AGRICULTURAL
RETAILERS
ASSOCIATION

1156 15th Street NW • Suite 302 • Washington, DC 20005
T 202.457.0825 • F 202.457.0864 • *www.aradc.org*

The Honorable Darrell Issa
The Committee on Oversight and Government Reform
2157 Rayburn House Office Building
Washington, DC 20515

January 11, 2011

Dear Chairman Issa:

On behalf of the membership of the Agricultural Retailers Association (ARA), we submit the following comments in response to your December 8, 2010 letter that requested information on government regulations that have a negative economic impact on our industry. We appreciate the opportunity to comment on several regulations that concern agricultural retailers and distributors.

ARA is a not-for-profit trade association that represents America's agricultural retailers and distributors. ARA members provide goods and services to farmers and ranchers which include: fertilizer, crop protection chemicals, seed, crop scouting, soil testing, custom application of pesticides and fertilizers, and development of comprehensive nutrient management plans. Retail and distribution facilities are scattered throughout all 50 states and range in size from small family-held businesses or farmer cooperatives to large companies with multiple outlets.

The following regulations are currently negatively impacting retailers' income, or they are proposals being considered that are concerning to the agricultural retail and distribution industry:

Department of Transportation (DOT)

Hours of Service Agricultural Exemption Interpretation:

In 1995, the National Highway System Designation Act (P.L. 104-59) was enacted into law, amending the hours of service agricultural exemption by dropping the term "retail" to clarify that the HOS agricultural exemption does not apply solely to farmers and farm retailers but should cover ALL moves which are essential to the timely planting and harvesting of crops. In addition, the area was extended to a 100 air-mile radius from a 50-mile radius. Congress also provided the States with the authority to adopt the exemption and establish the "planting and harvesting seasons" within the state in order to designate the time of year the exemption would be in effect. (Section 345)

In the summer of 2008, a DOT enforcement official cited a carrier of anhydrous ammonia (NH3) for abusing the HOS agricultural exemption. The carrier was transporting NH3 from a

terminal/pipeline to an agriculture retail facility and FMCSA interpreted (for the first time) that the agriculture exemption was only for transport of product from retail to farm and not from terminal to retail. In 2010, FMCSA issued a 2 year waiver for transportation of NH3 under the agricultural exemption from the terminal/distribution point to the retail location or farm.

The interpretation made in 2008 limits the agricultural HOS exemption to only retail moves of farm supplies directly to the farm and clearly does not fit the reality of the farm supply chain. Also, it is not in line with congressional intent - to include critical movement of agricultural commodities and farm supplies that are essential to the timely planting and harvesting of crops. Without the exemption it would require an investment to more than double the current trucks carrying product which is not economically feasible for businesses which utilize assets for such a short seasonal period. The increase in trucks would require additional drivers and would face increased safety concerns due to additional inexperienced drivers on the road. The alternative to increasing assets would be to carry less product, which would adversely affect the yields on crops around the nation shrinking our overall food supply.

Hazardous Materials Transportation Special Permit Program:

The Pipeline and Hazardous Materials Safety Administration (PHMSA) conducts the special permit (SP) program, which permits a person to perform a function that is otherwise not permitted by the regulations. SP are only issued when the applicant demonstrates that the SP will achieve a level of safety at least equal to that required by the regulation. The SP allows private industry to invest in research and use techniques that allow for safer hazardous materials transportation when the regulations are dated.

In reaction to Congressional oversight in Fall 2009, PHMSA's work reared to a halt and the administration ceased processing special permit and approval applications, which left businesses either out of business or out of compliance. In May 2010, PHMSA issued a policy announcement that it would no longer issue special permits to trade associations on behalf of their memberships. Those companies would now need to go through a company "fitness determination" to determine eligibility to participate in the SP or approval programs. The criteria of the "fitness determination" are unclear to industry. Furthermore, PHMSA has an incredible backlog of unprocessed SP and approval applications in addition to the thousands of companies affected by the policy announcement that trade associations cannot apply.

In August 2010, PHMSA proposed to incorporate two SP's into the regulations that are widely used in the agricultural retail industry- SP 13554 and SP 10950. These SP's allow retailers to use certain equipment in the transportation of anhydrous ammonia fertilizer. Since the original grantee of these SP's is a trade association, by incorporating these long-standing and widely used SP's into the regulations, PHMSA would be saving the industry and the Administration from much paperwork and delay. However, the SP's have not been incorporated by Final Rule into the regulations yet, and PHMSA has stopped processing paperwork on these SP's. So no new

companies can have access to the SP's in order to stay in compliance with the law, and PHMSA is not processing renewals for expiring permits.

PHMSA's inability to process applications has crippled many businesses, and has left many businesses out of regulatory compliance not because of the business's lack of safety, but PHMSA's lack of action.

Duplicative Commercial Drivers License (CDL) Background Checks and Credentialing:

To obtain the proper credentials to carry hazardous materials, a carrier must pay for and undergo obtaining multiple credentials and undergo multiple background checks. Agricultural retailers are burdened by the cost of the duplicative background checks and credentials. It is also difficult to hire carriers who are able to carry materials across multiple jurisdictions because of the large hurdle to obtain and maintain all applicable licenses.

The safe and secure transportation of hazardous materials is best achieved through uniform regulatory requirements. To this end, Congress explicitly provided preemptive authority to DOT. Congress should clarify DOT authority to preempt state/local regulations that impose an unreasonable burden on commerce. Currently, DOT does not apply this standard, forcing parties to resolve these issues in court rather than through the more efficient preemption process.

Also, there should be a risk-based approach to background checks of drivers that transport hazardous materials. This risk-based approach would require DHS to work with DOT, NRC and HHS to promulgate a rule that creates a subset of hazardous materials that are "security sensitive". Individuals that transport security sensitive hazardous materials would undergo a fingerprint-based background check and obtain a Transportation Worker Identification Credential (TWIC) as evidence of their fitness to transport these materials. The TSA would continue to perform name-based background checks for drivers seeking to obtain or renew their hazardous materials endorsements to their commercial drivers' licenses. Redundant security background checks and duplicative security credentials, which are a significant financial burden upon drivers, would be eliminated.

Hazardous Materials Safety Permit Implementation:

The hazardous materials safety permit (HMSP) is in its third permitting cycle. Since the program's inception, however, the program has been fraught with complaints. Program data is missing. Still records show that there have been thousands of administrative permit denials simply because DOT databases are not linked. Rather than setting a standard of safety and allowing all carriers to aspire to meet the standard, the program operates with a floating standard that results in carriers being "safe" in one permitting cycle and though nothing in their operations changes, they are deemed "unsafe" in the next cycle. The application of separate, arbitrary 30 percent disqualification thresholds results in a disqualification rate of about 50 percent.

The majority of permitees are short-haul carriers with specialized equipment for the high hazard materials that they carry. These companies are not in a position to fall back on the movement of other types of cargo while they address disqualification issues, legitimate or not. Further, the permitting cycle is two years with one year not counting towards a company's data for eligibility the following permitting cycle. This is a bias against rural carriers who are inspected much less frequently than carriers on major highways. Just a couple of out-of-service violations can result in losing the carrier's HMSP the following permitting cycles due to the difficulty in statistically obtaining enough inspections to overcome two violations.

The program would benefit from better internal coordination and the synchronization of DOT's existing database systems, as many permits are denied only to be subsequently issued after the carrier proves to DOT that they already had obtained the necessary prerequisites for permit issuance. In fact the number of initial denials exceeds suspensions or revocations by a factor of 100. The Federal Motor Carrier Safety Administration (FMCSA) should be required to report to Congress on the status of this program, its problems, and what the agency is willing to do address these issues and to restore confidence in this safety initiative.

Environmental Protection Agency

Emergency Planning and Community Right-to-Know Act (EPCRA) Regional Interpretation of the Fertilizer Retail Exemption:

The U.S. Environmental Protection Agency's (EPA) Region 4 office began issuing citations to agricultural retail facilities for failure to report under the Emergency Planning and Community Right-to-Know Act (EPCRA) when fertilizer was blended at the retail facility. However, the EPCRA exempts "fertilizer held for sale by a retailer to the ultimate consumer".

When EPA headquarters was asked to clarify the exemption, EPA sided with Region 4, saying that custom blending is manufacturing fertilizer, so the exemption does not apply. This exemption is longstanding in the industry. Nearly all agricultural retailers custom blend types of fertilizer at the retail site for farmer customers because farmers do not have equipment to blend in the field. Furthermore, blending fertilizer is a different process than manufacturing fertilizer.

In 1987, EPA articulated the following interpretation of Congressional intent regarding the fertilizer retail exemption:

> Because the general public is familiar with the application of agricultural chemicals as part of common farm, nursery, or livestock production activities, and the retail sale of fertilizers, there is no community need for reporting of the presence of these chemicals.

52 Fed. Reg. 38,344, 38,349 (Oct. 15, 1987) (final rule). In other words, EPA concluded in 1987 that Congress' intent was to exempt a retail facility from these provisions because the community was well aware of the retail sale and application of fertilizers, not because these

fertilizers are present in small quantities or because of any activities performed on the fertilizers at the facility.

ARA and other agricultural organizations have written EPA for further clarification, and the industry is waiting on a response.

The consequences of letting this interpretation stand are increased costs of reporting fertilizer under EPCRA, the risk of regulatory enforcement on other retailers seemingly working under the exemption, and the additional consequences of defining a agricultural retailer as a "manufacturer". This would change the regulatory requirements for retailers under other environmental laws. For example, it would pull retailers into the stormwater runoff permitting requirements, Clean Air Act requirements, and Toxics Release Inventory reporting. If a retailer bundled all of these permits together with one engineering firm, a retailer could probably obtain a total EHS service for around $30,000 initial with a $6,000 annual update cost.

Pesticide Spray Drift Guidance:

EPA plans to release pesticide spray drift guidance later this year in order to help standardize pesticide labels and to help regulators have clarity. In November 2009, EPA proposed new spray drift label guidance that used language like, "could cause harm" or "may cause adverse effects" as the standard for liability. However, the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) has a science-based, risk-benefit standard of "no unreasonable adverse effects". When EPA proposed to diverge from this standard to an essentially zero-tolerance spray drift standard, the agriculture industry quickly commented to EPA that this standard is unworkable and it is not in line with FIFRA and opens industry up to endless citizen suits. The proposed standard would also not encourage technology adoption or applicator training.

EPA is now reconsidering other pesticide spray drift labeling and plans to release a final guidance at the end of the year. Congress should see that EPA does not try to change the legal standard found in FIFRA through a guidance document.

Clean Water Act Pesticide Permits:

EPA is developing a general National Pollutant Discharge Elimination System (NPDES) permit in response to the 6th Circuit Appeals Court decision in *National Cotton Council v. EPA*, which struck down a EPA rule that exempted certain pesticide applications from Clean Water Act point source permitting. The court gave EPA and industry until April 2011 to develop and adopt a NPDES permitting system for pesticide applications.

The issue is that pesticides are already thoroughly evaluated by EPA under FIFRA. The pesticide label, which includes use instructions for different crops, geographic regions and weather conditions, is approved by EPA, and the instructions are based on mountains of health and environmental data. Thus, the new NPDES permitting system will result in little to no

environmental benefit but will cost the industry millions of dollars in compliance costs and leave the industry vulnerable to citizen suits.

Congress should pass legislation to explicitly exempt FIFRA-compliant pesticide applications from Clean Water Act permitting requirements. Any permit system released by EPA should pose the minimal additional burdens on industry.

Numeric Nutrient Criteria in Florida:

Pursuant to a January 2009 Clean Water Act determination and a consent decree with Florida Wildlife Federation to settle a 2008 lawsuit, EPA proposed numeric nutrient water quality standards for lakes and flowing waters in Florida in January 2010, and established final standards in November 2010. EPA also committed to propose numeric nutrient water quality standards for Florida's estuarine coastal, and southern inland flowing waters by November 14, 2011, and establish final standards by August 15, 2012.

The model used to define impaired waters is scientifically flawed, and will result in 50 percent more impaired waters than would be defined as "impaired" if a biological component were added. EPA did not have the legal basis to set criteria for Florida. As a result of this rule, the Florida agriculture industry will be severely hurt in terms of jobs, monetary cost of compliance, and agricultural production. It is estimated that 44 states have some form of numeric nutrient criteria in development. EPA should not be able to enter states and force the state to adopt numeric nutrient criteria which are not scientifically based or attainable.

Chesapeake Bay TMDL's- Nutrient and Sediment Pollution Diet:

The agricultural community supports protecting and improving water quality in the Chesapeake Bay and its tributaries, however the final phosphorus, nitrogen and sediment total maximum daily loads (TMDLs) are clearly based on a flawed model that will cost the agriculture industry.

Farmers have taken voluntary action throughout the Bay region to responsibly manage the nutrients from fertilizer and manure used to produce crops, and to prevent or minimize soil loss from farmland. Conservation and agronomic measures adopted by farmers in the Bay watershed have resulted in significant reductions in nutrient and sediment loss to the Bay over the past 25 years. The agricultural community has more to do to fulfill its commitment to improving water quality in the Bay, and is eager to work with the Bay states, other stakeholders and the Environmental Protection Agency (EPA) to continue to improve its management of all nutrient sources.

The agricultural sector is struggling to accept this TMDL, either substantively or as a matter of economics, and is questioning the wisdom of EPA's insistence to move forward with these policies at this time. The agricultural community believes that the approach EPA is taking in the Bay TMDL is entirely wrong and counterproductive, for the following reasons:

- EPA has adopted thoroughly unachievable goals for water quality in the Bay region, given the population that lives there and the environmental impact of supporting and employing a growing number of residents.
- EPA followed the setting of these impossibly high expectations by issuing poor and incomplete information about water quality in the Bay region and the real cost of achieving the goals it has set.
- One of the reasons for this impossibly flawed information is that EPA is relying upon an untested and highly imperfect model of the Bay, including incomplete and incorrect information about agricultural practices in the region and their water quality performance. Despite these serious concerns, most of that model's operations and assumptions are not reviewable by the public.
- EPA is further undermining confidence in this effort by using means and measures that are absolutely contrary to the law.

Clean Air Act:

- **Dust regulation:**

Under the Clean Air Act, EPA periodically reviews National Ambient Air Quality Standards (NAAQS). EPA has traditionally regulated small particulate matter because it is known to cause health problems, like cigarette smoke. However, now EPA is discussing regulating course particulate matter (PM) or dust, at levels that would be impossible for some places like the West to achieve. EPA has discussed regulating dust at levels that are unobtainable due to the geographic nature of certain areas. There is no conclusive evidence that PM causes health problems. If EPA is allowed to go forward with regulating PM at very low levels of occurrence, the agriculture industry will be severely limited in many parts of the U.S.

- **Greenhouse Gas Regulation:**

EPA's greenhouse gas "endangerment finding" has triggered the regulation of greenhouse gas emissions under the Clean Air Act. Since greenhouse gasses occur naturally and are necessary for life, it is clear that the Clean Air Act is an inappropriate vehicle for regulating greenhouse gas emission. EPA has issued a "Tailoring Rule" to help small emitters adjust and to shelter certain emitters from the requirements of the Clean Air Act. However, it is not clear that EPA has the authority to tailor through emitting certain emitters from the rule requirements. Our industry is concerned of agricultural retailers' suppliers' costs of compliance that will be passed along to the retailer. Furthermore, retailers fear that their farmer customers and their businesses will eventually be brought into the rule. The cost of complying with sourcing permits would cause many customers to stop farming and would detrimental to most retail facilities. In an industry that operates on very thin margins (approximately 2%), uncertainty can play a large part of a retailer's economic failure or success.

Department of Homeland Security

Chemical Facility Anti-Terrorism Security Act (CFATS):

In the aftermath of September 11, 2001, Congress passed the Homeland Security Appropriations Act of 2007 (Section 550 of P.L. 109-295), and the U.S. Department of Homeland Security (DHS) was mandated to establish risk-based performance standards for the security of "high-risk" chemical facilities. Since many chemicals stored at agricultural retail facilities are considered "chemicals of interest", DHS officials have worked with ARA and other impacted industry segments on the implementation of these new security regulations, called the Chemical Facility Anti-Terrorism Standards (CFATS) program. ARA is concerned with the following CFATS regulatory compliance aspects:

- **DHS Personnel Surety Program Information Collection Request:**

Agricultural retailers and distributors have limited resources available to address security related matters, and it is important that those resources are spent wisely to coincide with the appropriate level of risk for that particular facility and chemicals of interest covered under CFATS.

In a survey of several retailers and manufacturers, one facility has determined that the first year cost for personnel surety compliance for two facilities will total $598,750 and $537,869 in subsequent years. One retailer reports that between managerial and administrative staff its costs will average $40 and $20 per hour per facility respectively with 20 facilities covered under CFATS.

We are concerned that the time and money spent complying with the Personnel Surety Program will reap little to no security benefit. Facilities will have no knowledge of the results of their submissions since DHS appears to have no intention of notifying facilities if there is a match, and facilities have 60 to 90 days to submit the information to DHS after an individual has access to a restricted area or leaves the facility and possibility moves on to another facility.

The lack of notification to CFATS facilities of the results of the Terrorist Screening Data Base (TSDB) check appears contrary to the April 2007 CFATS interim final rule that states "where appropriate, DHS will notify the facility and applicant via U.S. mail, with information concerning the nature of the finding and how the applicant may contest the finding. Applicants will have the opportunity to seek an adjudication proceeding and appeal."

- **Certain Chemicals of Interest (COI) Listed as Ingredients in Agricultural Chemicals:**

There is an issue of concern related to a recent interpretation of the chemicals of interests (COIs) that are active ingredients in widely-used agricultural chemical products. We believe it is important to resolve this type of issue prior to DHS finalizing Site Security Plans (SSP) and starting inspections beyond Tier 1 facilities sometime next year.

In June 2010, DHS provided a revised definition / interpretation of any commercial grade products (ACG) and sodium chlorate mixtures that is inconsistent from the industries previous understanding of how your agency intended to handle agricultural pesticide and fertilizer mixtures. Based on this latest DHS interpretation, Agricultural retailers and their farmer customers would have to track all chemicals that have an "active ingredient" that is an (ACG) COI. The implication of this latest COI definition / interpretation would likely result in many agricultural retailers dropping any agricultural pesticide products containing an active ingredient listed as a COI. In addition, it could impact agricultural fertilizer mixtures that had any amount of a COI such as Sodium nitrate contained within it, as under conditions of normal use, the Sodium nitrate would release. This also means that DHS is regulating those ACG compounds more strictly than ammonium nitrate, as ammonium nitrate has a minimum concentration within a mixture of 33 percent.

ARA and industry officials met with DHS regarding this matter in November 2010. DHS appears to be interested in favorably addressing this issue but it is still pending.

- **Alternative Security Programs (ASPs)**

The CFATS program allows DHS to approve the use of Alternative Security Programs (ASPs) for Tier 4 facilities. However, to date no ASPs have been approved, forcing all facilities to utilize the DHS Security Program even though industry specific programs such as ACC's Responsible Care and ARA's Asmark SVA program have been designed to address security related concerns for these facilities.

- **Inherently Safer Technology (IST)**

Another CFATS area of concern is the agency's plan to implement some sort of program promoting / urging use of Inherently Safer Technology (IST). DHS is looking into IST internally by forming a work group. At some future date the agency may push for some form of IST for certain CFATS facilities. An IST mandate would hurt the agriculture sector, for example, if farmers could not use certain forms of nitrogen, a 1,000 acre corn farm could pay an extra $43,000-$65,000 due to the cost to switch materials, imports, and change in infrastructure.

- **Material Modification**

CFATS regulations should allow for the seasonal and emergency use of products. In the agriculture industry, it is difficult to predict all of the products that will be needed at the beginning of a growing season because pest threats and plant nutritional needs change. Agricultural retailers should not need to re-file a large amount of paperwork every time inventory changes, especially if it is a slight change for a short amount of time.

Conclusion

Thank you for reviewing government regulations and the effect that they have on agricultural retailers' and distributors' operating environment. If you have any comments or concerns, please contact me at Carmen@aradc.org or (202) 457-0825.

Sincerely,

Carmen Haworth
Public Policy Counsel

AOPA Legislative Affairs
601 Pennsylvania Avenue, NW
Suite 875, South Building
Washington, DC 20004

T. 202-737-7950
F. 202-737-7951

www.aopa.org

January 6, 2011

The Honorable Darrell Issa
Chairman
Committee on Oversight and Government Reform
2157 Rayburn House Office Building
Washington, DC 20515-6143

Dear Chairman Issa:

Thank you for the opportunity to identify existing and proposed regulations that have negatively impacted job growth in general aviation.

As you know, general aviation contributes high-skilled jobs in aircraft manufacturing, avionics and technology development, and flight training. It is also utilized for agriculture, law enforcement, and business travel. An estimated 65 percent of general aviation flights are conducted for business and public services, many of which serve smaller communities that do not have commercial aviation.

General aviation contributes more than $150 billion to U.S. direct and indirect economic output and employs nearly 1.3 million people whose collective annual earnings exceed $53 billion. There are 5,200 public use airports and more than 13,000 privately owned landing facilities in the U.S. with more than 223,000 active general aviation aircraft in the United States.

While we are a heavily regulated industry and can point to many regulations that impact job retainment and growth in our industry, we believe the following two regulations are worth your consideration at this time:

NPRM, Aircraft Repair Station Security, Docket TSA-2004-17131

On November 17, 2009, the Transportation Security Administration (TSA) issued a Notice of Proposed Rulemaking (NPRM) entitled "Aircraft Repair Stations". The NPRM proposes to amend existing aviation transportation security regulations by extending to a broad and very diverse group, foreign and domestic Part 145 certificated repair stations, a comprehensive and costly regime of security

AOPA Legislative Affairs
601 Pennsylvania Avenue, NW
Suite 875, South Building
Washington, DC 20004

T. 202-737-7950
F. 202-737-7951

www.aopa.org

regulations. A copy of the proposed regulation and our comments are attached. The proposed rule is beyond the intent of federal legislation, as presented is not feasible and will add costs and complexities that are a barrier to business.

Washington D.C. Flight Restricted Zone Application Process (ADIZ)

The ADIZ (now known as the Special Flight Rules Area or SFRA) was hastily established during a weekend in February 2003, and was intended to be a temporary security measure imposed in preparation for the then-pending Iraq war. The restrictions remain as controversial today as they were 7 years ago.

The SFRA extends security measures outside of the preexisting 15-mile flight restricted zone (FRZ) and restricts general aviation access to airspace under 18,000 feet in a 30 mile radius around Washington, D.C. The SFRA procedures require that all aircraft in the SFRA must be on a flight plan, obtain and use a discrete transponder code, and maintain two-way communication with air traffic control. Failure to comply could result in pilot certificate revocation or even being "shot down".

Because it is the only one of its kind, even experienced pilots and aviation officials are often unfamiliar with its requirements and procedures. Pilots are fearful of flying in or near the SFRA. An economic study in 2005 showed that 10 of the 13 airports analyzed inside the ADIZ were losing about $43 million annually in wages, revenue, taxes, and local spending.

On August 4, 2005, the FAA released its NPRM to make these temporary restrictions permanent.

- More than 22,000 comments opposing
- Four Public Meetings hosting 600 pilots, Airport & Business Owners attended
- The ADIZ was replaced by the SFRA and became permanent on August 17, 2009

The ADIZ and now, the SFRA, has imposed significant economic costs on general aviation and has increased the administrative burden on the FAA, Department of Defense, and Department of Homeland Security.

- Total private sector costs, over ten years, sum to $628.00 million
- Total public and private sector costs combined, over ten years, sum to $1.04 billion.

AOPA Legislative Affairs
601 Pennsylvania Avenue, NW
Suite 875, South Building
Washington, DC 20004

T. 202-737-7950
F. 202-737-7951

www.aopa.org

The Government has never provided a specific, intelligence-based threat assessment to justify the design and specific procedures of the SFRA. Nor has there been any evidence or analysis demonstrating that the SFRA results in any measurable increase in security.

We suggest that several things can be done without compromising national security. For instance:

- Replace SFRA with National Security Area (NSA)
- Maintain 15-nm Flight Restricted Zone around Capitol
- Activate SFRA only for High or Severe Threat level
- Reduce Size of covered area to 20 miles
    - Eliminates number of airports impacted
- Eliminate the flight plan requirement

Again, thank you for the opportunity to present these issues to you for future consideration. We are happy to provide detailed briefings or additional information as needed.

Sincerely,

Lorraine Howerton
Vice President
Legislative Affairs

[9110-05-P]

DEPARTMENT OF HOMELAND SECURITY

Transportation Security Administration

49 CFR Parts 1520 and 1554

[Docket No. TSA-2004-17131]

RIN 1652-AA38

Aircraft Repair Station Security

AGENCY: Transportation Security Administration (TSA), DHS.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: TSA is proposing to issue regulations to improve the security of domestic and foreign aircraft repair stations as required by the Vision 100–Century of Aviation Reauthorization Act. The proposed regulations establish requirements for repair stations that are certificated by the Federal Aviation Administration (FAA) under 14 CFR part 145 to adopt and implement a standard security program and to comply with security directives issued by TSA. This rule proposes to codify the scope of TSA's existing inspection program and to require regulated parties to allow TSA and Department of Homeland Security (DHS) officials to enter, inspect, and test property, facilities, and records relevant to repair stations. The proposed regulations also provide procedures for TSA to notify repair stations of any deficiencies in their security programs, and to determine whether a particular repair station presents an immediate risk to security. The proposal includes a process whereby a repair station may seek review of a determination by TSA that the station has not adequately addressed security deficiencies or that the repair station poses an immediate risk to security.

DATES: Submit comments by [Insert date 60 days after date of publication in the Federal Register].

ADDRESSES: You may submit comments, identified by Docket No. TSA-2004-17131, to the Federal Docket Management System (FDMS), a government-wide, electronic docket management system, using any one of the following methods:

Electronically: You may submit comments through the Federal eRulemaking portal at http://www.regulations.gov. Follow the online instructions for submitting comments.

Mail, Fax, or In Person: Address, hand-deliver, or fax your written comments to the Docket Management System, U.S. Department of Transportation, 1200 New Jersey Avenue SE, West Building Ground Floor, Room W12-140, Washington, DC 20590-0001; Fax: 202-493-2251. The Department of Transportation (DOT), which maintains and processes TSA's official regulatory dockets, will scan the submission and post it to FDMS.

See SUPPLEMENTARY INFORMATION for format and other information about comment submissions.

FOR FURTHER INFORMATION CONTACT: Celio Young, Office of Security Operations, TSA-29, Transportation Security Administration, 601 South 12th Street, Arlington, VA 20598-6029; telephone (571) 227-3580; facsimile (571) 227-1905; e-mail celio.young@dhs.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

TSA invites interested persons to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, recordkeeping, or federalism impacts that might result from adopting the proposals in this document. See ADDRESSES above for information on where to submit comments.

With each comment, please identify the docket number at the beginning of your comments. TSA encourages commenters to provide their names and addresses. The most helpful comments reference a specific portion of the rulemaking, explain the reason for any recommended change, and include supporting data. You may submit comments and material electronically, in person, or by mail as provided under ADDRESSES, but please submit your comments and material by only one means. If you submit comments by mail or delivery, submit them in two copies, in an unbound format, no larger than 8.5 by 11 inches, suitable for copying and electronic filing.

If you want TSA to acknowledge receipt of your comments submitted by mail, include with your comments a self-addressed, stamped postcard on which the docket number appears. We will stamp the date on the postcard and mail it to you.

TSA will file in the public docket address, as well as items sent to the address or email under "FOR FURTHER INFORMATION CONTACT," in the public docket, except for comments containing confidential information and sensitive security information (SSI).[1] Should you wish your personally identifiable information redacted

[1] "Sensitive Security Information" or "SSI" is information obtained or developed in the conduct of security activities, the disclosure of which would constitute an unwarranted invasion of privacy, reveal trade secrets or privileged or confidential information, or be detrimental to the security of transportation. The protection of SSI is governed by 49 CFR part 1520.

prior to filing in the docket, please so state. TSA will consider all comments that are in the docket on or before the closing date for comments and will consider comments filed late to the extent practicable. The docket is available for public inspection before and after the closing date.

Handling of Confidential or Proprietary Information and Sensitive Security Information (SSI) Submitted in Public Comments

Do not submit comments that include trade secrets, confidential commercial or financial information, or SSI to the public regulatory docket. Please submit such comments separately from other comments on the rulemaking. Comments containing this type of information should be appropriately marked as containing such information and submitted by mail to the address listed in FOR FURTHER INFORMATION CONTACT section.

TSA will not place comments containing SSI in the public docket and will handle them in accordance with applicable safeguards and restrictions on access. TSA will hold documents containing SSI, confidential business information, or trade secrets in a separate file to which the public does not have access, and place a note in the public docket explaining that commenters have submitted such documents. TSA may include a redacted version of the comment in the public docket. If an individual requests to examine or copy information that is not in the public docket, TSA will treat it as any other request under the Freedom of Information Act (FOIA) (5 U.S.C. 552) and the Department of Homeland Security's (DHS') FOIA regulation found in 6 CFR part 5.

Reviewing Comments in the Docket

Please be aware that anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comments, if submitted on behalf of an association, business, labor union, etc.). You may review the applicable Privacy Act statement published in the Federal Register on April 11, 2000 (65 FR 19477) and modified on January 17, 2008 (73 FR 3316)..

You may review TSA's electronic public docket on the Internet at http://www.regulations.gov. In addition, DOT's Docket Management Facility provides a physical facility, staff, equipment, and assistance to the public. To obtain assistance or to review comments in TSA's public docket, you may visit this facility between 9:00 a.m. to 5:00 p.m., Monday through Friday, excluding legal holidays, or call (202) 366-9826. This docket operations facility is located in the West Building Ground Floor, Room W12-140 at 1200 New Jersey Avenue, SE, Washington, DC 20590.

Availability of Rulemaking Document

You may obtain an electronic copy using the Internet by

(1) Searching the Federal Docket Management System (FDMS) web page at http://www.regulations.gov;

(2) Accessing the Government Printing Office's web page at http://www.gpoaccess.gov/fr/index.html; or

(3) Visiting TSA's Security Regulations web page at http://www.tsa.gov and accessing the link for "Research Center" at the top of the page.

In addition, copies of the rulemaking document are available by writing or calling the individual in the FOR FURTHER INFORMATION CONTACT section. Make sure to identify the docket number of this rulemaking.

Outline of the Notice of Proposed Rulemaking

I. Background

A. Introduction

Civil aviation remains a target of terrorist activity worldwide. Terrorists continue to seek opportunities to destroy public confidence in the safety and security of travel, deny the ability of the public to move and travel freely, and damage international economic security.

TSA is proposing to issue regulations to provide for the security of maintenance and repair work conducted on aircraft and aircraft components at domestic and foreign repair stations, of the aircraft and aircraft components located at these repair stations, and of the repair station facilities as required by Vision 100-Century of Aviation Reauthorization Act, codified at 49 U.S.C. 44924 (Vision 100).

For purposes of this rulemaking, "repair stations" are those facilities certificated by the FAA to perform maintenance, repair, overhaul, or alterations on U.S. aircraft or aircraft components, including engines, hydraulics, avionics, safety equipment, airframes, and interiors. According to the FAA, there are 4,227 domestic repair stations located in

the United States and 694 foreign repair stations located outside the United States that have an FAA certificate under part 145 of the FAA's rules.[2]

In addition, for purposes of this rulemaking, the term "component" includes any article, airframe, aircraft engine, propeller, appliance, or part that is under repair. The term is used broadly to encompass both articles and appliances as defined by the FAA.[3]

Aircraft repair stations vary widely in size, type of repair work performed, number of employees, and proximity to an airport. The FAA issues ratings to certificated repair stations for the work that can be performed at the repair station.[4] These include airframe ratings, power plant ratings, propeller ratings, radio ratings, instrument ratings, and accessory ratings. Within each rating there are different classes for particular aircraft and equipment. The FAA also issues limited ratings for certificated repair stations that only work on a particular type of airframe or equipment or performs only specialized maintenance operations.[5] The FAA certificates repair stations with few employees located in industrial parks and in residences that may work on small components, such as aircraft radios or seat cushions, as well as repair stations with many employees that perform major aircraft overhauls located in close proximity to an airport runway.[6] Because repair station characteristics vary widely, TSA believes that existing security measures, as well as the corresponding security threat, also vary widely.

Repair stations are closely regulated and monitored by the FAA and both the FAA and the air carriers inspect work done at repair stations. FAA performance standards for

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[2] FAA Fact Sheet, "FAA Oversight of Repair Stations," March 29, 2007. See "FAA Certificated Repair Stations Directory," Advisory Circular (AC) 140-7R, for a list of FAA certificated repair stations.
[3] See 14 CFR 1.1 and 145.3(b).
[4] 14 CFR 145.59.
[5] 14 CFR 145.61.
[6] Approximately 2,803 domestic repair stations have fifteen or fewer employees and 1,407 have five or fewer employees. Approximately 3,000 certificated domestic repair stations are not located on an airport.

foreign and domestic repair stations are the same. While the FAA has implemented extensive safety requirements for both foreign and domestic repair stations, supplementing those requirements with specific security measures for both foreign and domestic repair stations would further reduce the likelihood that terrorists would be able to gain access to aircraft under repair at a repair station. As terrorist organizations continue to seek new and creative means of using aircraft to undermine the security and safety of the traveling public, the importance of requiring all aircraft repair stations to have measures in place to prevent persons from commandeering, tampering, or sabotaging aircraft has increased as well. Enhancement of repair station security will mitigate the potential threat that an aircraft could be used as a weapon or that an aircraft could be destroyed.

This rulemaking sets forth proposed regulations to require all FAA certificated repair stations to adopt and carry out a standard security program. The proposed regulations list performance standards for security measures that would be included in the standard security program. The proposed regulations also would require repair stations to carry out Security Directives issued by TSA in the event of a specific threat.

In addition, the proposed regulations codify the scope of TSA's authority to conduct inspections of both domestic and foreign repair stations. The proposed regulations also provide procedures for TSA to notify repair stations of deficiencies in their security program and to determine whether a particular repair station represents an immediate risk to security. Finally, the proposal contains a process whereby a repair station may seek review of a determination by TSA that security deficiencies have not been addressed or that the repair station poses an immediate risk to security.

B. Statutory Requirements

Vision 100 requires DHS to promulgate security regulations for domestic and foreign aircraft repair stations.[7] The statute includes the following additional requirements regarding security audits of foreign repair stations:

- TSA must complete a security review and audit of foreign repair stations certificated by the FAA no later than six months after regulations are issued.[8] When conducting the audit, TSA must give priority to those repair stations that pose a significant risk to security. If security audits are not completed within six months from the date regulations are issued, the FAA is barred from certificating any new foreign repair stations until the security audits are completed for existing repair stations.
- TSA must notify the FAA of any security issues or vulnerabilities identified during the audit and require foreign repair stations to address any such issues or vulnerabilities within 90 days. If, after 90 days, TSA determines that the foreign repair station does not maintain and carry out effective security measures, TSA must notify the FAA and the FAA must suspend the repair station's certificate until such time as TSA determines that the repair station does maintain and carry out effective security measures.
- TSA must notify the FAA if TSA determines that a foreign repair station poses an immediate risk to security and the FAA must revoke the repair station's

[7] This section of Vision 100 is codified at 49 U.S.C. 44924. The requirement to promulgate regulations is described in 49 U.S.C. 44924(f). The statute also requires that the Under Secretary for Border and Transportation Security issue the final regulations. The Under Secretary delegated authority for issuing such regulations to TSA on September 16, 2005. TSA sent a Report to Congress on August 24, 2004, as required at 49 U.S.C. 44924(g).

[8] In the Implementing Recommendations of the 9/11 Commission Act of 2007 (Pub. L. 110-53, 121 Stat. 266, Aug. 3, 2007), the original 18-month deadline for completing security inspections of foreign repair stations was reduced to 6 months.

certificate. TSA must establish an appeal procedure to be used when a certificate is revoked.

C. Summary of Proposed Rule

TSA is proposing regulations to:

- Codify TSA's inspection authority.
- Require foreign and domestic repair stations certificated by the FAA under part 145 of the FAA's rules to allow TSA and DHS officials to enter, inspect, audit, and test property, facilities, and records relevant to repair stations.
- Require foreign and domestic repair stations certificated by the FAA to adopt and carry out a standard security program issued by TSA to safeguard the security of the repair station, the repair work conducted at the repair station, and all aircraft and aircraft components at the repair station.
- Require each security program to describe the specific measures the repair station has implemented to identify individuals authorized access to the repair station, aircraft, and aircraft components; control access to the repair station, aircraft, and aircraft components; challenge individuals who are not authorized access and use escort measures for authorized visitors; provide security awareness training to all employees; verify employee background information; designate a security coordinator; and establish a contingency plan.
- Require each repair station to comply with Security Directives issued by TSA.
- Establish a process to notify the FAA to suspend a certificate upon written notification by TSA that a repair station has not corrected security deficiencies

identified during a security audit within 90 days and to permit appeal of a certificate suspension.

- Establish a process to notify the FAA to revoke a certificate upon written notification by TSA that a repair station is an immediate risk to security and to permit appeal of a certificate revocation.

In developing these proposals, TSA has consulted with FAA officials responsible for repair station safety matters.

D. FAA Safety Regulations

The security regulations proposed in this NPRM are designed to build upon the extensive certification and safety requirements for repair stations instituted by the FAA. The FAA certificates repair stations, as well as repairmen who work in repair stations.[9] The FAA requires that in order to receive certification, repair stations must establish and maintain a quality control system acceptable to the FAA that ensures the airworthiness of the articles on which the repair station or any of its contractors performs maintenance, preventive maintenance, or alterations.[10] The quality control system must describe the procedures the repair station uses to inspect incoming raw materials, perform preliminary inspection of all articles that are maintained at the repair station, qualify and monitor noncertificated persons who perform maintenance, preventive maintenance, or alterations for repair stations, and conduct final inspections of maintained articles. In addition, the FAA requires that a certificated repair station inspect each article upon which it has performed maintenance, preventive maintenance, or alterations before approving that

[9] See 14 CFR part 145 and 14 CFR part 65. While the FAA only certificates certain repair station personnel who work in the United States, it does require that those repair station personnel located outside the United States have practical experience or training in the work being performed. Supervisors in repair stations located outside the United States must understand, read, and write English. 14 CFR 145.153.
[10] 14 CFR 145.211.

article for return to service.[11] The FAA conducts safety inspections of both foreign and domestic repair stations.

While these quality control measures provide a significant layer of protection and oversight of the components and aircraft under repair, the proposed regulations would supplement those measures by requiring that FAA certificated repair stations also adopt and carry out a security program that would include procedures to control access to the repair station itself, the components and aircraft under repair, and the work being performed; verify the identity of repair station employees; and establish a security coordinator to serve as the point of contact for security-related matters.

E. Public Listening Session and Comments

On February 27, 2004, TSA held a public listening session to receive input from stakeholders and other interested parties on repair station security issues. TSA also invited written comments to be submitted by March 29, 2004.[12] TSA requested specific comments on the following issues:

- Security measures that are currently deployed.
- Existing security vulnerabilities.
- Standards that should be in place to prevent unauthorized access, tampering, and any other security breaches.
- Current security system costs.
- Whether security requirements should be tailored to the type of authorization the repair station holds, number of employees, proximity to an airport, number of repairs completed, or other characteristics.

[11] 14 CFR 145.211.
[12] 69 FR 8357 (Feb. 24, 2004).

- Whether aircraft operators should play a role in ensuring that repair stations maintain a secure workplace.
- Whether any repair station operator has experienced a breach in security.

Twelve parties, representing air carriers, repair station operators and employees, manufacturers, and unions, spoke during the public meeting.[13] While several parties questioned the need for security regulations, most recognized the importance of protecting the security of the aircraft, the maintenance work that repair stations perform on aircraft and aircraft components, and the facility itself, noting that TSA is required by statute to develop such regulations. Most parties also agreed that the regulations should be tailored to reflect security measures that may already be in place, as well as other factors, such as those listed by TSA in its request for comments. Concerns were expressed regarding the expedited timing of the regulations and the security audits, the potential financial burdens resulting from the imposition of new regulations, particularly on small repair stations, and the appeal process. Several parties recommended that the regulations define what constitutes an "immediate risk to security," as well as "existing repair stations." Other parties discussed security initiatives that had been employed at their facilities since September 11, 2001.

TSA also received 21 written comments, representing the views of repair station operators and employees, unions, air carriers, aircraft owners, and manufacturers regarding potential security regulations. The majority of those submitting written comments also supported the need for security regulations, and agreed that the regulations should be tailored to reflect the particular characteristics of a repair station.

[13] A transcript of the public meeting and copies of all filed comments are available in docket number TSA-2004-17131 at http://regulations.gov/search.

Some commenters suggested that TSA include general security criteria for domestic and foreign repair stations and others offered recommendations regarding specific provisions that should be included in the regulations, such as access controls, personnel identification, employee background checks, and security awareness training. The comments provide valuable input as to how repair station security issues should be addressed and the proposal reflects many of the issues, as well as the recommendations, contained in these initial comments. TSA looks forward to receiving further comments on the proposed regulations.

F. Repair Station Site Visits

In addition to the information gathered during the public listening session and through written comments, TSA visited repair stations to conduct research on the physical characteristics of repair stations, the type of repair work performed, and the extent of security measures that had been implemented. The following site visits were conducted:

- June 2005—1 repair station in Hamburg, Germany, and 1 repair station in Amsterdam, the Netherlands.
- August 2005—5 repair stations in Singapore.
- November 2006—9 repair stations in the state of Arizona.
- December 2006—3 repair stations in Naples, Italy.
- January 2007—3 repair stations in the state of Georgia.
- May 2007—1 repair station in Singapore and 1 repair station in Guangzhou, China.
- July 2007—1 repair station in Teterboro, New Jersey.

- May 2008—3 repair stations in Bogota, Colombia.

These repair station site visits provided valuable insight into the different types of facilities certificated by the FAA, the different types of repair work conducted at the facilities, and the different types of security measures deployed by the various facilities. All of the stations visited had some security measures in place. For example, one foreign repair station had over 10,000 employees with many buildings and its own airport. This facility had perimeter fencing, security guards, and surveillance cameras to control access to the facility. Its employees were required to display identification media. Another foreign repair station had only seven employees and was located at an industrial park. That facility was planning to install surveillance cameras to be monitored by a private security company. In two countries the government had mandated security requirements for certain repair stations.

In the United States, one domestic repair station facility with 40 employees relied on personal recognition to identify individuals authorized entry into the facility, while another domestic repair station with fifteen employees used identification media and surveillance cameras. By conducting these site visits, TSA was able to study security measures already deployed and develop a proposal that reflects repair station diversity.

II. Summary of the Proposed Rule

TSA proposes to add a new part 1554 to its regulations, entitled "Aircraft Repair Station Security." The new part would require aircraft repair stations that are certificated by the FAA under 14 CFR part 145, both domestic and foreign, to adopt and carry out a standard security program. The regulations would require repair stations to safeguard the security of the aircraft and components located at the station, the maintenance and repair

work performed there, as well as the repair station's facilities as required by 49 U.S.C. 44924. For a more detailed discussion of the proposed regulations, see the Section-by-Section Analysis portion of this preamble.

TSA is also proposing changes to its regulations regarding the protection of sensitive security information (SSI) to specify that a repair station security program is categorized as SSI and that the repair station operator or owner is subject to the SSI requirements described in 49 CFR part 1520.[14]

A. Repair Station Standard Security Program

FAA certificated repair stations, whether located at airports that have a TSA security program,[15] at general aviation airports, or at off airport properties, could be a target of terrorist activity and TSA is proposing that each FAA certificated repair station implement and carry out a standard security program issued by TSA to mitigate that risk. If the repair station is already incorporated within an airport's security program and uses the airport's access control measures, TSA will consider the repair station to be in compliance with the security measures proposed in these regulations.

The proposed regulations list the general security requirements that each repair station would be required to carry out in the standard security program. The standard security program would require each repair station to include (1) a description of access controls for the facility as well as for the aircraft and/or aircraft components; (2) a description of the measures used to identify employees and others who are authorized to

[14] "Sensitive Security Information" or "SSI" is information obtained or developed in the conduct of security activities, the disclosure of which would constitute an unwarranted invasion of privacy, reveal trade secrets or privileged or confidential information, or be detrimental to the security of transportation. The protection of SSI is governed by 49 CFR part 1520.

[15] See 49 CFR part 1542 for a description of airport security program requirements. Aircraft repair stations located at a commercial airport may be included within the airport security program.

access aircraft and/or aircraft components; (3) a description of the procedures to challenge unauthorized individuals; (4) a description of security awareness training for employees; (5) the name of the designated security coordinator; (6) a contingency plan; and (7) a description of the means used to verify employee background information. The complete security program contents are discussed in the Section by Section analysis.

These requirements are consistent with the recommendations included in the written comments received by TSA, as well as with established security procedures for aircraft operators, air carriers, and airports.[16]

Recognizing that a "one size fits all" approach would not appropriately address the diversity in repair station characteristics, TSA believes that repair stations should have some flexibility regarding the particular equipment, facilities, and measures that would be listed in the standard security program and used to comply with the proposed regulations. While TSA would provide a standard security program which would contain the majority of security measures that a repair station must adopt to comply with the proposed regulations, certain measures in the standard security program that the repair station must adopt may differ depending upon risk factors considered by TSA.

TSA would not require repair stations that are not located on or adjacent to an airport to implement the same physical security measures in the standard security program as those repair stations that are located on or adjacent to an airport. In adopting this approach, TSA considered the security risks of repair station operations to determine whether there were any factors that could increase the security risks of a repair station. The factors TSA considered were (1) size and type of aircraft to which employees had access; (2) the type of repair work permitted by the FAA certificate; (3) whether the

[16] See, generally, TSA security regulations at 49 CFR parts 1540, 1542, 1544, and 1546.

repair station was located on an airport and the type of airport; and (4) the number of employees at the repair station.

Based on the information acquired during the repair stations site visits, an examination of FAA safety requirements, and discussions with FAA safety inspectors, TSA determined that while all of the characteristics examined had some effect on security risks, repair stations that are located on or adjacent to an airport could pose a higher security risk. TSA found that at airport locations, there was greater accessibility to aircraft and proximity to a runway, thereby increasing the possibility that an aircraft could be commandeered and used as a weapon or sabotaged. At off-airport locations, TSA found that repair station employees had little, if any, access to operational aircraft or runways. Repair station employees at off airport locations typically are not the last individuals with access to aircraft prior to the reintroduction of the aircraft into service. TSA believes that it would be difficult for an individual to damage an aircraft at a repair station location that is only rated to repair aircraft components if the individual does not have access to aircraft. FAA safety regulations require inspection of the repair work and the component before it is installed in an aircraft and before the aircraft is deemed to be airworthy. Thus, TSA believes it is less likely that a terrorist would attempt to target an aircraft by sabotaging a component at an off airport location.

This assessment of the greater risk posed by repair stations located on or adjacent to an airport was also supported by several commenters. One commenter noted that repair stations located within an airport posed the greatest risk to security because of the larger number of entry points in such a location. Another explained that repair facilities located off airport generally only work on aircraft components and that the multiple

layers of testing and oversight already conducted by the FAA serves as an important security function as well. Another commenter agreed, stating that repair stations that do not have access to aircraft do not pose a security risk because the airworthiness of the components are tested before they are released into service.

Based on this risk assessment, TSA would specify particular security measures in the standard security program that would apply to repair stations on or adjacent to an airport, but that would not be required for other repair stations. TSA believes that this approach would be consistent with its efforts to strengthen security measures at the non public areas of the airport.

In addition, TSA would not require repair stations on or adjacent to airports that only serve aircraft with a maximum certificated take-off weight (MTOW) of 12,500 pounds or less to include the same security measures in the standard security program as repair stations located on or adjacent to airports that serve larger aircraft. TSA has long recognized that aircraft with a MTOW over 12,500 pounds pose a greater risk to security because such aircraft are of sufficient size and weight to inflict significant damage and loss of lives.[17] Smaller aircraft may be a less attractive target for terrorists. Therefore, the security program would not include the same requirements for repair stations that are located on or adjacent to an airport that serves small aircraft. While the proposed regulations apply to all FAA certificated repair stations, TSA requests comment on whether it should exempt certain repair stations after it conducts security reviews and audits. For instance, TSA may consider whether to exempt repair stations that only perform maintenance on aircraft that are 12,500 MTOW or less. TSA also requests

[17] See 49 CFR 1544.101(d) and 1550.7.

comments on whether there are other considerations that could be used to determine potential exemptions.

TSA is aware that the FAA may certificate repair stations operating on a Federal government facility, such as a U.S. military base. TSA believes that the security at such a facility would likely meet and exceed the security requirements proposed herein. Therefore, TSA would not apply its requirements to any FAA certificated repair station at which the Federal government has assumed responsibility for security measures.

The issue of requiring drug and alcohol testing of repair station employees was raised during the public listening session. TSA is not proposing to include drug and alcohol testing as part of its security program requirements. TSA notes that the FAA has instituted alcohol and drug testing as part of its safety regulations.[18] TSA believes that such testing should remain under the purview of the FAA.

TSA believes that the standard security program would be useful to repair stations that have not developed or implemented a security program, particularly small repair stations that may lack the resources to create their own security program. Further, the standard security program would provide consistency in format and content for the thousands of security programs that would be implemented under this proposal. TSA anticipates requesting comment from repair stations on the standard security program before a final rule is adopted and will make a draft of the standard security program

[18] See 14 CFR part 121 at Appendix I and Appendix J. The FAA requires part 145 certificate holders and non-certificated repair stations that perform safety sensitive functions for air carriers and commercial operators under 14 CFR parts 121 and 135 to implement an FAA Antidrug Program.

available for review and comment by the repair stations subject to the regulations either electronically, through meetings, or both.[19]

B. Repair Station Profile

To assess the security risks of a repair station and to establish the priority by which repair stations must be inspected, TSA would require each repair station to provide a brief profile, to include general information as to location, such as whether the repair station is located on or adjacent to an airport,[20] the total number of employees, and the number of employees with access to large aircraft. The type of information is discussed in the Section by Section analysis. We note that while the FAA holds some of this information, it does not have all of it. We invite comments on the burdens associated with TSA collecting this profile. As explained above, TSA has determined that repair stations located on or adjacent to an airport pose a higher security risk than those that are not located on or adjacent to an airport. In addition, TSA has determined that repair stations on airports that perform work on aircraft over 12,500 MTOW pose a higher security risk. Identifying these higher risk repair stations will enable TSA to make certain that they are given a higher priority when scheduling inspections.

Further, the profile will assist TSA in determining which measures included in the standard security program must be implemented to address the higher risk posture of repair stations that are located on or adjacent to an airport.

[19] Security programs will be sensitive security information and will not be available to the general public. See Section-by-Section analysis for § 1520.3 in this preamble.

[20] If located on an airport, whether the repair station participates in the airport security program will impact the need for the repair station to comply with the proposed security regulations.

C. Security Inspections

The proposed regulations would codify TSA's inspection authority and would require repair stations to permit TSA and DHS officials to enter, inspect, and test property, facilities, and records relevant to repair stations. The purpose of the inspection would be to assess threats to aviation security, enforce TSA security regulations, directives, and requirements, evaluate all aspects of the repair station security program, verify whether the security program is being implemented and whether it is effective, as well as to identify and correct security deficiencies. Such oversight is also necessary to monitor continuing compliance with the security requirements. Since the inspection program is critical to the enforcement of the security program requirement, TSA's inspection authority would extend to all repair stations. TSA would initiate foreign repair station inspections by giving priority to those foreign repair stations that pose the greatest risk to aviation security as required by Vision 100, and that have identified themselves through the profile as being located on or adjacent to an airport and as performing repair work on large aircraft.

Pursuant to the inspection process and consistent with Vision 100, TSA is proposing to notify the repair station and the FAA of any deficiencies in a security program and to permit the repair station 90 days to correct such deficiencies. If the deficiencies are not corrected within 90 days, TSA would notify the FAA that it must suspend the repair station's certificate until such time as TSA determines that the deficiencies are resolved. The proposed regulations also contain a process whereby a repair station may request further review of TSA's determination regarding security deficiencies.

D. Immediate Risk to Security

The proposed regulation contains a specific process whereby a repair station that poses an immediate risk to security is identified and the FAA is notified of such a determination. The FAA must revoke the certificate of a station that TSA determines poses an immediate risk to security. Whether the threat is immediate would be evaluated on a case by case basis considering existing and potential circumstances as information is received and analyzed. The proposal provides a repair station with the opportunity to obtain the releasable materials upon which the determination was made and to seek review of such a determination.

III. Section-by-Section Analysis

PART 1520—PROTECTION OF SENSITIVE SECURITY INFORMATION

Section 1520.3--Sensitive Security Information

Protection of Sensitive Security Information (SSI), as codified at 49 CFR part 1520, would apply to each repair station required to adopt and carry out a security program. Airport and aircraft operator security programs and plans, amendments, security directives and information circulars, technical specifications of security screening and detection systems and devices, among other types of information, all constitute SSI under current § 1520.3 and are prohibited from public disclosure. TSA is proposing to amend its part 1520 rules to include a repair station security program as SSI. This change would prevent the public disclosure of the security measures implemented and utilized by a repair station covered under the new rules because such disclosure would pose a threat to transportation security. It would also ensure that the repair station

standard security program is protected just as other TSA required security programs are protected.

Section 1520.7--Covered Persons

TSA proposes to amend § 1520.7 to include repair station operators as covered persons subject to its SSI requirements. This change would require that repair station operators adhere to the SSI rules and protect SSI from public dissemination. Access to SSI is strictly limited to those persons with a need to know, as defined in 49 CFR 1520.11. In general, a person has a need to know specific SSI when he or she requires access to the information in order to carry out transportation security activities that are government-approved, -accepted, -funded, -recommended, or -directed, including for purposes of training on, and supervision of, such activities or to provide legal or technical advice regarding security-related requirements. Accordingly, the protection of SSI would apply to each repair station standard security program pursuant to part 1554.

PART 1554—AIRCRAFT REPAIR STATION SECURITY (NEW)

Section 1554.1--Scope and Purpose

Section 1554.1 of the proposed regulation sets forth the scope and purpose of new part 1554. The proposed regulations would apply to all repair stations, both domestic and foreign, that are certificated by the FAA pursuant to 14 CFR part 145. The purpose of the proposed regulations would be to safeguard the security of domestic and foreign aircraft repair stations as required by 49 U.S.C. 44924. The requirements would not apply to any FAA certificated repair station at which the U.S. government has assumed responsibility for security measures.

Section 1554.3--Terms Used in This Part

Section 1554.3 of the proposed rule sets forth the definitions of certain terms used in this part. The term "repair station" is defined as any maintenance facility that is certificated by FAA pursuant to 14 CFR part 145 to perform maintenance, preventive maintenance, repair, overhaul, or alterations of an aircraft, airframe, aircraft engine, propeller, appliance, or component part.[21] Since the proposed regulations apply to both foreign and domestic repair stations, the section defines "domestic repair station" as any FAA-certificated repair station located within the fifty States, the District of Columbia, or the territories and possessions of the United States. A "foreign repair station" is defined as any FAA-certificated repair station located outside of the fifty States, the District of Columbia, or the territories and possessions of the United States.

Section 1554.5--TSA Inspection Authority

Section 1554.5 would codify TSA's authority to inspect repair stations and would require repair stations to permit TSA and DHS officials to enter, inspect, and test property, facilities, and records relevant to repair stations. This section would allow TSA to assess threats, enforce regulations, security directives, and requirements, inspect all facilities and equipment, test the adequacy of security measures, verify the implementation of security measures, review security programs and other records, and perform such other duties as appropriate. This section also would allow TSA to request evidence of compliance, including copies of records in English.

The proposed regulatory language is consistent with the inspection authority currently codified at 49 CFR 1542.5 and 1546.3, which apply to certain U.S. airports and

[21] The proposed definition is consistent with the description of the applicability of the FAA's repair station regulations at 14 CFR 145.1.

foreign air carriers. TSA has established protocols and procedures on conducting inspections outside the United States through its Foreign Airport and Foreign Air Carrier Assessment Programs. These established procedures require advance notice to the facility to be inspected and coordination with the U.S. Department of State and the appropriate foreign government authorities. TSA inspectors are required to have TSA identification media and credentials with them when inspecting facilities and must display them when requested to do so. TSA will use these established procedures when conducting inspections of foreign repair stations.

TSA is also amenable to working with the U.S. Department of State and foreign government authorities to facilitate inspections of U.S. repair stations that are certificated by a foreign government authority. TSA currently permits such inspections of U.S. airports and air carriers by foreign government authorities consistent with ICAO Annex 17, Section 2.1.

TSA has kept ICAO apprised of the rulemaking and will continue its efforts to harmonize its regulations with those of other countries through its participation in ICAO.

Section 1554.101--Adoption and Implementation

Section 1554.101 would require each repair station to adopt and carry out a security program designed to safeguard aircraft and aircraft components located within the repair station, the maintenance and repair work performed there, and the facility itself. Repair stations would be required to use the TSA standard security program unless otherwise authorized by TSA.

This section would also require a repair station to submit a profile. The purpose of the profile would be to provide basic information regarding repair station operations to

assist TSA in determining what measures the repair station must include in its security program to meet the security requirements. The profile would also assist TSA in prioritizing repair stations for purposes of conducting inspections. TSA would make the profile template available to all repair stations either through the TSA web site, by mail, or both. The profile would request the following types of information:

- Identification of the repair stations, such as FAA certificate number, repair station name as it appears on the FAA certificate, and repair station address.
- Description of location (on or adjacent to an airport, off airport in a business location, off airport private residence).
- Security coordinator who will serve as the TSA point of contact.
- If on an airport, the name and three letter designator of the airport.
- Total number of employees.
- Number of employees authorized unescorted access to aircraft over 12,500 MTOW.

The name and location of each repair station would assist TSA in identifying the repair station and determining its proximity to an airport since, as explained above, TSA would consider such repair stations to be a higher risk than those that are not located on or adjacent to an airport. The profile information would also help TSA to prioritize its inspections. Repair stations would also be required to update their profile information within 30 calendar days if a change in the information submitted occurs. This requirement would enable TSA to maintain current information on each regulated repair station and make certain that it is appraised of changes that could impact the security posture of a repair station. Repair stations would not be required to alert TSA to changes

in total number of employees or number of employees who work on large aircraft to prevent the submission of a new profile every time an employee is hired or terminated.

Section 1554.103—Security Program Content, Availability, and Amendment

Section 1554.103 would describe the general requirements describing the measures that each repair station must adopt in the standard security program. The standard security program must include:

(1) a description of the measures used to identify individuals who are authorized to enter the repair station to prevent unauthorized individuals from entering the repair station;

(2) a description of the measures used to control access to the repair station and to detect and prevent the entry, presence, and movement of unauthorized individuals and vehicles into or within the repair station;

(3) a description of the measures used to control access to the aircraft and/or aircraft components to allow only authorized individuals to have such access;

(4) a description of the measures used to challenge any individual entering the repair station to ascertain the authority of the individual to enter or be present in the repair station and measures to escort an individual who does not have unescorted authority while within the repair station;

(5) a description of the measures to train all individuals with authorized access to aircraft and components on the provisions of this part and the security program;

(6) a description of the measures used to verify employee background information through confirmation of prior employment and any other means as appropriate to validate employee information;

(7) the name, 24-hour contact information, duties, and training requirements of the designated security coordinator who will serve as the primary and immediate contact for security-related activities and communications with TSA;

(8) a contingency plan;

(9) a diagram with dimensions detailing boundaries and pertinent physical features of the repair station;

(10) a list and description of all entry points; and

(11) an emergency response contact list.

The regulations also would require that the security program be in writing, and signed by the repair station operator, owner, or other authorized person. Each repair station would not have to submit the security program to TSA, but would have to make it available to TSA upon request or during an inspection.

The individual standard security program requirements are discussed below.

(1) Identification of Authorized Individuals

The proposed regulations would require the repair station to adopt and describe measures to identify individuals to prevent unauthorized individuals from entering the repair station. The specific requirements for a personnel identification media system would be included in the standard security program. Personal recognition may be sufficient at certain repair station locations. During the inspection process, TSA would use the following factors to evaluate whether the personnel identification media system must be implemented and what type of features the system must use:

- Number of employees and number of shifts.
- Physical size of the repair station.

- Number of visitors.
- Proximity of other businesses or operations.
- Type of work, size of aircraft, and length of runway.
- Number of entry points into the repair station.
- Airport security features.
- Other factors that increase ability of unauthorized individuals or vehicles to access the repair station.

For example, a repair station with 50 employees who work multiple shifts at a repair station, located adjacent to an airport with many access points, might be required to adopt and carry out the personnel identification media system. Such a repair station would be considered to be a higher risk because of its proximity to an airport. Further, the large number of employees working multiple shifts would make it difficult for employees to rely solely on personal recognition as workers from different shifts may not be able to recognize each other. A repair station located in a residence with a single employee would not be required to adopt the personnel identification media system in the security program. TSA would not anticipate requiring a repair station located at an airport to adopt a personnel identification media system if employees were required to obtain and display airport identification media.

(2) Repair Station Access Control Measures

The standard security program would specify the access control security requirements for all repair stations. Such requirements would include measures to control access to the facility and to the aircraft and components within the repair station,

to challenge any individuals to determine if they are authorized to enter or be present in the facility, and to respond if unauthorized individuals or vehicles are discovered.

Acceptable access control measures would be specified in the security program. Such measures would cover a broad spectrum, including standard locks with key control, card swipe access locks, cipher locks, locks with coded keys, biometric access cards, fencing, security guards, surveillance cameras, and motion detectors.

As part of the standard security program, the repair station would be required to describe all of the entry points to the facility and the specific access control measures used for each. During the inspection process, TSA would determine whether the access control measures deployed at the entry point are appropriate. A repair station located on or adjacent to an airport that performs substantial maintenance on large aircraft would be required to have more stringent access controls. Such controls could include such measures as card swipe access locks, security guards, electronically monitored access or motion detectors, fencing or a combination of such controls. A repair station located in a private residence or in a small component shop in an industrial park would be required to have less sophisticated controls, such as standard locks with key control and an inventory system to track the number of keys. A repair station would be able to select the above or other measures that would provide a appropriate level of security.

Access controls would also be required to restrict unauthorized access to components located within the facility, such as locked storage containers and inventory control of keys.

(3) Aircraft Access Control Measures

In addition, the security program would include measures to control access to aircraft, such as requiring repair stations located on or adjacent to an airport to secure large aircraft by locking or disabling the aircraft, keeping the aircraft in a secure hangar during non-operational hours, fencing, surveillance cameras, lighting, and security guards.

(4) Challenge Procedures

The security program would describe the procedures to be followed when challenging individuals who cannot be readily identified. Only those individuals who are designated and trained in escort procedures would be permitted to escort visitors to the repair station. The responsibilities of the escort would be specified in the security program. At a small facility with few employees, the ability to observe individuals present within the facility may be sufficient to ensure that access to repair work and/or components is controlled. At large repair station facilities, such as those that use a personnel identification media system, employees may have to escort individuals as part of their responsibilities.

(5) Security Training Measures

The security program would include measures to conduct initial and recurrent security training programs, such as providing guidance to repair station personnel on how to implement and maintain the security measures included in the security program. The security program would also specify that the training curriculum be updated to reflect current security requirements. The repair station would be required to maintain records of initial and recurrent security training for each employee. The standard security

program would include a model curriculum that the repair station could modify based on the specific security requirements applicable to that repair station.

(6) Employee Background Verification

The security program would include the measures by which the repair station verifies the employment history of its employees and conducts background checks, to the extent permitted by the laws of the country in which the repair station is located. The employment history, length of employment, and measures used to verify the individual's employment would be listed in the security program.

(7) Security Coordinator

Each repair station would be required to designate a security coordinator who would serve as the immediate and primary point of contact for security-related activities and communications with TSA. Each repair station would include the name, responsibilities, and contact information of the security coordinator in the security program and would also specify the training curriculum required for the security coordinator. The security coordinator would not necessarily need to be on-site at the repair station, but they must be able to coordinate incident management at any time.

(8) Contingency Plan

The security program would include a contingency plan to include the specific measures that would be taken to address security-related incidents. The security program would include such items as the names of the repair station employees designated to perform specific tasks, the name and contact information for any contingency response organizations that would assist the repair station, a description of the DHS threat advisory levels and the additional security measures that would be implemented based on the

threat level, and set forth the responsibilities of all personnel involved. The plan would also provide for training and regular practices, if appropriate.

Other Security Program Requirements

The proposed regulations would also require that each security program include a diagram of the repair station detailing the boundaries and describing the physical features of the repair station. The security program would also include a list and description of all entry points into the repair station that would be supplied by the repair station operator. These requirements would assist TSA in assessing the security vulnerability of the repair station and determining whether security measures are appropriate. The security program would also include emergency response contact information.

Section 1554.103 (b) would require that the security program be in writing, and hand-signed by the repair station operator, owner, or other authorized person. The security program would be required to be accessible to employees at the repair station facility and be written in English and in the official language of the repair station's country. The security program could be accessible electronically so long as it meets all of the requirements. This section would also include a requirement that repair stations must restrict the distribution, disclosure, and availability of sensitive security information as described in 49 CFR part 1520.

Section 1554.103 (c) would require a repair station to notify TSA of any amendment to the standard security program and would require that the repair station acknowledge receipt and adopt an emergency amendment issued by TSA within the time prescribed in the emergency amendment. If the repair station cannot implement the emergency amendment, the repair station must immediately notify TSA to obtain

approval of alternative measures. They may contact their TSA inspector or the TSA Repair Stations Office at TSA headquarters.

Section 1554.105--Security Directives

This section would require a repair station to comply with any Security Directive issued by TSA mandating security measures. Security Directives may be issued when TSA determines that additional or specific security measures are necessary to respond to a threat assessment or a specific threat against aviation. Upon receipt of a Security Directive, the repair station would be required to comply with the measures in the time prescribed or immediately notify TSA if it is unable to implement the specified security measures so that the repair station can obtain approval of alternative measures. The repair station would also be required to restrict the availability of a Security Directive to only those individuals with an operational need to know.

Section 1554.201--Notification of Security Deficiencies; Suspension of Certificate

Proposed § 1554.201 implements the requirements of 49 U.S.C. 44924(c)(1) regarding the suspension of a repair station certificate. Vision 100 requires audits to be conducted of foreign repair stations within a specified timeframe.[22] TSA would comply with that requirement and intends to perform ongoing audits and inspections of all repair stations covered by the proposed regulation in order to check for compliance with the final regulations.

The proposed regulation would provide that TSA would notify the repair station and the FAA in writing of any security deficiencies identified by TSA during an audit. Repair stations would be required to respond within 90 days of receipt of the written

[22] In the Implementing Recommendations of the 9/11 Commission Act of 2007 (Pub. L 110-53, 121 Stat. 266, Aug. 3, 2007), the 18-month deadline for completing security inspections of foreign repair stations was reduced to 6 months.

notification that the deficiency has been corrected and include a written explanation of the efforts, methods, and procedures used to correct the deficiency. TSA may re-audit the repair station to verify that the deficiencies have been corrected. The proposal specifies that TSA would provide written notification to the FAA if the repair station failed to respond and/or to correct the deficiencies within the 90-day period and that, consistent with the statute, FAA would suspend the repair station certificate. The suspension would remain in effect until TSA makes a determination that the deficiencies had been corrected; TSA would then notify the FAA requesting that the suspension be lifted.[23] This section also provides that a repair station may seek review of a TSA determination that deficiencies have not been corrected and includes the redress procedures.

Section 1554.203--Immediate Risk to Security; Revocation of Certificate and Review Process

Proposed § 1554.203 implements 49 U.S.C. 44924(c)(2) and requires that if TSA makes an initial determination that a repair station poses an immediate risk to security, TSA would notify the repair station and the FAA that the station's certificate must be revoked. The repair station may seek review of TSA's determination that the station poses an immediate risk to security; however, the revocation would remain in effect unless and until the review is complete and a determination is made that the repair station does not pose an immediate risk to security.

Proposed § 1554.203(b) would allow the repair station to request the releasable materials upon which the determination is based. Proposed § 1554.203(c) would permit

[23] If the repair station certificate covered more than one facility, but not all the facilities were found to have security deficiencies, TSA would specify that only the facility that was found to be deficient be suspended.

the repair station to request a review and to provide a response to TSA. The response may include any information that the repair station deems relevant to a final decision. TSA would conduct an initial review of the basis for the determination and the response and, if the determination is upheld, a final review by the TSA Assistant Secretary. TSA would notify the FAA of its final determination.

Section 1554.205--Nondisclosure of Certain Information

This section preserves TSA's authority not to disclose classified information or other information protected by law or regulation.

IV. Rulemaking Analyses and Notices

A. Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501 et seq.) requires that TSA consider the impact of paperwork and other information collection burdens imposed on the public and, under the provisions of PRA section 3507(d), obtain approval from the Office of Management and Budget (OMB) for each collection of information it conducts, sponsors, or requires through regulations. This proposed rule contains new information collection activities subject to the PRA. Accordingly, TSA has submitted the following information requirements to OMB for its review.

Title: Aircraft Repair Station Security.

Summary: This proposal would require all aircraft and aircraft component repair stations certificated by the FAA under 14 CFR part 145 to adopt and maintain a security program that meets general security requirements as required by 49 U.S.C. 44924(f). The proposed regulations also authorize TSA to conduct security audits, assessments, and inspections of repair stations. Repair stations will be required to implement a TSA

standard security program which must include the specific security measures used by the repair station to comply with the regulation. In addition to the actual security measures, the security program must also contain any amendments to the security program, a contingency plan, a diagram of the facility with dimensions detailing boundaries and physical features, the name and contact information for the person responsible for security-related activities and communications with TSA, a list and description of all entry points and an emergency response contact list. The security program may be kept electronically or in hard copy format. It does not have to be submitted to TSA, but must be made available for review when TSA conducts a security audit or inspection. Other records that must also be made available during the audit or inspection would include employee training records, employee background information, and any security directives issued by TSA.

Use of: This proposal would support the information needs of TSA in order to ensure the security of maintenance and repair work conducted on air carrier aircraft and aircraft components at repair stations, as well as the security of the aircraft and the facility.

Respondents (including number of): The likely respondents to this proposed information requirement are the owners and/or operators of repair stations certificated by the FAA under 14 CFR part 145, which is estimated to number approximately 5,460 over the next ten years.

Frequency: Each of the respondents initially would submit a repair station profile and develop and carry out a standard security program provided by TSA.

Annual Burden Estimate: Annualized over the next three years, the average yearly burden to create security programs is estimated to be 12,620 hours for all respondents. Thus, the total annual time burden estimate is approximately 13,817 hours. The estimated annual costs beyond the time burden is approximately $45,200 for all respondents when annualized over the next three years.

TSA is soliciting comments to--

(1) Evaluate whether the proposed information requirement is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(2) Evaluate the accuracy of the agency's estimate of the burden;

(3) Enhance the quality, utility, and clarity of the information to be collected; and

(4) Minimize the burden of the collection of information on those who are to respond, including using appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

Individuals and organizations may submit comments on the information collection requirements by [Insert date 60 days after publication in the Federal Register]. Direct the comments to the address listed in the ADDRESSES section of this document, and fax a copy of them to the Office of Information and Regulatory Affairs, Office of Management and Budget, Attention: DHS-TSA Desk Officer, at (202) 395-5806. A comment to OMB is most effective if OMB receives it within 30 days of publication. TSA will publish the OMB control number for this information collection in the Federal Register after OMB approves it.

As protection provided by the Paperwork Reduction Act, as amended, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

B. International Compatibility

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is TSA policy to comply with ICAO Standards and Recommended Practices where possible. TSA has determined that these proposed regulations are consistent with ICAO Standards and Recommended Practices for security of airports and facilities contained in Annex 17 of the Convention, the ICAO Security Manual and the ICAO Security Audit Reference Manual.

C. Regulatory Impact Analyses

1. Regulatory Evaluation Summary

Changes to Federal regulations must undergo several economic analyses. First, Executive Order 12866, Regulatory Planning and Review (58 FR 51735, October 4, 1993), directs each Federal agency to propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. Second, the Regulatory Flexibility Act of 1980 (5 U.S.C. 601 et seq., as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996) requires agencies to analyze the economic impact of regulatory changes on small entities. Third, the Trade Agreements Act (19 U.S.C. 2531-2533) prohibits agencies from setting standards that create unnecessary obstacles to the foreign commerce of the United States. In developing U.S. standards, the Trade Act requires agencies to consider international standards, where appropriate, as the basis of U.S. standards. Fourth, the Unfunded Mandates Reform Act

of 1995 (2 U.S.C. 1531-1538) requires agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by State, local, or tribal governments, in the aggregate, or by the private sector, of $100 million or more annually (adjusted for inflation).

TSA has prepared a separate detailed analysis document, which is available to the public in the docket.[24] With respect to these four analyses, TSA provides the following conclusions, supported by additional summary information.

a. This proposed rule is not an economically "significant regulatory action" as defined in the Executive Order. However, this rulemaking may be considered significant because of Congressional and stakeholder interest in security since the events of September 11, 2001.

b. The Initial Regulatory Flexibility Analysis (IRFA) shows that there may be a significant impact on a substantial number of small entities.

c. This proposed rule imposes no significant barriers to international trade.

d. This proposed rule does not impose an unfunded mandate on State, local, or tribal governments, or on the private sector in excess of $100 million (adjusted for inflation) in any one year.

2. Executive Order 12866 Assessment

This summary highlights the costs and benefits of the proposed rule to amend the transportation security regulations to further enhance and improve the security of repair stations. TSA has determined that this is not a major rule within the definition of Executive Order (EO) 12866, as annual costs to all parties do not pass the $100 million

[24] See information on viewing the Docket under "Reviewing Comments in the Docket" above. The Regulatory Evaluation is categorized as "Supporting and Related Materials."

threshold in any year. The Initial Regulatory Flexibility Analysis (IRFA) shows that there may be a significant impact on a substantial number of small entities. There are no significant economic impacts for the required analyses of international trade or unfunded mandates. Both in this summary and the economic evaluation, descriptive language is used to try to relate the consequences of the regulation. The tables are numbered as they appear in the economic evaluation. Although the regulatory evaluation attempts to mirror the terms and wording of the regulation, no attempt is made to precisely replicate the regulatory language and readers are cautioned that the actual regulatory text, not the text of the evaluation, is binding.

Comparison of Costs and Hypothetical Benefits

Comparison of the total undiscounted domestic costs of the proposed rule with potential benefits from the proposed aircraft repair station security program relies on a breakeven comparison based on the extent to which the program must reduce the underlying baseline risk of specific attack impact scenarios in order for the program benefits to be greater than the expected costs. Such a comparison is presented in Table 2 following the "Benefits" section below. This comparison is discussed briefly above and in greater depth in the body of the analysis.

Benefits

A major line of defense against an aviation-related terrorist act is the prevention of explosives, weapons, and/or incendiary devices from getting on board a plane. To date, efforts have been primarily related to inspection of baggage, passengers, and cargo, and security measures at airports that serve air carriers. With this rule, attention is given to aircraft that are located at repair stations, and to aircraft parts that are at repair stations,

themselves to reduce the likelihood of an attack against aviation and the country. Since repair station personnel have direct access to all parts of an aircraft, the potential exists for a terrorist to seek to commandeer or compromise an aircraft when the aircraft is at one of these facilities. Moreover, as TSA tightens security in other areas of aviation, repair stations increasingly may become attractive targets for terrorist organizations attempting to evade aviation security protections currently in place.

To better inform the comparison of the costs of the repair station security program in the proposed rule with the benefits to homeland security it might afford due to reduced risk of successful terror attack involving an aircraft, a breakeven analysis was performed. In this analysis, the annualized costs of the program, discounted at seven percent, are compared to the expected benefits of avoiding or preventing three attack scenarios of varying consequence. For each scenario, the required extent of annual risk reduction due to the proposed program, expressed as the frequency with which attacks must be averted, is reported in the final column of the break-even analysis (Table 2) below.

Table 2: Frequency of Attacks Averted for Aircraft Repair Station Security Costs to Equal Expected Benefits, by Attack Scenario (Annualized at 7 percent)

	Attack Scenario	Lives Lost	Value of a Statistical Life (VSL) at $5.8M ($ million)	Moderate Injuries	Valuation of Moderate Injuries at 1.55% of VSL ($ million)	Severe Injuries	Valuation of Serious Injuries at 18.75% of VSL ($ million)	Estimated Aircraft Market Value ($ million)	Total Impact ($ million)	Attacks Averted by Repair Station Security Required to Break Even
		A	B=A x 5.8	C	D=C x .0899	E	F = E x 1.0875	G	H=B+D+F+G	= H ÷ $24.5M*
1	Minimal	3	$17.4	10	$0.9	-	$0.0	$9.3	$27.6	one every 1.1 years
2	Aircraft Target	132	$765.6	-	$0.0	-	$0.0	$21.8	$787.4	one every 32.1 years
3	Moderate	250	$1,450.0	-	$0.0	750	$815.6	$9.3	$2,274.9	one every 92.7 years

*The total cost of the rule annualized at 7 percent.

Costs

As required, alternatives to the primary rule requirements were analyzed. Table 31 that follows provides the 10-year cost of the preferred alternative and two other alternatives, undiscounted and at three and seven percent discount rates.

Table 31: Total 10-Year Costs by Scenario and Discount Rate (2006$ millions)

Total by Scenario	Undiscounted	3% Discount	7% Discount
Primary Scenario	$344.4	$293.3	$241.0
Security Threat Assessments	$347.0	$295.7	$243.1
Vulnerability Assessments	$347.1	$295.8	$243.3

Using a seven percent discount rate, TSA estimated the 10-year cost impacts for the primary scenario of this proposed rule would total $241.0 million. This total is distributed among domestic repair stations, which would incur total costs of $118.6 million; foreign repair stations, which would incur costs of $68.7 million; and TSA-projected Federal Government costs, which would be $53.7 million.

3. Initial Regulatory Flexibility Analysis (IRFA)

The Regulatory Flexibility Act of 1980 (RFA) establishes "as a principle of regulatory issuance that agencies shall endeavor, consistent with the objective of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the business, organizations, and governmental jurisdictions subject to regulation." To achieve that principle, the RFA requires agencies to solicit and consider flexible regulatory proposals and to explain the rationale for their actions. The RFA covers a wide range of small entities, including small businesses, not-for-profit organizations, and small governmental jurisdictions.

Agencies must perform a review to determine whether a proposed or final rule will have a significant economic impact on a substantial number of small entities. If the

determination is that it will, the agency must prepare a regulatory flexibility analysis as described in the RFA. However, if an agency determines that a proposed or final rule is not expected to have a significant economic impact on a substantial number of small entities, section 605(b) of the 1980 RFA, as amended, provides that the head of the agency may so certify and a regulatory flexibility analysis is not required. The certification must include a statement providing the factual basis for this determination, and the reasoning should be clear.

As part of implementing this NPRM, TSA expects security to be integrated into actions the same way safety has and to become an integral component of doing business rather than adding layers or extra program costs. The primary cost to repair stations resulting from this NPRM would be additional hours for personnel to perform the duties of the repair station security coordinator. For many stations this may constitute an insignificant impact, while for others the costs to comply with the proposed rule may prove significant. TSA has conducted an initial regulatory flexibility analysis and believes the proposed requirements may result in a significant economic impact on a substantial number of small entities. TSA requests comments, particularly those supported by data, on this preliminary conclusion.

Reason for the Proposed Rule

In 2003, Congress enacted Vision 100–Century of Aviation Reauthorization Act (Vision 100), Pub. L. 108-176, (117 Stat. 2490, December 12, 2003). Vision 100, which was signed into law by President George W. Bush on December 12, 2003, expands TSA's authority to address the security of the civil aviation system by requiring TSA to

issue final regulations to ensure the security of both domestic and foreign aircraft repair stations.

Objectives of the Proposed Rule

The requirements proposed in this NPRM are designed to increase overall civil aviation security by bolstering the level of security at domestic and foreign aircraft repair stations.

Descriptions and Estimates of the Number of Small Entities

Aircraft repair stations are classified by the U.S. Census Bureau as falling primarily within the North American Industry Classification System (NAICS), code 488190 Other Support Activities for Air Transportation. In its account of the industry, the U.S. Census Bureau describes firms in this market as "providing specialized services for air transportation (except air traffic control and other airport operations)."[25] The Small Business Administration defines a small business within this NAICS code as one having annual revenues of $7.0 million or less.[26] More details about the industry can be obtained by reading the "Discussion of the Industry and Status Quo" section of the Regulatory Evaluation.

To estimate the number of small businesses in the aircraft repair station industry affected by this NPRM, TSA accessed information maintained by Dun & Bradstreet, a provider of international and U.S. business data. The data obtained for this effort did not identify the type of maintenance the repair stations are certificated to perform or their

[25] U.S. Census Bureau, "2002 NAICS Definitions." Retrieved from http://www.census.gov/epcd/naics02/def/ND488190.HTM#N488190 on January 31, 2007.
[26] U.S. Small Business Administration, "Table of Small Business Size Standards Matched to North American Industry Classification System Codes." http://www.sba.gov/idc/groups/public/documents/sba_homepage/serv_sstd_tablepdf.pdf.

location. This made it difficult for TSA to determine compliance costs for the identified small businesses (this is discussed more below).

Through its research, TSA obtained Dun & Bradstreet revenue and employment records for 2,276 domestic aircraft repair stations. Of this total, 2,123 reflected small businesses, as defined by SBA, and 153 did not. TSA was unable to find data on the remaining domestic repair stations. For the purposes of this analysis, and to remain conservative in its estimates, TSA assumed that the remaining domestic repair stations are also small. TSA thus estimated that 4,115 of 4,268 domestic aircraft repair stations are small businesses, as defined by SBA.

Description and Estimate of Compliance Requirements

In order to address the need for security measures at aircraft repair stations and to fulfill the obligations set forth by Congress, TSA is proposing to add a new part 1554 to its regulations, entitled "Aircraft Repair Station Security." The new part would require all aircraft repair stations that are certificated by the FAA under 14 CFR part 145, both domestic and foreign, to adopt and carry out a security program that includes specific security requirements. The regulations would require repair stations to safeguard aircraft and components located at the station, the maintenance and repair work conducted there, as well as the repair station's facilities, as required by 49 U.S.C. 44924.

TSA is also proposing changes to its regulations regarding the protection of sensitive security information (SSI) to specify that a repair station security program is categorized as SSI and that the repair station operator or owner is subject to the SSI requirements.

The proposed rule would require repair stations to establish security programs. TSA would provide a standard security program that would include the following: access controls, a personnel identification system, security awareness training, the designation of a security coordinator, employee background verification, and a contingency plan. While repair stations would have some flexibility regarding the particular equipment, facilities, and measures used to comply with the general security requirements, their security methods would need to address each of these requirements in a manner commensurate with the station's security risk. For example, small repair stations may meet the requirement for a personal identification system through employee recognition and challenge procedures, while TSA would require stations located on or adjacent to an airport and having 50 or more employees to implement a formal badging system.

The proposed rule would require each repair station to complete and return to TSA a brief profile form. The profile would identify information, such as whether the repair station is located at an airport,[27] the total number of employees, and the number of employees with unescorted access to aircraft with a maximum certificated takeoff weight (MTOW) exceeding 12,500 pounds. These indicators would assist TSA in conducting a risk-based analysis of the repair station in order to determine what measures would be needed to meet the security requirements proposed in the regulations.

The proposed regulations also would establish TSA's authority to conduct security audits, assessments, and inspections in order to ascertain the adequacy of the measures employed by the repair stations to implement and maintain the security

[27] If located on an airport, whether the repair station participates in the airport security program will impact the repair station's compliance with the proposed security regulations.

requirements. The proposed inspections and appeals processes are described in detail in the NPRM.

In its effort to fulfill the requirements of the RFA, TSA attempted to estimate all costs of complying with the above described requirements for each firm for which it had Dun & Bradstreet data and to calculate those costs as a percent of the repair station's reported revenues. TSA determined that this methodology would best conclude whether the proposed rule would represent a considerable economic burden to a large number of small businesses. After completing this preliminary analysis (described below), TSA has tentatively concluded that the proposed rule may impose a significant economic impact on a substantial number of small entities. The agency seeks comment on this preliminary conclusion.

Compliance costs for the proposed rule would vary across firms. A small business with one employee who only services one component of a particular aircraft may incur very low compliance costs. Such a business is likely to be operated from a small shop or even a private residence. Conversely, a larger repair station that works on more complex systems or even entire aircraft may incur higher costs as a result of this NPRM. These types of facilities may be located at an airport, in an industrial park, or may be part of an aircraft manufacturing facility. For example, in the "Cost of Compliance" section above, TSA estimated repair stations located on or adjacent to an airport would require 8 hours on average to complete their security programs whereas repair stations located off-airport would require only 4. Unfortunately, TSA was unable to pair the data from Dun & Bradstreet with repair station data provided by the FAA. As a result, TSA could not estimate compliance costs particular to repair station

characteristics such as whether it is located on an airport or performs substantial maintenance on commercial aircraft.

Therefore, in order to characterize compliance costs as a percentage of repair station revenues, TSA estimated unit compliance costs based on weighted averages so as not to underestimate the costs of the rule. As a result, these estimates likely overstate the costs to some small businesses while understating them for others. TSA welcomes comments that will assist it in more accurately estimating compliance costs for small businesses.

Using the assumptions and methods described above, TSA estimated the average compliance costs to be about $3,013 for a business with one employee to $4,216 for a business with 45 employees. Of this total, $2,733 represents costs for security coordinators, and $253 represents costs for development and implementation of security programs. The remainder is comprised of employee training costs.

These totals exclude costs for repair stations located on or adjacent to an airport and having 50 or more employees to implement a badging system. TSA assumed that firms with 100 or more employees likely already have a badging system. Based on the Dun and Bradstreet data, TSA estimated the average compliance cost for firms reported as having between 50 and 99 employees would be approximately $4,728 before adding costs to implement a badging system. These firms employ an average of 64 individuals. Using the estimate of $25 per badge cited in the Regulatory Evaluation, badges would add an average of nearly $1,600 to these repair stations' compliance costs, resulting in a total cost of $6,328. Firms having between 50 and 99 employees in the Dun and Bradstreet sample reported average revenue of nearly $6 million. The estimated

compliance costs would therefore constitute less than one percent of their annual revenues. Since the proposed ID requirement would affect a subset of these repair stations—only those which are located on or adjacent to an airport—TSA does not believe the proposed ID requirement would result in a significant impact on affected repair stations.

Table 32 below shows the distribution of compliance costs, excluding ID costs, as a percent of repair station revenues.

Table 32: Small Repair Station Business Distribution of Compliance Cost–Revenue Ratios

Compliance Costs as a Percentage of Revenue	Number of Small Businesses	Cumulative Percentage of Small Businesses
≤1.0%	692	32.6%
≤2.0%	1,015	47.8%
≤3.0%	1,527	71.9%
≤4.0%	1,712	80.6%
≤5.0%	1,759	82.9%
≤10.0%	2,100	98.9%
Total	**2,123**	**100.0%**

The table uses rounded percentages to show that TSA's initial assessment is that the NPRM may have a significant impact on a substantial number of small businesses. TSA believes that for 47.8 percent of the small businesses, the compliance costs will result in an economic impact of two percent of annual revenue or less, and for 71.9 percent of the small businesses, the compliance costs will be less than three percent of annual revenue. TSA requests comment on these estimates.

Significant Alternatives Considered

During the course of drafting this NPRM, TSA considered regulatory alternatives. These alternatives included requiring security threat assessments for certain repair station employees and requiring each repair station to complete a vulnerability self-assessment.

Both of these alternatives would have increased the burden on repair stations and thus on small entities. A description of these alternatives and the reasons they were not adopted can be found in the section of the Regulatory Evaluation titled, "Alternatives Considered."

Additionally, as noted above, TSA requests comment on whether it should exempt certain repair stations after it conducts security reviews and audits. For instance, TSA may consider whether to exempt repair stations that only perform maintenance on small aircraft (aircraft having a maximum certificated takeoff weight of 12,500 pounds or less). To help the agency evaluate the impact of this alternative, TSA requests comments, supported by data, on the number of repair stations that work exclusively on such aircraft and their compliance costs under the proposed rule.

Identification of Duplication, Overlap and Conflict With Other Federal Rules

TSA has no knowledge of any duplicative, overlapping, or conflicting Federal rules.

Preliminary Conclusion

Based on this preliminary analysis, TSA believes the proposed requirements may result in a significant economic impact on a substantial number of small entities. However, TSA holds a final assessment in abeyance until such time as information becomes available to facilitate the development of a Final Regulatory Flexibility Analysis (FRFA). TSA requests comments, particularly those supported by data, to inform this process.

4. International Trade Impact Assessment

The Trade Agreement Act of 1979 prohibits Federal agencies from engaging in any standards or related activities that create unnecessary obstacles to the foreign commerce of the United States. Legitimate domestic objectives, such as security, are not considered unnecessary obstacles. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards. In addition, it is the policy of TSA to remove or diminish, to the extent feasible, barriers to international trade, including both barriers affecting the export of American goods and services to foreign countries and barriers affecting the import of foreign goods and services into the U.S.

In keeping with U.S. obligations under the Convention on International Civil Aviation, it is TSA's policy to comply with International Civil Aviation Organization (ICAO) Standards and Recommended Practices where possible. TSA has determined that there are no ICAO Standards and Recommended Practices that correspond to the regulatory standards established by this notice of proposed rulemaking (NPRM). TSA has assessed the potential effect of this NPRM and has determined that it is unlikely it would create barriers to international trade. The full evaluation provides an analysis of a number of issues directly related to international trade that were considered with this proposed rule.

5. Unfunded Mandates Reform Act Assessment

The Unfunded Mandates Reform Act of 1995 is intended, among other things, to curb the practice of imposing unfunded Federal mandates on State, local, and tribal governments. Title II of the Act requires each Federal agency to prepare a written

statement assessing the effects of any Federal mandate in a proposed or final agency rule that may result in a $100 million or more expenditure (adjusted annually for inflation) in any one year by State, local, and tribal governments, in the aggregate, or by the private sector; such a mandate is deemed to be a "significant regulatory action." This rulemaking does not contain such a mandate. The requirements of Title II of the Act, therefore, do not apply.

D. Executive Order 13132, Federalism

TSA has analyzed this proposed rule under the principles and criteria of Executive Order 13132, Federalism. We have determined that this action will not have a substantial direct effect on the States, on the relationship between the National Government and the States, or on the distribution of power and responsibilities among the various levels of government, and therefore will not have federalism implications.

E. Environmental Analysis

TSA has reviewed this action under DHS Management Directive 5100.1, Environmental Planning Program (effective April 19, 2006) which guides TSA compliance with the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321-4347). TSA has determined that this proposal is covered by the following categorical exclusions (CATEX) listed in the DHS directive: Number A3(a) (administrative and regulatory activities involving the promulgation of rules and the development of policies); paragraph A4 (information gathering and data analysis); paragraph A7(d) (conducting audits, surveys, and data collection of a minimally intrusive nature, to include vulnerability, risk, and structural integrity assessments of infrastructures); paragraph B3 (proposed activities and operations to be conducted in

existing structures that are compatible with ongoing functions); paragraph B11 (routine monitoring and surveillance activities that support homeland security, such as patrols, investigations, and intelligence gathering), and H1 (approval or disapproval of security plans required under legislative mandates where such plans do not have a significant effect on the environment). In addition, TSA has determined that this proposal meets the three conditions required for a CATEX to apply, as described in paragraph 3.2, (Conditions and Extraordinary Circumstances).

F. Energy Impact Analysis

The energy impact of this NPRM has been assessed in accordance with the Energy Policy and Conservation Act (EPCA) Public Law 94-163, as amended (42 U.S.C. 6362). TSA has determined that this rulemaking is not a major regulatory action under the provisions of the EPCA. TSA has also analyzed this proposed rule under E.O. 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use," 66 FR 28355 (May 18, 2001). TSA has determined that this is not a "significant energy action" under that order.

List of Subjects

49 CFR Part 1520

Air carriers, Aircraft, Aircraft repair stations, Airports, Maritime carriers, Rail hazardous materials receivers, Rail hazardous materials shippers, Rail transit systems, Railroad carriers, Railroad safety, Railroads, Reporting and recordkeeping requirements, Security measures, Vessels.

49 CFR Part 1554

Aircraft, Aircraft repair stations, Aviation safety, Reporting and recordkeeping requirements, Security measures.

The Proposed Amendment

In consideration of the foregoing, the Transportation Security Administration proposes to amend Chapter XII of Title 49, Code of Federal Regulations, to read as follows:

SUBCHAPTER B--SECURITY RULES FOR ALL MODES OF TRANSPORTATION

PART 1520--PROTECTION OF SENSITIVE SECURITY INFORMATION

1. The authority citation for part 1520 continues to read as follows:

Authority: 46 U.S.C. 70102-70106, 70117; 49 U.S.C. 114, 40113, 44901-44907, 44913-44914, 44916-44918, 44935-44936, 44942, 46105.

2. In § 1520.3, amend the definition of "Security program" by revising paragraphs (3) and (4) and adding paragraph (5) to read as follows:

§ 1520.3 Terms used in this part.

* * * * *

Security program * * *

(3) A maritime facility, vessel, or port area;

(4) A transportation-related automated system or network for information processing, control, and communications; or

(5) An aircraft repair station.

* * * * *

3. In § 1520.7, add paragraph (o) to read as follows:

§ 1520.7 Covered persons.

* * * * *

(o) Each operator or owner of an aircraft repair station required to have a security program under part 1554 of this chapter.

SUBCHAPTER C--CIVIL AVIATION SECURITY

4. Add a new part 1554 to subchapter C to read as follows:

PART 1554—AIRCRAFT REPAIR STATION SECURITY

Subpart A--General

Sec.

Subpart B--Security Program

Subpart C--Compliance and Enforcement

Authority: 49 U.S.C. 114, 40113, 44903, 44924.

Subpart A--General

§ 1554.1 Scope and pnrpose.

This part applies to domestic and foreign repair stations that are certificated by the Federal Aviation Administration pursuant to 14 CFR part 145 except for a repair station certificated by the Federal Aviation Administration at which the U.S. Government has assumed responsibility for security. The purpose of this part is to provide for the security of maintenance and repair work conducted on aircraft and aircraft components at domestic and foreign repair stations, of the aircraft and aircraft components located at the repair stations, and of the repair station facilities, as required in 49 U.S.C. 44924.

§ 1554.3 Terms used in this part.

In addition to the terms in §§ 1500.3 and 1540.5 of this chapter, the following terms apply in this part:

Repair station means a domestic or foreign facility certificated by the Federal Aviation Administration pursuant to 14 CFR part 145 that is authorized to perform maintenance, preventive maintenance, or alterations of an aircraft, airframe, aircraft engine, propeller, appliance, or component part.

(1) Domestic repair station means a repair station located within the fifty States, the District of Columbia, or the territories and possessions of the United States.

(2) Foreign repair station means a repair station located outside the fifty States, the District of Columbia, or the territories and possessions of the United States.

§ 1554.5 TSA inspection authority.

(a) General. Each repair station must allow TSA and other authorized DHS officials, at any time and in a reasonable manner, without advance notice, to enter,

conduct any audits, assessments, tests, or inspections of any property, facilities, equipment, and operations; and to view, inspect, and copy records as necessary to carry out TSA's security-related statutory or regulatory authorities, including its authority to--

(1) Assess threats to transportation security;

(2) Enforce security-related regulations, directives, and requirements;

(3) Inspect, maintain, and test security facilities, equipment, and systems;

(4) Ensure the adequacy of security measures;

(5) Verify the implementation of security measures;

(6) Review security programs; and,

(7) Carry out such other duties, and exercise such other powers, relating to transportation security as the Assistant Secretary of Homeland Security for the TSA considers appropriate, to the extent authorized by law.

(b) Evidence of compliance. At the request of TSA, each repair station operator must provide evidence of compliance with its security program and with this part, including copies of records.

(1) All records required under this part must be available in English.

(2) All responses and submissions provided to TSA or its designee, pursuant to this part, must be in English, unless otherwise requested by TSA.

(c) Access to repair station. (1) TSA and DHS officials working with TSA may enter, without advance notice, and be present within any area without access media or identification media issued or approved by the repair station in order to inspect, test, or perform any other such duties as TSA may direct.

(2) Repair stations may request TSA inspectors and DHS officials working with TSA to present their credentials for examination, but the credentials may not be photocopied or otherwise reproduced.

Subpart B--Security Program

§ 1554.101 Adoption and implementation.

(a) General. Each repair station must adopt and carry out a security program to safeguard aircraft and aircraft components located within the repair station and its facilities, the repair and maintenance work conducted at the repair station, and the repair station facility itself.

(b) Repair station profile. No later than 30 calendar days after final rules are published in the Federal Register or no later than 30 calendar days after FAA certification, each repair station must submit a profile in a manner prescribed by TSA. Each repair station must report changes in profile information as specified by TSA within 30 calendar days of the date of the change.

(c) Repair station security program. Unless otherwise authorized by TSA, each repair station must use the TSA standard repair station security program.

§ 1554.103 Security program content, availability, and amendment.

(a) Content of security program. Each security program must--

(1) Include measures to identify all individuals who are authorized to enter the repair station to prevent unauthorized individuals from entering the repair station.

(2) Include measures to control access to the repair station. Such measures must be designed to prevent, detect and resolve any unauthorized entry, presence, and movement of individuals and vehicles into or within the repair station.

(3) Include measures to control access to the aircraft and aircraft components to allow only authorized individuals to have access to the aircraft and aircraft components within the repair station.

(4) Include measures to challenge any individual entering the repair station or who is present in the repair station to ascertain the authority of that individual to enter or be present in the area and measures to escort an unauthorized individual while within the repair station.

(5) Include measures to conduct initial and recurrent security training of all individuals with authorized access to aircraft and components on the provisions of this part and the security program and to maintain a record of training completed by each employee.

(6) Include measures to verify employee background information through confirmation of prior employment and any other means as appropriate to validate employee information.

(7) Include the name, means of contact on a 24 hour basis, duties, and training requirements of the security coordinator(s) who will serve as the primary and immediate contact for security-related activities and communications with TSA.

(8) Include a contingency plan.

(9) Include a diagram with dimensions detailing boundaries and physical features of the repair station.

(10) Include a list and description of all repair station entry points.

(11) Include an emergency response contact list.

(12) Be in writing and signed by the operator, owner, or any person delegated authority in this matter.

(b) Availability. (1) The repair station security program must--

(i) Be written both in English and in the official language of the repair station's country.

(ii) Be accessible at each facility.

(2) Each repair station must restrict the distribution, disclosure, and availability of sensitive security information (SSI) as defined in part 1520 of this chapter to persons with a need to know and refer all requests for SSI by other persons to TSA.

(c) Amendment. (1) A repair station must notify TSA of any amendment to the standard security program.

(2) If TSA finds that there is a situation requiring immediate action to respond to a security threat, TSA may issue an emergency amendment to the standard security program. TSA will provide an explanation of the reason for the amendment. Each repair station must acknowledge receipt and adopt the emergency amendment within the time prescribed. If a repair station is unable to implement the emergency amendment, the repair station immediately must notify TSA to obtain approval of alternative measures.

§ 1554.105 Security Directives.

(a) General. When TSA determines that additional security measures are necessary to respond to a threat assessment or to a specific threat against civil aviation, TSA issues a Security Directive setting forth mandatory measures.

(b) Compliance. Each repair station required to have a security program must comply with each Security Directive TSA issues to the repair station within the time prescribed. Each repair station that receives a Security Directive must—

(1) Verbally acknowledge receipt of the Security Directive.

(2) Specify the method by which security measures have been or will be implemented to meet the effective date.

(3) Notify TSA to obtain approval of alternative measures, if the repair station is unable to implement the measures in the Security Directive.

(c) Availability. Each repair station that receives a Security Directive and each person who receives information from a Security Directive must—

(1) Restrict the availability of the Security Directive and the information contained in the document to persons who have an operational need to know.

(2) Refuse to release the Security Directive or the information contained in the document to persons other than those who have an operational need to know without the prior written consent of TSA.

Subpart C--Compliance and Enforcement

§ 1554.201 Notification of security deficiencies; suspension of certificate.

(a) General. Each repair station that does not establish and carry out a security program, as specified in this part, may be subject to suspension of its FAA certificate, as provided by 49 U.S.C. 44924(c)(1).

(b) Notice of security deficiencies. TSA provides written notification to a repair station and to the FAA of any security deficiency identified by TSA.

(c) Response. A repair station must provide TSA with a written explanation in English of all efforts, methods, and procedures used to correct the security deficiencies identified by TSA within 45 days of receipt of the written notification described in paragraph (b) of this section.

(d) Suspension of certificate. If the repair station does not correct security deficiencies within 90 days of the repair station's receipt of the written notice of security deficiencies, or if TSA determines that the security deficiencies have not been addressed sufficiently to comply with this section, TSA provides written notification to the repair station and to the FAA that the station's certificate shall be suspended. The notification includes an explanation of the basis for the suspension. The suspension remains in place until such time as TSA determines that the security deficiencies have been corrected.

(e) Reply. No later than 20 calendar days after the date of receipt of the notification of suspension, the repair station may serve upon TSA a written request for review of the basis for the determination that the security deficiencies have not been addressed sufficiently. The request must be in English and may include any information that the repair station believes TSA should consider regarding its determination. The suspension remains in effect until the review is complete.

(f) TSA Review. Not later than 30 calendar days, or such longer period as TSA may determine for good cause, after TSA receives the repair station's request for review, TSA reviews its initial determination and issue a Final Determination on the repair station and the FAA in accordance with this paragraph.

(1) TSA considers the initial notification, the repair station's reply, and any other relevant materials before issuing the Final Determination.

(2) If TSA determines that security deficiencies exist and have not been addressed, TSA serves upon the repair station and the FAA a Final Determination. The Final Determination shall include a statement that TSA has reviewed all of the relevant information available and has determined that the repair station is not in compliance with this section.

(3) If TSA determines that security deficiencies do not exist or have been corrected in a manner consistent with the requirements of this part, TSA notifies the repair station and the FAA that the repair station's certification may be reinstated.

§ 1554.203 Immediate risk to security; revocation of certificate and review process.

(a) Notice. TSA determines whether any repair station poses an immediate risk to security. If such a determination is made, TSA provides written notification of its determination to the repair station and to the FAA that the certificate must be revoked. The notification includes an explanation of the basis for the revocation. TSA does not include classified information or other information described in paragraph (e) of this section.

(b) Request for review. Not later than 30 days after receipt of the notice, a repair station may file a request for review of the determination that the repair station poses an immediate risk to security. The revocation remains in effect until the review is complete. The request must be made in writing, in English, signed by the repair station operator or owner, and include--

(1) A statement that a review is requested; and

(2) A response to the determination of immediate risk to security, including any information TSA should consider in reviewing the basis for the determination.

(c) TSA Review. Not later than 30 calendar days, or such longer period as TSA may determine for good cause, after TSA receives the repair station's request for review, TSA examines the basis for the determination that the repair station poses an immediate risk to security, the repair station's response, and any other relevant materials.

(d) Final determination. If TSA determines that the repair station poses an immediate risk to security, the TSA Assistant Secretary or his or her designee reviews the notification, the materials upon which the notification was based, the repair station's response and any other available information. If the TSA Assistant Secretary or his or her designee determines that the repair station continues to pose an immediate risk to security, the TSA Assistant Secretary or his or her designee submits to the repair station and to the FAA a Final Determination. The Final Determination includes a statement that the TSA Assistant Secretary or his or her designee personally has reviewed all of the relevant information available and has determined that the repair station poses an immediate risk to security. If TSA determines that the repair station does not pose an immediate risk to security, TSA notifies the repair station and the FAA. A Final Determination constitutes a final agency action for purposes of 49 U.S.C. 46111.

§ 1554.205 Nondisclosure of certain information.

In connection with the procedures under this subpart, TSA does not disclose classified information, as defined in Executive Order 12968 section 1.1(d), and TSA

reserves the right not to disclose any other information or material not warranting disclosure or protected from disclosure under law or regulation.

Issued in Arlington, Virginia, on NOV 12 2009

Gale Rossides,

Acting Administrator.

AOPA Outline of Proposed Comments and Concerns

Re: Notice of Proposed Rule Making, Aircraft Repair Station Security, Docket TSA-2004-17131

On November 17, 2009, the Transportation Security Administration (TSA) issued a Notice of Proposed Rulemaking (NPRM) entitled "Aircraft Repair Stations". The NPRM proposes to amend existing aviation transportation security regulations by extending to a broad and very diverse group, foreign and domestic Part 145 certificated repair stations, a comprehensive and costly regime of security regulations.

AOPA has been a proponent of reasonable measures that enhance aviation security without unnecessarily imposing regulatory costs on small businesses, or unduly infringing upon citizens' freedom of movement and right to privacy. Furthermore, AOPA supports the intent behind this proposed rule, but questions its extension to domestic non air carrier facilities.

AOPA requests that TSA focus only on the intent of the Vision 100 language, which is to develop security procedures for foreign repair stations that work with air carrier aircraft and components. However, if this rule must be extended to cover domestic repair facilities, it should only be applicable to those that perform work on TSA regulated air carrier aircraft. By limiting this rule to foreign repair stations, or those that only serve air carrier aircraft, TSA will be able to address any security vulnerabilities identified and comply with the mandate dictated by Vision 100, without stretching resources and the limited inspection capability that exists.

AOPA's 416,000 members continue to be committed to strengthening general aviation security, but the proposed rule raises concerns focused on the following areas:

1. **The Proposed rule is beyond the intent of the legislation.**
   This NPRM was issued by TSA to comply with the mandate of the Vision 100-Century of Aviation Reauthorization Act and was not rooted in a credible security threat or from a formal threat assessment. In analyzing Vision 100-Century of Aviation Reauthorization Act, it is clear that the scope of the legislation is limited to the oversight of repair stations performing work on air carrier components at foreign repair stations.

2. **General aviation should not be a focus.**
   By including domestic general aviation in this NPRM, implementation of the proposal becomes unworkable. The majority of general aviation repair stations in the United States are small businesses located on a non-Part 1542 TSA regulated airports. The NPRM as proposed requires the repair station to carry out the standard security program, which includes a description of access controls and challenge procedures for the facility. AOPA has concerns with the practicality and costs of these measures at a non-TSA regulated airport. For example, the typical general aviation airport has security components that are designed to protect unauthorized persons from entering the facility from the street, or public side of the airport. Sections of the facility that open to the airport such as hangar doors are not normally included in a security program. This practice is consistent with general guidelines since those persons that would access the facility from the airside, i.e. pilots and aircraft owners, are authorized to be in that area. Often on warm summer days, the hangar door will remain open. In its current form, this proposed rule could cause an aircraft owner who walks into the hangar from the ramp, not knowing

the difference between a regulated maintenance facility and non-regulated facility, to potentially find himself in violation of security procedures without even knowing.

3. **The NPRM as presented is not feasible.**
   Repair stations can exist on or off an airport and are situated on both general aviation and commercial service airports. Due to the large variation in types and the location of repair stations, trying to develop a security plan and audit system for these vast differences is unrealistic. AOPA appreciates that in the NPRM, the TSA acknowledges that a one size fits all approach will not work. However, the proposed requirement for all repair stations to implement the standard security program appears to negate that statement. How can something standard be mandated and still account for diversity? Only those repair stations that service commercial air carrier aircraft should be required to follow and implement the standard security program.
4. **The NPRM creates redundancy.**
   Because TSA has issued Security Directive 1542-04-08G, which required any person with unescorted access to an airport operations area (AOA) to undergo a security threat assessment and gain an airport ID, many items in this NPRM become redundant when applied to domestic repair stations. Security Directive 08G mitigates the need to regulate badging, employee background verification, access control and challenge procedures.
5. **Weight threshold versus operation based criteria.**
   In the NPRM, TSA seeks comment on whether or not repair stations that serve aircraft under a specified weight should be exempt. AOPA believes that it is better to set criteria based on the type of operation (i.e. airline operations), not based on a specific weight threshold. However, if the TSA finds it necessary to differentiate through aircraft weight versus operational characteristics, then, it should reflect a weight consistent with the soon to be released large aircraft security program supplemental NPRM.
6. **The threat of security directives.**
   Based on recent actions by TSA to issue wide sweeping Security Directives and skirting the regulatory process to seek public comment, AOPA does not support this proposed requirement for repair stations.
7. **Suspension and revocation process.**
   This proposed rule would establish procedures to suspend and revoke a repair station certificate if TSA determines that a foreign repair station poses an immediate risk to security. AOPA requests that TSA follow the procedures already in place for the revocation of an FAA airmen certificate. That is, the repair station can appeal that decision to an independent third party — first an administrative law judge and then the National Transportation Safety Board (NTSB). TSA and the FAA can implement Congress's intent of Vision 100 in a lawful manner and at the same time afford the repair station the due process historically provided by the federal transportation code.

AIR TRANSPORT ASSOCIATION

NICHOLAS E. CALIO
PRESIDENT AND CEO

January 10, 2011

The Honorable Darrell Issa
Chairman
U.S. House Committee on Oversight and
Government Reform
2157 Rayburn House Office Building
Washington, DC 20515-6143

Dear Chairman Issa:

Congratulations on assuming the chairmanship of the House Committee on Oversight and Government Reform, and thank you for seeking input from the Air Transport Association of America[1] (ATA) regarding "existing and proposed regulations that have negatively impacted job growth" in the aviation industry. We share your commitment to advancing a strong economic recovery, and look forward to working with you in your new capacity.

We have identified rules that fail to meet the stated objective while the costs and burden of implementation, often by the regulator's own admission, greatly exceed any reasonably expected benefit that might flow from these rules.

Commercial aviation is vital to the health of our nation's economy. It helps drive approximately $1.14 trillion in annual economic activity in the United States, $346 billion per year in personal earnings, and 10.2 million jobs. It also contributes $692 billion per year to our nation's gross domestic product – roughly 5.2 percent of GDP. Certain aspects of the extensive federal regulatory environment we operate under are clearly important, and can be beneficial. However,

[1] The members of the Air Transport Association include: ABX Air, Inc.; AirTran Airways; Alaska Airlines, Inc.; American Airlines, Inc.; ASTAR Air Cargo, Inc.; Atlas Air, Inc.; Continental Airlines, Inc.; Delta Air Lines, Inc.; Evergreen International Airlines, Inc.; Federal Express Corporation; Hawaiian Airlines; JetBlue Airways Corp; Southwest Airlines Co.; United Airlines, Inc.; UPS Airlines and US Airways, Inc.

much of the regulation we face is unproven, unnecessarily burdensome and adversely impacts growth, profitability and job creation in our industry.

The safety of our customers and our employees is and will remain the single most important priority for all U.S. airlines. The airline industry is currently enjoying one of the safest periods in its history, and any notion that an overhaul of Federal Aviation Administration (FAA) airline safety regulations would be beneficial is simply unfounded. Safety regulations evolve and will continue to evolve, in a reasoned and targeted manner, with well-researched solutions to address demonstrated issues facing our industry. A rewrite of proven airline operational regulations is completely unnecessary, will do nothing to improve safety, and will be significantly disruptive to the industry.

Flight and Duty Rule

As an example, the FAA recently issued a proposed rule to completely rewrite pilot flight and duty time (FDT) regulations for flight crews. Air carriers also have made specific proposals to change flight and duty time rules that would actually lead to a reduction in pilot fatigue and increase scheduled rest opportunities. However, in its proposal, the FAA failed to link their specific regulatory changes to targeted improvements, and it is unclear what benefit each proposal is meant to provide. Since this rulemaking process is still ongoing, we are hopeful that we will be able to work collaboratively with the administration to achieve a meaningful outcome as we move forward in the process. We would like to update the Committee as progress on this issue matures.

Superfluous Training Regulations

In 2009, the FAA proposed to completely rewrite training regulations for pilots, flight attendants, flight engineers, and dispatchers.[2] A commitment to continuous improvement, rather than unnecessary and disruptive regulation, has consistently advanced training and safety for the airlines. Airlines support data-driven proposals that directly relate to and target very specific concerns. To be most effective, the airlines and regulators must work cooperatively to identify and address causal issues.

In this training rule, FAA failed to demonstrate how these very costly proposed changes would actually improve safety and prevent accidents. Based on an incorrect analysis, it is suggested that 169 accidents that took place from 1984 to 2004 could have been avoided for a cost avoidance benefit of $535 million. However, the 169 accidents in the FAA analysis included corporate and general-aviation accidents that operate under very different rules, and the majority of accident investigations did not cite training as a causal factor.

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[2] *Proposed Qualification, Service, and Use of Crewmembers and Aircraft Dispatchers*, 74 Fed. Reg. 1280 (January 12, 2009) Docket No. FAA-2008-0677.

The analysis also gave no credit for the many safety improvements that FAA and industry implemented during that time period. Most importantly, FAA failed to provide any link between the voluminous proscriptive training changes and the specific causes of past accidents; in other words, it is not clear that any of the proposed changes would have any impact on the causes of past accidents. ATA estimates a maximum benefit value of $25.4 million for this rule, a fraction of what the FAA suggests.

FAA also did not create a training syllabus for comparison to existing carrier training programs, which FAA approves, to determine the impact or accurately identify implementation costs. It is estimated that the FAA underestimated the cost at $350 million for this proposal; one ATA member created a training syllabus for just one category of aircraft and determined that FAA had severely underestimated the time it would take to train all the specific tasks included in the proposal.

In fact, the proposal created so many restrictive and complex rules that ATA members estimate that there is not enough aircraft simulator time available in the United States to comply with the proposal. This analysis is in contrast to U.S. airline training rule, "Advanced Qualification Programs" (AQP) adopted by FAA in 1990, under which 19 U.S. airlines now train pilots. AQP constantly modifies airline training programs using actual flight and simulator data to identify areas on which a carrier needs to focus.

After adjusting the amount of training time it would take to implement the proposal, ATA estimates the cost to be at least $3.3 billion over ten years.[3] Before proceeding with this rulemaking, the FAA should create a training syllabus for the entire proposal, so industry can determine the impact and the agency's methodology. In addition, FAA should exempt airlines already training under an AQP system to ensure that resources are not diverted in a manner that could negatively impact jobs.

Lithium Battery Rule

The DOT Office of Pipeline and Hazardous Materials Safety Administration (PHMSA) released an NPRM last year that proposed restrictions on air shipments of electronic equipment containing lithium batteries. None of the incidents that the NPRM cited as the basis for new safety regulations involved shipments of electronic devices as air cargo.

Because the provisions of the NPRM differ significantly from international dangerous-goods regulations, electronics shipments to the United States would be significantly disadvantaged in the global marketplace. Sensitive electronics cannot be shipped by sea; consequently, shippers in Asia would have to transport electronics by air to Canada or Mexico using foreign-flag carriers, and truck the merchandise across the border. U.S. jobs at several points in the supply chain would be at risk.

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[3] ATA comments, filed on August 10, 2009, are in the public docket at Docket ID No. FAA-2008-0677-144.1.

DOT should not issue a final rule (slated for February 2011) that would place U.S. businesses or jobs at a competitive disadvantage without a clear safety benefit. Since air shipments of electronics containing lithium ion batteries have not proven to be unsafe or dangerous based on historical data, extreme economic measures should not be imposed without a demonstrated safety benefit. The proposed PHMSA rule does not meet that standard.

Passenger Protection Proposals

Understanding the full implications of any rule is critical, and should be required in the analysis and discussions with the industry. DOT is imposing rules that may meet one objective but actually cause deterioration in the customers' experience because of unanticipated consequences of the rules across the operations.

A passenger proposal published in June 2010 seeks to re-regulate the industry in violation of the *Airline Deregulation Act* (ADA).[4] In essence, the Department seeks to reach into airline contracts of carriage to mandate service terms and conditions, which Congress reserved for marketplace competition in passing the ADA. DOT also seeks to create state court litigation over airline passenger disputes, which would replace the statutorily required DOT enforcement of passenger protections, again contravening the ADA and raising the threat of frivolous lawsuits.

The proposal also exceeds DOT statutory authority by seeking to dictate how airlines advertise fares and control the private contract relationship between airlines and global distribution systems (GDS), companies that contract to independently sell airline fares such as Travelocity and Expedia.[5] The second passenger proposal is scheduled to be finalized in the second quarter of 2011. DOT estimated that these and many other provisions would cost airlines just under $30 million over 10 years. However, DOT only estimated costs for seven out of 11 proposed requirements, making the DOT cost/benefit analysis incomplete. ATA estimated the contract-of-carriage provision alone would cost airlines at least $17.5 million per year in litigation expenses.[6] DOT should eliminate new proposals that Congress had rightly left to competition and the marketplace when it passed the ADA, including regulation of contracts of carriage, full-fare advertising, and airline/GDS contractual relationships.

Deicing Effluent Limitation Rule

There are several new environmental regulations that are unsubstantiated as to environmental benefit, but carry significant cost. In your December 8 letter to ATA, you cite the U.S. Environmental Protection Agency (EPA) effluent-limitation guideline proposal for construction sites as example of a costly new regulation that will result in lost jobs. Similarly,

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[4] *Proposed Enhancing Airline Passenger Protections*, 75 Fed. Reg. 32318 (June 8, 2010).
[5] Southwest Airlines does not concur with the ATA position on GDS ancillary-fee disclosures. Southwest's position on this issue is set out in its comments that are filed in DOT NPRM Docket DOT-OST-2010-0140.
[6] ATA comments, filed on September 23, 2010, are in the public docket at Docket ID No. DOT–OST–2010–0140-1881.

ATA and its members are extremely concerned about an effluent-limitation guideline now proposed for aircraft and airport deicing.[7]

As detailed in the more than 200 pages of comments that ATA filed on the proposal, EPA proposes to impose what amounts to "two sizes fit all" deicing fluid collection, retention and treatment requirements on the diverse aircraft and airport operations throughout the country, without having properly considered the significant, adverse effects that those requirements will have on the safety, throughput and cost of those operations.[8]

Among our other concerns is the requirement that all large airports (one of the two "sizes") would be required to establish centralized deicing pads, even at severely land-constrained airports like LaGuardia, Boston, Newark and JFK, where centralized deicing pads could pose safety concerns and capacity constraints.[9] EPA also failed to consider the safety and operational impacts of the collection mandate for smaller airports, which will require scores of glycol recovery vehicles to be poised in the midst of aircraft operations.

Perhaps of even greater concern is the EPA proposal to establish a 25-gallon limit on deicing fluid for aircraft taxiing. Pilots must continue to make such critical decisions regarding safe operation of an aircraft, including additional deicing operations, and this proposal would remove that authority. Not only does this run afoul of FAA authority to regulate aircraft operations but, if sustained, could require an airline to temporarily cease operations if it felt in a given circumstance that it needed more than 25 gallons of fluid for safe taxiing.

As was the case with the effluent guideline for the construction agency, we believe the cost-estimation methodology approach that EPA chose underestimates the costs of the deicing effluent guidelines proposal by several orders of magnitude. Mistakes made by EPA even in applying its own methodology resulted in an underestimation of capital costs by approximately $1.19 billion and of annual costs by approximately $88 million. While we have asked EPA to rework the proposal considerably, and have provided detailed suggestions for doing so, we continue to be concerned that the Agency plans to go forward in finalizing a highly flawed rule in 2011. Our members are very mindful and take smart, efficient actions to mitigate the environmental impact of their operations, and want to work collaboratively with the EPA on practical, meaningful improvements that do not impact safety.

Fuel Tank Inerting

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[7] *Proposed Effluent Limitation Guidelines and New Source Performance Standards for the Airport Deicing Category*, 74 Fed. Reg. 44676 (Aug. 28, 2009).

[8] ATA comments, filed on February 26, 2010, are in the public docket at Docket ID No. EPA-HQ-OW-2004-0038.

[9] Massport and the Port of New York and New Jersey filed extensive comments citing these and other concerns.

The FAA recently adopted a final rule mandating flammability reduction measures (FRM, commonly known as "fuel tank inerting") for aircraft.[10] Once again, this appears to be a rule in which the objective (reducing flammability) has already been accomplished through other targeted regulatory actions that have been undertaken over the last 15 years. ATA estimates that, between now and 2017, the FRM rule will cost U.S. carriers approximately $1 billion to retrofit their aircraft to meet this mandate, impeding the ability of those airlines to invest in their business, expand service and create new jobs. The ATA commissioned and funded technical and cost-benefit studies that demonstrated that, with respect to these retrofits, the rule clearly is not a cost-effective safety measure. Even FAA, in its own analysis, conceded that the rule may not be cost-effective and, evidently, adopted the rule on other grounds. Over 200 airworthiness directives that FAA has adopted since 1996 are providing more than adequate protection and reducing flammability, rendering the FRM rule redundant and unnecessary.

European Union Emissions Trading Scheme

Although you have asked about U.S. regulation in particular, I also wanted to take this opportunity to raise a foreign regulatory issue that will have a significant, negative impact on U.S. airlines. As you may know, the European Union has unilaterally extended its emissions trading scheme (EU ETS) to all airlines that fly to, from or within the EU. Beginning January 1, 2012, all airlines will have to purchase sufficient emissions "allowances" under the European scheme to cover specified quantities of greenhouse gas emissions over the entirety of the flight to and from the EU, including such emissions released while on the ground in the United States, in U.S. airspace and over the high seas. In other words: taxes from the EU for emissions released by U.S. aircraft on U.S. soil.

This unilateral action already has imposed a significant burden on our members that have flights to the EU, as they have had to prepare and file detailed emissions-monitoring plans with European authorities and put in place new information technology systems to meet the European-specific data format requirements.

Although Congress previously stated its opposition to this scheme in a Sense of the Congress and ATA has brought a legal action challenging the EU ETS as applied to ATA airlines, the federal government has not taken action to challenge this extraterritorial regulatory action by the EU. In our experience, the lack of action by the United States has been construed by the Europeans as tacit agreement to their system. Given that our Congress has declined to finalize U.S. emissions trading legislation, it is more than ironic that U.S. airlines are likely to be subjected to EU emissions trading requirements even while in U.S. airspace.

The EU ETS also complicates the proposed global approach to aviation emissions, as well documented by ICAO, and in the short term presents significant risk of duplicative regulation within the United States and other countries – to the detriment of the airlines. In addition, our

[10] "Reduction of Fuel Tank Flammability in Transport Category Airplanes; Final Rule" – Fed. Reg. Vol. 73, No. 140, page 42444, July 21, 2008; Docket No. FAA-2005-22997

repeated concern is that this significant cost impedes U.S. aviation's ability to improve our environmental impact by siphoning away funds that airlines could use to invest in new planes, technologies, alternative fuel and business development.

The EU ETS situation underscores the need for our government to push for harmonized international aviation policies. Our ability to compete and provide the most economic services to our passengers and shippers will be undercut if we face a patchwork of requirements around the world.

Thank you again for the opportunity to share with you some of the most pressing regulatory issues that may be unnecessary or do little to impact their stated goals, but will have significant financial and business impact. The commercial aviation industry is committed to the safety of our passengers and employees and is dedicated to being a major engine of economic growth. We look forward to working with you in your new capacity to resolve these issues and ensure the enactment of only effective, efficient and necessary rules on U.S. industry.

Regards,

Nick

Nicholas E. Calio

cc: The Honorable Edolphus Towns, Ranking Member

December 21, 2010

Hon. Darrell E. Issa
Ranking Minority Member
Committee on Oversight and Government Reform
U.S. House of Representatives
2157 Rayburn House Office Building
Washington, DC 20515-6143

Dear Congressman Issa:

This is in response to your letter of December 10 requesting information on proposed regulations that negatively impact the economy and jobs. According to 2009 government and industry data, the US aluminum industry directly employs 106,219 men and women in 50 states with indirect employment at 357,195 for a total of 463,414. Total direct and indirect payroll is $20.7 billion.

The US primary aluminum industry was the largest in the world until the 1990's. It is now the fourth largest and may be lower if facilities temporarily curtailed from recession do not return to full capacity.

The focus of aluminum industry concerns are the EPA SO2 National Ambient Air Quality Standard (NAAQS) and the Maximum Achievable Control Technology (MACT) determinations.

SO2 NAAQS

The SO2 standard is a recently promulgated short term 75 ppb ambient air concentration limit. The form of the standard is also new based on an air quality statistics using the 3-year average of the 99th percentile of the annual distribution of daily maximum 1-hour average concentrations to assess compliance. EPA states that the agency will require air dispersion modeling to identify counties that do not comply instead of using actual air quality monitoring data as in the past for all NAAQS standards. The dispersion model to be used is estimated to over –predict air concentrations by a factor of two.

The proposed EPA standard is at variance with the World Health Organization guidelines (190 ppb as a 10-minute average) and the European Union standard (134 ppb as a one-hour average with 24 exceedances per year).

The impact of this standard will be felt on primary aluminum production facilities perhaps necessitating SO2 scrubbers costing hundreds of millions per facility and threaten dozens of aluminum plants with curtailment.

MACT Standard Determinations

EPA has changed the determinations in MACT technology standards by revising the definitions of the technology floor for control requirements. In the past the average performance of the top 12 % included a determination of a no-control floor for some pollutants if emission control systems were not in use. Now EPA develops emission limits based simply on process or raw material variability regardless of whether there are controls to manage the emissions. Worse, EPA selects emission limits for each of the regulated pollutants looking at a separate floor determination for each pollutant. As a result, there are instances where no best operating source can meet the emission limit for all regulated pollutants.

In residual risk determinations, EPA also provides no mechanism to exempt pollutants with de minimus risk and instead sets low emission limits with no benefit based on the MACT floor process. There is growing concern that the MACT determinations are leading to severe requirements with economic consequences. The proposed Boiler and Process Heater MACT and Cement Kiln MACT rules are recent examples.

EPA is now developing proposals for both primary and secondary aluminum facilities due to be published in the fall, 2011. It appears that the Agency is following the same stringent pathway in developing these MACT standards that they have been in developing the Boiler and Cement rules.

Approximately 50% of the primary aluminum facilities have been curtailed in the last decade. Further unwarranted and extreme regulations will accelerate this trend.

Sincerely,

J. Stephen Larkin

J. Stephen Larkin
President
The Aluminum Association

AMERICAN BEVERAGE ASSOCIATION

January 3, 2011

The Honorable Darrell Issa
Chairman
House Committee on Oversight and Government Reform
2157 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Issa:

Thank you for the opportunity to address concerns over the use of taxpayer revenue for purposes which may fall into the category of "government overreach." The beverage industry is fully supportive of collaborative efforts to improve the health of the country's citizens and appreciates the leadership role the Centers for Disease Control (CDC) has taken on many issues. However, we believe the CDC's use of federal money it received as part of the 2009 American Reinvestment and Recovery Act (ARRA) to discourage the consumption of certain beverages under the guise of obesity prevention is misguided.

The beverage industry has initiated voluntary initiatives to combat obesity. In 2006 we removed all full calorie beverages from elementary, middle and high schools as part of our National School Beverage Guidelines. That effort has reduced beverage calories in schools by 88%.

More recently the beverage industry collaborated with First Lady Michelle Obama's call for innovative initiatives to end obesity in a generation by committing to putting caloric information on the front of all its bottles and cans, vending machines and fountain dispensers. This initiative, called Clear on Calories, will start with a roll out early this year and be completed in 2012 as part of the industry's efforts to help educate consumers as they manage their diets and weight.

We are concerned about the approach CDC is taking in ARRA's "Communities Putting Prevention to Work" program, by giving federal grants to local that unfairly

single out beverages containing sugar for denigration, including campaigns encouraging the imposition of special taxes on these products.

When Congress passed the American Recovery and Reform Act, taxpayer money was allocated for "shovel ready" projects in an effort to stimulate the economy and create or preserve jobs. Instead, in some instances, this money was spent in ways which may have the opposite effect – by denigrating particular products which could result in lost sales and lost jobs.

Clearly, it should not have been the intention of Congress to allocate taxpayer money to run "counter advertising" against soft drinks as a means to combat obesity as part of so-called "stimulus" funding. This issue was recently highlighted in a report issued by Senators McCain and Coburn on the 100 most wasteful projects included in the stimulus measure, a link to which can be found here http://coburn.senate.gov/public/index.cfm/2010/8/today-sens-coburn-and-mccain-released

The attached chart outlines the amount of the grants awarded as well examples of how these funds are being used against the beverage industry in a variety of communities across the nation. Obesity is a complex issue with many causes that requires a comprehensive approach if we are to address it in a meaningful way. To single out one product in the diet as the single cause and use taxpayer funds to discourage its consumption seems to us to be wrongheaded, poor public policy, unfair, and frivolous.

Advertising against soft drinks and other sugared beverages, taxes on these products, and bans won't make people healthier. Making smart, educated decisions about diet and exercise do.

We appreciate the opportunity to provide you with this information and look forward to working with you as you address this important topic.

Sincerely,

Susan K. Neely

Susan K. Neely
President and CEO

CDC Grants and Sugar-Sweetened Beverages

The American Beverage Association (ABA) appreciates the leadership role the Centers for Disease Control (CDC) has taken in addressing the nation's obesity problem. The beverage industry shares the CDC's concern for the health and well-being of all Americans and is doing its part to help children and adults make balanced choices.

In 2006, we removed all full-calorie beverages from elementary, middle and high schools as part of our National School Beverage Guidelines. The beverage industry understands that schools are special environments since parents are not always present. Our Guidelines were developed in partnership with parents and gives them more control over the beverage choices their children have during school. That effort has resulted in an 88% drop in calories available from beverages in schools, as shown in our Third-Year School Beverage Guidelines Implementation Report released in March 2010.

The beverage industry is continuing its leadership in this area by answering First Lady Michelle Obama's call for innovative industry initiatives to help solve the challenge of childhood obesity in a generation. In support of her Let's Move initiative, America's leading beverage companies have voluntarily committed to put caloric information on the front of all its bottles and cans, vending machines and fountain dispensers. This commitment, called Clear on Calories, will start with the rollout of bottles and cans featuring caloric labels this fall and will be completed by 2012.

We believe both of these initiatives will have a measurable impact on obesity because they address one of the most basic contributors to the problem – education. The National School Beverage Guidelines are part of a broader effort led by the Alliance for a Healthier Generation to teach children the importance of a balanced diet and exercise. Clear on Calories provides adults with the nutrition information they need to help their families achieve a healthier lifestyle.

We appreciate that the CDC is attempting to achieve the same goal through grants included as part of the 2009 American Reinvestment and Recovery Act. However, we believe that some of the direction given to states and communities in developing their grant proposals unfairly singles out the soft drink industry for punishment in the form of negative advertising and the imposition of special taxes to discourage consumption.

The MAPPS evaluation strategy, used in the past to discourage tobacco consumption, was referenced in the grant announcement as one guideline states and communities should consider in developing their proposals. Comparing soft drinks to tobacco is unfounded to begin with, and the MAPPS strategy unfairly singles out beverages in the following ways:

- Media: "Counter-advertising for unhealthy choices"
- Access: "Limit food/drink availability"
- Point of Purchase: "Signage and Product placement of healthy vs. unhealthy"
- Price: "Changing relative prices of healthy vs. unhealthy" (i.e, taxes)

Attached as a reference is a list of states and communities that have utilized these strategies in discouraging the consumption of soft drinks.

Furthermore, it is troubling that the grants do not include a mechanism to gauge the effectiveness of the various methods states and communities might employ to combat obesity. As one example of a strategy that has not produced the intended results, Arkansas and West Virginia have long had soft drink taxes in place and the obesity rates in those two states are among the highest in the nation. We believe an evaluation mechanism that would help determine whether or not these punitive interventions are effective.

Rather than establishing "good" and "bad" foods, ABA encourages CDC to consider the importance of education in reducing obesity rates. We believe that programs that will fundamentally change the way people consider their food and beverage choices and how they fit into their individual lifestyle is the best way to impact our nation's obesity problem, not discriminatory taxes or counter-advertising.

Examples of Grant Proposals Focusing on Beverages

Boston: "Decrease consumption of sugar-sweetened beverages"

Los Angeles County: "Implement a targeted public education campaign in an effort to reduce sugar sweetened beverage consumption"

New York City: "Sponsor major awareness campaigns to discourage consumption of sugar-sweetened beverages"

"Set policies and create environments that reduce consumption of sugar-sweetened beverages and overly-salted food"

New York State: "Reduce consumption of sugar-sweetened beverages"

Colorado: "Reduce consumption of sugar-sweetened beverages"

Douglas County, NE: "Limiting sweetened beverages in after-school programs"

January 3, 2011

Summary of CDC AARA Grants with Potential Impact on Beverage Industry

1. "Communities Putting Prevention to Work" (CPPW)
   - Grants made March 19, 2010
   - $373 M granted to 44 communities
   - Awards address both tobacco and obesity prevention
   - 30 communities received funding for obesity prevention; 23 for obesity prevention alone, 7 for both tobacco and obesity
   - Of the 37 communities saying receiving monies for obesity prevention; 6 jurisdictions proactively state they will use their monies to discourage the consumption of SSBs specifically; this number includes Douglas County, NE which says it will use its monies to "limit sweetened beverages in after-school programs." Two additional jurisdictions – Seattle and Philadelphia – are using their monies for "discourage consumption" campaigns, though they did not proactively state this use. 6 jurisdictions say they will use the monies to restrict availability or reduce consumption of unhealthy foods or beverages, though they do not specifically indicate SSBs.
   - Communities will use MAPPS intervention strategies (which include using media to promote healthy foods/drinks and restricting advertising and employing counter advertising for tobacco and unhealthy foods and drinks; and using POS signage and price to encourage intake of healthy foods
   - See chart below for brief analysis of communities' stated intention for grant monies

2. State and Territory Base Awards for Policy and Environmental Change
   - Grants made Feb. 5, 2010; Approx $44.6 M total
   - Awards are part of Recovery Act funding designed to "carry out evidence-based clinical and community-based prevention and wellness strategies that deliver specific, measurable health outcomes that address chronic disease rates."
   - Awards distributed to all states and territories on a formula basis
   - Per CDC, "all 58 applicants will receive funding for efforts in nutrition, physical activity and tobacco control."

3. Competitive Special Policy and Environmental Change Initiative
   - Awards made to 13 states on a competitive basis to "implement one or more high-impact policy, environmental or system change strategy to eliminate health disparities and achieve health equity related to individual risk factors..."
   - Total funding - $30 M
   - Two states – Colorado and New York – specifically identify reduction of SSBs as an intended use for grants
     i. CO - $1.1 M
     ii. NY - $3 M total; $259,000 to reduce consumption of SSBs

STATE/COMMUNITY COMPETITIVE GRANTS

City/Community/State	Project Concern	Obesity Grant Amt.	Grant Recipient
BOSTON	Decreased consumption of SSBs [illegible]	[illegible]	Boston Public Health [illegible]
LOS ANGELES COUNTY	- "Implement a targeted public education campaign in an effort to reduce SSB consumption and promote healthy eating." - Will also increase physical activity policies in schools.	[illegible]	Los Angeles County Dept of Public Health
NEW YORK CITY	- "city will sponsor major awareness campaigns to discourage consumption of unhealthy foods, SSBs and oversized portions." - "NYC will also work to set policies and create environments that reduce consumption of SSBs and overly-salted food." - Also will increase availability of fresh produce, and make water and produce more avail in schools	$15.5 M ($15.6 Tobac)	Fund for Public Health in New York, Inc.
PHILADELPHIA	- "unhealthy foods will be removed from school stores and fundraisers" - Other stated tactics: farmers markets, creating 1,000 healthy corner stores, pedestrian/bike path	$15 M ($10.4 Tobac)	Philadelphia Dept of Public Health
SEATTLE/KING COUNTY	- "increasing access to healthy foods in schools" - Other stated tactics: develop healthy	$15.5 M ($10 M Tobac)	Seattle & King County Dept. of Public Health

	corner stores, promote walking in master plans, increase safe places for school/park activity, institute daily phys ed in schools		
STATE OF COLORADO	Advance a comprehensive statewide youth access policy; increase statewide awareness of the health implications of excess dietary sodium; **reduce consumption of sugar-sweetened beverages**; and develop and implement model food policies for schools statewide	$1.198 M	CO Dept of Health
STATE OF NEW YORK	- Reduce consumption of sugar-sweetened beverages. - Also menu labeling and transfat reduction	$259K (total $3M)	NY Dept of Health
COOK COUNTY, IL (CHICAGO)	- **"inform...decision makers about evidence- and practice-based pricing and access strategies"** - Provide tech and financial assistance to communities/institutions participating in Model Community/Model Schools program (note – this is a $20,000 program...each grantee will get $5,000...rfp is out now, due May 3...program guidelines do specifically target reduction of SSBs)	$15.9 M	Cook County Department of Public Health/Public Institute of Metro Chicago
OLMSTEAD CO, MN (MINNEAPOLIS)	- **"decrease relative costs of healthy foods and beverages in community vending machines"** - Also enhance safe routes to school	$5.9 M (for both Minneapolis and Olmstead Co. Minneapolis lang re: transportation	Minnesota Dept of Health

MIAMI-DADE COUNTY	- **"media campaigns to promote healthy food and drink choices** and increased physical activity" - "MD hopes to reduce sodium consumption" - Other stated tactics: enhanced signage for bike lanes; work with child care facilities to increase phys activity	$14.7 M	Miami-Dade County Health Department
JEFFERSON COUNTY, AL (BIRMINGHAM)	- **"disseminating health information through mass media "** - Part of larger plan including increasing access to healthy food - Other stated tactics: developing greenways, neighborhood walking groups, supporting mixed-use development, decreasing food deserts	$6.3M ($7 M Tobac)	Jefferson County Dept of Health, AL
PIMA CO, AZ	- **"culturally relevant public education campaign that includes television, radio and...communications"** - Other state tactics: improved access to local food, community gardens; wellness education; encouragement to frequent restaurants with menu info	$15.8 M	Pima County Health Dept.
SAN ANTONIO	- **Trainings for education leaders to improve** physical activity and **availability of healthy foods in schools** - Other stated tactics: training on phys ed options, support "Complete Streets" reccs, expand after hours school phys ed opps.	$15.6 M	San Antonio Metro Health District
ADAMS/ARAPAHOE/ DOUGLAS COUNTIES, CO (NOT DENVER COUNTY)	- **"educational campaign to raise awareness of benefits of healthy eating** and physical activity" - **"support community partners in**	$10.5 M	Tri-County Health Dept, CO

	advancing additional policy, systems and environmental changes to promote healthy eating and physical activity" - "advise municipalities in planning, zoning and trans efforts to promote phys activity and access to healthy foods" - Other stated tactics: increase restaurant signage for healthy food; support community gardens		
SAN DIEGO COUNTY, CA	- Increase access to healthy foods - "Enhance and implement school wellness , before-and after-school physical activity policies to create environments that promote nutrition"	$16.1 M	SD Health & Human Services Agency
HAMILTON COUNTY, OH	- Educational campaign to promote healthy eating and physical activity - "Improved access to healthy options through school-based vending policies and community garden development"	$ 6.7 M	Ham. Co General Health District
LOUISVILLE/JEFFERSON CO. KENTUCKY	- "Food Fight" educational campaign - "School based strategies to increase student input in food and beverages choices and use student-grown produce"	$ 7.9 M	Lou/Jeff. Co. Metro Government
MULTNOMAH COUNTY, OR	- Creation of a "Healthy Active Schools Network," to reduce the availability of unhealthy foods and beverages	$ 7.5 M	Chronic Disease Prevention Program, Multnomah Co. Health Dept. Oregon

NASHVILLE/ DAVIDSON CO. TN	- Increase access to fresh fruits and vegetables in schools and targeted neighborhoods	$ 7.5 M	Metro Public Health Department, TN
DOUGLAS COUNTY, NE	- Healthy eating messages - **"Limiting sweetened beverages in after-school programs"** - Healthy Stores program: employing product placement and pricing strategies - Farm to School Program	$ 5.7 M	Douglas CO. Health Dept.

SMALLER/RURAL COMMUNITIES

CITY/COMMUNITY/STATE	PROJECT CONCERN	OBESITY GRANT AMT.	GRANT RECIPIENT	NEXT STEPS/INTEL
KAUAI	- **"increase residents' awareness of knowledge of healthy eating** and active living **through multiple media venues"** - **"restrict availability of unhealthy foods in schools"**	$3.4 M (for both Kauai and Maui)	Hawaii Dept of Public Health	
MAUI	- **"increase residents' awareness of knowledge of healthy eating** and active living **through multiple media venues"** - **"restrict availability of unhealthy foods in schools"**			
PORTLAND, ME	- **"public education campaign to promote healthy foods and beverages"** - Also increasing places for safe phys activity, mixed-use neighborhoods, increased use of parks; supporting Safe Routes to School	$4.3M (for both Portland and Lakes)	Maine Dept of Health and Human Services	ME Beverage Assn investigating
LAKES REGION, ME	- **"conduct public education campaign to promote healthy foods, healthy beverages and physical education opportunities."** - Also includes increasing phys ed in schools, access to local food, safe places for activity, etc			ME Beverage Assn investigating

MID-OHIO VALLEY, WV	- **"reduce the consumption of less healthy foods and beverages"** ...when food is eaten away from home - Also includes increasing fresh food options in schools, and increasing breastfeeding	$4.5 M	WV Department of Health and Human Resources	WV Beverage Assn investigating
LA CROSSE CO, WI	- **"increase awareness of the importance of healthy eating** and physical activity"	$6 M	WI Dept of Health Services (also includes Wood Co, Wi – application focuses on reduced television hours, increased physical activity in children and adults)	Wisconsin Beverage Assn investigating further.
BARTHOLOMEW/ VANDERBURGH CO. INDIANA	- promote healthy nutrition by decreasing cost of healthy foods relative to unhealthy foods - "Move*Ment" initiative will negotiate healthy vending options	$ 5.4 M	INDIANA STATE DEPARTMENT OF HEALTH	Hoosier Beverage Assn investigating
PUEBLO OF JEMEZ (TRIBE) , NM	- promote healthy food and beverage choices	$ 0.9 M	The Pueblo of Jemez Health and Human Services Department	
CHEROKEE NATION, OK	- Develop local media strategies to promote healthy food and beverage choices - Limit unhealthy beverage choices in schools - Implement menu labeling	$ 1 M	Cherokee Nation Health Service Group, OK	

January 3, 2011

STATE FORMULA GRANTS

CITY/COMMUNITY/STATE	PROJECT CONCERN	OBESITY GRANT AMT.	GRANT RECIPIENT	NEXT STEPS/INTEL
ARIZONA	- Focus on school cafeterias	?	Arizona Dept. of Health Services	AZ Beverage Assn investigating
NEW MEXICO	- Initial 20 school pilot program focusing on nutrition and physical activity - "Goal: Reduce childhood obesity rates and improve nutritional well-being of elementary school-age children by promoting and increasing availability of healthy and **limiting availability of unhealthy foods and beverages in public schools.**" - Media Objective: "Promote eating more fruits and veggies and **discourage soda consumption** by conducting the media campaign in schools"	$498K	New Mexico Dept. of Health	CCE (Luisa Casso) scheduling meeting with NM Sec. of Health

American Chemistry Council

January 18, 2011

The Honorable Darrell E. Issa
Chairman
Committee on Oversight and Government Reform
2157 Rayburn House Office Building
Washington, DC 20515

Dear Mr. Chairman:

I am writing in response to your December 8, 2010 letter regarding existing and proposed federal regulations that negatively impact the economy, the investment climate in the United States, and job creation and maintenance. You have raised a critical issue; one that is becoming more widely recognized as reflected by President Obama's comments in this morning's *Wall Street Journal* noting his interest in ensuring that regulations do not create an unreasonable burden on U.S. businesses.

The American Chemistry Council (ACC), representing America's chemical manufacturers, believes our ability as an industry to compete in a growing global market, drive innovation throughout the value chain, and preserve and create the high-skilled, high-paying domestic manufacturing jobs of the future is directly related to our ability as a nation to strike the right balance with respect to government regulation. We share your concern about the potential impact of recent and new regulatory proposals on the nascent economic recovery and American jobs. As an example, ACC has estimated that just one of the Environmental Protection Agency's proposed regulations -- for industrial boilers and heaters (the so-called "Boiler MACT" rules) – would jeopardize some 60,000 jobs and impose capital costs on the order of $3.8 billion in the chemical industry alone.

There are several recent regulations that deserve scrutiny because of their anticipated consequences, including the "Boiler MACT" rules mentioned above and EPA's rules regulating greenhouse gas emissions from stationary sources. But these individual rules should be viewed as symptoms of a larger problem that must be addressed in order to ensure more transparent, fully-informed and balanced rulemakings in the future.

Two serious root problems exist in the process used by federal regulatory agencies to develop and evaluate potential new regulations. First, the quality and scope of economic assessments to measure financial and employment impacts of proposed rules must be improved by ensuring that the costs of overlapping rules and economy-wide costs are measured. Second, regulatory agencies must establish clear standards for scientific data used to develop rules in order to ensure its objectivity and credibility.

We believe EPA's economic models and approach to evaluating scientific information are flawed and deserve examination by the committee. Addressing these two fundamental problems will help ensure that rules better reflect costs and benefits and will provide greater clarity about the true consequences of proposed regulations.

Federal agency assessments of the likely economic impacts of specific proposed rules are important determinants of the value of regulatory action. Unfortunately, the assessments vary widely in quality, and the assessment process itself is not entirely transparent. For example, the Department of Commerce has reportedly conducted an assessment of the potential job implications of EPA's proposed Boiler MACT rules that differs significantly from EPA's own assessment. Despite requests from then-Senator Carte Goodwin; Reps. Upton and Whitfield (attached); and Senators Snowe, Pryor, Vitter and Begich (attached), the Commerce Department's study has not been publicly released and therefore, we do not have a full picture of what the true impact of the rules is likely to be.

Not only does the administration's failure to make public the Commerce Department's study prevent affected industries and elected officials from understanding regulation's consequences, it also is in contradiction to its stated principles of transparency, another issue that we would encourage the Committee to examine. We note that EPA has asked the U.S. Court of Appeals for the District of Columbia Circuit for more time to review and assess the Boiler MACT rule, a review which we believe is warranted given the economic impacts and incomplete data upon which the proposal was based.

As the Committee is no doubt aware, Executive Order 12866 requires agencies to ensure that the benefits of major regulatory actions justify their costs. In addition, the Order specifically requires agencies to take into account the costs associated with cumulative regulations, although the typical agency cost and benefit assessment does not comport with this requirement. Executive Order 12866 also applies to significant policy and guidance documents that may have cost implications across the economy, according to a March 4, 2009 memorandum from Peter Orszag, then Director of the Office of Management and Budget. Yet in some cases, such as EPA's Dioxin Preliminary Remediation Goals, no impact assessment has been conducted.

A flawed economic model leads to flawed conclusions. For example, Administrator Jackson recently asserted that increased regulation will actually create jobs. As the representative of a highly regulated industry, I can tell you that the rules proposed by the Environmental Protection Agency in the past two years will put tens of thousands of high-paying manufacturing jobs at risk. Any economic model that comes to an alternative conclusion should be reexamined.

A similar concern exists with respect to chemical specific risk assessments and guidance documents that do not reflect the best available science – and which in turn may have significant economic and job impacts. In ACC's view, it is critical that the science relied on in agency risk-based decision-making comport with the highest standards of quality, reliability, and credibility.

To that end, we believe uniform criteria for the relevance, quality and reliability of data relied on by all federal agencies need to be established, so that irrespective of funding source or affiliation of investigators the government has a well-founded scientific basis for decisions. More importantly, there is a need for direction and guidance on assessing the overall weight of the scientific evidence, including a structured evaluative framework that can be broadly applied by government agencies and research institutions.

ACC would be happy to provide additional information related to both of these concerns. In the meantime, I have attached a copy of a 2009 report by Resources for the Future, "Reforming Regulatory Impact Analysis." This report outlines a number of improvements that might be considered to enhance the technical quality, relevance, and transparency of impact analyses. While ACC cannot endorse every recommendation made in the report, we believe it is a valuable assessment of a key analytical tool in the regulatory process – and perhaps a key starting point in the Committee's evaluation of regulatory impacts.

Thank you very much for your attention to this important issue.

Sincerely,

Cal Dooley

Cal Dooley

Attachments
cc: The Honorable Elijah E. Cummings

Congress of the United States

Washington, DC 20515

November 30, 2010

The Honorable Gary Locke
U.S. Department of Commerce
Herbert C. Hoover Building
1401 Constitution Ave., N.W.
Washington, D.C. 20230-0001

Dear Secretary Locke:

As you are probably already aware, the U.S. Environmental Protection Agency (EPA) is considering changes to the agency's proposed Maximum Available Control Technology (MACT) rules for boilers, with final rules expected by January 14, 2011. EPA received numerous public comments on the proposal as well as letters from 115 Members of Congress and more than 40 Senators concerned about potential harm to the economy and job creation. We are likewise concerned about the fragile state of the economy and how EPA's proposal could hinder recovery.

It is our understanding that the U.S. Department of Commerce has conducted an economic impact analysis of the Boiler MACT rule, including its impact on manufacturing and employment, but that despite the importance and relevance of the analysis, it has not been publicly released. The Commerce Department is to be commended for examining the economic impacts of EPA's rules, which helps fulfill its mission to "advance economic growth and jobs and opportunities for the American people." But in order to benefit from the study's findings, we request that the Commerce Department share them with Congress, other administrative agencies, and the American public.

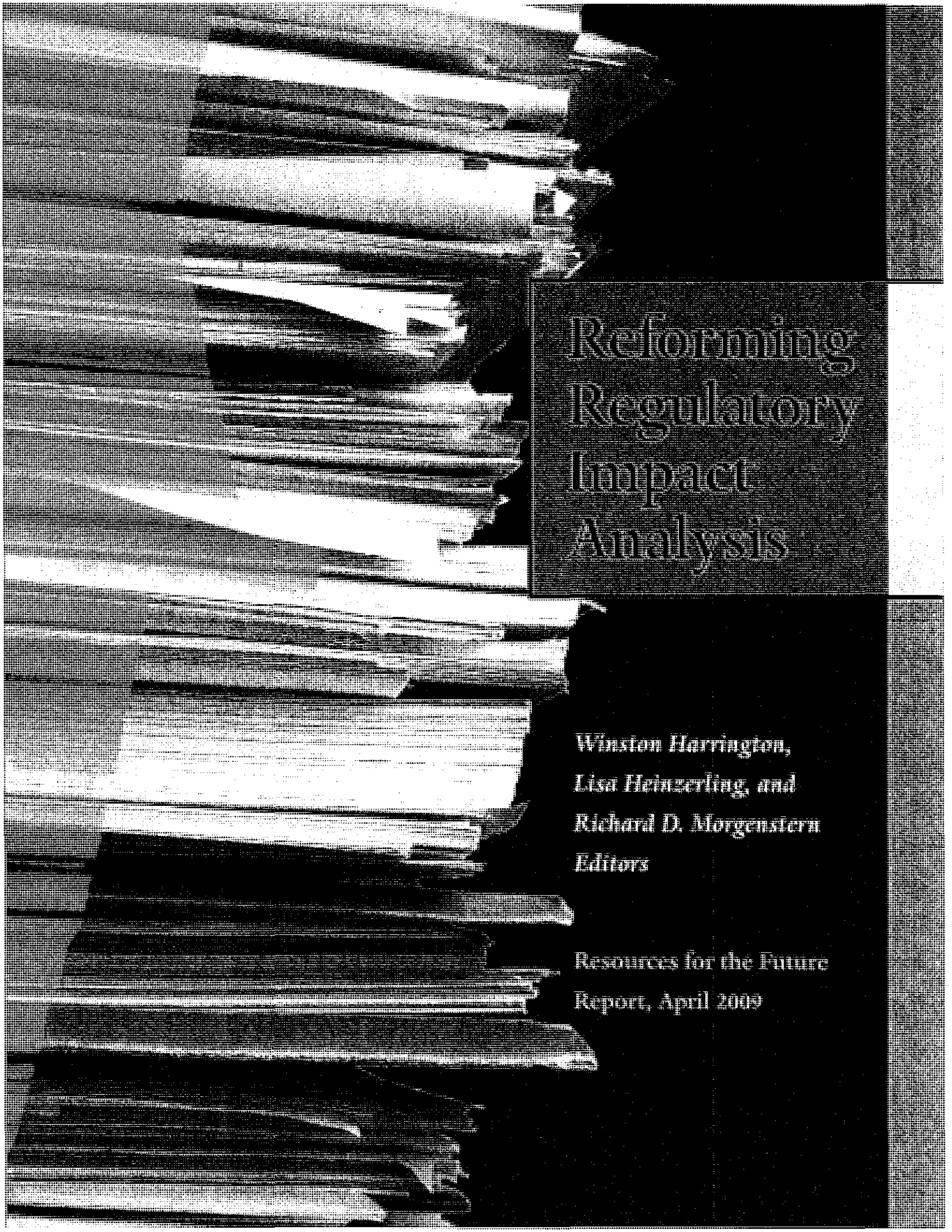
The Commerce Department's analysis may be especially important given the sharply contrasting results of other Boiler MACT studies to date. While EPA projected $9.5 billion in total capital costs, a study by IHS Global Insight on behalf of the Congress of Industrial Boiler Owners (CIBO) found capital costs of $20 billion. The CIBO study and one by the paper industry predicted the loss of hundreds of thousands of American manufacturing jobs. We are also troubled by comments from the U.S. Small Business Administration, which warned of "significant new regulatory costs" for "businesses, institutions and municipalities across the country." With interagency review slated to begin within days, time is short to understand any economic and jobs impacts from the Boiler MACT rule and make appropriate changes to the final regulations.

We request your assistance in ensuring the immediate release of the Department's Boiler MACT analysis to Congress and the public.

Sincerely,

Fred Upton
Member of Congress

Ed Whitfield
Member of Congress



Reforming Regulatory Impact Analysis

Winston Harrington, Lisa Heinzerling, and Richard D. Morgenstern
Editors

Resources for the Future
Report, April 2009

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ACRONYMS AND ABBREVIATIONS

ACI	activated carbon injection
ACS	American Cancer Society
ADHD	attention deficit hyperactivity disorder
AEC	Atomic Energy Commission
AEI	adverse environmental impacts
APA	Administrative Procedure Act
BPJ	best professional judgment
BPT	best practicable control technology currently available
BTA	best technology available
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CAMR	Clean Air Mercury Rule
CB	chronic bronchitis
CBA	cost–benefit analysis
CEA	cost-effectiveness analysis
CHPAC	Children's Health Protection Advisory Committee
CMAQ	Community Multiscale Air Quality
CO_2	carbon dioxide
COPD	chronic obstructive pulmonary disease
C-R	concentration-response
CWA	Clean Water Act
CWIS	cooling water intake structures
EBA	Economic and Benefits Analysis
EDF	Environmental Defense Fund
EGU	electric generating unit
EIA	Energy Information Administration
EIS	environmental impact statement
EO	executive order
EPA	Environmental Protection Agency
EPRI	Electric Power Research Institute
GAAP	Generally Accepted Accounting Principles
GDP	gross domestic product
HAP	hazardous air pollutant
Hg	mercury
HRC	habitat replacement cost
I&E	impingement and entrainment
ICD	International Classification of Diseases
IGEM	Intertemporal General Equilibrium Model
IPM	Integrated Planning Model
IQ	intelligence quotient
kg	kilogram(s)
L	liter
m^3	cubic meter
MACT	maximum achievable control technology
MAF	mean annual flow
mg	milligram(s)
MMAPS	Mercury Maps
MR	mental retardation
MRAD	minor restricted activity day
µg	microgram(s)
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHANES	National Health and Nutrition Examination Survey
NODA	notice of data availability
NO_x	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
NRC	National Research Council
NRDC	Natural Resources Defense Council
O&M	
OIRA	Office of Information and Regulatory Affairs
OMB	Office of Management and Budget
PM	particulate matter
$PM_{2.5}$	fine particulate matter
PRA	Paperwork Reduction Act
RA	Regional Analysis
RfD	reference dose
RFF	Resources for the Future
RIA	regulatory impact analysis
SAB	Science Advisory Board (of EPA)
SIP	state implementation plan
SO_2	sulfur dioxide
SO_x	sulfur oxides
TB	technology-based
TDD	Technical Development Document
TRUM	
TSD	Technical Support Document
USDA	U.S. Department of Agriculture
UVb	ultraviolet b
VSL	value of a statistical life
WLD	work loss day
WTA	willingness to accept
WTP	willingness to pay
YPR	yield-per-recruit

RESOURCES FOR THE FUTURE BOARD OF DIRECTORS

Resources for the Future
1616 P Street, NW
Washington, DC 20036–1400

Telephone: 202-328-5000
www.rff.org

Editors:
Elizabeth Stallman Brown
Felicia Day, RFF Managing Editor
Adrienne Foerster, RFF Assistant Editor

Design and production:
Meadows Design Office Inc., Washington, DC
www.mdomedia.com

Printed in the United States of America

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PREFACE

The federal rulemaking process will never be the subject of a great novel. While the ponderous analyses and complicated calculations involved in federal rulemaking spark great passion and controversy among a hardy band of scholars and analysts, most citizens have little reason to think about the regulatory processes that affect much of modern commerce. Only when rules impacting their daily lives make news does the public become engaged, especially if the outcomes are perceived as particularly egregious. When the Office of Management and Budget (OMB) announced that it would take into account the fact that life expectancies of older Americans were less than those of younger ones, and would assign lower values to the lives of seniors than those of the young, a major brouhaha followed. The so-called "senior discount" was promptly denounced by the very agency that had developed it. But most controversies over the underpinnings of regulations do not make such news.

Beyond the headlines, important matters of principle and substance are at stake. Two quite divergent groups of scholars find these matters important enough to fight about. One group believes that economic analyses are critical to sound regulatory decisionmaking. The other group questions both the premise that economic considerations should play a prominent role and the particular methods used to develop quantitative estimates of benefits and, to a lesser degree, of costs. Although federal regulators have relied on cost–benefit analyses of regulatory impact analyses (RIAs) for close to four decades, the practice has remained controversial from its inception in the 1970s.

The differences between the proponents and opponents of economic analysis are many and profound, but perhaps the most important are the contrasting attitudes about the value of environmental improvement. In one camp are those, mostly economists, who believe that environmental outcomes can, in principle, be valued just as market goods and services can: by finding what households are willing to pay to improve the quantity, quality, or their own access to the good in question. In the other camp are those who believe that simply asking the willingness-to-pay question lessens the environmental values at stake, and that the answers tend to leave important considerations entirely out of the decisionmaking calculus.

Over the continued and often passionate objections of the cost–benefit opponents, the RIA requirement has become firmly embedded in rulemaking procedures. For their part, the cost-benefit advocates, within both government and academia, have been content to expand the methods and improve the technical content of the analyses, largely ignoring the opponents.

Not surprisingly, much of the debate has been expressed in largely philosophical and rhetorical terms—from both sides. Largely absent has been a practical nuts and bolts approach to the problem, asking quite basic questions: What are current practices, and how can they be improved?

Successful collaborations usually involve individuals with complementary rather than competing ideas. From the very beginning, however, it was clear from the writings of these three editors that significant differences of opinion existed: Harrington and Morgenstern, both economists, were clearly supportive of cost–benefit analysis as an aid to decisionmaking. Heinzerling, a lawyer, has authored a number of critiques of the approach. Yet this report grew out of a belief that, if one assumed that cost–benefit analysis is here to stay, a middle ground could be found—and that if it could be explored, federal rulemaking would be the better for it. For the opponents, this offered an opportunity to identify and suggest changes to some aspects of RIAs. For the advocates, it offered a chance to explore those most objectionable aspects and perhaps sacrifice a little of the things they really care about in order to make the process more acceptable to its critics.

At the outset, we decided to focus on actual RIAs as case studies, and to avoid the philosophical issues as much as possible. We were fortunate to recruit respected scholars from both camps, individuals who had puzzled over the same issues and had some prior familiarity with the particular rules and RIAs being studied. We were also fortunate that these individuals shared our enthusiasm for the overall endeavor and, especially, for the idea of trying to bridge the gap between camps.

We owe many debts in this project, most notably to the chapter authors. We also acknowledge the important contributions of the designated peer reviewers (Frank Ackerman, Tufts University; James Hammitt, Harvard University; and William Pedersen, attorney at law), and to additional experts from the U.S. Environmental Protection Agency's air and policy offices and from OMB (Alexander Cristofaro, Arthur Fraas, Bryan Hubbell, Albert McGartland, and Sam Napolitano)—all of whom attended an authors workshop held at Resources for the Future in June 2008.

As editors, we take sole responsibility for the recommendations for reform contained in the last chapter of the volume. While our intellectual debts to the chapter authors and reviewers are large, they are not responsible in any way for the recommendations. We alone should be held accountable for the results. In this effort, we developed a total of fourteen individual recommendations upon which the three of us agreed. They cover five areas: technical quality of the analyses; relevance to the agency decisionmaking process; transparency of the analyses; treatment of new scientific findings; and balance in both the analyses and the associated processes, including the treatment of distributional consequences. While we make no claim of completeness of these recommendations, we see them as a concrete starting point for discussions about reform of the RIA process.

We owe a special debt of gratitude to our editors, Elizabeth Stallman Brown, Felicia Day, and Adrienne Foerster. Finally, we thank the Smith Richardson Foundation for financial support for the project. We especially appreciate the assistance of Mark Steinmeyer, our project officer, who early on saw both the promise and the peril of this project but persisted in his support and encouragement.

■ ■ ■

CHAPTER 1

Controversies Surrounding Regulatory Impact Analysis

WINSTON HARRINGTON, LISA HEINZERLING, AND RICHARD D. MORGENSTERN

The use of economic methods to evaluate the benefits and costs of new regulations in the areas of health and the environment has expanded dramatically over the past several decades in the United States and is now quite entrenched in the federal regulatory process. In 1981, one of the first actions of the Reagan administration was the issuance of an executive order (EO 12291) that required that "major" regulations—including those with an effect on the economy of $100 million or more—undergo a "regulatory impact analysis" (RIA). Thus, in most federal agencies, a major rule could not be proposed in the *Federal Register* until a cost–benefit analysis (CBA) had been prepared and submitted to the Office of Management and Budget (OMB) for review and approval. Executive orders by subsequent administrations, most notably President Clinton's EO 12866, put greater attention on ensuring an efficient OMB vetting process and a heightened focus on the nonquantitative consequences of major rules. Nevertheless, Clinton's executive order left in place the key components of regulatory benefit and cost estimation and OMB review. This order continues to govern regulatory review today.[1]

Most observers of the regulatory process expect that the outcome of the 2008 presidential election will not affect this general structure. Indeed, some time ago, law professor Cass Sunstein heralded the arrival of the "cost–benefit state" (Sunstein 2002). (Sunstein's views have become all the more important with his nomination to be head of the Office of Regulatory Affairs in the Obama administration.) More recently, New York University School of Law Dean Richard Revesz and attorney Michael Livermore declared that "[c]ost–benefit analysis is here to stay."[2]

At the same time, a growing chorus of scholars and activists have decried what they consider to be an excessive focus on economic analysis and economic efficiency in federal rulemaking. They have argued, for example, that the cost–benefit approach inappropriately values impacts on "priceless" species, habitats, and other important, difficult-to-quantify resources; that the discounting of future regulatory consequences, including human mortality, treats lives unequally and trivializes the future; and that gains and losses to the rich should not be treated the same as those to the poor (Ackerman and Heinzerling 2004). In 2002, leading advocates of alternative approaches to regulatory assessment launched the Center for Progressive Reform, dedicated to the support of regulatory action to protect health, safety, and the environment while "rejecting the conservative view that government's only function is to increase the economic efficiency of private markets."[3]

This report proceeds on two premises. The first is that the opponents of more stringent environmental regulation are not going to get everything they want, nor should they. Clearly, environ-

mental regulation is here to stay, and the American electorate will not tolerate a return to the bad old days when, for example, polluters were free to dump whatever noxious substances they wanted into the air or water.

The second premise is that few want to see a world where every potential environmental risk, no matter how small or fanciful, leads to a new and potentially onerous restriction on product use or manufacture or on corporate or individual behavior.

In sum, both advocates and skeptics of more stringent regulation have been guilty of overreaching in the past, and both sides have paid a price for it. Of course, it is too simplistic to suggest that one could find a happy medium of environmental protection. What is possible from a legislative and regulatory perspective shifts constantly depending on precedent, environmental incidents, the state of technology, the philosophy of the party or individuals in power, and other factors.

The principal focus of this report is not on the lively, and ongoing, philosophical debate between proponents and opponents of the approach as to whether the analytical technique of cost–benefit analysis is necessary, rational, and environmentally protective—or unhelpful, indeterminate, and immoral. Rather, for the purposes of this volume, we embrace the pragmatic view of Sunstein and Revesz that CBA is here to stay.

This volume brings together, for the very first time, distinguished scholars with diverse views in an effort to improve the workings of the basic structure of regulatory impact analysis that we now have. We have asked proponents of CBA to approach fundamental features of current economic analysis with a fresh and skeptical eye. We have asked opponents of CBA, for present purposes at least, to set aside their general objections and to offer constructive possibilities for adjustments to the method. Thus, although a central premise of the volume is that some type of formal economic analysis will be used to support major federal regulations, the design of that analysis and its proper role in the regulatory process are very much at issue.

Rather than considering these matters in the abstract, the report considers the appropriate use of CBA by examining actual RIAS. Case studies of the RIAS for three U.S. Environmental Protection Agency (EPA) rules provide the fodder for the reforms we ultimately propose. The rules are the Clean Air Interstate Rule (CAIR), the Clean Air Mercury Rule (CAMR), and the Cooling Water Intake Structure Rule (Phase II). The case studies help to clarify concrete differences between the sides in the cost–benefit debate and to suggest reforms to the current system for preparing and reviewing RIAS.

Overall, we seek to augment the often philosophical nature of the current debate with a quite pragmatic focus on actual regulatory analyses. We address a number of basic questions: Could particular changes to current practice improve the transparency of RIAS, enhance or modify their content, and increase the acceptability of the resulting studies? Even if the skeptics never fully embrace a cost–benefit framework, could it be made less objectionable?

This first chapter is designed to set the stage for the more detailed assessments that follow. We first present some essential background information on the role of CBA in the regulatory process and on the debates it has spawned. We briefly describe major contentions in this debate—not to answer them, but as part of our effort to improve the current process of regulatory analysis by understanding the perspectives of all sides. We then explain the process followed in engaging the multidisciplinary group of scholars involved in this study. Chapters 2–10 contain the detailed assessments of the three cases, including critiques of each RIA by proponents and opponents of CBA.

The final chapter is an attempt by the editors to seek some common ground on the preferred means of conducting regulatory analysis, including recommendations for improving both the content of RIAs and the process by which they are developed and reviewed.

This report comes at a particularly timely moment, as President Obama, on January 30, 2009, issued a memorandum directed to the heads of executive departments and agencies, asking for their views on how to improve the process of regulatory review. The memorandum directs the head of OMB, "in consultation with representatives of regulatory agencies, to produce within 100 days a set of recommendations for a new Executive Order on regulatory review." The memorandum invites particular attention to "the role of distributional considerations, fairness, and concern for the interests of future generations," and to "the role of the behavioral sciences in formulating regulatory policy."

Background

How CBA Fits into the Regulatory Process

CBA can play several different roles in the regulatory process. First, one environmental law—the Safe Drinking Water Act Amendments of 1996—explicitly calls for formal CBA in deciding on the scope of regulation under the statute. Clearly, under this law, CBA conducted pursuant to the process of regulatory review aligns with the kind of analysis called for by the statute.

Second, quite a large number of health and environmental laws, such as the Toxic Substances Control Act and the Federal Insecticide, Fungicide, and Rodenticide Act, require agencies to conduct a generalized balancing of costs and benefits in coming to their decisions. Here, too, CBA arguably fits comfortably within the statutory framework.

Third, some statutes either dictate a precise regulatory result or forbid altogether the application of CBA in choosing a regulatory approach. In these cases, CBA is not in part of the statutory framework. All versions of the executive orders on regulatory review have provided that, where the law and CBA conflict, the law prevails. Thus, for example, where Congress dictates that a particular performance level must be achieved by regulated sources or rules out the use of CBA in regulatory decisionmaking, congressional directives—rather than the dictates of CB —prevail.

Even in the latter case, proponents of CBA argue that this approach can play a useful role in informing political leaders and the public about the consequences—good and bad—of regulatory decisions. This discussion demonstrates, however, that from the very outset, there may be quite different expectations regarding the analysis conducted pursuant to statutory directives and that undertaken pursuant to the executive orders on CBA. That mismatch can sometimes create legal conflict.

CBA: The Pros

To its proponents, the paramount advantages of a well-done CBA are twofold. First, it forces regulatory designers to think about quantification (that is, the physical effects of regulations they propose) on public health, environmental quality, ecosystem health, and a host of other potentially relevant outcomes. Second, it forces serious consideration of whether and how much those changes matter, and it does so in a particular way. CBA attempts to express the value of those phys-

ical changes using, as a metric, a monetary measure of the aggregate change in individual well-being resulting from a policy decision. Individual welfare is assumed to depend on the satisfaction of individual preferences, and monetary measures of welfare change are derived by observing how much individuals are willing to pay or give up in terms of other consumption opportunities. This approach can be applied to nonmarket "public goods" such as environmental quality or environmental risk reduction as well as to market goods and services, although the measurement of nonmarket values is more challenging. When measurement of such nonmarket values is impossible or in some way unacceptable, analysts may resort to cost-effectiveness analysis (CEA), a less ambitious approach in which a policy outcome (for example, a specified reduction in ambient pollution concentration) is taken as a given, and the analysis seeks to identify the least-cost means for achieving the goal, taking into account any ancillary benefits of alternative actions. Every CBA has at least one CEA buried inside.

In addition, the advantages of CBA (and CEA) include the following:

- transparency and the resulting potential for engendering accountability;
- the provision of a framework for consistent data collection and the identification of gaps and uncertainty in knowledge;
- the development of metrics for both the beneficial and adverse consequences of alternative regulatory approaches, allowing those alternatives to be compared to one another; and
- with the use of a monetary metric, the ability to aggregate dissimilar effects (such as those on health, visibility, and crops) into one measure of net benefits.

Most economists would acknowledge that CBA does not incorporate all factors that can and should influence judgments on the social worth of a policy and that individual preference satisfaction is not the only criterion. Nevertheless, most would also argue that rigorous CBA can elucidate for a broader audience how various regulatory choices are supposed to work and who is likely to be affected. At a minimum, then, it can play a useful informational role in the decisionmaking process. CBA also makes a moral argument that private economic activity, as well as regulation, can generate value, and hence that good public policymaking is a balancing process.

From an economist's perspective, the usefulness of CBA is primarily limited by the ability to quantify the effects of regulations and to measure people's willingness to pay for those different health and environmental outcomes. Fortunately, the state of the science of measuring such economic values is quite active. Estimates of the willingness to pay for reductions in mortality and morbidity risks, for avoiding environmental damage to recreation opportunities, and for avoiding visibility degradation are the subjects of much ongoing research. Issues of a higher order stalk the estimation of nonuse values, and a variety of mostly empirical concerns have left material damage poorly understood. Often, estimation of the costs of reducing environmental effects, generally thought to be relatively straightforward, can be as challenging as estimation of the benefits.

The RIAs in which the CBAs are embedded have also undergone considerable changes because so many have been subjected to critical scrutiny, including internal agency and OMB reviews prior to publication of regulatory proposals, commentary from stakeholders, and, in many cases, review by the courts. Nearly 30 years of experience has led to an informal list of best practices—

characteristics and components that, according to various commentators, belong in most if not all RIAs. These include the following:

- the use of clear and consistent baseline assumptions;
- the evaluation of an appropriately broad range of policy options, including alternatives to new regulation;
- transparency in the use of assumptions, data and models, the comparison of alternatives, and the reporting of results;
- appropriate treatment of discounting future benefits and costs and accounting for the cost of risk-bearing;
- the use of probabilistic analyses and other methods to explore the robustness of conclusions;
- the identification of nonmonetizable or nonquantifiable aspects of a policy and the potential incidence of all effects; and
- the use of benefit and cost measures that are grounded in economic theory (measures of willingness to pay and opportunity cost).

Not surprisingly, in practice many RIAs do not contain all these elements. The reasons for the omissions vary: sometimes general resource limitations may be to blame, in other cases the omissions may be more strategic. Overall, the sophistication of RIAs appears to have increased over time. In part, this tracks with the growth in the field of environmental economics. Yet one unfortunate result of this growing sophistication is that RIAs have become much longer and more technically oriented documents, leading perhaps to a certain sacrifice in transparency.

CBA: The Cons

To its critics, CBA is a flawed technique that, among other things, excessively emphasizes the quantification and monetization of risks, trivializes the future through discounting, fails to meaningfully assess the value of avoiding nonmarginal consequences (including environmental catastrophe), and ignores distributional concerns.

Quantification

In many cases, it is currently impossible to quantify all of the important benefits of an environmental regulation. Indeed, it is often impossible to quantify even a substantial portion of them. When the quantified benefits of a rule include only cancer cases averted, yet the rule will also prevent many other illnesses as well as adverse effects on ecosystems, a CBA of that rule will be woefully incomplete (*see* Heinzerling 1998).

Monetization

Even cost–benefit proponents concede that there are no good estimates of the monetary value of many of the benefits of environmental regulation, including the avoidance of many kinds of illnesses and other adverse health conditions and the prevention of harms to species and ecosystems. Where no good estimates of value exist, the benefits will not count for very much in CBA. Even where cost–benefit analysts believe that the estimates are pretty good, cost–benefit critics often disagree.

The value of preventing death is a prime example. It has become standard to measure the health risk reductions associated with proposed regulations as statistical lives. If the risk of dying from a particular cause is reduced by one in one million for one million people, it is said that the regulation would save one statistical life. To measure the value of this statistical life, cost–benefit analysts ask how much individuals are willing to pay to avoid—or how much they are willing to accept to take on—the extra risk of one in one million. If, say, everyone is willing to pay $1 to avoid this risk, then the analysts would say that the value of the statistical life in this case is $1,000,000.

This analysis has many problems, according to cost–benefit critics. Here we cite three. First, in inventing the statistical life, cost–benefit analysts have not escaped the fundamental moral conundrum of valuing life itself; they have merely glossed over it. When a person dies as a result of environmental contamination, she really dies: a real life, not a statistical one, is lost. CBA ignores this fundamental fact.

Second, in assuming that willingness to pay is the measure of value, CBA takes as a given that decisions made in private economic markets will be the same as decisions made by individuals acting as public citizens. But, for many reasons, these settings might produce different decisions, not least among them the fact that in environmental matters, the problem of public goods will press individuals acting alone to devote few or no resources to cleaning up a problem.

Third, valuing life—or health—according to how much people are willing to pay for it invites inequality. Some cost–benefit proponents have advocated, for example, that the rich should be valued more highly than the poor—a position at which many among us would flinch but which is perfectly consistent with the underlying theory of willingness to pay. And, indeed, we see glimmers of this approach in recent EPA analyses. In a preliminary assessment of the social costs of carbon, EPA relied on an estimate that embedded wildly differential values for the lives of people in rich and poor countries. Equally troubling are EPA's fitful efforts to reduce the value of the elderly compared to that of younger people.

Discounting

Much of environmental law aims to protect the future—to protect people living now from illnesses that might befall them in the future, to protect future people from such events, and to preserve ecosystems so that future generations might use and enjoy them much as we do now. Although discounting does account for the costs to present generations of providing these protections, opponents of CBA believe that discounting is not consistent with environmental law's forward-looking premise because the standard technique of constant exponential discounting can have a potentially large adverse effect on the perceived benefits of policies—such as policies to address climate change or policies to protect against long-latency diseases like cancer—that aim to prevent future harms.

Uncertainty

Although the studies increasingly emphasize the incorporation of uncertainty, CBA often assumes stable problems with stable solutions. It works at the margins, but not when the margin is a cliff's edge. Many environmental problems—perhaps the most important example is climate change—involve great uncertainties and potential irreversibility, features ill-suited to the cost–benefit framework.

Distribution

As implied in the above discussion of the value of life, opponents of CBA believe that the willingness to pay criterion has an inherent inequity. There is no corrective to this problem in CBA as it is currently conducted, and indeed CBA is largely blind to the distributional implications of environmental degradation. The kinds of concerns stated above have led numerous cost–benefit critics to call for abandonment of the method—ending it rather than mending it. However, this report assumes that CBA is here to stay. Thus, we focus on the reform rather than the rejection of the approach. Specifically, we aim to improve the cost–benefit method, as currently applied by EPA, without fully engaging the larger debate over whether it is fundamentally flawed. Yet, as we shall see, some of the more fundamental criticisms of the method turn out to be helpful in recommending ways in which current practices might be improved.

Analysis versus Decisionmaking

Throughout this volume, it is useful to distinguish between the analytical and decisionmaking components of rulemaking. Although the two are closely related, they are not one and the same. In fact, some of the differences between the two components were clarified in EO 12866. Specifically, EO 12866 replaced the stipulation contained in EO 12291 that benefits "outweigh" costs with a requirement for "a reasoned determination that the benefits...justify the costs." Further, agencies were mandated to "include both quantifiable measures...and qualitative measures of costs and benefits" and "to select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity) unless a statute requires another regulatory approach."[4] In effect, EO 12866 embraces social welfare considerations that may not be easily quantified, such as public health and distributional impacts, and rejects the idea that quantified CBA provides a rigid rule for decisionmaking.

Thus, EO 12866 is consistent with the views of most economists, who see CBA as a tool rather than a strict rule for decisionmaking. As Nobel Laureate Kenneth Arrow and others have written:

> *...[In] many cases, benefit–cost analysis cannot be used to prove that the economic benefits of a decision will exceed or fall short of the costs.... [But it] can provide illuminating evidence for a decision, even if precision cannot be achieved because of limitations on time, resources, or the availability of information. (Arrow et al. 1996, 5)*

Arrow et al. (1996) also note that agencies may want to consider other factors in their decisions, such as equity within and across generations, or they may want to place greater weight on particular characteristics of a decision, such as irreversible consequences. They recommend that when the expected costs of regulations far exceed expected benefits, agency heads should be required to present a clear explanation justifying the reasons for their decisions.

Critics of CBA are concerned that even this attenuated process places too much emphasis on CBA and, more generally, on economic efficiency in the decisionmaking process. Despite the language of EO 12866, they also fear that, in its review of new rules, OMB continues to apply the more rigid criteria of EO 12291, namely that benefits outweigh costs.

The true influence of RIAs on regulatory outcomes is not well understood. Indeed, it may be that some of the regulatory "successes" of CBA would have reached a similar outcome even if no CBA had ever been prepared.

Interestingly, the direct effect of a CBA on the regulatory outcome is not the only, and may not be its most important, influence on the regulatory process. Twenty years ago, an EPA report (EPA 1987) listed four specific areas—besides supporting regulatory decisions—where the RIA influenced the development of regulations:

- guiding the development of the regulation;
- adding new alternatives;
- eliminating noncost-effective alternatives; and
- adjusting alternatives to account for differences among industries or industry segments.

The RIA requirement also has been credited with making upper management at EPA and other regulatory agencies more aware of the implications of their decisions.

Our Process

For each of the three RIAs examined in this volume, the first task was to produce a coherent and readable description of the analysis that was conducted by EPA. We assigned this task to two of the volume editors (Harrington and Morgenstern), and to a former Resources for the Future (RFF) colleague who has joined the staff of EPA's Policy Office (David Evans). The assignment for these three authors was to faithfully report the content of the RIA, including the stated justification for the rule; to digest and summarize its technical complexities; and, where appropriate, to highlight potentially controversial issues. However, the authors of these chapters were asked not to take a stand on any of the controversies. Rather, their role is largely reportorial in nature.

The second task, for three scholars on each side of the cost–benefit debate, was to review the RIAs, critique them, and explore what complementary or substitute analyses could have been included. The three authors skeptical of CBA (all law professors) are: Douglas Kysar, Yale Law School; Catherine O'Neill, Seattle University Law School; and Wendy Wagner, University of Texas Law School. The three authors favoring CBA (all economists) are: Nathaniel Keohane, originally Yale University, now Environmental Defense Fund; Alan Krupnick, RFF; and Scott Farrow, University of Maryland. Purposely, we did not specify a precise format for the critiques. The resulting papers cover a wide-ranging set of issues, with the economists generally focusing more on the techniques used in the individual RIAs, and the lawyers often including broader philosophical critiques of CBA.

A small authors workshop was convened in June 2008 at RFF in Washington, DC, to review the papers and consider possible reforms of both the analytical facets of CBA and the process for doing and using this type of analysis. Workshop participants included the paper authors, designated peer reviewers (Frank Ackerman, Tufts University; James Hammitt, Harvard University; and William Pedersen, attorney at law), and selected additional experts from EPA's air and policy offices and from OMB: Alexander Cristofaro, Arthur Fraas, Bryan Hubbell, Albert McGartland, and Sam Napolitano.

Following the workshop, the authors exchanged drafts and had the opportunity to revise their papers on the basis of workshop comments, with the overall goal of ensuring relatively parallel coverage of topics.

Case Study Selection

We make no claim that the RIAs studied in this volume are representative of the 100-plus such analyses prepared by EPA since 1981. However, the regulations selected for inclusion in this project involve issues that are clearly relevant to examining CBA in operation; for example, the valuation of statistical lives, the monetization of ecological and other types of difficult-to-measure benefits, the discounting of future consequences, and the distribution of costs and benefits. All three cases are based on relatively recent rules, thereby ensuring that they reflect current practices in RIA development at EPA. Two of the three rules involve air pollution and one addresses water bodies. The fact that all focus on the electric utility industry is somewhat accidental and certainly not part of any grand design. Arguably, however, an RIA focused on this industry, which has been subject to environmental controls since even before the days of national regulation, is probably among the most sophisticated, thus revealing some of the "best" practices for RIAs. The fact that all three rules have been invalidated by the courts was clearly not part of our design. A description of the three rules follows:

1. The CAIR, issued by EPA in March 2005, aimed at considerable reductions in emissions of sulfur dioxide (SO_2) and nitrogen oxides (NO_x) in the eastern United States. EPA expected that, by 2015, SO_2 emissions would decline by 70 percent from 2003 levels, whereas NO_x emissions would fall by 60 percent. Although the RIA demonstrated that the monetized benefits of the rule—largely in the form of reduced human mortality—exceeded the costs by a considerable margin, thus providing solid justification for the rule, critics contend that the agency's own analysis would have supported even larger emissions reductions with earlier compliance deadlines. Key issues involve both the interpretation and the use of the RIA. The U.S. Court of Appeals in Washington, DC, rejected the CAIR in its entirety, concluding, among other things, that the regional trading program created by the rule paid inadequate attention to the state-specific focus of the relevant statutory provisions.

2. The CAMR, also issued by EPA in March 2005, was designed to reduce mercury emissions from power plants. Although interim emissions reductions of 20 percent from 2003 levels were expected from the installation of controls required under the CAIR, the CAMR itself was expected to result in further reductions in mercury amounting to almost 70 percent reductions by the year 2018. Critics contend that the agency's own analysis supported earlier and deeper cuts of these toxic emissions. Further, they expressed concern that the provision for emissions trading could lead to unacceptably high exposure levels for individuals in certain areas. The U.S. Court of Appeals in Washington, DC, also invalidated this rule, reasoning that EPA had failed to follow proper procedures in taking mercury off the list of pollutants to be regulated under a provision of the Clean Air Act requiring strict technology-based controls for regulated sources.

3. The Cooling Water Intake Structures Rule (Phase II), issued by EPA in June 2006, was designed to minimize the harmful impacts on aquatic life caused by cooling water intake structures at existing power plants. The rule set performance standards (rather than technology requirements) for these plants and also allowed plants to avoid these requirements either through restoration measures or through a site-specific CBA indicating that the costs of meeting the standards were not worth the benefits at a specific plant. EPA's stated reason for the content of its rule was that the CBA did not support a more stringent approach. Critics contend that the agency's RIA failed to

adequately account for certain ecological damages and so understated the net benefits to be achieved from further controls. The U.S. Court of Appeals in New York invalidated the rule, finding that the relevant provision of the Clean Water Act did not permit CBA. The U.S. Supreme Court agreed to hear the case in its 2008–2009 term.

The case studies of these three rules form the backbone of our work, which is to recommend changes, both substantive and procedural, to improve the process of regulatory review.

■ ■ ■

Notes

1. In March 2007 President Bush issued EO 13422, which expanded OMB's jurisdiction to include the review of guidance documents issued by federal agencies. It also required that regulatory agencies provide a written rationale for new regulations and estimates of aggregate annual costs and benefits of all regulatory activities in the agencies' plans. President Obama rescinded EO 13422 on February 4, 2009.

2. Revesz and Livermore 2006, page 11.

3. Center for Progressive Reform (n.d.)

4. EO 12866 1(a), 3 CFR at 638–39 (1995).

References

Ackerman, F., and L. Heinzerling. 2004. *Priceless: On Knowing the Price of Everything and the Value of Nothing.* New York: The New Press.

Arrow, Kenneth, M. Cropper, G. Eads, R. Hahn, L. Lave, R. Noll, P. Portney, M. Russell, R. Schmalensee, K. Smith and R. Stavins. 1996. "Is There a Role for Benefit-Cost Analysis in Environmental, Health, and Safety Regulation?" *Science,* 272:5259 (April 12), pp 221–222.

Center for Progressive Reform (n.d.), www.progressiveregulation.org.

U.S. Environmental Protection Agency (EPA). 1987. *EPA's Use of Benefit–Cost Analysis, 1981–1986.* USEPA-230-05-87-028. Washington, DC: U.S. EPA.

Heinzerling, L. 1998. Regulatory Costs of Mythic Proportions. *Yale Law Journal* 107: 1981–2070.

Revesz, R.L., and M.A. Livermore. 2008. *Retaking Rationality: How Cost–Benefit Analysis Can Better Protect the Environment and Our Health.* New York: Oxford University Press.

Sunstein, C.R. 2002. *The Cost-Benefit State: The Future of Regulatory Protection,* The American Bar Association (Section of Administrative Law and Regulatory Practice), Chicago.

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CHAPTER 2

The Clean Air Interstate Rule

RICHARD D. MORGENSTERN

The Clean Air Interstate Rule (CAIR), promulgated by the U.S. Environmental Protection Agency (EPA) in March 2005, mandates reductions in power plant emissions of sulfur dioxide (SO_2) and nitrogen oxides (NO_x) in the eastern United States by 70 percent and 60 percent, respectively, by 2015, with interim reduction targets in 2010. The accompanying regulatory impact analysis (RIA) estimates that the quantified benefits of the CAIR will exceed the quantified costs by $80–100 billion in 2015, with most of the benefits in the form of reduced mortality and improvements in respiratory and cardiovascular health for adults and children. A closely related but distinct action, the Clean Air Mercury Rule (CAMR), mandates that coal-fired electric utilities reduce their emissions of mercury (Hg). Together, the CAIR and the CAMR create a multipollutant strategy to reduce emissions that closely resembles an unsuccessful legislative initiative by the Bush administration known as Clear Skies.

Using an updated version of an analytical framework employed in prior rulemakings, the RIA contrasts a baseline scenario reflecting expected economic and environmental conditions without the CAIR to one anticipated with the rule in place. The SO_2 baseline, for example, reflects the emissions allowed under the current Title IV Acid Rain Trading Program in addition to existing state regulations. The differences between the two economic and environmental scenarios are measures of the costs and benefits, respectively. Of course, these scenarios are underpinned by a complex set of technical and policy judgments involving emissions inventories, air quality modeling, dose–response functions, monetization of benefits, cost estimation, and other elements of the analysis. One very basic judgment concerns the nature and stringency of the options considered in the RIA. Although standard practice calls for the consideration of multiple options, in this case only a single alternative was examined in addition to the status quo. Other judgments involve the extent and type of sensitivity and uncertainty analyses conducted to reasonably portray the uncertainties inherent in the analysis.

Whereas the two subsequent chapters in this volume critique the analytical approach followed by EPA, the aim of this chapter is to consider, in summary form, the RIA developed by the agency and to highlight some of the strategic choices made in the analysis. The organization of this chapter is similar to that of the 400-plus-page RIA itself. Following this brief introduction, the next section presents essential background information used to develop the RIA, including summary data on the emissions and air quality impacts. The following section focuses on the assessment of both physical and monetized benefits and summarizes the qualitative analysis of

nonmonetized benefits conducted by the agency. Finally, the last section presents the cost analysis along with the overall assessment of the net benefits of the CAIR, including the uncertainties.

Background

History

Beginning in the mid-1990s, EPA staff began considering options to simplify and rationalize some of the increasingly complex requirements imposed on regulated entities under the Clean Air Act (CAA). Reflecting its size and overall contribution to emissions, the initial focus was on the electric utility industry. Although internal agency discussions were motivated in part by longstanding industry complaints about the burdens of new source performance standards and certain other requirements, these discussions were driven primarily by the recognition that a new round of emissions reductions was on the horizon.

During 1997 and 1998, EPA promulgated new, more stringent National Ambient Air Quality Standards (NAAQS) for particulate matter (PM) and ozone, reflecting the growing evidence regarding health damages associated with these pollutants. Around the same time, the Clinton administration embraced the Kyoto Protocol, which, if submitted to and ratified by the U.S. Senate, would have mandated regulation of carbon dioxide (CO_2) and other greenhouse gases. Overall, about one-third of U.S. CO_2 emissions come from the electric utility sector.

When the Bush administration took office in 2001, calls for reform of the system increased while the interest in imposing mandatory CO_2 controls diminished. Early on, the administration indicated its desire to pull back from the Kyoto Protocol and, for all practical purposes, any other policies involving mandatory CO_2 controls. At the same time, the push for more stringent regulations of SO_2 and NO_x was strengthened by a series of court decisions that supported the agency's new ambient standards promulgated a few years earlier. Concurrent with these developments, the scandals at Enron and other energy-related corporations created additional hurdles for financing new investments in the electric utility industry.

On September 11, 2001, the Bush administration unveiled a straw proposal for reform of environmental regulation of the industry while at the same time achieving significant emissions reductions of sulfur oxides (SO_x), NO_x, and Hg—the so-called 3P approach. Although not a formal legislative initiative, the straw proposal was accompanied by extensive economic and environmental analyses. In many respects, these analyses resembled the RIA that ultimately accompanied the proposed CAIR issued in 2003 when the administration abandoned its legislative strategy and, instead, embraced a regulatory approach.

From 2001 to 2003, extensive public discussion and analysis of the issues raised in the straw legislative proposal took place. Should CO_2 be included in the new program? Should Hg be included? Should the reform elements be explicitly linked to the new round of emissions reductions? Should the program be national or only regional in scope? How large should the reductions be for the different pollutants, and how quickly should they occur? How would different states and different industries be affected by the program?

Rather than addressing the half dozen or more legislative proposals introduced in the Senate during the 2001 to 2003 period—all of which form the backdrop to the CAIR and the CAMR—I focus instead on the regulations themselves. Consistent with the administration's legislative pro-

posal, the regulations do not cover CO_2; rather, they focus exclusively on SO_x, NO_x, and Hg. In contrast to the legislative approach, however, the regulations decouple the reform and emissions reduction elements, and move away from a national program to a regional one. At the same time, the CAIR and the CAMR do represent a commitment to a major new round of emissions reductions that, in turn, involve decisions about the amount and timing of reductions to be achieved for the pollutants. These issues are considered in detail in the RIA and, ultimately, form the central elements of the regulatory decision.

The CAIR

Legal authority for the CAIR derives primarily from Section 110(a)(2)(D) of the CAA, which requires upwind states to control emissions that contribute significantly to downwind nonattainment of the NAAQS. States are required to submit plans to EPA within three years of issuance of revised NAAQS. Among other requirements, these plans must address emissions in the state that contribute significantly to nonattainment downwind.

The CAIR finds that 28 states and the District of Columbia contribute significantly to nonattainment or interfere with maintenance of the NAAQS for fine PM ($PM_{2.5}$) and/or eight-hour ozone in downwind states. Thus, EPA requires these upwind states to revise their state implementation plans (SIPS) to include control measures to reduce emissions of SO_2 and NO_x, which, in turn, will assist the downwind $PM_{2.5}$ and eight-hour ozone nonattainment areas in achieving the NAAQS. In the RIA, EPA argues that this will allow attainment to be achieved in a more equitable, cost-effective manner than if each nonattainment area attempted to achieve attainment by implementing local emissions reductions alone.

Technically, the CAIR does not directly regulate emissions sources. Instead, it requires states to revise their SIPS to include control measures to reduce emissions of NO_x and SO_2. The emissions reduction requirements that would be assigned to the states are based on controls that EPA has modeled as cost-effective for electric generating units, the largest source categories for both SO_2 and NO_x. The CAIR would affect roughly 3,000 fossil fuel–fired units with a nameplate capacity greater than 25 megawatts. Nationwide, these sources accounted for roughly two-thirds of the SO_2 emissions and more than 20 percent of the NO_x emissions in 2003.

A key decision involves the identification of specific policy options to consider in the analysis. In the RIA, EPA argues that the decision to model a specific emissions cap-and-trade program phased in over time—beginning with SO_2 and NO_x caps in 2010 and lowering these emissions caps in 2015—was made based on the time points at which control actions would be needed to help the states in terms of their NAAQS attainment efforts, the feasibility of installing emissions controls, and other factors. The RIA refers to studies conducted by the agency concerning the technical feasibility of producing and installing large amounts of pollution control equipment in a short timeframe. Although the RIA argues that specific caps chosen were derived by determining the amount of SO_2 and NO_x emissions that can be cost-effectively controlled from electric generating units, it is silent on whether the policy option selected actually maximizes net benefits.

The RIA consists of four distinct modeling efforts:

- calculation of the costs and related impacts of the CAIR on electricity generating units assuming a cap-and-trade program based on the national inventory of precursors to PM, specifically NO_x and SO_2;

- air quality modeling for 2010 and 2015 to determine changes in ambient concentrations of ozone and PM, reflecting baseline and postcontrol emissions inventories;
- a benefits analysis to determine the changes in human health and welfare, in terms of both physical effects and monetary value, that result from the projected changes in ambient concentrations of the key pollutants; and
- an uncertainty analysis reflecting data gaps, variability in estimated epidemiological and other relationships, projection errors for population and economic growth, and model misspecifications.

A wide range of human health and welfare effects are linked to the emissions of NO_x and SO_2 and the resulting impact on ambient concentrations of ozone and PM. Potential human health effects associated with $PM_{2.5}$ range from premature mortality to cardiovascular-related symptoms, asthma, and other morbidity effects associated with long-term (chronic) and shorter-term (acute) exposures. Exposure to ozone has also been linked to a variety of respiratory effects, including hospital admissions and illnesses resulting in work and school absences. Although not included in the primary calculation of monetized benefits, the RIA notes that recent research has linked short-term ambient ozone exposure to premature mortality. Welfare effects potentially tied to PM and ozone include materials damage, visibility impacts, and reduced yields of crops and forests. Some of these effects are quantified in the RIA.

The RIA lays out a number of important caveats applicable to the analysis:

- Reductions in ambient concentrations of air pollution generally lower the risk of future adverse health effects by a fairly small amount for a large population.
- The appropriate economic measure is willingness to pay (WTP) for changes in risk prior to the regulation.
- Adoption of WTP as the measure of value implies that the value of environmental quality improvements depends on the individual preferences of the affected population and assumes that the existing distribution of income is appropriate.
- For some health effects for which WTP measures are not available (e.g., hospital admissions), the cost of treating or mitigating the effect is used as the measure of benefits.
- In the absence of direct measurement, three nonmarket methods are used to value endpoints: stated preference or contingent valuation, indirect market (e.g., hedonic wage), and avoided cost methods.
- Benefits transfer, the adaptation of research from similar contexts to estimate benefits for the issues at hand, is widely used in the RIA.
- To account for the effect of future changes in real income on WTP, the estimated health benefits are adjusted upward using category-specific estimates of the income elasticity of demand for the different benefit categories. None of these elasticity estimates is above one.

The RIA recognizes various types of uncertainties in the benefits assessment for PM as well as other endpoints concerning impact functions, PM mortality risk, baseline incidence rates, economic valuation, and the aggregation of monetized benefits. These are displayed in Table 2.1. Some of these uncertainties are explored in the formal uncertainty analysis conducted by the

Table 2.1
Primary Sources of Uncertainty in the Benefits Analysis

Source: *EPA Table 4-5, p. 4-21.*

1. *Uncertainties associated with impact functions*

- The value of the ozone or PM effect estimate in each impact function.
- Application of a single impact function to pollutant changes and populations in all locations.
- Similarity of future-year impact functions to current impact functions.
- Correct functional form of each impact function.
- Extrapolation of effect estimates beyond the range of ozone or PM concentrations observed in the source epidemiological study.
- Application of impact functions only to those subpopulations matching the original study population.

2. *Uncertainties associated with ozone and PM concentrations*

- Responsiveness of the models to changes in precursor emissions resulting from the control policy.
- Projections of future levels of precursor emissions, especially ammonia and crustal materials.
- Model chemistry for the formation of ambient nitrate concentrations.
- Lack of ozone monitors in rural areas requires extrapolation of observed ozone data from urban to rural areas.
- Use of separate air quality models for ozone and PM does not allow for a fully integrated analysis of pollutants and their interactions.
- Full ozone season air quality distributions are extrapolated from a limited number of simulation days.
- Comparison of model predictions of particulate nitrate with observed rural monitored nitrate levels indicates that the Regional Modeling System for Aerosols and Deposition, or REMSAD, overpredicts nitrate in some parts of the eastern United States.

3. *Uncertainties associated with PM mortality risk*

- Limited scientific literature supporting a direct biological mechanism for observed epidemiological evidence.
- Direct causal agents within the complex mixture of PM have not been identified.
- The extent to which adverse health effects are associated with low-level exposures that occur many times during the year versus peak exposures.
- The extent to which effects reported in the long-term exposure studies are associated with historically higher levels of PM rather than the levels occurring during the period of study.
- Reliability of the limited ambient $PM_{2.5}$ monitoring data in reflecting actual $PM_{2.5}$ exposures.

4. *Uncertainties associated with possible lagged effects*

- The portion of the PM-related long-term exposure mortality effects associated with changes in annual PM levels that would occur in a single year is uncertain, as is the portion that might occur in subsequent years.

5. Uncertainties associated with baseline incidence rates

- Some baseline incidence rates (e.g., those taken from studies) are not location specific and therefore may not accurately represent the actual location-specific rates.
- Current baseline incidence rates may not approximate well the baseline incidence rates in 2015.
- Projected population and demographics may not represent well the future-year population and demographics.

6. Uncertainties associated with economic valuation

- Unit dollar values associated with health and welfare endpoints are only estimates of mean WTP and therefore have uncertainty surrounding them.
- Mean WTP (in constant dollars) for each type of risk reduction may differ from current estimates because of differences in income or other factors.

7. Uncertainties associated with aggregation of monetized benefits

- Health and welfare benefits estimates are limited to the available impact functions. Thus, unquantified or nonmonetized benefits are not included.

agency. Others are noted in more qualitative terms. For example, the RIA presents lists of unquantified and nonmonetized benefits and costs (see Table 2.2).[1]

EPA estimates the monetary benefit of reducing premature mortality risk using the value of a statistical life (VSL) approach, which is a summary measure for the value of small changes in mortality risk experienced by a large number of people. The mean value of avoiding one statistical death is assumed to be $5.5 million in 1999 dollars. This represents a central value consistent with the range of values suggested by recent meta-analyses of the wage–risk VSL literature.

The best available estimate of WTP to avoid a case of chronic bronchitis (CB) comes from Viscusi et al.[2] The Viscusi et al. study, however, describes a severe case of CB to the survey respondents; therefore, EPA adjusted the Viscusi et al. estimate of the WTP to avoid a severe case. This is done to account for the likelihood that an average case of pollution-related CB is not severe. The unit values used for economic valuation of premature mortality, CB, and all other endpoints monetized in the RIA are displayed in Table 2.3.

Benefits Analysis—Results

Applying the impact and valuation functions described in the previous section to the estimated changes in ozone and PM yields estimates of the changes in physical damages (e.g., premature mortalities, cases, admissions, and changes in light extinction) and the associated monetary values for those changes. Estimates of physical health impacts are presented in Table 2.4. Monetized values for both health and welfare endpoints are presented in Table 2.5, along with total aggregate monetized benefits. All of the monetary benefits are in constant-year 1999 dollars.

Not all known PM- and ozone-related health and welfare effects could be quantified or monetized. EPA represents the monetized value of these unquantified effects by adding an unknown "B"

Table 2.2
Unquantified and Nonmonetized Effects of the Clean Air Interstate Rule

Source: EPA Table 1-4, p. 1-10.

Pollutant—effect	Effects not included in primary estimates—changes in:
OZONE: HEALTH	■ Premature mortality ■ Chronic respiratory damage ■ Premature aging of the lungs ■ Nonasthma respiratory emergency room visits ■ Increased exposure to UVB

OZONE: WELFARE	■ Yields for:
	  ■ commercial forests,
	  ■ fruits and vegetables, and
	  ■ commercial and noncommercial crops
	■ Damage to urban ornamental plants
	■ Recreational demand from damaged forest aesthetics
	■ Ecosystem functions
	■ Increased exposure to UVB

PM: HEALTH	■ Premature mortality: short-term exposures ■ Low birth weight ■ Pulmonary function ■ Chronic respiratory diseases other than chronic bronchitis ■ Nonasthma respiratory emergency room visits ■ Exposure to UVB (+/–)
PM: WELFARE	■ Visibility in many Class I areas ■ Residential and recreational visibility in non-Class I areas ■ Soiling and materials damage ■ Ecosystem functions ■ Exposure to UVB (+/–)
NITROGEN AND SULFATE DEPOSITION: WELFARE	■ Commercial forests resulting from acidic sulfate and nitrate deposition ■ Commercial freshwater fishing resulting from acidic deposition ■ Recreation in terrestrial ecosystems resulting from acidic deposition ■ Existence values for currently healthy ecosystems ■ Commercial fishing, agriculture, and forests resulting from nitrogen deposition ■ Recreation in estuarine ecosystems resulting from nitrogen deposition ■ Ecosystem functions ■ Passive fertilization resulting from nitrogen deposition

MERCURY: HEALTH	■ Incidence of neurological disorders
	■ Incidence of learning disabilities
	■ Incidence of developmental delays
	■ Potential reproductive effects
	■ Potential cardiovascular effects, including:
	  ■ altered blood pressure regulation
	  ■ increased heart rate variability
	  ■ incidence of myocardial infarction

MERCURY DEPOSITION: WELFARE	■ Impacts on birds and mammals (e.g., reproductive effects) ■ Impacts to commercial, subsistence, and recreational fishing

Table 2.3: Unit Values Used for Economic Valuation of Health Endpoints (1999$)

Health endpoint	CENTRAL ESTIMATE OF VALUE PER STATISTICAL INCIDENCE 1990 income level	2010 income level	2015 income level
PREMATURE MORTALITY (VALUE OF A STATISTICAL LIFE)	$ 5,500,000	$ 6,000,000	$ 6,400,000
CHRONIC BRONCHITIS	$ 340,000	$ 380,000	$ 400,000
NONFATAL MYOCARDIAL INFARCTION (HEART ATTACK)			
3% DISCOUNT RATE			
Age 0–24	$ 66,902	$ 66,902	$ 66,902
Age 25–44	74,676	74,676	74,676
Age 45–54	78,834	78,834	78,834
Age 55–65	140,649	140,649	140,649
Age 66 and over	66,902	66,902	66,902
7% DISCOUNT RATE			
Age 0–24	$ 65,293	$ 65,293	$ 65,293
Age 25–44	73,149	73,149	73,149
Age 45–54	76,871	76,871	76,871
Age 55–65	132,214	132,214	132,214
Age 66 and over	65,293	65,293	65,293
HOSPITAL ADMISSIONS			
CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) (ICD CODES 490-492, 494-496)	$ 12,378	$ 12,378	$ 12,378
PNEUMONIA (ICD CODES 480-487)	14,693	14,693	14,693
ASTHMA ADMISSIONS	6,634	6,634	6,634
ALL CARDIOVASCULAR (ICD CODES 390-429)	18,387	18,387	18,387
EMERGENCY ROOM VISITS FOR ASTHMA	286	286	286
RESTRICTED ACTIVITY AND WORK/SCHOOL LOSS DAYS			
WORK LOSS DAYS (WLDS)	VARIABLE (NATIONAL MEDIAN=)		
SCHOOL ABSENCE DAYS	75	75	75
WORKER PRODUCTIVITY	$0.95 per worker per 10% change in ozone per day		
MINOR RESTRICTED ACTIVITY DAYS (MRADS)	51	53	54

Note: ICD stands for International Classification of Diseases. Source: EPA Table 4-11, p. ___

Table 2.4
Clean Air Interstate Rule: Estimated Reduction in Incidence of Adverse Health Effects

Source: EPA Table 4-16, p. 4-74.

Health effect	2010	2015
	Incidence reduction	
PM-RELATED ENDPOINTS		
Premature mortality		
Adults, age 30 and older	13,000	17,000
Infants, age <1 year	29	36
Chronic bronchitis (adult, age 26 and older)	6,900	8,700
Nonfatal myocardial infarction (adults, age 18 and older)	17,000	22,000
Hospital admissions—respiratory (all ages)	4,300	5,500
Hospital admissions—cardiovascular (adults, older than age 18)	3,800	5,000
Emergency room visits for asthma (age 18 and younger)	10,000	13,000
Acute bronchitis (children, age 8–12)	16,000	19,000
Lower respiratory symptoms (children, age 7–14)	190,000	230,000
Upper respiratory symptoms (asthmatic children, age 9–18)	150,000	180,000
Asthma exacerbation (asthmatic children, age 6–18)	240,000	290,000
Work loss days (adults, age 18–65)	1,400,000	1,700,000
Minor restricted-activity days (adults, age 18–65)	8,100,000	9,900,000
OZONE-RELATED ENDPOINTS		
Hospital admissions—respiratory causes (adults, 65 and older)	610	1,700
Hospital admissions—respiratory causes (children, under 2)	380	1,100
Emergency room visits for asthma (all ages)	100	280
Minor restricted-activity days (adults, age 18–65)	280,000	690,000
School absence days	180,000	510,000

to the aggregate total. The estimate of total monetized health benefits is thus equal to the subset of monetized PM- and ozone-related health and welfare benefits plus B, the sum of the nonmonetized health and welfare benefits.

As noted, total monetized benefits are dominated by the benefits of mortality risk reductions. The primary analysis estimate projects that the final rule will result in 13,000 avoided premature deaths annually in 2010 and 17,000 avoided premature deaths annually in 2015. The increase in annual benefits from 2010 to 2015 reflects additional emissions reductions from the standards, as well as increases in total population and the average age (and thus baseline mortality risk) of the population. Note that unaccounted-for changes in baseline mortality rates over time may lead to reductions in the estimated number of avoided premature mortalities.