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agenda item 6.)

United States of America

**Environmental Protection Agency
(EPA)**

Regulation Development Process

United States Federal Executive Branch



15
Executive Departments

65
Independent Agencies,
Commissions & Government
Corporations

Department Of
Transportation
13 Administrations
& Bureaus

Environmental Protection
Agency

NHTSA

U.S Environmental Protection Agency

Clean Air Regulatory Authority

- EPA has general rulemaking authority
- Clean Air Act provides specific authority
 - Key sections: 202 and 213
 - EPA shall prescribe regulations applicable to any class of motor vehicles, highway or nonroad engines that cause or contribute to air pollution.
 - Such standards shall achieve the greatest degree of emissions reductions achievable, taking into account factors such as cost and safety
 - Need to consider appropriate lead time for such standards
 - Obligation to revise standards from time to time
 - EPA regulations are technology-forcing, performance-based requirements
 - Clean Air Act also includes requirements for product certification, enforcement of standards, penalties

U.S Environmental Protection Agency Noise Regulatory Authority

- Noise Control Act provides specific authority
 - Key sections: 5.0 and 6.0
 - EPA shall identify major sources of noise that can adversely affect public health and welfare
 - EPA shall prescribe noise emission regulations for motors and engines that power equipment or vehicles that produce noise capable of adversely affecting public health or welfare
 - Such standards shall achieve the greatest degree of emissions reductions achievable with best available technology, taking into account technical feasibility and cost
 - Obligation to revise standards from time to time
 - EPA regulations are technology-forcing, performance-based requirements
 - Noise Control Act also includes requirements for enforcement of standards and non-compliance penalties

What Analyses Go Into A Rulemaking?

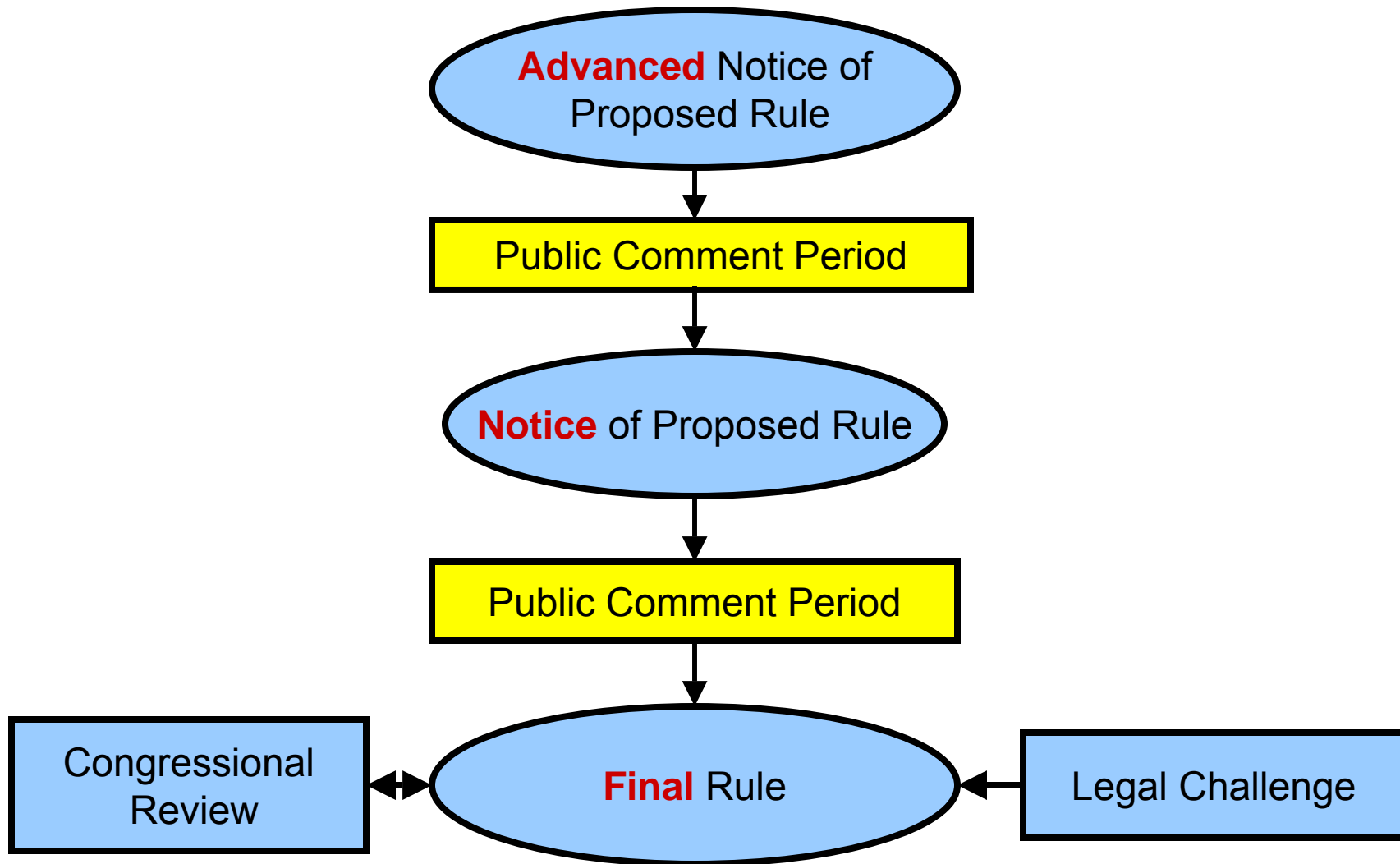
- Assessment of **environmental need** for new standards
- Assessment of **technical feasibility**
- Analysis of **engineering costs**
- Analyses of **societal costs and benefits**
- Analysis of **small business impacts and flexibility options**
- Analysis of **other regulatory and non-regulatory options**
- **Other considerations** as needed to ensure sound decisions

Major Rulemaking Activities

- **EPA expends significant resources during rule development**

- **Major rules are multi-year commitments**
 - **Negotiations with industry, public health groups and other non-government entities,**
 - **EPA laboratory technology testing and development to justify proposed control measures,**
 - **Example: For U.S. new car/truck requirements, EPA purchased an SUV and modified it to demonstrate that new standards were feasible.**

Rule Development Process



Government and Public Role in Rulemaking

- **Typical process for significant rules actions:**
 - **EPA works with stakeholders to develop a proposed rule**
 - **Proposal includes primary control requirements and options**
 - **Proposed rule undergoes review by other Federal agencies and the Executive Office of the President.**
 - **Proposal issued for public comment – all interested party's including foreign entities (average 60 day comment period).**
 - **EPA reviews comments, addresses issues, and develops final rule**
 - **Final rule package undergoes review by other Federal agencies and the Executive Office of President**
 - **EPA Administrator signs rule**
 - **U.S. Congress has 60 days to review, with ability to vacate rule**
 - **Affected parties can legally challenge final rule provisions**
 - **All rule challenges go to U.S. Court of Appeals for the District of Columbia, whose decision can be reviewed by U.S. Supreme Court**

Rule Package Contents

➤ Rule package includes:

- Preamble that explains regulatory provisions, health impacts and benefits, enforcement mechanisms, technical justification
- Regulations contain binding compliance requirements
- Regulatory Impact Analysis/Technical Support Document
 - Includes technical justification for new requirements, description of health effects and benefits, cost and benefit estimates, economic analyses
- Response to Comments document detailing how EPA addressed each comment
- These packages are very detailed and provide EPA's complete justification for its actions (Recent nonroad rule documents total approximately 2,500 pages)

Example: Engineering Cost Estimation for Diesel Engine Standards

Variable Costs

Engine hardware

(fuel system, PM filter, NOx aftertreatment, etc.)

Equipment hardware

Warranty

Fixed Costs

Engine R&D

Equipment redesign

Engine tooling

Equipment tooling

Engine Certification

Service tools and manual updates

Operating Costs

Fuel cost

Fuel consumption

Oil change interval

Cleaning and other maintenance

Per-vehicle Cost Estimates

Total Program Aggregate Costs

Input to Cost-Benefit Analysis

Recent Impacts of Public Input on EPA Rulemaking

- **Stakeholder input on technical feasibility, cost, health benefits and other factors very important**
 - Stakeholders provide factual evidence supporting their recommended positions
 - As appropriate, changes are made to proposed and final rules based on this feedback

- **Final Rule – Example - Tier 2 Car/Light Truck Emission Requirements**
 - Offered more flexibility to automobile manufacturers in meeting the final standards by allowing them to produce vehicles that meet a wider range of emission limits as long as the average emissions of all their vehicles meets interim standards.
 - Provided additional time to the oil industry to phase in sulfur restrictions
 - Included, for the first time, emission standards for the heaviest passenger vehicles (Gross vehicle weight of 8,500-10,000 pounds)
 - Added provisions for both vehicle manufacturers and refiners to obtain extra credit for early compliance.

- **Final Rule – Example - Heavy Duty On-Highway 2007**
 - Adjusted fuel compliance program from 100% in 2006 to a phase-in of 80%-20%.
 - Included provisions to provide extra credit for earlier compliance.

- **Final Rule – Example - Non-Road Diesel**
 - Included a requirement for locomotive and marine diesel fuel to be at 15ppm sulfur.
 - Did not finalize CO controls for less than 75hp.
 - Based on technological feasibility comments, changed standards for engines 750hp and greater.