent, bio-accumulative and toxic
 - Limited number of toxicity assessments
 - Regulated as a class or by individual PFAS
 - Data gaps lead to precautionary approach



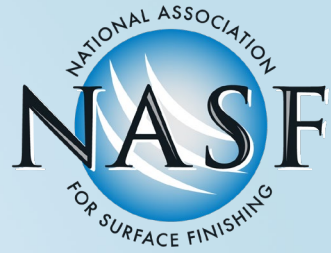
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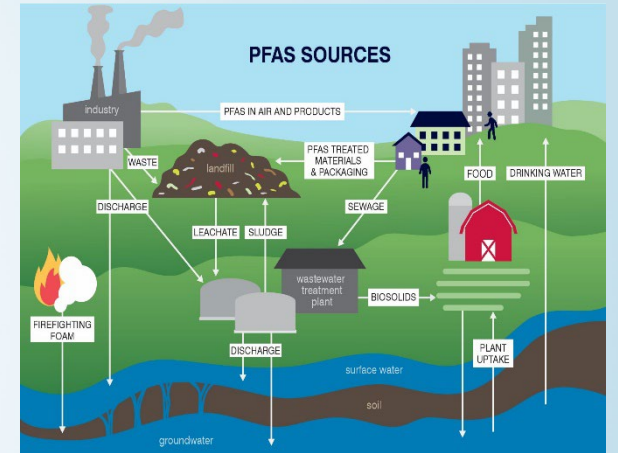
- Regulatory Efforts – EPA, States & Global
- Potential Liabilities
 - Lawsuits – Focus currently on manufacturers (downstream users?)
 - Dupont/Chemours -- \$4 Billion Settlement
 - 3M -- \$10.3 Billion Settlement
 - Extremely low regulatory limits – ppt
 - Single drop in 20 Olympic-sized swimming pools
 - One second in 32,000 years
 - Expensive regulatory compliance
 - Uncertain and expensive cleanup costs
 - Emerging treatment technologies



EPA PFAS Regulatory Developments



- Proposed Drinking Water Standard – Final September 2024
 - 4 ppt for PFOA & PFOS
 - Hazard Index for mixtures of four additional PFAS
 - Economic and technological feasibility
- Proposed CERCLA Hazardous Substance Listing – Final March 2024
 - PFOA & PFOS
 - Broad liability for cleanup costs
 - Uncertain cleanup levels
 - Unintended consequences and expensive cleanup costs
 - Legislative Exemptions for “Passive Receivers”?
 - E.g., POTWs, drinking water agencies, landfills, farms, and certain fire fighting uses
- ANPRM for Additional CERCLA Listing
 - Should other PFAS be listed?
- Proposed RCRA Hazardous Constituent Listing – Still at White House
 - PFOA & PFOS – Not Hazardous Waste Listing
 - Trigger corrective action
 - More targeted approach – releases from solid waste management units
- PFAS ELG for Surface Finishing
 - EPA in Information Gathering Phase – Survey Expected by Year End
 - Proposed Rule Expected December 2024
 - Chromium Operations Only
 - BAT Economically Achievable – GAC Being Used in Michigan



PFAS Remediation: A Closer Look

Total PFAS Remediation Costs Across All Industry Sectors

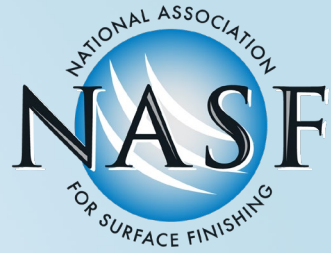
| | |
|---|---------------|
| Remediation Costs | \$100 Billion |
| Additional 10% for Legal Costs | \$10 Billion |
| POTW and Water Utility (Treatment Equipment/System Upgrades) | \$100 Billion |

Chromium Electroplating Operations | Source: Environmental Business Journal, 2022

| Number of Facilities | % of Facilities with Contamination | Average Cost per Facility | Total Industry Cost | Total Cost plus 10% for Legal Costs | Total Annual Costs |
|----------------------|------------------------------------|---------------------------|---------------------|-------------------------------------|--------------------|
| 4,400 | 40% | 1 million | 1.760 billion | 1.936 billion | 96.8 million |
| 2,200 | 40% | 1 million | 880 million | 968 million | 48.4 million |
| 1,100 | 40% | 1 million | 440 million | 484 million | 24.2 million |

NASF PFAS Resource Center

Technical Information for the Supply Chain, Regulators and the Public



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The National Association for Surface Finishing (NASF) represents the interests of businesses, technologists and professionals in the surface coatings industry.

NASF and its member companies have a long history of environmental stewardship. **We are the only industry in the U.S. to have requested a ban from the U.S. Environmental Protection Agency on the use of PFOS nearly ten years ago.**

Due to the association's efforts, the EPA banned the use of perfluorooctane sulfonate (PFOS) in our industry in 2012. NASF and its members have continued to work proactively with the U.S. EPA, the Michigan Department of the Environment, Great Lakes and Energy (MEGLE), and other stakeholders at the national and global levels, to find effective solutions to reduce and eliminate any residual PFOS in wastewater discharges from plating facilities.

As recent concerns of other PFAS in wastewater discharge have come to light, NASF has continued to engage stakeholders across the U.S. and worldwide to better understand and take appropriate steps to address the issues.



What are PFAS?

What are per- and polyfluoroalkyl substances and their uses



PFAS in Surface Finishing

Use as a fume suppressant and history of proactive environmental stewardship



Replacement Chemicals

Safety of EPA-compliant replacement FTS 6:2

Environmental Justice

Louisiana v. EPA



- NGOs and community groups alleged discrimination in state permitting practices and potential impact on EJ communities in area known as “Cancer Alley”
 - Permits were allowing facilities to release harmful chemicals
- EPA initiated investigation into the allegations
- State of Louisiana challenged EPA’s probe as unconstitutional and lacking statutory authority
- ***EPA concluded its investigation with a finding of no discrimination***
- Status of federal statutory authority to enforce environmental justice is unclear – Civil Rights Act of 1964
 - Some states have their own statutory authority to enforce environmental justice

Questions

