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EPA's Safety Assessment of Substitutes for Ozone-Depleting Chemicals and Legal Issues Relating to CFC and Halon Production Rights

Statement for the Record
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Before the
Subcommittee on Environmental Protection
Committee on Environment and Public Works
United States Senate

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Mr. Chairman and Members of the Subcommittee, we appreciate the opportunity to present our views on EPA's safety assessment of substitutes for chlorofluorocarbons (CFCs) and other ozone depleting chemicals. Our February 1989 report[1] is the basis for our statement, as is follow-up work done since the report was issued. In addition, our Office of the General Counsel also examined EPA's authority to use certain economic measures to capture windfall profits that might be created by the required limits on CFC production.

In brief:

-- We recommended in our report that EPA fully use its authority under the Toxic Substances Control Act (TSCA) to assess the safety and environmental effects of chemicals that are now being developed as substitutes for CFCs and halons, the major ozone-depleting chemicals. These chemicals are now used in homes, businesses, and industry in a wide number of applications. The safety of substitute chemicals is therefore an issue that affects millions of users, as well as our environment. (Attachment I contains detailed information on our report findings and followup).

-- EPA has published a solicitation for comments on the potential use of economic measures, such as a fee or auction system, to capture windfall profits. Our Office of the General Counsel has identified some key issues EPA must face to successfully implement these measures, such as whether such measures would be viewed as user fees, regulatory fees, or taxes, and whether EPA is authorized to implement them under current law. It would be highly

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[1] Stratospheric Ozone: EPA's Safety Assessment of Substitutes for Ozone-Depleting Chemicals (GAO/RCED-89-49, Feb. 13, 1989).

speculative to conclude whether EPA is authorized under current law to use such measures before EPA makes a specific proposal and articulates the legal and other support for it. Further, because current court precedents do not definitively address some of these issues, EPA's implementation of either measure is likely to result in litigation. In this regard, if EPA replaces the allocation system with an auction system subsequently voided by the courts, compliance with the Montreal Protocol could be affected. These uncertainties suggest to us that legislative action would be a more appropriate course to follow in addressing whether and what kind of economic measures should be established to capture windfall profits. A number of bills have been introduced during this Congress to impose economic measures on the production of CFCs and halons. (Attachment II contains a detailed discussion of these issues).

SUMMARY OF REPORT FINDINGS AND RECENT DEVELOPMENTS

Let me return to our findings on EPA's safety assessment of CFC and halon substitutes. The need for CFC and halon substitutes is present and growing. Beginning in July, the Montreal Protocol--an international agreement--will set in motion a 10-year time frame for signatory countries to cut their CFC production levels by as much as 50 percent of 1986 levels. Halon production is to be frozen in 1992 at 1986 levels. While these cuts are being initiated, participating countries, including the United States, are actively considering an acceleration of the reduction schedule. Just over 2 weeks ago, representatives from approximately 80 nations met in Helsinki, Finland, to discuss the latest scientific knowledge regarding ozone depletion. The participants issued a nonbinding, draft declaration that CFCs regulated by the Protocol should be phased out no later than the year 2000, that halons should be phased out as soon as possible,

and that other ozone-depleting chemicals should be controlled as soon as feasible. On April 17, 1989, EPA issued an Advance Notice of Proposed Rulemaking to request public comment on the possible regulation of two ozone-depleting chemicals not covered by the Protocol--methyl chloroform and carbon tetrachloride.

As the Montreal Protocol participants work toward a revision of their goals for production and consumption of ozone-depleting chemicals, the availability of safe substitutes for these chemicals becomes even more important. Some users have already been able to move away from the regulated CFCs. But for other industrial applications, substitute chemicals or products are either not yet available or not as effective.

In response to this need, chemical producers around the world are working to develop CFC substitutes. Part of the development process involves testing potential substitutes to determine whether they could have adverse effects on human health. According to EPA evaluations, the existing toxicity data on alternative fluorocarbons is still incomplete. EPA's evaluations also noted concerns about potential adverse health effects that were suggested by both the available tests and other analyses of the chemicals.

Although the chemical producers are testing CFC alternatives both individually and as part of two international joint testing programs, EPA still has statutory responsibilities under TSCA to ensure that CFC and halon substitutes do not present unreasonable risks to human health and the environment. In November 1988, EPA outlined an approach for assessing the safety of most potential chemical substitutes, i.e., both "new" and "existing" chemicals. "Existing" chemicals are those that are listed on the TSCA Chemical Substance Inventory, and can be commercially produced by anyone, in any amount, and for any use without prior notification to EPA or an EPA safety review. "New" chemicals are those not listed on the Chemical Substance Inventory.

EPA's approach for assessing new chemicals as potential CFC substitutes is to identify and assess them through the normal premanufacture notification process required under section 5 of TSCA. We believe that EPA's approach for new chemical substitutes should be adequate.

EPA's approach for reviewing existing chemicals that may be used as substitutes is still evolving. Reviewing the information contained in producers' health and safety studies is an essential first step in EPA's assessment of CFC and halon substitute safety. However, EPA's November 1988 approach called for only an internal assessment of published health and safety data. As a result of our February, 1989 recommendations, EPA decided to add to its assessment approach the use of TSCA section 8(d) authority which will require producers to provide the agency in an ongoing fashion their unpublished health and safety studies on potential CFC and halon substitutes. These data will help EPA decide whether further testing is needed to determine the safety of chemical substitutes and whether control measures on their use are needed to protect human health and the environment. EPA also intends to use section 8(a) of TSCA to gather data on current and projected production of potential substitutes and their likely uses and human exposure levels. This information will also help EPA assess the risks associated with potential substitutes. According to EPA, it will take about 1 year to obtain data under these authorities.

In the meantime, EPA plans to use its authority under section 114 of the Clean Air Act to quickly obtain similar data from a limited number of producers for a variety of potential substitutes. EPA anticipates receiving this data within 6 to 8 weeks. A previous EPA attempt to gather testing data through section 114 has not been fully successful, however, since two out of the seven domestic CFC and halon producers have not furnished requested information, despite repeated follow-up. Since CFC

substitutes will take years to develop, the use of TSCA section 8(d) for data gathering is the most appropriate way for ensuring that EPA is provided with health and safety data on a timely, routine basis over the coming years. EPA should review this data as part of its assessment of the safety of these chemical substitutes to determine if additional testing or controls are required.

While EPA's approach for assessing existing chemicals as potential CFC substitutes has been improved, more needs to be done. Our February report also recommended that EPA use its TSCA section 5(a)(2) authority to require producers to provide advance notification of intended significant new uses of existing chemicals as substitutes for CFCs. This authority enables EPA to review the safety of significant new uses of existing chemicals and quickly control those that pose an unreasonable risk to human health and the environment. The agency is still considering whether and how to make full use of its TSCA section 5(a)(2) authority. Our follow-up work disclosed that EPA is considering issues such as what chemicals might be included in framing a significant new use rule for CFC substitutes and what triggers might be used to cause the rule to come into play. For example, the rule might specify that certain named chemicals must come under review if their production volume exceeds a stated level. Until EPA takes advantage of its section 5(a)(2) authority, the cause of our concern continues to be an issue: most of the potential substitutes identified so far can be produced by anyone, in any amount, and for any use, without prior notification to EPA or an EPA safety review.

Mr. Chairman, we recognize the need to eliminate the use of chemicals that deplete stratospheric ozone, and like EPA, we believe that CFC and halon substitutes must be safe and not pose unreasonable risks to human health and the environment. In our view, the urgency associated with quickly developing substitutes to

offset the phaseout of existing ozone-depleting CFCs and halons requires effective EPA oversight in order to protect public health and the environment.

We commend EPA's announcement of its intent to act on our recommendation to use its TSCA section 8(d) authority and its intention to use section 8(a). We urge the agency to follow through with its decision as quickly as possible. However, we remain concerned that EPA may not make expeditious use of its section 5(a)(2) authority. For this reason, we continue to urge the EPA Administrator to use his authority under TSCA section 5(a)(2) to promulgate "significant new use" rules. These rules would require chemical producers to notify EPA before existing chemicals are produced for significant new uses as CFC and halon substitutes, and they would enable EPA to review the safety of these uses and quickly control those that pose an unreasonable risk to human health and the environment.

GAO'S FINDINGS ON EPA'S SAFETY ASSESSMENT OF SUBSTITUTES FOR OZONE-DEPLETING CHEMICALS

THE NEED FOR CFC SUBSTITUTES

The need for chlorofluorocarbon (CFC) and halon substitutes is present and growing. Even the initial phase of the Montreal Protocol that calls for a production "freeze" at 1986 levels will result in CFC cutbacks because current production levels are already several percentage points higher than 1986 levels.[1] And, as recently as 2 weeks ago in Helsinki, Finland, the United States and approximately 80 other countries issued a nonbinding draft declaration that CFCs regulated by the Protocol should be phased out no later than the year 2000, that halons should be phased out as soon as possible, and that other ozone-depleting chemicals should be controlled as soon as feasible. On April 17, 1989, EPA issued an Advance Notice of Proposed Rulemaking that requested public comment on the possible regulation of two ozone-depleting chemicals not covered by the Protocol--methyl chloroform and carbon tetrachloride.

The effect of CFC regulations on industry depends not only on the pace of CFC reductions, but also on the speed with which substitutes can be developed and commercialized. Some users have already found the means to move away from the regulated CFCs. For example, the Foodservice & Packaging Institute, Inc., recently announced that its members have discontinued using CFC-12 to

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[1]The exact percentage, based on reports by producers to EPA, is protected as confidential business information. The International Trade Commission, however, reported that U.S. production of CFC-11 and CFC-12 grew from 1986 to 1987 by 11.0 and 14.3 percent, respectively.

announced that its members have discontinued using CFC-12 to produce disposable food service products. This is possible because HCFC-22, which has only 5 percent of the capacity to deplete the ozone as CFCs-12, is a commercially available substitute. For other industrial applications, however, substitute chemicals or products are either not yet available or not as effective. For example, there are no fire extinguishing substances that have the useful properties of halon, and commercially available alternative insulating materials are not as energy efficient as CFC-blown rigid foam.

Several producers of CFCs have announced stepped-up research efforts to develop chemical substitutes. Du Pont announced in July and September 1988 that it plans commercial production in Michigan and Texas of three alternatives to regulated CFCs. The alternatives are HFC-134a, HCFC-141b, and HCFC-142b, which have applications in refrigeration, air conditioning, and foam blowing. Du Pont also has a pilot plant in New Jersey for producing developmental quantities of HCFC-123. Du Pont reports that it spent more than $30 million in 1988 on CFC alternatives research and production. ICI, headquartered in Great Britain, is spending approximately $83 million (50 million pounds sterling) in search of benign CFC substitutes and has two pilot plants producing test quantities of alternative chemicals. And, in November 1988, ICI announced plans to spend about $50 million on a plant in the United States for the commercial production of HCFC-134a by 1992. Allied-Signal of the United States has reported that it will spend over $250 million on CFC research over the next 10 years. In March 1988, Allied-Signal joined with Atochem, Europe's largest CFC producer, in an effort to develop CFC substitutes. Each firm has pilot plants, and Allied Signal reports that it has made the

potential substitutes HCFC-123, HCFC-141b, and HFC-134a available to end-users for testing and evaluation.

TESTING OF SUBSTITUTES

But even with increased research, substitutes may be several years away from commercialization. Producers must not only identify and synthesize potential substitutes, but also subject them to tests to determine their performance capabilities in the particular applications for which they may be used. Most importantly, producers are putting substitutes through lengthy toxicological testing to assess their effects on human health and the environment.

These toxicity evaluations, which can take several years to complete, are a key step in the development of CFC or halon substitutes since many applications using CFCs and halons require low toxicity. A toxicity evaluation begins with a literature search to identify data already available on the toxicity of the chemical in question. The chemical's structure and various technical properties are ascertained, and an estimate is made of human exposure conditions. Then three tiers of toxicological testing are performed:

-- Tier one focuses on the acute effects of exposure to the chemical through inhalation, ingestion, or skin contact.

-- Tier two tests for subchronic effects, providing data on genetic, systemic, carcinogenic, and developmental effects that may result from repeated exposure to the chemical.

-- Tier three is concerned with the effects of chronic (lifetime) exposure. Carcinogenic potential is investigated, along with multigeneration reproductive toxicity. Special tests, such as cardiac sensitization, neurotoxicity, and environmental impacts, would also be done at this time.

Tier one and tier two testing are generally done early in the development process and can be completed within a year. Tier three tests can take from 3 to 4 years to complete.

After the testing is finished, the results are analyzed to determine the exposure conditions under which the chemical can be used safely. Based on these results, along with an assessment of other factors, such as production costs and potential markets, the producer makes a "go/no go" decision on whether to proceed with commercializing the chemical.

EPA'S ROLE REGARDING SAFE SUBSTITUTES

Article 9 of the Montreal Protocol calls upon participating parties to cooperate in research, development, and exchange of information on possible alternatives to ozone-depleting CFCs and halons. As one of the key U.S. agencies dealing with the stratospheric ozone issue, EPA will be involved in this future effort. EPA, however, has had long-standing responsibilities under section 153(b) of the Clean Air Act, as amended, to undertake research on "safe substitutes" for substances that directly or indirectly affect the stratosphere, especially the ozone in the stratosphere. Thus, even before the signing of the Montreal Protocol in 1987, EPA began to investigate whether other types of

CFCs, known as "non-fully halogenated CFCs" or "HCFCs," might be feasible substitutes for ozone-depleting CFCs. These alternative fluorocarbons have lower ozone-depletion potential because their chemical composition includes hydrogen, making them less stable. They tend to decompose in the lower atmosphere and consequently have much less chance of reaching and harming the stratosphere. Reports by an EPA contractor and an EPA-sponsored international committee of CFC experts indicated that some alternative fluorocarbons may prove to be successful substitutes, but that toxicity testing on these potential substitutes was incomplete.

EPA also has statutory responsibilities under the Toxic Substances Control Act (TSCA) to protect the public and environment from unreasonable risks posed by chemicals used in commerce, which include CFC substitutes. TSCA authorizes EPA to take steps to identify potentially harmful chemicals, gather information on their use and safety, and take appropriate control actions for those chemicals found to present an unreasonable risk to human health and the environment. However, the authorities provided under TSCA for regulating existing chemicals and new chemicals differ. "Existing" chemicals are defined under the provisions of TSCA as those that are listed in the TSCA Chemical Substance Inventory, which includes over 62,000 chemicals. "New" chemicals are defined as those not listed in the inventory.

While some CFC substitutes are new chemicals, most of them are existing chemicals because they are listed on the inventory (even though some have never been commercially produced). This fact has important ramifications for EPA's effort to review the safety of substitutes for ozone-depleting chemicals since, for the most part, only new chemicals are routinely subject to an EPA safety review before they are commercialized.

Review Authority for New Chemicals

Under section 5 of TSCA, any person who intends to manufacture or import a new chemical for commercial purposes in the United States must submit a notice called a "premanufacture notification" (PMN) to EPA at least 90 days before beginning manufacture. TSCA specifies that the notification include information available to the producer on the chemical's identity, intended uses, and health and environmental effects. EPA has 90 days (extendable to another 90 days) to review the notification and assess whether or not the new chemical presents or may present an unreasonable risk to human health or the environment. If EPA decides that additional data are needed to make this assessment, it can control the use of the chemical until the data are provided. If EPA determines that the chemical does in fact present an unreasonable risk, it is required to take control actions ranging from requiring labeling to banning the chemical. Once the chemical successfully goes through the premanufacture notification review process, it is considered an existing chemical and is put on the TSCA inventory of existing chemicals. Unless EPA has stipulated control measures as a result of its premanufacture notification review, the chemical can be produced by anyone, for any purpose, in any amount without submission of further notifications or additional EPA safety review.

While the premanufacture notification review provides EPA with an initial opportunity to screen a new chemical for safety, only a few potential CFC substitutes are "new chemicals" subject to this review process. Most of the potential CFC substitutes identified

by EPA--both the alternative fluorocarbons and other industrial chemicals--are on the TSCA inventory of existing chemicals.[2]

Review Authority for Existing Chemicals

TSCA provides EPA with several authorities to obtain data for assessing risks that may be posed by chemicals on the TSCA inventory of existing chemicals. Section 8(e) requires that producers must report to EPA any information that suggests a substantial risk of injury to health or the environment could be caused by a particular chemical. Section 8(d) of TSCA authorizes EPA to require producers to provide EPA with their unpublished health and safety studies.[3] Also, section 8(a) allows EPA to collect production, use and exposure data from chemical producers. If EPA finds that a chemical could present an unreasonable health or environmental risk (or if there may be substantial human or environmental exposure to the chemical) and if testing is needed to develop sufficient data to determine the risks, EPA can use section 4 of TSCA to require chemical producers to perform such tests. Section 6 of TSCA authorizes EPA to take actions--ranging from labeling to a complete ban--to control the use of chemicals that it determines present an unreasonable risk to human health or the

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[2]Among the alternative fluorocarbons, for example, HCFC-141b is considered a new chemical, while HFC-134a and HCFC-22, -123, and 142b are listed as existing chemicals.

[3]EPA defines "health and safety study" to mean "any study of any effect of a chemical substance or mixture on health or the environment or on both, including underlying data and epidemiological studies, studies of occupational exposure to a chemical substance or mixture, toxicological, clinical, and ecological or other studies of a chemical substance or mixture, and any test performed under TSCA . . . . Any data that bear on the effects of a chemical substance on health or the environment would be included." (40 C.F.R. 716.3).

environment. However, until an existing chemical is shown to pose such a risk and appropriate control actions are implemented by EPA, the chemical can be produced by anyone, in any amount, and for any use without notification to EPA.

There is an important TSCA provision, however, which gives EPA the opportunity to review the safety of chemicals on the TSCA inventory prior to their being put to new uses. By imposing a "significant new use rule" (SNUR) under section 5(a)(2) of TSCA on a specified existing chemical, EPA can require producers to notify the agency in advance of a significant new use of that chemical. The producer must provide information on the chemical, including its composition, projected volumes and worker exposure, and any available test data. If EPA decides that the information submitted is inadequate to assess whether the significant new use is safe, EPA can require that testing be done to collect additional data. The SNUR also gives EPA authority to put a hold on the chemical's new use while the data are being gathered and evaluated.

At present, none of the alternative fluorocarbons on the TSCA inventory of existing chemicals have SNURs attached to them. Consequently, they can be produced by anyone, in any volume, and for any use without an EPA safety review.

EPA'S APPROACH TO ASSESSING CFC AND HALON SUBSTITUTE SAFETY

Recognizing that special actions would have to be taken to assess potential substitutes classified as existing chemicals, EPA has considered various approaches to assessing the safety of existing chemical substitutes, as well as new chemical substitutes.

The approach ultimately adopted in November 1988 set several broad assessment goals.

As outlined in an internal memorandum, EPA's overall goal is "to ensure the introduction of safe substitutes"--that is, substitutes that present no "unreasonable risks." EPA stressed that "[a]ny long-term solution must not create new health or environmental problems." The memorandum also noted the importance of early EPA involvement in testing decisions for the substitutes "to ensure that testing needs for both new and existing substitutes are identified using consistent approaches, that needed testing is properly performed, and that evaluations of test data on the substitutes are performed in a consistent manner." Early review is important to ensure that any disagreements between EPA and chemical producers over testing are raised and resolved quickly in order to avoid unnecessarily delaying the introduction of safe substitutes.

While EPA's approach calls for new chemical substitutes to be identified and assessed through the normal premanufacture notification review required under section 5 of TSCA, its current plans for reviewing existing chemicals that may be used as substitutes call for only partial use of TSCA authorities. On April 18, 1989, EPA announced plans to implement our recommendation which called for EPA to use its TSCA section 8(d) authority to require producers to provide the agency with their unpublished health and safety studies on CFC and halon substitutes. EPA is still considering whether to require producers to report significant new uses of existing chemicals as substitutes.

Use of TSCA and Clean Air Act Authority to Require Data on Existing Chemical Substitutes

EPA told us on May 4, 1989, that it has initiated efforts to promulgate the section 8(d) rulemaking. While the agency will make use of a "model" rule that eases the difficulty of the process, we were told that it will be approximately 12 months before the required information is received.

At the same time it issues the section 8(d) rulemaking, EPA also plans to use TSCA section 8(a) authority to request additional information from producers on potential substitutes. This authority allows EPA to collect data on current and projected production quantities, as well as likely uses and exposure levels to humans and the environment. EPA commented that this additional request will not delay the collection of health and safety studies under section 8(d).

In the meantime, EPA also plans to obtain production, use, exposure, and health and safety information on many of the potential CFC substitutes by sending letters to producers requesting this information under section 114 of the Clean Air Act. Three separate letters are expected to be sent in May. Two will be sent to known producers of either terpenes or aqueous cleaners which have the potential to replace the solvent CFC-113. The third letter will be sent to the known producers of ten HCFCs and HFCs that have the potential to be substitutes for the controlled CFCs and halons. According to EPA, they will be sent to all of the companies that are listed on the TSCA Chemical Substance Inventory as producers of the potential substitutes.

The information that EPA will request through section 114 of the Clean Air Act will be comparable in nature to that required by section 8(d) of TSCA. Section 114 letters, however, will only be sent to those companies known to have produced these chemicals some time in the past, and the responses will only provide data for a particular point in time. Section 8(d) of TSCA, on the other hand, applies to all companies, and requires the submission of data on an ongoing basis.

EPA has used section 114 to gather information on CFC substitutes, in the past, but without complete success. In December 1987, EPA attempted to obtain testing information from the seven domestic CFC and halon producers, but two producers would not respond with the requested data. EPA made followup requests to both producers. One producer did not respond, even after a second followup request. The other producer replied in February 1988 that it would supply the requested testing information by March. However, this information was not supplied. In June 1988, after followup by EPA, the producer replied that it was a member of an international testing group called PAFT, or Program for Alternative Fluorocarbon Toxicity Testing made up of over a dozen major chemical companies. The producer referred EPA to the chairman of PAFT for information regarding its testing. Other producers who had responded to EPA's original request also mentioned their involvement in PAFT, but provided no details on the testing plans that were being developed by PAFT.

The chairman of PAFT told us that the PAFT protocol prohibits any one member company from disclosing testing information. He added, though, that the protocol recognizes that this restriction can be superceded by any regulations in a particular country that

require a company to report toxicity information. In a January 1988 letter to the EPA Administrator, the PAFT chairman stated that "[i]t is intended that the results from the test programs will be published in the open literature. In addition, any significant interim results will be promptly communicated to regulatory authorities as required by law" [emphasis added].

EPA did not contact PAFT about its testing program until after the November 1988 assessment memorandum was signed. In a December 5, 1988, letter to the PAFT chairman, EPA invited PAFT representatives to meet with EPA staff "to present your on-going activities and future plans for toxicity testing of the chemicals covered by your organizations." On March 22, 1989, EPA met with three PAFT members and discussed PAFT's planned and ongoing testing for CFC substitutes. On April 17, 1989, EPA sent a letter to the three companies requesting information on PAFT's testing program and schedule, including PAFT's rationale for conducting or not conducting certain tests. The letter also requested the results of tests already completed by PAFT, and a copy of the organization's bylaws and any other agreements or contracts which pertain to the domestic producers' obligations under section 8(e) of TSCA to report substantial risks. The letter requested a response by May 16, 1989.

We recognize that it is important for EPA to review the producers' testing plans as quickly as possible, especially given the fact that the producers' testing is underway and EPA was slow in coming to closure on how to approach the safety issue. We also believe that the reporting of health and safety studies should be put on a formal basis. We believe that TSCA section 8(d) authority is an appropriate vehicle for obtaining health and safety information from PAFT members doing business in the United States

and subject to TSCA, as well as from domestic chemical producers and importers who are not members of PAFT. Use of section 8(d) will establish an ongoing regulatory mechanism to provide EPA with health and safety studies on substitutes on a timely basis over the coming years. This is a particularly important point since the substitute safety issue will take years to resolve due to the long-term nature of the testing and the likelihood that a series of substitutes will be developed over several years to replace the regulated CFCs and halons. We welcome EPA's recent decision to follow the recommendation in our report to make use of section 8(d), provided that the authority is implemented properly.

Use of TSCA Authority to
Review and Control New Uses
of Existing Chemical Substitutes

Neither EPA's November 1988 assessment approach, nor current plans specifically call for the use of TSCA section 5(a)(2) to promulgate "significant new use" rules, or SNURs, on any of the chemical substitutes. The EPA Administrator has recently indicated, however, that the agency is actively considering options related to the use of SNURs. We believe that SNURs are warranted in the case of alternative fluorocarbons that are currently on the TSCA inventory of existing chemicals, as well as fluorocarbons that may later be added to the inventory following a premanufacture notification review. We also believe that chemical substitutes other than alternative fluorocarbons should be considered for SNURs, depending on their known toxicity, exposure levels, and exposure situations as substitutes in CFC applications.

SNURs, in essence, provide EPA with review and control authorities over specified existing chemicals similar to the

premanufacture review for new chemicals required under TSCA. SNURs would ensure that EPA is notified before existing alternative fluorocarbons and other existing chemicals are put to new significant uses as CFC and halon substitutes, and they would give EPA the opportunity to review the producers' health and safety data to determine whether the chemicals could be used safely in the particular exposure situations that the new uses involve. This authority is also useful in the case of new fluorocarbons that undergo premanufacture notification review and are subsequently added to the inventory. A SNUR would enable EPA to monitor changes in the manufacture and use, and thus exposure, of these newer chemicals.[4] Also, unlike section 8(d) authority, which is limited to data-gathering, SNURs enable EPA to quickly control significant new uses of the substitutes, if deemed necessary to protect human health and the environment.

Whether EPA will eventually use SNURs for CFC and halon substitutes remains an open issue at this time. EPA told us that SNURs are cumbersome rules to develop, promulgate, and implement. Part of the difficulty in developing a SNUR involves the need to fine-tune the SNUR to capture adequately the specific chemicals and uses of concern. According to Office of Toxic Substances (OTS) staff, a SNUR rulemaking can take 6 to 8 months if there are no problems, but a year is more common.

Without SNURs, only new chemical substitutes would be routinely subject to review before commercialization. An existing

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[4]In an earlier report, Assessment of New Chemical Regulation Under the Toxic Substances Control Act (GAO/RCED-84-84, June 15, 1984), we discussed the advantages of using SNURs to monitor changes in the manufacture and use of new chemicals that have undergone EPA's premanufacture notification review and have been added to the TSCA inventory of existing chemicals.

ATTACHMENT I

substitute that had never been commercialized would face no such review unless a SNUR is imposed on it. Promulgating SNURs on alternative fluorocarbons and other chemical substitutes listed on the TSCA inventory of existing chemicals would essentially bring them into a similar review process as the "new" fluorocarbons and would, therefore, help EPA meet its declared assessment goal of having both new and existing chemical substitutes undergo consistent testing and review before being used commercially.

ATTACHMENT II

LEGAL ISSUES RELATED TO USING ECONOMIC MEASURES TO IMPLEMENT THE MONTREAL PROTOCOL

EPA has implemented an allocated quota system to carry out the Montreal Protocol on Substances That Deplete the Ozone Layer. However, EPA is exploring the use of economic measures because of its concern that restricting future supplies of CFCs and halons could produce sizeable "windfall profits" to producers, and create an economic incentive for producers to delay introduction of safe substitutes. The measures being explored include regulatory fees to accompany the existing allocated quota system and an auction system to replace the quota system. The measures would be intended to recover the market value of the restricted right to produce CFCs and halons.

EPA has not yet proposed a rule for the use of economic measures. It would be highly speculative to conclude whether EPA is authorized under certain law to use such measures before EPA makes a specific proposal and articulates the legal and other support for it. Nevertheless, it is clear that if EPA decides to use economic measures to implement the Protocol, it will have to resolve certain fundamental legal issues, such as whether such measures constitute user fees, regulatory fees, or taxes, and whether EPA is authorized to establish them under current law. Further, because current court precedents do not definitively resolve some of these issues, EPA's implementation of a fee or auction system is likely to result in litigation. In this regard, if EPA replaces the allocated quota system with an auction system subsequently voided by the courts, compliance with the Montreal Protocol could be adversely affected. These uncertainties suggest

that legislative action would be a more appropriate course to follow in addressing whether a fee or auction system should be established to capture windfall profits.

BACKGROUND

The Montreal Protocol went into force on January 1, 1989. Its purpose is to reduce the depletion of stratospheric ozone by limiting the participating countries' total production and consumption of certain ozone-depleting chemicals according to a specified schedule. Two groups of chemicals are affected: CFCs and halons.

The Protocol ties future production and consumption of the controlled chemicals to 1986 levels.[1] Production and consumption of CFCs will be frozen at 1986 levels for the twelve-month period beginning July 1, 1989. CFCs then would be reduced by 20 percent from the 1986 levels by June 30, 1994, and 50 percent by June 30, 1999. Production and consumption of halons will be frozen at 1986 levels in 1992. Within each group of substances (CFCs and halons), each chemical is assigned an ozone-depletion weight which measures its relative ability to destroy ozone molecules in the stratosphere. Production may be shifted from a chemical in one group to another chemical in the same group, provided that the total ozone-depletion potential is not increased.

The EPA issued a final rule under section 157(b) of the Clean Air Act, 42 U.S.C. § 7457, to implement the Montreal Protocol.[2]

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[1]Production is defined as the amount of controlled chemicals produced minus the amount destroyed by approved technologies. Consumption is defined as production of controlled chemicals plus imports minus exports.

[2]53 Fed. Reg. 30566 (August 12, 1988).

The rule allocates production and consumption to firms based on their 1986 production and consumption levels. EPA rejected a regulatory fee or auction system in favor of the allocated quota system.[3] However, because of concern that the quota system could result in potential windfalls to producers and create an economic incentive for producers to delay introduction of chemical

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[3]EPA gave the following reasons for selecting the quota allocation system:

> "EPA has concluded that the allocated quota system is the appropriate method for implementing the Montreal Protocol for several reasons. One, by directly regulating the supply of CFCs and halons, the allocated quota system is a straightforward method of ensuring that the requirements of the Montreal Protocol are met. Two, it is clearly lawful, in contrast to the auction and regulatory fee systems which raise legal issues. Three, as a market-based approach, the allocated quota system is economically efficient. Four, it is relatively simple to administer, since the producers and importers subject to the allocated quotas are small in number. While EPA recognizes that an allocated quota system has the potential for windfall profits and the concentration of market power in relatively few companies, it does not believe those disadvantages would prevent the system from bringing about the reductions in ozone-depleting substances required by the Protocol.
>
> * * *
>
> EPA has selected the allocated quota system rather than other strategies, given the allocated quota systems capability of implementing the Montreal Protocol in an economically efficient, low cost manner and the legal and other concerns associated with other systems. However, EPA recognizes that the use of an allocated quota system standing alone could result in substantial windfalls to a small number of CFC and halon producers which could create an economic incentive for these firms to delay the introduction of chemical substitutes.
>
> Because of this concern, EPA is continuing to examine several alternatives to the use of an allocated quota system alone. . . ." 53 Fed. Reg. 30579 (August 12, 1988).

substitutes, EPA also issued an Advance Notice of Proposed Rulemaking to further explore the use of economic measures to implement the Protocol.[4]

The economic measures being explored by EPA generally are regulatory fees coupled with the allocated quota system and an auction system. Stated simply, a regulatory fee would be a direct charge on producers with allocations to recover some or all of the windfalls accruing to them. EPA also is exploring auctioning production and consumption rights to any interested party, which presumably would yield a price for these rights that reflects the expected windfall.

As discussed below, there are significant legal issues surrounding EPA's authority to use either of these measures. These issues are whether these measures would be viewed as user fees, regulatory fees, or taxes, and whether EPA is authorized to implement them under existing law.

DISCUSSION

Generally, courts have addressed legal challenges to an agency's authority to levy a charge on the public by analyzing the nature of the charge and whether it falls within the statutory authority relied on by the agency. Charges characterized as "user charges" are generally authorized by 31 U.S.C. § 9701, for which a significant body of case law exists. Other charges characterized as "regulatory fees" may be upheld by the courts when they are either expressly provided by the agency's authorizing legislation or deemed necessary to accomplish a legitimate regulatory purpose

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[4]53 Fed. Reg. 30604 (August 12, 1988).

under a broad grant of statutory authority. However, courts generally conclude that the authority to assess a charge does not include the authority to tax, and have been unwilling to uphold charges when doing so would move the authorizing statute towards a delegation of Congress' taxing power, absent a clear expression of legislative intent to the contrary.

User Charges

Two Supreme Court decisions provide the framework for analyzing charges established by agencies under the authority of the so-called User Charge Statute.[5]

National Cable Television Co. v. United States, 415 U.S. 336 (1974), concerned the legality of annual fees assessed by the Federal Communications Commission (FCC) on cable television systems at a rate of 30 cents per subscriber. FCC justified the assessment on the ground that the User Charge Statute authorized FCC to

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[5]The User Charge Statute, formerly 31 U.S.C. § 483a and now codified at 31 U.S.C. § 9701, provides:

* * *

"(b) The head of each agency (except a mixed-ownership Government corporation) may prescribe regulations establishing the charge for a service or thing of value provided by the agency. Regulations prescribed by the heads of executive agencies are subject to policies prescribed by the President and shall be as uniform as practicable. Each charge shall be--

(1) fair; and
(2) based on--

(A) the costs to the Government;
(B) the value of the service or thing to the recipient;
(C) public policy or interest served; and
(D) other relevant facts . . . ."

recover all of its costs in regulating cable television systems. The Supreme Court reversed a lower court approval of the fee.

The Court discussed the difference between a tax and a fee, which it described as incident to a voluntary act involving a government service that bestows a benefit on an individual.[6] However, the Court chose not to address whether the User Charge Statute authorized the levying of taxes, in which case the statute

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[6]The Court stated:

> "Taxation is a legislative function, and Congress, which is the sole organ for levying taxes, may act arbitrarily and disregard benefits bestowed by the Government on a taxpayer and go solely on ability to pay, based on property or income. A fee, however, is incident to a voluntary act, e.g., a request that a public agency permit an applicant to practice law or medicine or construct a house or run a broadcast station. The public agency performing those services normally may exact a fee for a grant which, presumably, bestows a benefit on the applicant, not shared by other members of society. It would be such a sharp break with our traditions to conclude that Congress had bestowed on a federal agency the taxing power that we read 31 U.S.C. § 483a narrowly as authorizing not a 'tax' but a 'fee.' A 'fee' connotes a 'benefit' and the Act by its use of the standard 'value to the recipient' carries that connotation. The addition of 'public policy or interest served, and other pertinent facts,' if read literally, carries an agency far from its customary orbit and puts it in search of revenue in the manner of an Appropriations Committee of the House.
>
> "The lawmaker may, in light of the 'public policy or interest served,' make the assessment heavy if the lawmaker wants to discourage the activity; or it may make the levy slight if a bounty is to be bestowed; or the lawmaker may make a substantial levy to keep entrepreneurs from exploiting a semipublic cause for their own personal aggrandizement. Such assessments are in the nature of 'taxes' which under our constitutional regime are traditionally levied by Congress." 415 U.S. 340-341.

would be subject to challenge as an unconstitutional delegation of the taxing power.[7]

Rather, the Court focused on the function of the FCC to safeguard the public interest[8] and whether the fee assessed by the FCC measured "the value to the recipient." In so doing, the Court stated that the words "value to the recipient" and not "public policy or interest served and other pertinent facts" in the User Charge Statute were relevant. The Court then concluded that the FCC had not clearly used the correct standard because assessing a fee to recover all of the FCC's cost in regulating the cable industry would recoup costs unrelated to the conferral of any special benefit.[9] The Court reversed and remanded the case to the FCC for further consideration consistent with its opinion. 415 U.S. at 344.

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[7]415 U.S. at 341-342.

[8]The Court stated that:

> "There is no doubt that the main function of the Commission is to safeguard the public interest in the broadcasting activities of members of the industry. If assessments are made by the Commission against members of the industry which are sufficient to recoup costs to the Commission for its oversight, the CATV's and other broadcasters would be paying not only for benefits they received but for the protection services rendered the public by the Commission . . . . " 415 U.S. at 341.

[9]The Court stated that:

> "It is not enough to figure the total cost (direct and indirect) to the Commission for operating a [cable] unit of supervision and then to contrive a formula that reimburses the Commission for that amount. Certainly some of the costs inured to the benefit of the public, unless the entire regulatory scheme is a failure, which we refuse to assume." 415 U.S. at 343.

A companion case, Federal Power Commission v. New England Power Co., 415 U.S. 345 (1975), also addressed the User Charge Statute. The Federal Power Commission (FPC) assessed fees to recoup costs it incurred in regulating the interstate transmission and sale of electricity and the interstate delivery of natural gas.[10] The FPC justified the fees on the basis that their regulations benefited the regulated industries by creating an economic climate for greater usage of their services, the result of which was to place the industries in sounder financial position. 415 U.S. at 348.

The Court agreed with a lower court's conclusion that whole industries are not in the category of those who may be assessed under the User Charge Statute, its thrust reaching only specific charges for specific services to specific individuals or companies. 415 U.S. at 349. The Court noted that OMB Circular No. A-25, September 23, 1959, stated that a reasonable charge should be made to each identifiable recipient for a measurable unit or amount of government service or property from which he derives a special benefit, and that no charge should be made for service rendered when the identification of the ultimate beneficiary is obscure and the services can be primarily considered as benefiting the general public. 415 U.S. at 349-350.

The Court concluded that the OMB Circular represented the proper construction of the User Charge Statute, and keeps the statute within the boundaries of a fee system and away from the

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[10]The FPC's fees were assessed against electric utilities under the Federal Power Act and natural gas companies under the Natural Gas Act. In both cases, the FPC determined its costs of administration and, after deducting certain items, assessed the remainder against the utilities and companies in proportion to their activities.

domain of taxes toward which the FPC's economic climate argument would lead. In this regard, the Court pointed out that some of the assessments made by the FPC would be on companies which had no proceedings before, or had neither requested nor received benefits from, the FPC during the year in question. The Court stated that while some regulatory rulings might result in each member of an industry being an identifiable recipient of the regulator's service, in which case a fee might be warranted, the fees FPC assessed on the basis of general regulatory activities were not within the scope of the statute. 415 U.S. at 351. The Court affirmed the Court of Appeals decision to set aside the annual charges.

The analysis contained in the National Cable and New England Power cases suggests that an agency may assess a fee under the User Charge Statute for specific services provided to specific individuals and companies if the fee measures the "value of the service to the recipient." However, the cases also suggest that the Courts are not sympathetic to a fee based either on the public policy or interest criteria set forth in 31 U.S.C. § 9701 (b)(2)(C)-(D) or on the costs to the government of general regulatory activities.

However, these cases did not provide specific criteria for measuring "value to the recipient." Since "cost to the government" is already addressed by 31 U.S.C. § 9701(b)(2)(A), to equate "value to the recipient" and "cost to the government" would appear inconsistent with a generally accepted rule of statutory construction, i.e. statutory provisions should not be construed to render one mere surplusage. Nevertheless, a number of the lower courts have in fact held that "value to the recipient" cannot

exceed the "cost to the government" in providing the identified benefits.[11]

These lower court cases suggest some difficulty for EPA in assessing a fee under the User Charge Statute which exceeds its cost in providing the specific benefit conferred. To this point, the fee and auction system EPA is exploring appears to be based on the "windfall profits" that will accrue to producers as a result of EPA's allocating to the producers the right to produce restricted commodities, and not on EPA's costs in conferring the benefits. Further, a fee assessed under the User Charge Statute which is designed to serve the public policy of creating an economic incentive to develop safe substitutes may be viewed as the type of assessment which moves the statute away from fees and towards taxes, and which the Court warned against in New England Power.

Nevertheless, this situation does differ from the cases discussed above. New England Power involved economic benefits which the Court concluded were general, unspecified and unmeasured. Here, there presumably will be companies applying to EPA for production and consumption allocations, and EPA may be able to measure the economic benefit accruing to each company from EPA's regulatory actions. However, it is unclear what importance the courts will give to these factors, and whether they would entertain

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[11]See, e.g., Central & Southern Motor Freight Tariff Ass'n v. United States, 777 F.2d 722, 729 (D.C. Cir. 1985); Nevada Power Co. v. Watt, 711 F.2d 913, 933 (10th Cir. 1983); Yosemite Park and Curry Co. v. United States, 686 F.2d 925, 931 (Ct. Cl. 1982); Mississippi Power & Light v. NRC, 601 F.2d 223, 230 (5th Cir. 1979), cert. denied, 444 U.S. 1102 (1980); National Cable Television Ass'n v. United States, 554 F.2d 1094, 1106-07 (D.C. Cir. 1976); Electronic Industries Ass'n v. FCC, 554 F.2d 1109, 1114-15 (D.C. Cir. 1976); National Ass'n of Broadcasters v. FCC, 554 F.2d 1118, 1128 (D.C. Cir. 1976); Capital Cities Communities, Inc. v. FCC, 554 F.2d 1135, 1138 (D.C. Cir. 1976).

a fee under the User Charge Statute based on "windfall profits" earned by producers.

Regulatory Fees

The concept underlying regulatory fees is that the government may levy charges on a part of its citizenry incident to some regulatory purpose. A seminal case in this area is the Head Money Cases, 112 U.S. 580 (1884). This case involved legislation which provided for a duty of 50 cents on shipowners for each and every passenger who is not a citizen of the United States who enters a port in the United States from a foreign port. The money collected was paid into the Treasury in a special fund used to defray the expense of regulating immigrations under the act and for the care of immigrants arriving in the U.S.

The statute was challenged on the grounds that the duty was a tax which violated the Taxing Clause of the Constitution in that it was not levied for the common defenses and general welfare of the United States and that it was not uniform throughout the United States.[12] The Court first discussed in dicta that there was substantial uniformity under the statute within the meaning of the Constitution and that it would not be difficult to show that the contributions of shipowners were for the general welfare of the United States. 112 U.S. at 594-595. However, the Court decided that the true answer to the challenge to the statute was that the

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[12]U.S. Constitution, Art. I, Sec. 8, cl. 1 which provides:

> "The Congress shall have power to lay and collect taxes, duties, imposts, and excises, to pay the debts and provide for the common defense and the general welfare of the United States; but all duties, imposts, and excises shall be uniform throughout the United States."

power exercised under the statute was not the taxing power. Rather, the payment was a mere incident of Congress' regulation of commerce, namely that part of foreign commerce involved in immigration. 112 U.S. at 595. In this regard, the Court noted that the authorizing legislation was designed to address potential evils inherent in the business of bringing foreigners to this country, and the shipowners reaped the profit from this business. The Court thus concluded that the statutory payment was not a tax within the meaning of the Constitution, but rather money that Congress was empowered to collect under the statute as part of its statutory scheme for regulating commerce.

Lower court decisions have similarly sustained statutory charges levied when expressly authorized and there is a close relationship between the charge and the regulatory purpose. E.g., State of South Carolina ex rel Tindal v. Block, 717 F.2d 874, 887 (4th Cir. 1983), cert. denied 465 U.S. 1080 (1984); United States v. Stangland, 242 F.2d 843 (7th Cir. 1957); Rodgers v. United States, 138 F.2d 992 (6th Cir. 1943). In rejecting arguments that a regulatory assessment was a tax, the courts have stated that the assessment is a tax only when its primary purpose is raising revenue. See e.g., Rural Telephone Coalition v. FCC, 838 F.2d 1307, 1314 (D.C. Cir. 1988); Brock v. Washington Metropolitan Area Transit Auth., 796 F.2d 481, 188-89 (D.C. Cir. 1986), cert. denied 481 U.S. 1013 (1987).

Therefore, the question of Congress' authority to enact, and the executive branch's authority to implement legislation that explicitly establishes a regulatory fee is fairly well-settled. However, the authority of the executive branch to establish a regulatory fee under a general grant of authority is more murky.

In FEA v. Algonquin Sng, Inc., 426 U.S. 548, (1976), a regulatory fee established by the President was upheld. This case involved whether section 232(b) of the Trade Expansion Act as amended, 19 U.S.C. § 1862(b), authorized the President to impose a license fee to regulate the importation of oil into the country. Section 232(b) of the Act provides that if an article is being imported into the United States in such quantities or under such circumstances as to threaten to impair the national security, the President is authorized to take such action, and for such time, as he deems necessary to adjust the imports of such article and its derivatives so that such imports will not threaten to impair the national security.

After finding that the importation of crude oils and crude oil derivatives and products threatened to impair the national security, the President in 1959 imposed under a predecessor statute a system of quotas on the importation of petroleum and petroleum products. The quotas were not wholly successful in decreasing the gap between domestic consumption and production, and the quotas were increased periodically to satisfy domestic consumption. Therefore, the President instituted a program in 1973 to substitute fees for quotas. The program established a gradually increasing schedule of license fees for importers with some oil imports initially exempted. In 1975, based on a section 232(b) finding, the President accelerated the increase in license fees and added supplemental fees on all oil imports.

The President's 1975 action was challenged on the basis that the imposition of the fees was beyond the President's constitutional and statutory authority. The Supreme Court concluded that the statute was a proper delegation of authority and that the fees were authorized by the broad language of the statute.

The Court first rejected the argument that reading section 232(b) to authorize a license fee system presents a serious question of unconstitutional delegation of legislative power. The Court, in noting that it had previously upheld the constitutionality of legislation empowering the President to increase or decrease import duties in order to equalize the differences between foreign and domestic production costs for similar articles, stated:

> "If Congress shall lay down by legislative act an intelligible principle to which the [President] is directed to conform, such legislative action is not a forbidden delegation of legislative power." 426 U.S. at 548 (quoting Hampton & Co. v. United States, 276 U.S. 394, 409 (1928)).

The Court then concluded that section 232(b) satisfied the Hampton test. The Court pointed out that section 232(b) establishes clear preconditions to Presidential action, and does not give the President unbounded leeway in deciding what action to take in the event the preconditions are fulfilled. In fact, section 232(b) authorizes the President to act only to the extent necessary to adjust the imports of such article and its derivatives so that such imports will not threaten to impair the national security. Further, section 232(c) articulates a series of specific factors to be considered by the President in exercising his authority under 232(b). 426 U.S. at 559.[13]

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[13]The Court rejected the challengers' reliance on National Cable, discussed previously. In so doing, the Court contrasted that case's consideration of the open-ended nature of the "public policy or interest served, and other pertinent facts" provision in the User Charge Statute with the more limited authorization in section 232(b) and clearly articulated standards in section 232(c). 426 U.S. at 559, note 10.

The Court then proceeded to reject the challengers' argument that the President's authority to adjust imports under section 232(b) encompassed only quantitative methods such as quotas, but not monetary methods such as fees. The Court concluded that the broad language of the statute and its legislative history belies any suggestion that Congress intended to limit the President's authority to imposing quotas. 426 U.S. at 561, 570. However, in approving the license fees, the Court made clear that its holding did not compel the conclusion that any Presidential action having a remote impact on imports also is authorized.

This warning by the Court was prophetic. In Independent Gasoline Marketers Council v. Duncan, 492 F. Supp. 614 (D.D.C. 1980), the Court struck down the Petroleum Import Adjustment Program (PIAP) initiated by the President under the authority of section 232 of the Trade Expansion Act. The PIAP would have collected a floating license fee on importers which would be measured by the effect the fee had on the retail price of all gasoline. The purpose was to raise the price of all gasoline by 10 cents a gallon. Importers would have been reimbursed their costs by refiners through the PIAP entitlement program while refiners would pass through the costs on their sales of both domestic and imported oil products. The court determined that the fee was not directed at the reduction of imported oil but at the reduction of the consumption of all oil with only an incidental effect on the retailing of imported gasoline. The court struck down the fee as being unauthorized by the statute. The court held that unlike Algonquin where the fee assessed directly affected the price of imported oil relative to domestic oil, the PIAP fee had no similar effect.

The court further held that section 232 does not authorize the President to impose general controls on domestically produced goods either through monetary mechanisms or through quantitative devices. The statute provided for the regulation of imports, which may have an incidental impact on domestic goods. Since the primary purpose of the PIAP fee was to regulate both domestic and imported oil, it was not within the scope of authority conferred by the statute, and therefore unauthorized. 492 F. Supp. at 618.

Taxes

As the foregoing discussion of user charges and regulatory fees demonstrates, whether an agency possesses the authority to exact a charge depends not on its characterization, but instead on whether the charge is properly exacted pursuant to an adequate grant of authority conferred by law. When the courts find a specific charge to be unauthorized, they may do so by rejecting the agency's request to read the statute broadly on the grounds that such a reading would move the statute towards a delegation of Congress' taxing power. The courts often avoid addressing the taxing power by concluding that the proposed charge does not satisfy the statutory standards applicable to that fee.

Thus, even in cases like National Cable where the Supreme Court has chosen to describe some of the attributes of taxes[14], it has not had to define what constitutes a tax. The Court indicated that taxes may be arbitrary, going solely to ability to pay, based on property or income. Further a tax may be made heavy to

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[14]See footnote no. 11.

discourage an activity[15] or to prevent exploitation of a semipublic cause for private gain. Alternatively a tax may be made light to bestow a bounty.

However, two recent cases have addressed the proposition that the taxing power may be delegated to an agency and concluded that an agency may assess a tax under adequate standards. Florida Power & Light Co. v. U.S., 846 F.2d 765, 771-775 (D.C. Cir. 1988) (appeal pending); Skinner v. Mid-America Pipeline Co., 57 U.S.L.W. 4458 (U.S. April 25, 1989).

In Florida Power, the court considered the authority conferred on the Nuclear Regulatory Commission (NRC) by section 7601 of the Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA), 42 U.S.C.A. § 2213 (West Supp. 1988). Section 7601 directed the NRC to assess and collect annual fees from NRC licensees to fund all or part of the activities conducted by the NRC. The NRC is required to impose the annual charges through rulemaking subject to three limitations: (1) the aggregate annual fee plus other amounts collected (e.g., under the User Charge Statute) may not exceed thirty-three percent of the NRC's fiscal year costs, (2) the annual charges must be reasonably related to the regulatory services

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[15]Under current court precedent, user charges are recoverable when they are intended to recoup costs incurred by an agency for bestowing a special benefit on an identifiable recipient, and not the public generally. Regulatory fees may be unrelated to the bestowing of any special benefit on the party assessed, but instead may be assessed on the basis of accomplishing some independent regulatory objective authorized by law. For example, such fees may be intended to discourage an activity--one of the attributes of a tax. Regulatory fees unlike taxes may not be arbitrary. However, if the power to exact a tax is to be exercised by an agency, it must be pursuant to an appropriate delegation of authority and the agency's action must be guided by an intelligible legislative standard. In this sense the agency may not act arbitrarily.

provided by the NRC and (3) the charges shall fairly reflect the cost of the NRC providing the service.

The NRC adopted a rule setting a uniform annual fee for each power operating licensee by calculating the NRC's costs budgeted for certain generic services (services that do not have a specific identifiable beneficiary) which it concluded were reasonably related to regulating all licensees in the category. The costs were compared to thirty-three percent of the NRC's budget less fees collected under the User Charge Statute, and the resulting amount divided by the number of operating licensees.

After rejecting the contention that the judicial standard applicable to the User Charges Statute should also be applied to assessments under section 7601, the court held that even if the assessment of the fees for generic services was characterized as a tax, the delegation of authority to the NRC would meet constitutional limitations. The court viewed the constitutional problems discussed in prior cases as being one of adequate standards, rather than holding that the taxing power cannot be delegated. The Court then concluded that NRC had exercised its authority in conformity with an intelligible legislative standard and section 7601 met these limitations. 846 F.2d at 772-776.

More recently in Skinner, the Supreme Court considered the authority conferred on the Secretary of Transportation by section 7005 of COBRA, 49 U.S.C. App. § 1682a (1982, Supp. IV). Section 7005 directs the Secretary of Transportation to establish a fee schedule based on the usage, in reasonable relationship to volume-miles, miles, revenues, or an appropriate combination thereof, of natural gas and hazardous liquid pipelines. These fees are to be collected annually, from persons operating (1) all pipeline

facilities subject to the Hazardous Liquid Pipeline Safety Act of 1979 (HLPSA), 49 U.S.C. App. § 2001 et seq., and (2) all pipeline transmission facilities and all liquified natural gas facilities subject to the jurisdiction of the Natural Gas Pipeline Safety Act of 1968 (NGPSA), 49 U.S.C. App. § 1671 et seq. The fees collected are to be sufficient to meet the costs of activities under the HLPSA and NGPSA and are to be used to the extent provided for in advance in appropriation Acts to fund activities authorized under the HLPSA and NGPSA. However, the fees may not exceed 105 percent of the aggregate of appropriations made for such fiscal year for the activities to be funded by the fees.

The Secretary of Transportation determined that the total pipeline safety program costs, excluding state grants-in-aid, would be allocated based on pipeline miles at 80 percent for persons regulated by the NGPSA and 20 percent for persons regulated by the HLPSA. Five percent of the total gas program costs were to be borne by Liquified Natural Gas (LNG) facility operators allocated as a function of storage capacity and number of LNG plants. Certain operators were excluded since administrative costs of assessing the fees would exceed recoveries.

The Supreme Court upheld the constitutionality of the statute. The Court first held that even if the user fees are a form of taxation, the delegation of discretionary authority under Congress' taxing power is subject to no constitutional scrutiny greater than that which the Court has applied to other delegations of congressional powers. The Court next held that the Congress had clearly indicated its intention to delegate to the Executive the discretionary authority to recover administrative costs not inuring directly to the benefit of regulated parties by imposing additional financial burdens on those parties. Finally, the Court held that

the law provided the Secretary with intelligible guidelines to follow in exercising this discretionary authority. The Court's decision thus appears to resolve the issue of whether the Congress may delegate to agencies the authority to levy taxes.

EPA's Statutory Authority

EPA has identified section 157 of the Clean Air Act, 42 U.S.C. § 7457, and section 6 of the Toxic Substances Control Act, 15 U.S.C. § 2605, as potential authority to implement economic measures as part of its regulatory program.

Section 157(b) of the Clean Air Act, 42 U.S.C. § 7457(b), requires the Administrator to:

> ". . . propose regulations for the control of any substance, practice, process, or activity (or any combination thereof) which in his judgment may reasonably be anticipated to affect the stratosphere, especially ozone in the stratosphere, if such effect in the stratosphere may reasonably be anticipated to endanger public health or welfare. Such regulations shall take into account the feasibility and the cost of achieving such control. . ."

This grant of regulatory authority is broad and neither requires nor prohibits a particular type of regulatory control. Furthermore, the legislative history lends some support to the view that the Administrator be given latitude to use a variety of methods to address this problem. For example, the report of the House Interstate and Foreign Commerce Committee[16] states that under this provision

> ". . . the Administrator is directed to take into account the 'feasibility and cost' of complying with any stratosphere

[16]H.R. Rep. No. 95-294, 95th Cong., 1st Sess., 101 (1977).

> protection measure recommended or promulgated by him. By using this language, the committee intends to assure that any such measure is undertaken only with adequate awareness of its costs and its other economic impacts and social impacts. This informed awareness is necessary for the Administrator in determining what combination of stratospheric protection measures are most appropriate, and for the Congress in reviewing any such measures recommended or promulgated by the Administrator" [emphasis added].

The report also states that the primary purpose of the statute is to protect the public health, and that therefore "the committee does not wish to tie the Administrator's hands or confer an authority which is cumbersome or unduly difficult to use, administer, or enforce."[17]

Section 6(a)(5) of the Toxic Substances Control Act provides that:

> "If the Administrator finds that there is a reasonable basis to conclude that the manufacture, processing, distribution in commerce, use, or disposal of a chemical substance or mixture, or that any combination of such activities, presents or will present an unreasonable risk of injury to health or the environment, the Administrator shall by rule apply one or more of the following requirements to such substance or mixture to the extent necessary to protect adequately against such risk using the least burdensome requirements: * * * (5) A requirement prohibiting or otherwise regulating any manner or method of commercial use of such substance or mixture."

Section 6(c) establishes issues to be considered and requirements to be followed by the Administrator in promulgating such requirement.

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[17] Id.

The conferral of authority under this provision is also broad. As with the Clean Air Act, there is no express mention of the use of economic measures as a means of bringing about a legitimate regulatory objective. Further, the legislative history does not indicate whether Congress intended the use of some form of economic measure to be authorized or prohibited.

As we discussed in the Head Money Cases, economic measures for regulatory purposes can find their origin in powers other than the taxing power (for example the commerce power). Applying the holding of the Court in Algonquin, an express conferral of the use of economic means is not necessary where there is a broad grant of authority coupled with an adequate standard against which to apply that authority.

However, the case before us presents several unresolved issues. First, does the Clean Water Act or the Toxic Substances Control Act contain the broad grant of authority under which EPA may use the economic measures being employed. Second, do these acts provide adequate standards for EPA to follow? Third, if so, do the economic measures being considered meet those standards?

In addressing these questions, a fundamental issue is whether the economic measures will be primarily employed to bring about a legitimate regulatory objective or to generate revenue. In this regard, EPA's primary focus has been on the windfall producers will derive from the allocated quota system and the effect this

could have on the development of substitutes.[18] We note that in Algonquin, the fee was imposed after quotas on imports failed to bring about a reduced reliance on imported petroleum products. In the present situation, EPA already has in place a regulation it deems effective to implement the Montreal Protocol. Whether these considerations would have a bearing on the legality of any regulatory scheme that employs economic measures remains to be seen.

Auctions

One way to evaluate their auction being considered is to view it as a surrogate for a fee, and analyze EPA's authority to implement the auction under the same criteria applicable to a fee as previously discussed. An alternative is to view the auction as a separate and distinct regulatory tool.

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[18]See also The United States Budget In Brief, Fiscal Year 1990, p. 89, which states:

> "The administration is also proposing to charge market value for the rights to produce chlorofluorocarbons (CFCs) and related substances that deplete the ozone layer (CFCs are used as refrigerants and solvents as well as to make insulation). Current regulations, which require major reductions in the production of CFCs, will lead to a significant rise in the price of CFCs. By charging market value for these limited production rights, the revenue resulting from the price rise would accrue to the Treasury for the benefit of the general public, rather than to producers as windfall profits. Capturing this windfall will also remove the potential disincentive that profits might have on current producers to quickly develop environmentally safer but potentially less profitable substitutes for CFCs. Mechanisms to be considered could include permit fees and auctions. The charges for these rights are expected to generate proceeds in 1990 of $0.4 billion."

See also Major Policy Initiatives, 1990 pp. 154-155.

Auctions generally have involved the sale of government owned property, such as surplus property sales under 40 U.S.C. § 485(b) and timber sales on National Forest System lands under 16 U.S.C. § 472a; or the leasing of exploration rights by competitive bidding, such as oil and gas land leases under 30 U.S.C. § 226. However, what EPA would be auctioning is neither ownership of government property nor the right to use such property, but rather the right for private industry to continue producing certain chemicals subject to government restrictions. We are unaware of a court decision addressing the case of an auction under such circumstances.

Finally, there is a programmatic issue relating to EPA instituting an auction system inextricably tied to the allocation. Should an auction system be voided by the courts, the allocations based upon the auction would be suspect. This in turn could affect the United States compliance with the requirements of the Montreal Protocol.

CONCLUSIONS

No legislation expressly authorizes EPA to establish the fee or auction system it is exploring. This means that EPA will have to rely on its general regulatory authority under the Clean Air Act or the Toxic Substances Control Act, or the general authority provided by the User Charge Statute. It would be highly speculative to conclude whether EPA is authorized to use such economic measures under current law. However, as previously discussed, EPA faces various fundamental legal issues, some of which have not been definitively resolved by the courts.

The uncertain resolution of the issues we have discussed suggest that legislative action would be a more appropriate course to follow in addressing whether a fee or auction system should be established to capture windfall profits. If Congress believes that the potential for windfall profits, and for adverse effects arising from the current system of allocating production and consumption, should be addressed by the types of economic measures EPA is considering, we believe the Congress should expressly authorize their use. Furthermore, if Congress enacts such legislation, the Congress also might consider earmarking some or all of the funds recovered for research into substitutes for CFCs and halons. We note that earmarking a portion of the funds recovered by the government for special purposes was authorized by the Crude Oil Windfall Profits Tax Act of 1980. Of course, if Congress believes EPA's concerns are without merit, legislation may be needed to prohibit EPA from pursuing economic measures to control CFC and halon production and consumption. A number of bills have been introduced during this Congress to impose economic measures on the production of CFCs and halons.