Issued in Washington, DC, on April 13, 1994.

J. Suzanne Hedgepeth,

Chief, Exemption Programs, Office of Hazardous Materials Exemptions and Approvals.

[FR Doc. 94-9490 Filed 4-19-94; 8:45 am]

BILLING CODE 4910-60-M

Office of Hazardous Materials Safety; Applications for Exemptions

AGENCY: Research and Special Programs Administration, DOT.

ACTION: List of applicants for exemptions.

SUMMARY: In accordance with the procedures governing the application for, and the processing of, exemptions from the Department of Transportation's Hazardous Materials Regulations (49 CFR part 107, subpart B), notice is hereby given that the Office of Hazardous Materials Safety has received the applications described herein. Each mode of transportation for which a particular exemption is requested is indicated by a number in the "Nature of Application" portion of the table below as follows: 1—Motor vehicle, 2—Rail freight, 3—Cargo vessel, 4—Cargo aircraft only, 5—Passenger-carrying aircraft.

DATES: Comments must be received on or before May 20, 1994.

ADDRESS COMMENTS TO: Dockets Unit, Research and Special Programs Administration, U.S. Department of Transportation, Washington, DC 20590.

Comments should refer to the application number and be submitted in triplicate. If confirmation of receipt of comments is desired, include a self-addressed stamped postcard showing the exemption application number.

FOR FURTHER INFORMATION CONTACT: Copies of the applications are available for inspection in the Dockets Unit, room 8426, Nassif Building, 400 7th Street, SW. Washington, DC.

NEW EXEMPTIONS

Application No.	Applicant	Regulation(s) affected	Nature of exemption thereof
11237-N	Dapco Industries, Inc., Ridgefield, CT.	49 CFR 173.34(e)	To authorize the ultrasonic testing method of 3A and 3AA cylinders used for transporting various hazardous materials classed as Division 2.1, 2.3, 6.1 and Class 3 and 8. (Mode 1, 2, 3.)
11238-N	Thiokol Corporation, Brigham City, UT.	49 CFR 172.101, 172.102, Code 109, 173.60(a), 173.61, 173.62.	To authorize the transportation of rocket motors, in propulsive stage containing one or more hazardous materials, classed as Division 1.3, in specially designed packaging. (Mode 1.)
11239-N	CO.ME.F Carpenteria, s.r.l., Tradate, Italy.	49 CFR 178.245-1(b)	To authorize the transportation of certain liquefied flammable and non-flammable refrigerant gases, Division 2.1 and 2.2, in non-DOT specification steel portable tanks equipped with openings in the shell which are not grouped together. (Mode 1, 2, 3.)
11240-N	Mead Fine Paper, Chillicothe, OH	49 CFR 173.31(A1)(c)	To authorize a one-time shipment of a DOT-Specification 111A100W1 rail car, which was filled after it was out-of-test, containing corrosive liquid, n.o.s., Class 8. (Mode 2.)
11241-N	Rohn and Haas Company, Philadelphia, PA.	49 CFR 179.13	To authorize the transportation of Class 3 material in quantities greater than those authorized by the CFR, not to exceed 270,000 pounds gross weight in DOT Specification 105J tank cars. (Mode 2.)
11242-N	Northrop Corporation, Hawthorne, CA.	49 CFR 172.200, 172.300, 173.400, 173.60, 173.62.	To authorize the interfacility transportation of Class 1 explosives packaged in strong wooden boxes and shipped as non-regulated in private owned enclosed vehicles. (Mode 1.)
11243-N	Thiokol Corporation, Brigham City, UT.	49 CFR 173.28(b)(4)	To authorize UN1A2/Y 300/S drums of 220 liter capacity embossed with a minimum wall thickness of less than 0.96 mm, equipped with polyethylene liner, to be reused without reconditioning, for the shipment of ammonium perchlorate, Division 5.1. (Mode 1.)
11244-N	Aerospace Design & Development, Inc., Niwot, CO.	49 CFR 178.57-2(b) and 178.57-5(a).	To authorize the transportation of 4 liter cylinders constructed of titanium alloy similar to DOT-4L Specification equipped with 951 psi operating pressure to provide air supply for self contained breathing apparatus. (Mode 1.)

This notice of receipt of applications for new exemptions is published in accordance with part 107 of the Hazardous Materials Transportations Act (49 U.S.C. 1806; 49 CFR 1.53(e)).

Issued in Washington, DC, on April 14, 1994.

J. Suzanne Hedgepeth,

Chief, Exemption Programs, Office of Hazardous Materials Exemptions and Approvals.

[FR Doc. 94-9489 Filed 4-19-94; 8:45 am]

BILLING CODE 4910-60-M

DEPARTMENT OF THE TREASURY

Public Information Collection Requirements Submitted to OMB for Review

April 13, 1994.

The Department of Treasury has submitted the following public information collection requirement(s) to OMB for review and clearance under the Paperwork Reduction Act of 1980,

Public Law 96–511. Copies of the submission(s) may be obtained by calling the Treasury Bureau Clearance Officer listed. Comments regarding this information collection should be addressed to the OMB reviewer listed and to the Treasury Department Clearance Officer, Department of the Treasury, room 2110, 1425 New York Avenue, NW., Washington, DC 20220.

Bureau of Alcohol, Tobacco and Firearms

OMB Number: 1512–0507.
Form Number: ATF F 5300.26 and ATF REC 5300/26.
Type of Review: Extension.
Title: Federal Firearms and Ammunition Excise Tax Return.
Description: This information is needed to determine how much taxes are owed for firearms and ammunition excise taxes. ATF uses this information to verify that a taxpayer has correctly determined and paid tax liability on the sale or use of firearms or ammunition. Businesses, including small businesses, may be required to use this form.
Respondents: Businesses or other for-profit, Small businesses or organizations.
Estimated Number of Respondents/ Recordkeepers: 875.
Estimated Burden Hours Per Respondent/Recordkeeper: 7 hours.
Frequency of Response: On occasion, Quarterly, Annually.
Estimated Total Reporting/ Recordkeeping Burden: 24,500 hours.
Clearance Officer: Robert N. Hogarth (202) 927–8930, Bureau of Alcohol, Tobacco and Firearms, room 3200, 650 Massachusetts Avenue, NW., Washington, DC 20226.
OMB Reviewer: Milo Sunderhauf (202) 395–6880, Office of Management and Budget, room 3001, New Executive Office Building, Washington, DC 20503.

Lois K. Holland,

Departmental Reports Management Officer.

[FR Doc. 94–9454 Filed 4–19–94; 8:45 am]

BILLING CODE 4810–31–P

Public Information Collection Requirements Submitted to OMB for Review

April 13, 1994.

The Department of Treasury has submitted the following public information collection requirement(s) to OMB for review and clearance under the Paperwork Reduction Act of 1980, Public Law 96–511. Copies of the submission(s) may be obtained by calling the Treasury Bureau Clearance Officer listed. Comments regarding this information collection should be addressed to the OMB reviewer listed and to the Treasury Department Clearance Officer, Department of the Treasury, room 2110, 1425 New York Avenue, NW., Washington, DC 20220.

U.S. Customs Service

OMB Number: 1515–0020.
Form Number: CF 7539.
Type of Review: Reinstatement.
Title: Drawback Entry Covering Rejected and Same Condition Merchandise.
Description: CF 7539 is needed to establish the eligibility of rejected, same condition, substitution same condition or destroyed merchandise for return of duty. The form is used by claimant to provide the necessary information for Customs to approve the drawback claim.
Respondents: Businesses or other for-profit.
Estimated Number of Respondents/ Recordkeepers: 2,100.
Estimated Burden Hours Per Respondent/Recordkeeper: 2 hours.
Frequency of Response: On occasion.
Estimated Total Reporting/ Recordkeeping Burden: 22,550 hours.
Clearance Officer: Ralph Meyer (202) 927–1552, U.S. Customs Service, Paperwork Management Branch, Room 6316, 1301 Constitution Avenue, NW., Washington, DC 20229.
OMB Reviewer: Milo Sunderhauf (202) 395–6880, Office of Management and Budget,Room 3001, New Executive Office Building, Washington, DC 20503.

Lois K. Holland,

Departmental Reports Management Officer.

[FR Doc. 94–9455 Filed 4–19–94; 8:45 am]

BILLING CODE 4820–02–P

Public Information Collection Requirements Submitted to OMB for Review

April 13, 1994.

The Department of Treasury has submitted the following public information collection requirement(s) to OMB for review and clearance under the Paperwork Reduction Act of 1980, Public Law 96–511. Copies of the submission(s) may be obtained by calling the Treasury Bureau Clearance Officer listed. Comments regarding this information collection should be addressed to the OMB reviewer listed and to the Treasury Department Clearance Officer, Department of the Treasury, room 2110, 1425 New York Avenue, NW., Washington, DC 20220.

Internal Revenue Service

OMB Number: 1545–0013.
Form Number: IRS Form 56.
Type of Review: Extension.
Title: Notice Concerning Fiduciary Relationship.
Description: Form 56 is used to inform the IRS that a person is acting for another person in a fiduciary capacity so that the IRS may mail tax notices to the fiduciary concerning the person for whom he/she is acting. The data is used to ensure that the fiduciary relationship is established or terminated and to mail or discontinue mailing designated tax notices to the fiduciary.
Respondents: Individuals or households, Businesses or other for-profit, Small businesses or organizations.
Estimated Number of Respondents/ Recordkeepers: 25,000.
Estimated Burden Hours Per Respondent/Recordkeeper:
Recordkeeping—8 min.
Learning about the law or the form—32 min.
Preparing the form—46 min.
Copying, assembling, and sending the form to the IRS—15 min.
Frequency of Response: On occasion.
Estimated Total Reporting/ Recordkeeping Burden: 292,800 hours.
Clearance Officer: Garrick Shear (202) 622–3869, Internal Revenue Service, room 5571, 1111 Constitution Avenue, NW., Washington, DC 20224.
OMB Reviewer: Milo Sunderhauf (202) 395–6880, Office of Management and Budget, room 3001, New Executive Office Building, Washington, DC 20503.

Lois K. Holland

Departmental Reports Management Officer.

[FR Doc. 94–9456 Filed 4–19–94; 8:45 am]

BILLING CODE 4830–01–P

Federal Register

Wednesday
April 20, 1994

Part II

Department of Housing and Urban Development

Office of the Assistant Secretary for Public and Indian Housing

NOFA for the Traditional Indian Housing Development Program for Fiscal Year 1994; Notice

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Office of the Assistant Secretary for Public and Indian Housing

[Docket No. N–94–3736; FR–3624–N–01]

NOFA for the Traditional Indian Housing Development Program for Fiscal Year 1994

AGENCY: Office of the Assistant Secretary for Public and Indian Housing, HUD.

ACTION: Notice of funding availability (NOFA) for fiscal year 1994.

SUMMARY: A. This notice announces the availability of funding for Fiscal Year (FY) 1994 for the development of new Indian housing (IH) units and provides the applicable criteria, processing requirements and action timetable. All Indian Housing Authorities (IHAs) which have not been determined to be administratively incapable, in accordance with 24 CFR 905.135, are invited to submit applications for Indian housing developments in accordance with the requirements of this NOFA.

B. This NOFA contains information concerning the purpose of this NOFA; eligibility; available amounts; the procedures that an IHA must follow to apply for new Indian housing units. The procedures for rating, ranking, and funding IHA applications are also in this NOFA.

DATES: Applications must be physically received by the Indian field office (FO) having jurisdiction over the applicant on or before 4:30 p.m. (FO local time) June 6, 1994 for new Indian housing units. The applicant shall submit its application(s) for new housing units on Form HUD–52730 with all supporting documentation required by Appendix 2, and for demolition or disposition in accordance with 24 CFR part 905, subpart M.

FOR FURTHER INFORMATION CONTACT: Applicants may contact the appropriate Indian FO for further information. Refer to Appendix 1, for a complete list of FOs and telephone numbers.

SUPPLEMENTARY INFORMATION:

Paperwork Reduction Act Statement

In accordance with the Paperwork Reduction Act of 1980 (44 U.S.C. 3501–3520), the information collection requirements contained in these application procedures for development funds were reviewed by the Office of Management and Budget and assigned OMB control number 2577–0030.

I. New Development

A. Authority

1. Statutory Authority

Sections 5 and 6, U.S. Housing Act of 1937 (42 U.S.C. 1437c, 1437d), as amended; U.S. Department of Housing and Urban Development and Independent Agencies' Appropriations Act for Fiscal Year 1993. Section 23, U.S. Housing Act of 1937, as added by section 554, Cranston-Gonzalez National Affordable Housing Act; section 7(d), Department of Housing and Urban Development Act (42 U.S.C. 3535(d)).

2. Indian housing regulations

Indian housing development regulations are published at 24 CFR part 905.

B. Development Allocation Amount

The FY 1994 VA–HUD Appropriations Act (Pub. L. 103–124) made available $263,000,000 of budget authority for the traditional Indian Housing Development grants program (new Indian Housing units). Since some of the appropriated funds (approximately 2.5%) are to be derived from the recapture of prior year obligations, the actual amount available may be less. However, other adjustments within the Annual Contributions account in 1994, including the addition of carryover funds, are expected to abate the impact of this loss. At the time of this initial allocation of funds, $262,773,944 is available.

Up to $5,000,000 of the available Indian Housing Development funds will be made available by the Department in order to provide funds needed to replace units approved for demolition/disposition. Any portion of the $5,000,000 that is not designated for demolition/disposition replacements by July 1, 1994, as well as any amounts of actual recaptures that are realized and reallotted to the program, will be made available to the six Office of Native American Programs (ONAPs) on the same basis as the amounts allocated for new units.

Each of the ONAP jurisdictions has been designated as the smallest practical area for the allocation of assistance. Funds available for new units will be assigned to the ONAPS consistent with 24 CFR 791.403.

The competitive process, described in this NOFA, will be used to select IHA applications to be funded for new Indian Housing units. Departmental compliance with the metropolitan/non-metropolitan provisions of section 213(d) of the Housing and Community Development Act of 1974 may require the selection of lower rated metropolitan applications over higher rated non-metropolitan applications. The table below indicates the amount of grant authority available for new units in FY 1994 for the six ONAPs; the indicated amounts are inclusive of funds to meet off-site sewer and water requirements.

Chicago	$40,311,045
Oklahoma City	37,156,223
Denver	27,792,801
Phoenix	81,414,746
Seattle	22,336,995
Anchorage	48,762,135
Total	257,773,944

C. Eligibility For New Housing Units

All IHAs which have not been determined to be administratively incapable in accordance with 24 CFR 905.135, have been organized in accordance with 24 CFR 905.125 and 905.126, and have the required Tribal and/or local cooperation agreements as required by the U.S. Housing Act of 1937, as amended, are invited to submit applications for new Indian housing units.

All IHAs that have developments assisted under the U.S. Housing Act of 1937, as amended, and meet the requirements of 24 CFR part 905 subpart M, may apply for funds for demolition or disposition, whether eligible for new units or not.

D. Development Award Application Process

1. Application Due Date

An IHA may submit an application(s) for a project at any time after the publication date of this NOFA, to the Indian FO having jurisdiction over the IHA applicant on or before 4:30 p.m., FO local time, June 6, 1994 for new Indian housing units. The application(s) shall be submitted on Form HUD–52730 and shall be accompanied by all the legal and administrative attachments required by the form and the items specified in Appendix 2. A FAX of the application will NOT constitute physical delivery.

The application deadline is firm as to date and hour. HUD will treat as ineligible for consideration any application that is received after the application deadline. Applicants should make early submission of their materials to avoid any risk of loss of eligibility brought about by unanticipated delays or other delivery-related problems.

2. Application Kit

Application Form HUD–52730 may be obtained from any Indian FO listed in Appendix 1, or from the Indian Housing

Development Handbook 7450.1, Chapter 2.

3. Submittal of Complete Application

Completed applications must be submitted to the Indian FO having jurisdiction of the IHA applicant at the address/location listed in Appendix 1.

4. Action on Application

When the application is received by HUD, HUD will provide written notification to the IHA showing the date and time the application was received in the HUD office. The FO will begin review of the application within 14 calendar days after the application deadline. The application must be complete and must demonstrate legal sufficiency and the IHA must not have been disqualified for funding of new projects, as determined in accordance with § 905.135. If it is evident that any application fails to satisfy these technical requirements, the HUD FO will immediately return the application and will identify, in writing, the deficiencies. The IHA will be allowed to cure minor technical deficiencies within 14 calendar days of written notification by HUD. All responses must be in writing and received within 14 calendar days of the date HUD issues a written notification of deficiency. Under no circumstances may an applicant submit information which would affect the rating of the application after the original due date for application submission.

E. Ranking Factors and Selection Criteria

1. Rating and Ranking

Rating and ranking of applications from IHAs for new IH units will be done in accordance 24 CFR 905.220. Applications from new IHAs, or, in the case of an umbrella IHA that has added a new tribe, the application from the new tribe, will receive 100 points. If an IHA that serves more than one tribal government, or, in the case of Alaska, more than one village, submits applications for housing units in several of the communities, each application will be treated separately, for purposes of the number of points awarded.

For each Region, the rankings will be based on awarding points to each application for the following categories:

a. The relative unmet IHA need for housing units compared to the other eligible applications for that program type (i.e., low rent (LR) or mutual help (MH)), based on IHA waiting lists and the total number of units in management and in the development pipeline. There should be a separate waiting list for each program type. This need will be measured for each program type by dividing the number of families on the waiting list, by the IHA's total number of units in management and under development. If the result of this division is greater than 1.00, the points for this category shall be 40. Otherwise, the result of this division shall be multiplied by 40. If the IHA has 500 or more families on the waiting list, it is awarded the 40 points. The maximum number of points an IHA can receive is 40 points.

b. The relative IHA occupancy rate compared to the occupancy rates of other eligible IHA applications for that program type. The occupancy rate for an IHA shall be derived from the most recent data entered in the HUD Management Information Retrieval System (MIRS) national data base, which reports total units available and total units occupied based on information supplied by IHAs on forms submitted periodically to HUD. For all IHA projects in management, the total number of units occupied is divided by the total number of units available, multiplied by 100. This occupancy rate for an IHA will then be divided by the highest occupancy rate of any IHA (never to exceed 97%, in any event), and this ratio shall be multiplied by 20 to calculate an IHA's points for this category. The maximum number of points that an IHA can receive is 20 points. An existing IHA that is applying for a previously unfunded program type will be awarded a score equal to the highest rated score for this factor in the Regional competition.

c. Length of time since the last Program Reservation date. The number of days from January 1, 1994 to the date of the last Program Reservation for an IHA shall be divided by the longest time, in number of days, since the last Program Reservation for any IHA. This ratio shall be multiplied by 20 to calculate an IHA's points for this category. The maximum number of points that an IHA can receive is 20 points. FSS fund reservations for FY 1991 or FY 1992 and units received for demolition or disposition purposes will not be counted for rating and ranking purposes for new Indian housing units in FY 1994.

d. Current IHA development pipeline activity. The maximum number of points available for this factor is 20 and each IHA will start with 20 points. For each IHA development that was not completed (submittal of the ADCC documents) on January 1, 1994, points will be deducted as follows:

(1) For each IHA development which, within the past 24 months from the date this application was submitted, has not submitted an approvable Development Program within one year from the Program Reservation date for conventional and 18 months for turnkey development methods, 2 points may be deducted at the discretion of the ONAP Director up to a maximum deduction of 20 points.

(2) For each IHA development which, within the past 24 months from the date this application was submitted, has not achieved construction start within 30 months from the date of the Program Reservation (not counting days under statutory exclusions), 2 points may be deducted at the discretion of the ONAP up to a maximum deduction of 20 points.

(3) For each IHA development not meeting HUD requirements (during the past 24 months from the date of this application) for administration of development contracts as set forth in the regulations and handbooks, 2 points may be deducted at the discretion of the ONAP Director up to a maximum deduction of 20 points.

e. Computation. Scores for ranking shall be carried out to two decimal places (xx.xx).

2. Selection Criteria

a. The ranking process will produce an ordered list of IHA applications by Region that may receive funding. The order is established by the total number of points the application received in the rating process. If any funds remain after the initial funding cycle within the Region, the funds will be provided to more fully fund applications that were reduced due to the Maximum Units Award table shown in paragraph b. below.

b. The number of units awarded shall be based upon the following table to ensure a more equitable distribution and meaningful competition based on need. Exceptions to the maximum number of units awarded based on the table shall be made and approved by the Field Office Director upon proper justification.

Total of all units IHA requested in application(s) by program type	Maximum units awarded (subject to availability)
1,000 and above	300
750 to 999	200
500 to 749	150
400 to 499	100
300 to 399	80
200 to 299	60
199 or fewer	40

If an IHA that serves more than one tribal government, or in the case of

Alaska, more than one village, submits applications for housing units in several of the communities, each application will be treated separately, for purposes of the number of units awarded.

c. Tie breaker. In the case of ties, priority will be given to the application that has the highest ratio of units to:

(1). Pre-approved sites, and, if there is still a tie,

(2). BIA approved leases for the proposed project site(s).

3. Replacement Housing

IHA applications for demolition or disposition may require a commitment for replacement housing units on a one-for-one replacement to comply with requirements of section 18 of the U.S. Housing Act, as amended. IHAs are to process requests for demolition or disposition in accordance with 24 CFR part 905, subpart M.

F. Requests For Amendment Funds

1. Amendment funds may not be used for FY 94 approved projects. However, this will not restrict the availability of amendment funds in future years to those applicants approved in FY 1994.

2. Amendment funds will not be distributed to FOs on the same basis as funds for new units. Instead, they will be distributed by HUD Headquarters on the basis of (1) emergency requests from FOs or (2) in response to amendment money need surveys submitted by the FOs as requested. Requests that are not emergency requests will be evaluated using the following order of priority:

a. Projects with HUD-approved litigation settlement payable or which require funding to pay for litigation related legal costs.

b. Projects under construction to cover a HUD-approved cost increase.

c. Projects require a HUD-approved cost increase to enter the bidding process or execute construction contract/contract of sale.

d. Projects that require a HUD-approved cost increase for any reason not listed above.

II. Other Matters

A. HUD Reform Act

1. Required Disclosures by Applicants.

a. *Disclosures.* All applicants are required to disclose information with respect to any additional funds that can reasonably be expected to be received by them as assistance in excess of $200,000 (in the aggregate) during the Fiscal Year that will be related to the project.

Disclosure must be made relative to any related assistance from the Federal Government (agencies or instrumentalities other than HUD), a state, or a unit of general local government that is expected to be made available with respect to the project for which the applicant is seeking assistance.

The assistance shall include but not be limited to any loan, grant, guarantee, insurance, payment, rebate, subsidy, credit, tax benefit, or any other form of direct or indirect assistance.

b. *Updates.* The IHA applicant shall update this disclosure within 30 days of any substantial change. This update is required during the period when an application is pending or assistance is being provided.

2. Prohibited Disclosures by HUD Employees.

HUD's regulation implementing section 103 of the Department of Housing and Urban Development Reform Act of 1989 was published May 13, 1991 (56 FR 22088) and became effective on June 12, 1991. That regulation, codified as 24 CFR part 4, applies to this funding competition. The requirements of the rule continue to apply until the selection of successful applicants. HUD employees involved in the review of applications and in the making of funding decisions are restrained by part 4 from providing advance information to any person (other than an authorized employee of HUD) concerning funding decisions, or from otherwise giving any applicant an unfair competitive advantage. Persons who apply for assistance in this competition should confine their inquiries to the subject areas permitted under 24 CFR part 4.

Applicants who have questions should contact the HUD Office of Ethics (202) 708–3815. (This is not a toll-free number.) The Office of Ethics can provide information of a general nature to HUD employees, as well. However, a HUD employee who has specific program questions, such as whether particular subject matter can be discussed with persons outside the Department, should contact his or her FO counsel, or headquarters counsel for the IH development program.

B. Lobbying

Section 319 of the Department of the Interior and Related Agencies Appropriations Act hereafter referred to as the "Byrd amendment," prohibits grantees from using any federally appropriated funds to influence federal employees, members of Congress, and congressional staff regarding specific grants or contracts. The Department has determined that the requirements of the Byrd amendment do not apply to IHAs established by a Tribal government exercising its sovereign powers with respect to expenditures specifically permitted by other Federal law. The Byrd amendment requires all IHAs established under state law to submit the following documents for applications for grants exceeding $100,000.

1. Certification

A certification that no federal appropriated funds will be used for lobbying purposes. The certification shall be submitted on the Form entitled "Certification for Contracts, Grants, Loans and Cooperative Agreements".

2. Disclosure Document

A document disclosing any lobbying activities (on Standard Form—LLL, "Disclosure of Lobbying Activities"), where any funds other than federally appropriated funds will be or have been used to influence federal employees, members of Congress, and congressional staff regarding specific grants or contracts.

C. Conversions

Project conversion between program type (LR or MH) may only be considered where:

1. An IHA submitted projects for mutual help (MH) and low rent (LR), each scored high enough to be funded, and the IHA has the waiting list to support the conversion, or

2. If only one application was submitted and approved, the application upon re-ranking in the other program has to score at least 0.01 higher than the number of points achieved by the highest rated application from any IHA which was not funded. If neither circumstance exists, the request to convert will not be approved.

D. Errors in Ranking and Rating FY 1993

1. Errors made by a FO during the 1993 fiscal year's rating and ranking that resulted in a change of rank order detrimental to an IHA may be corrected as follows:

a. The FO will construct a hypothetical distribution that would have existed if the error had not been made, and

b. The FO will determine what the unit award/funding would have been for the IHA subject to the funds that were available at the time.

2. Remedial action will be taken for errors made by a FO as follows:

a. The FO will deduct any funds needed from the FY 1994 fair share assigned to that FO before any FY 1994 rating and rankings are completed.

b. A correction of an error for an IHA will not adversely affect the IHA participation on the FY 1994 rating and ranking process. The IHA's application will be rated and ranked on the same basis as other applications and as if no error had been made.

E. Environment

A Finding of No Significant Impact with respect to the environment has been made in accordance with HUD regulations that implement section 102(2)(C) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332). The Finding of No Significant Impact is available for public inspection during business hours in the Office of the Rules Docket Clerk, Office of General Counsel, room 10276, Department of Housing and Urban Development, 451 Seventh Street SW., Washington, DC 20410.

Dated: April 5, 1994..

Joseph Shuldiner,

Assistant Secretary for Public and Indian Housing.

Appendix 1. Listing of Indian Field Offices.

Region V—Chicago

Chicago Office of Native American Programs, Metcalfe Federal Building, 77 West Jackson Boulevard, Chicago, Illinois 60604–3507, (312) 353–1282 or (800) 735–3239, *TDD Numbers:* 1–800–927–9275, 312–886–3741.

Region VI—Oklahoma

Oklahoma City Office of Native American Programs, Murrah Federal Building, 200 NW. 5th Street, Oklahoma City, Oklahoma 73102–3202, (405) 231–4101, *TDD Numbers:* 405–231–4181, 405–231–4891.

Region VIII—Denver

Denver Office of Native American Programs, First Interstate Tower North, 633 17th Street, Denver, Colorado 80202–3607, (303) 672–5462, *TDD Number:* 303–844–6158.

Region IX —Phoenix

Office of Native American Programs, Two Arizona Center, 400 North Fifth Street, suite 1650, Phoenix, Arizona 85004–2360, (603) 379–4156, *TDD Number:* 602–379–4461.

Region IX —Albuquerque

Office of Native American Programs, suite 1830, 201 3rd St. NW., Albuquerque, New Mexico 87102–3368, (505) 766–1372, *TDD Number:* None.

Region X—Seattle

Seattle Office of Native American Programs, 909 First Avenue, Suite 200, Seattle, Washington 98104–1000, (206) 220–5270, *TDD Number: None.*

Region X—Anchorage

Anchorage Indian Housing Division, 949 East 36th Ave., suite 401, Anchorage, Alaska 99508–4399, (907) 271–4633, *TDD Number:* 907–271–4328.

Appendix 2—New Indian Housing Units. Development Application Submission Checklist.

Certain submission requirements listed on the following checklist is included on the application form HUD–52730. It is the responsibility of the IHA to assure that all submission requirements of the checklist are met whether through the application form or by separate submittal:

1. Application Form HUD–52730:
   _____ Complete application on Form HUD–52730.
   _____ Attach all exhibits and tables as required.
2. IHA Resolution(s): each application must be accompanied by an IHA Resolution which contains the following:
   _____ A statement that authorizes the submission of the application for units.
   _____ A statement explaining how solid waste disposal for the proposed development will be addressed.
   _____ A statement regarding the planned access to public utility services and a listing of any official commitment(s) for these utility services for the development.
   _____ The IHA Resolution must advise HUD of any persons with a pecuniary interest in the proposed development. Persons with a pecuniary interest in the development shall include but not be limited to any developers, contractors, and consultants involved in the application, planning, construction or implementation of the development. During the period when an application is pending or assistance is being provided, the applicant shall update the disclosure required within thirty days of any substantial change.
3. Certifications: Each application must contain the following certifications provided by the Executive Director on IHA letterhead.
   _____ Certification Regarding Drug-Free Workplace Requirements as directed by 24 CFR 24.630 (b).
   _____ Certification that the IHA will comply with 24 CFR part 8, which implements section 504 of the Rehabilitation Act of 1973.
   _____ Certification that the IHA will comply with Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.
   _____ Certification that the IHA will adhere to the Federal Uniform Accessibility Standards/Architectural Barriers Act of 1968.
   _____ For IHAs established under state law, a certification that no federal appropriated funds will be used for lobbying purposes. (Form entitled "Certification for Contracts, Grants, Loans and Cooperative Agreements.")
   _____ Where applicable, and only for IHAs established under state law, a statement disclosing lobbying activities using other than federal appropriated funds. (Standard Form—LLL, "Disclosure of Lobbying Activities.")
4. Letters: Each IHA application must be accompanied by a letter of support signed by the CEO of the general local government indicating:
   _____ support for the proposed application and development.
   _____ an authorization to apply for planning funds for the development.
   _____ where applicable, assurance to HUD that access road needs will be identified by Tribal Resolution (with BIA concurrence) and entered on the BIA Indian Reservation Roads prioritization schedule used by BIA for resource allocation (25 CFR part 170; 57 BIAM 4 and Supplement 4; and 24 CFR part 905 B, appendix I, Item 6).
5. Supporting Documentation: Each application must be accompanied by the following supporting documentation:
   _____ Disclosure of additional assistance from other sources that will be used in association with the project for which the applicant is seeking assistance.
   _____ Statement specifying the number of eligible applicant families by program type (LR or MH). The statement must be supported by a sufficient number of current applications from eligible families maintained by the IHA.
   _____ Identify sites in the application in accordance with §§ 905.230, 905.245 and 905.407.
6. Items That Should Be Submitted, If Not Previously Submitted:
   _____ Certified copy of the Transcript of Proceedings containing the IHA resolution pursuant to which the Application is being made.
   _____ IHA Organization Transcript or General Certificate.
   _____ Tribal Ordinance.
   _____ Cooperation Agreements. Where the provisions of the necessary local government cooperation are not contained in the ordinance or other enactment creating the IHA, the IHA shall submit an executed cooperation agreement (or copy of an existing one) for the location involved, which is sufficient to cover the number of units in the application.
7. Optional Items:
   _____ Preliminary Site Reports indicating pre-approved sites, and BIA approved leases for the proposed project site(s), if any.

[FR Doc. 94–9311 Filed 4–19–94; 8:45 am]

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Wednesday
April 20, 1994

Part III

Environmental Protection Agency

40 CFR Part 247, et al.

Comprehensive Guideline for Procurement of Products Containing Recovered Materials and Issuance of a Draft Recovered Materials Advisory Notice; Proposed Rule and Notice

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 247, 248, 249, 250, 252, and 253

[FRL–4875–6]

RIN 2050–AE16

Comprehensive Guideline for Procurement of Products Containing Recovered Materials

AGENCY: Environmental Protection Agency.

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) today is proposing a Comprehensive Procurement Guideline designating items that are or can be made with recovered materials. The Comprehensive Procurement Guideline implements section 6002(e) of the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984, and section 502 of Executive Order 12873. RCRA section 6002 requires EPA to designate items that are or can be produced with recovered materials and to recommend practices for the procurement of designated items by procuring agencies. Executive Order 12873 sets forth procedures for EPA to follow in implementing section 6002(e) of RCRA. The Executive Order requires EPA to designate items in a Comprehensive Procurement Guideline and to recommend procurement practices in a related Recovered Materials Advisory Notice. Once EPA designates an item, RCRA section 6002 requires any procuring agency using appropriated Federal funds to procure that item to purchase it with the highest percentage of recovered materials practicable. In addition to designating new items, the Comprehensive Procurement Guideline incorporates and reorganizes the five procurement guidelines previously issued by EPA. These guidelines are: paper and paper products, re-refined lubricating oil, retread tires, building insulation, and cement and concrete. Today's proposed action will foster markets for materials recovered from solid waste by using government purchasing power to stimulate use of these materials in the manufacture of new products.

DATES: EPA will accept public comments on this proposed rule until June 20, 1994.

ADDRESSES: The public must send an original and two copies of their comments to: RCRA Information Center (5305), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

Please place the docket number (F–94–PRMP–FFFFF) on your comments.

If any information is confidential, it should be identified as such. An original and two copies of Confidential Business Information (CBI) must be submitted under separate cover to: Document Control Officer (5305), Office of Solid Waste, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

Documents related to today's rule are available for viewing at the RIC, located at: U.S. Environmental Protection Agency, RCRA Information Center, room M2616, 401 M Street, SW., Washington, DC 20460.

The RIC is open from 9 a.m. to 4 p.m. Monday through Friday, except for Federal holidays. The public must make an appointment to review docket materials. Call (202) 260–9327 for appointments. Copies cost $.15 per page.

FOR FURTHER INFORMATION CONTACT: For general information, contact the RCRA Hotline at (800) 424–9346, or, in the Washington metropolitan area, (703) 412–9810. For technical information on individual item designations, contact the following EPA staff: Plastic Pipe and Fittings, Geotextiles, Carpet, Floor Tile and Patio Blocks, Playground Surfaces and Running Tracks—Robin Moran, (202) 260–5066; Engine Coolant, Structural Fiberboard and Laminated Paperboard, Rockwool and Fiberglass Insulation, Cement Containing Blast Furnace Slag, and Hydraulic Mulch—Dana Arnold, (202) 260–8518; Yard Trimmings Compost—Hope Pillsbury, (202) 260–2797; Temporary Traffic Control Devices, Office Recycling Containers and Waste Receptacles, Plastic Desktop Accessories, Remanufactured Toner Cartridges, Binders, and Plastic Trash Bags—Beverly Goldblatt, (202) 260–7932. For all other technical information, contact Beverly Goldblatt at (202) 260–7932, or Dana Arnold at (202) 260–8518.

SUPPLEMENTARY INFORMATION:

Preamble Outline

I. Authority
II. Background
A. Materials in Solid Waste
1. Paper and Paperboard
2. Plastics
3. Glass
4. Yard Trimmings
5. Wood
6. Rubber
7. Engine Coolant
8. Blast Furnace Slag
B. Benefits of Recycling
C. Requirements
1. RCRA Section 6002
2. Executive Order 12873
3. Other Requirements and Policies
D. Criteria for Selecting Items for Designation
E. Methodology for Selecting Items for Designation
F. Request for Comments
III. Consolidation of Procurement Guidelines into 40 CFR Part 247
IV. Purpose, Scope, and Applicability
A. Purpose and Scope
B. Applicability
1. Statutory Provisions
2. Who Is a Procuring Agency?
3. To Which Purchases Does Section 6002 Apply?
4. What Is the $10,000 Threshold?
V. Definitions
VI. Affirmative Procurement Program
A. Specifications
B. Preference Program
1. Minimum Content Standards
2. Case-by-Case Policy Development
3. Substantially Equivalent Alternative
4. Requirements for Contractors and Grantees
5. Exceptions
C. Promotion Program
1. Internal Promotion
2. External Promotion
D. Estimation, Certification, and Verification
E. Procedures to Monitor and Review the Procurement Program
1. Monitoring and Annual Review
2. Reporting
VII. Proposed Categories of Item Designations
VIII. Paper and Paper Products
IX. Vehicular Products
A. Re-Refined Lubricating Oil and Retread Tires
B. Engine Coolants
1. Background
2. Rationale for Designation
3. Designation
X. Construction Products
A. Building Insulation
B. Structural Fiberboard and Laminated Paperboard
1. Background
2. Rationale for Designation
3. Designation
C. Plastic Pipe and Fittings
1. Background
2. Rationale for Designation
3. Designation
D. Geotextiles
1. Background
2. Rationale for Designation
3. Designation
E. Cement and Concrete
1. Background
2. Rationale for Designation
3. Designation
F. Carpet
1. Background
2. Rationale for Designation
3. Designation
G. Floor Tiles and Patio Blocks
1. Background
2. Rationale for Designation
3. Designation
XI. Transportation Products
A. Temporary Traffic Control Devices
1. Background

2. Rationale for Designation
3. Designation
XII. Park and Recreation Products
A. Playground Surfaces and Running Tracks
1. Background
2. Rationale for Designation
3. Designation
XIII. Landscaping Products
A. Hydraulic Mulch
1. Background
2. Rationale for Designation
3. Designation
B. Yard Trimmings Compost
1. Background
2. Rationale for Designation
3. Designation
XIV. Non-Paper Office Products
A. Office Recycling Containers and Office Waste Receptacles
1. Background
2. Rationale for Designation
3. Designation
B. Plastic Desktop Accessories
1. Background
2. Rationale for Designation
3. Designation
C. Remanufactured Toner Cartridges
1. Background
2. Rationale for Designation
3. Designation
D. Binders
1. Background
2. Rationale for Designation
3. Designation
E. Plastic Trash Bags
1. Background
2. Rationale for Designation
3. Designation
XV. Miscellaneous Products
XVI. Potential Items for Future Designation
XVII. Availability
XVIII. Economic Impact Analysis
XIX. Supporting Information

I. Authority

This guideline is proposed under the authority of sections 2002(a) and 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended, 42 U.S.C. 6912(a) and 6962, and section 502 of Executive Order 12873 (58 FR 54911, October 20, 1993).

II. Background

Today, the Environmental Protection Agency (EPA) is proposing a Comprehensive Procurement Guideline designed to encourage the purchase and use of products containing recovered materials. Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (RCRA or the Act) and the Hazardous and Solid Waste Amendments of 1984 (HSWA), requires EPA to designate items that are or can be made with recovered materials and to recommend practices to assist procuring agencies in meeting their obligations with respect to designated items under RCRA section 6002. After EPA designates an item, RCRA requires that each procuring agency, when purchasing a designated item, must purchase that item composed of the highest percentage of recovered materials practicable.

Executive Order 12873 (Executive Order or E.O.) sets forth the procedure for EPA to follow in implementing RCRA section 6002(e). Section 502 of the Order requires EPA to designate items in a Comprehensive Procurement Guideline (CPG) and to recommend procurement practices in a related Recovered Materials Advisory Notice (RMAN). Today's proposed rule fulfills the CPG requirement of the Executive Order. The proposed RMAN also appears in today's **Federal Register**.

Since 1983, EPA has issued five guidelines for the procurement of products containing recovered materials. The guidelines issued to date are listed in Table 1.

TABLE 1.—EPA Guidelines for Procurement of Products Containing Recovered Materials

Guideline	CFR part	Date (FR)
Cement and concrete containing fly ash.	40 CFR Part 249.	January 28, 1983 (48 FR 4230).
Paper and paper products.	40 CFR Part 250.	June 22, 1988 (53 FR 23546).
Re-refined lubricating oils.	40 CFR Part 252.	June 30, 1988 (53 FR 24699).
Retread tires.	40 CFR Part 253.	November 17, 1988 (53 FR 46558).
Building insulation.	40 CFR Part 248.	February 17, 1989 (54 FR 7327).

Today, EPA is proposing to designate 21 additional items and to amend the building insulation guideline to establish recovered materials content levels for fiberglass and increase the levels for rockwool. The new items that EPA is proposing for designation are: engine coolant, structural fiberboard and laminated paperboard, plastic pipe and fittings, geotextiles, cement containing blast furnace slag, carpet, floor tile and patio blocks, traffic cones and traffic barricades, playground surfaces and running tracks, hydraulic mulch, yard trimmings compost, office recycling containers and office waste receptacles, plastic desktop accessories, remanufactured toner cartridges, binders, and plastic trash bags.

This preamble describes the requirements of RCRA section 6002 and Executive Order 12873, explains the basis for designating specific products as procurement items subject to RCRA section 6002, describes the proposed changes to the building insulation guideline, and incorporates and recodifies the existing five guidelines into a revised 40 CFR part 247. The related RMAN, which also appears in today's **Federal Register**, discusses EPA's proposed recommendations for implementing RCRA section 6002 with respect to procurement of the designated items. The RMAN also provides information regarding the price, availability, and performance of these products.

For the convenience of the reader, Table 2 lists acronyms referenced throughout this preamble.

TABLE 2.—COMMONLY REFERENCED ACRONYMS

Acronym	Term
AASHTO	American Association of State Highway and Transportation Officials.
APC	American Plastics Council.
ASHRAE	American Society for Heating, Refrigeration and Air Conditioning Engineers.
ASTM	American Society for Testing and Materials.
BOCA	Building Officials Council of America.
CABO	Council for American Builders Association.
CPG	Comprehensive Procurement Guideline.
C&D	Construction and Demolition Debris.
E.O.	Executive Order 12873.
EPA	Environmental Protection Agency.
FHWA	Federal Highway Administration.
GGBF	Ground Granulated Blast Furnace (Slag).
GSA	General Services Administration.
HDPE	High Density Polyethylene.
HSWA	Hazardous and Solid Waste Amendments of 1984.
ICBO	International Conference of Building Officials.
LDPE	Low Density Polyethylene.
LLDPE	Linear Low Density Polyethylene.
METRO	Metro Portland Solid Waste Department.
OFPP	Office of Federal Procurement Policy.
PET	Polyethylene Terephthalate.
PP	Polypropylene.
PS	Polystyrene.
PVC	Polyvinyl Chloride.
RCRA	Resource Conservation and Recovery Act of 1976.
RMAN	Recovered Materials Advisory Notice.

A. Materials in Solid Waste

As discussed in section II.E of this preamble, RCRA section 6002 provides criteria for EPA to consider when selecting items for designation. One of these criteria is the impact of procurement of the item on the solid waste stream: EPA's designation of an item should promote the statute's underlying objective of using the stimulus of government procurement to foster markets for items containing materials recovered from solid waste. Consistent with this objective, each of the items that EPA proposes to designate today is made with one or more materials recovered from solid waste. This section briefly discusses these materials and, where applicable, alternative uses for them.

Generally, solid waste has several components, such as municipal solid waste, construction and demolition debris, and non-hazardous industrial waste. EPA produces biennial characterizations of the generation and recovery of municipal solid waste in the United States. Similar national characterizations of the other components of non-hazardous solid waste are unavailable, although some state and local governments have characterized one or more of these other components within their jurisdiction. Under RCRA section 6002, EPA considers materials recovered from any component of solid waste for purposes of designating items containing recovered materials.

EPA's latest municipal solid waste characterization study, which presents 1990 waste generation and recovery data, addresses the following materials: paper and paperboard, glass, metals, plastics, rubber and leather, textiles, wood, food wastes, yard trimmings, miscellaneous inorganic wastes, and other materials. Table 3 shows the 1990 generation and recovery of these materials. The largest components of the municipal solid waste stream are paper and paperboard (37.5 percent), yard trimmings (17.9 percent), plastics (8.3 percent), and glass (6.7 percent). Paper, paperboard, and yard trimmings alone accounted for over 55 percent of the materials generated in 1990.

TABLE 3.—MATERIALS GENERATION AND RECOVERY IN THE U.S. MUNICIPAL WASTE STREAM, 1990

[In millions of tons]

Materials	Generation	Recovery
Paper and Paperboard	73.3	20.9
Glass	13.2	2.6
Metals		
Ferrous	12.3	1.9
Aluminum	2.7	1.0
Other Nonferrous	1.2	0.8
Plastics	16.2	0.4
Rubber and Leather	4.6	0.2
Textiles	5.6	0.2
Wood	12.3	0.4
Other	3.2	0.8
Food Wastes	13.2	(1)
Yard Trimmings	35.0	4.2
Misc. Inorganic Wastes	2.9	(1)
Totals	195.7	33.4

Source: "Characterization of Municipal Solid Waste in the U.S.: 1992 Update," U.S. EPA, July 1992.

[1] Negligible.

EPA's existing procurement guidelines foster markets for several of the municipal solid waste components identified in Table 3—paper and paperboard, rubber (tires), and plastics and glass (used in building insulation)—as well as used oil and fly ash generated by coal burning utilities. The proposed revisions and new item designations address paper, plastics, glass, yard trimmings, wood, rubber, and other materials.

1. Paper and Paperboard

As shown in Table 4, paper and paperboard are major components of the solid waste stream. In 1990, the municipal waste stream included over 73 million tons of waste paper, or 37.5 percent of total municipal solid waste generated. Paper waste includes office papers, newspapers, corrugated containers and other paper packaging, and a mixture of other papers (e.g., direct mail). In 1990, the United States generated nearly 13 million tons of newspapers, 6 million tons of office papers, and nearly 33 million tons of containers and packaging.

A significant portion of paper is recovered and used in the manufacture of new paper and paperboard products. In 1992, the American paper industry recovered nearly 40 percent of paper and paperboard generated in the U.S., or approximately 34 million tons. Of this, 26.5 million tons were used in U.S. mills to make recycled paper and paperboard products, 0.8 million tons were used in the manufacture of other products, and 6.3 million tons were exported. Table 4 provides the tonnage of various grades of paper and paperboard recovered in 1992, as reported by the American Forest & Paper Association.

TABLE 4.—RECOVERY OF PAPER AND PAPERBOARD IN 1992

[In millions of short tons]

Grade	Tonnage
Newspapers	7.2
Mixed papers	4.0
Corrugated	15.4
Pulp substitutes	3.7
High grade deinking	3.3
Totals	33.6

Source: American Forest & Paper Association.

In 1993, the American paper industry set a goal of recovering 50 percent of paper and paperboard generated by the year 2000. The industry estimates that 78 percent of all paper and paperboard recovered domestically in the year 2000 will be used in the manufacture of new paper and paperboard, 7 percent will be used in other products, and 15 percent will be exported. The industry projects that much of the growth in use of recovered paper will be in containerboard (corrugated medium and linerboard) and tissue products, although use in newsprint and printing and writing paper is expected to grow as well.

In addition to use in new paper products, recovered paper and paperboard can be used to make such items as hydraulic mulch and board products used in the construction industry for insulation and structural applications. Increasing demand for products made with recovered paper may help increase the supply of these products and can lead to an increase in the price of these materials. For technical performance and economic reasons, the paper industry is not now capable of using 100 percent recovered paper in all of its products. Also, despite the significant investment made by the paper industry over the last several years in equipment and capacity to use recovered paper, it is still difficult to find markets for recovered paper in some parts of the United States.

2. Plastics

Plastics in the waste stream include non-durable goods such as consumer packaging, containers, toys, and housewares; durable goods such as furniture, appliances, and computers; and commercial/industrial goods such as pipe, cable, siding, and auto parts. Plastics made up 8.3 percent by weight (16.2 million tons) of municipal solid waste according to EPA's 1992 characterization study. By volume, plastics were the second highest

component (21 percent) of municipal solid waste. The EPA characterization study also showed that plastics were recovered at a rate of 2.2 percent by weight in 1990.

The American Plastics Council (APC) reported that the 1992 recycling rate for postconsumer plastic bottles and rigid containers was 15.4 percent; for other types of plastic packaging, the recycling rate was 6.5 percent. The report, entitled, "Post-Consumer Plastics Recycling Rates: 1991 and 1992," is based on data compiled from 229 companies involved in the reclamation of postconsumer plastics. Information was compiled from plastic reclaimers who carried out the last value-added step before remanufacture, and plastics handlers, reclaimers, or brokers who were exporting the materials for recycling. According to APC, the most commonly recycled postconsumer products are polyethylene terephthalate (PET) soft drink bottles, with a 40.6 percent recycling rate, and high density polyethylene (HDPE) milk and water jugs, with a 23.5 percent recycling rate. Other postconsumer resins, including polyvinyl chloride (PVC), low density polyethylene (LDPE) (including linear low density polyethylene (LLDPE)), and polystyrene (PS) are recycled at rates lower than 1 percent; polypropylene (PP) is recycled at a somewhat higher rate of 3 percent.

PET has the highest recycling rate of all postconsumer resins. APC reported a 23.8 percent overall recycling rate (460.5 million pounds) for postconsumer PET. This rate reflects the high recycling rate for PET soft drink bottles, which are the most widely recycled plastic product. PET custom bottles (e.g., peanut butter jars and cooking oil bottles), other PET packaging, and non-packaging materials (e.g., x-ray film) are recycled at much lower rates (4.6 percent, 0.3 percent, and 12.6 percent, respectively). Currently, the primary market for postconsumer PET is fiber for use in products such as ski jackets, sleeping bags, and carpet. Other markets for postconsumer PET include geotextiles, soft drink bottles, and household product containers.

There is a large potential supply of HDPE from postconsumer sources, as well as preconsumer sources. APC reported that 443.9 million pounds of postconsumer HDPE were recycled in 1992. The supply of postconsumer HDPE is mainly from recycled milk and water jugs, detergent bottles and other household products bottles. Other sources reported that 427.6 million pounds of preconsumer (or post-industrial) HDPE were recycled in 1990. The availability of postconsumer HDPE is expected to increase as more communities include HDPE products in their recycling collection programs and as improvements in recovered plastics processing are achieved.

There is also a supply of recovered PVC, although relatively small amounts of postconsumer PVC are available. PVC bottles make up a small percentage of the consumer container market and typically have not been collected in local recycling programs. APC reported that 20.6 million pounds of postconsumer PVC was recycled in 1992. Other sources estimate that the amount of preconsumer recovered PVC were approximately 130.9 million pounds in 1990, and the supply of preconsumer recovered PVC now is expected to be greater due to increased diversion from the waste stream. Sources of preconsumer PVC include industrial scraps from the manufacture of vinyl siding, blister packs and floor tiling. EPA was unable to obtain estimates of post-industrial plastic recovery rates.

Currently, the price of most recovered resins is not competitive with virgin resin; thus, many communities are discouraged from including plastics in their collection programs. Further, there are still many technical barriers to the efficient processing of recovered plastics. For example, the various plastic resins are not mutually compatible, requiring that they be separated during processing. The development of higher value end-markets for the plastics that are currently being collected may off-set the costs of processing the recovered plastic and encourage more communities to recover plastics from the waste stream, which, in turn, will increase supply.

3. Glass

The glass found in municipal solid waste is primarily in the form of containers, although glass is also found in durable goods such as furniture, appliances, and consumer electronics. The chemical composition of glass varies with its use. For example, container glass differs from glass used in automotive windshields. For this reason, glass from one product may not be used easily in the manufacture of other products.

In 1990, approximately 22 percent of glass containers were recovered for recycling, with a 20 percent recovery rate for all glass in municipal solid waste. By 1992, 27 percent of all glass containers manufactured and sold in the U.S. were recycled. If refillables are counted, the glass recycling rate increases to 33 percent.

The major market for recovered container glass is the glass container manufacturing industry. There are 75 container plants in the U.S., but they are not distributed uniformly across the country. They are not now using all of the container glass being recovered.

A potential alternative market for recovered container and other glass is the fiberglass insulation manufacturing industry. EPA's 1989 building insulation products procurement guideline included fiberglass insulation, but EPA did not recommend recovered materials levels for this item. Today, EPA is recommending recovered materials levels for fiberglass insulation in order to foster use of recovered glass in this product.

4. Yard Trimmings

Roughly 35 million tons per year of yard debris (leaves, lawn clippings, bush and tree trimmings) and kitchen scraps (fruit and vegetable scraps) together comprise about 28 percent of municipal solid waste. Yard materials alone comprise 18 percent of the municipal waste stream.

These materials can be composted to produce a usable product, rather than landfilled or incinerated. Today, 26 states have laws or regulations that prohibit yard materials from being landfilled.

5. Wood

EPA estimates that approximately 12.3 million tons of wood were generated as municipal solid waste in 1990. Only 3 percent (400,000 tons) was recovered. The sources of wood include furniture, miscellaneous durables, wood packaging (including pallets), and other miscellaneous products.

Wood also is present in construction and demolition (C&D) debris—materials generated as a result of construction, renovation, or demolition of structures. C&D debris is disposed in both municipal and C&D landfills. Generation of C&D debris fluctuates with seasons, climate, weather, and the local and national economy. As a result, there are no generally accepted estimates of C&D debris generation. According to one report, various studies estimated generation rates ranging from 0.12 to 3.52 pounds/person/day. ["Construction Waste & Demolition Debris Recycling . . . A Primer," prepared for SWANA/EPA/MITE by Gershman, Brickner & Bratton, Inc.]

Wood can account for as much as 30 percent of C&D debris, particularly if land has been cleared for construction. According to one article, Maine and Oregon reported that more than 97 percent of their wood waste was

landfilled as recently as 1988. (Gitlin, Lisa, "Integrating Wood into the Recycling Loop," *Recycling Today*, June 1991) However, as landfill tipping fees increase and landfill space becomes limited in some states, wood chipping and reclamation of wood from C&D is increasing. Communities with public or private wood reclamation programs include Baltimore (the Loading Dock), the Bronx (Urban Solutions), Berkeley (Urban Ore), San Jose, Chicago, Milwaukee, Portland, Cleveland, and San Diego. Some of these programs reclaim parts for reuse, while others chip wood for new applications, or both. Much of the wood is turned into fuel, compost, or mulch, including hydraulic mulch.

Recovery of wood is increasing, however. In particular, in the West, there is growing demand for secondary sources of wood fiber due to restrictions on timber harvesting. In 1993, the Metro Portland Solid Waste Department (METRO) reported that more than 216,000 tons of wood were generated in 1992, including wooden shipping containers and pallets, untreated dimensional lumber and finishing pieces from C&D activities, and large stumps from landclearing. METRO estimated that 46 percent of these materials were recovered, excluding wood that was salvaged for reuse.

Although a comprehensive list of C&D debris recovery programs is not available, published reports indicate that programs exist in all parts of the U.S. and that it is technologically and economically feasible to recover wood wastes for use in such items as board products, industrial boiler fuel, landscaping and hydraulic mulches, sludge bulking media, and animal bedding.

6. Rubber

The predominant source of rubber in municipal solid waste is rubber tires. There are approximately 2–3 billion scrap tires currently stockpiled across the U.S., and over 240 million more are generated annually. Improperly operated stockpiles can create serious health and environmental threats from fires and insect- or rodent-borne diseases. Most states now have scrap tire management legislation fostering alternatives to tire stockpiling and disposal. One of these alternatives is tire retreading, which is the focus of EPA's 1988 tire procurement guideline. Another alternative is to use crumb rubber, either alone or mixed with plastics, to produce new products. Several of the items proposed for designation today contain recovered crumb rubber from tires.

Crumb rubber, a fine granular or powdered material capable of being used to make traffic cones and other products, is currently recovered from whole scrap tires using thermal and/or mechanical processing techniques. Crumb rubber is also derived from the tire retreading process, when a worn tire tread is removed from a retreadable tire casing during a buffing process before a new tread surface is affixed. Rubber materials derived from this process are frequently referred to as "buffings" or "buffing dust." Approximately 200 million tons of tire buffings are generated each year by the tire retreading industry in the United States.

7. Engine Coolants

Annually, more than 200 million gallons of engine coolant are sold in the United States. After purchase, engine coolant is diluted 50 percent with water before placement in the engine. If the majority of engine coolant sold annually is replacing spent engine coolant (rather than refilling leaking radiators), then 400 million gallons of spent engine coolant mixtures require disposal each year. Engine coolant is disposed by discharging it into a sewage treatment system, dumping it on the ground, recycling it, or managing it as a hazardous waste.

Some sewage treatment systems are designed in such a manner that they can treat spent engine coolant without a problem. Increasingly, sewage treatment plants require notification prior to or even restrict the discharge of spent engine coolant to their systems. In addition, engine coolant can cause damage to a septic treatment system if it is flushed into the system, and can cause harm to the environment if it is dumped on the ground.

Used engine coolant may become contaminated by heavy metals (predominately lead and copper) to such a degree that it is a hazardous waste according to EPA's regulations. Some engine coolant has failed the Toxicity Characteristic Leaching Procedure (TCLP) test because of heavy metals and, therefore, is subject to regulation as a hazardous waste in accordance with Federal and state hazardous waste management regulations. States such as New Jersey have chosen to list spent engine coolant as a hazardous waste.

The concentration of hazardous contaminants in spent engine coolant seems to depend on many factors, including: the maintenance and use of the vehicle, the design of the engine, the amount of corrosion inhibitor additives. The amount of heavy metals in spent coolant should greatly decrease in the next few years because of a trend in the automotive industry to use aluminum and plastic in radiators rather than brass. Use of plastic and/or aluminum parts reduces or eliminates the need for lead solder, thereby reducing or removing the source of lead and copper contamination. This industry trend may reduce, if not eliminate, the issue of contaminated engine coolant and disposal as a hazardous waste.

Spent engine coolant can be recycled by removing contaminants and breakdown products of the original ingredients and replacing corrosion inhibitors. Generators of spent engine coolant can either purchase equipment to reclaim the fluid themselves or contract with an engine coolant reclaimer.

8. Blast Furnace Slag

Iron blast furnace slag, or ground granulated blast furnace slag (GGBF slag), is a by-product of the production of iron in a blast furnace. It is produced when water quenches molten blast-furnace slag. Approximately 16 million tons of it are generated annually and are not reused within the original manufacturing process.

Approximately 75 percent of GGBF slag is used in aggregate applications such as fill, road bases, and the coarse aggregate component of asphalt and concrete, while the remaining 25 percent (3–4 million tons) is stockpiled. In other words, by the year 2000, as much as an additional 24 million tons of slag will have accumulated in stockpiles. GGBF slag can be used in cement and concrete for a variety of applications.

B. Benefits of Recycling

By all measures, the United States generates more solid waste (including municipal solid waste, construction and demolition debris and non-hazardous industrial waste) than any other country in the world. While the rate of increase of waste generation has slowed over the last 10 years, amounts generated measured on a per capita or total basis continue to grow. The occurrence of regional waste disposal capacity shortages and the difficulty in siting new disposal facilities continue to plague State and local decision-makers responsible for managing solid waste—creating national concern. In RCRA, Congress acknowledged the importance of recycling in helping to alleviate these problems and recognized that recycling is not merely the collection of materials, but includes the need for products to be made from these materials and purchased by consumers.

Section 6002 was added to RCRA to foster markets for products made from

materials diverted from the solid waste stream by using Federal purchasing power to stimulate the demand for products made with recovered materials. The statute does this by requiring EPA to issue guidelines to be used by Federal agencies to procure recycled products. President Clinton's Executive Order 12873 further bolsters the Federal government's commitment to buy products containing recovered materials by "streamlining" the process used by EPA in fulfilling its obligation under RCRA section 6002 to designate items that are or can be made with recovered materials.

Executive Order 12873 was issued with recognition that the Nation's interest is served when the Federal government makes more efficient use of natural resources by maximizing recycling and preventing waste wherever possible and that the Federal government should—through cost-effective waste prevention and recycling activities—work to conserve disposal capacity, and serve as a model in this regard for private and other public institutions. The use of recovered materials in manufacturing can result in significantly lower energy and material input costs than when virgin raw materials are used. Aluminum recycling, for instance, can save up to 97 percent of the energy requirements for making new aluminum, as compared to the use of bauxite. Use of recovered materials can reduce the generation and release of air and water pollutants often associated with manufacturing (including air emissions that contribute to the level of "greenhouse gases" and ozone depletion). Air pollutant reductions of nearly 25 percent have been associated with the manufacture of glass from recovered materials, while reductions from the manufacture of steel and aluminum can be as high as 85 percent and 95 percent, respectively, when recovered materials are used. Additionally, water pollutant reductions in the manufacture of steel and aluminum can be as high as 75 percent and 95 percent, respectively, when recovered materials are used. Using recovered materials also reduces the environmental impacts of mining, harvesting, and other extraction of natural resources, while conserving non-renewable resources for future use. Recycling can also divert large amounts of materials from landfills, conserving increasingly valuable space for the management of materials that truly require disposal. This reduces the need to expand existing or site new disposal facilities, allowing local officials to devote more attention to health, education, and safety issues.

Executive Order 12873 also points out that the use of recycled products by the Federal government can spur private sector development of new technologies and the use of such products, thereby creating business and employment opportunities that enhance local, regional and national economies. Technological innovation associated with the use of recovered materials can translate into economic growth and make American industry more competitive in the global economy.

Both RCRA and the E.O. recognize the interdependence between buying recycled products and the success of recycling. For recycling to occur, industry must use recovered materials as feedstock for the manufacture of new products. Despite the environmental and economic efficiencies that can be realized by using recovered materials as feedstock, a manufacturer's primary responsibility remains to produce products that meet the demand of the consumer. The Federal government, through its purchasing decisions as a consumer, can play a key role in influencing manufacturer's decisions on products made with recovered materials. By purchasing products containing recovered materials pursuant to the guidelines established under RCRA and Executive Order 12873, the Federal government has the opportunity to increase markets for recovered materials and to contribute significantly to an increased level of recycling in this country. These guidelines also serve to stimulate the purchase of recycled products nationwide, since many State and local governments, as well as the private sector, use these guidelines as a framework for their purchases.

Executive Order 12873 also requires Federal agencies to consider waste prevention in their acquisition of products and services. Waste prevention is the design, manufacture, purchase, or use of materials or products to reduce the volume or toxicity of the waste stream. EPA has not yet issued guidance on how to incorporate the concept of waste prevention in purchasing decisions. The Agency will be addressing this matter when EPA issues its guidance on "environmentally preferable-products," as required by section 503 of the Executive Order. Today's notice pertains only to the issuance of a Comprehensive Procurement Guideline designating items that are or can be made with recovered materials. A Recovered Materials Advisory Notice, which recommends recycled content levels at which the designated items are available, is published separately in today's **Federal Register**.

C. Requirements

RCRA section 6002 and Executive Order 12873 set forth requirements for the procurement of products containing recovered materials. The requirements of RCRA section 6002 apply to "procuring agencies," as defined in section V; Executive Order requirements apply only to Federal "Executive agencies," as defined in section 202 of Executive Order 12873.

1. RCRA Section 6002

RCRA section 6002 requires EPA to designate items that are or can be made with recovered materials and to recommend practices to assist procuring agencies in purchasing the designated items. Once an item is designated by EPA, procuring agencies that use appropriated Federal funds to purchase the item are required to purchase it composed of the highest percentage of recovered materials practicable (and in the case of paper, the highest percentage of postconsumer recovered materials), taking into consideration the limitations set forth in section 6002(c)(1) (A) through (C) (i.e., competition, price, availability, and performance). The requirement applies when the purchase price of the item exceeds $10,000 or when the total cost of such items, or of functionally equivalent items, purchased during the preceding fiscal year was $10,000 or more. Within one year after EPA designates an item, RCRA section 6002(d)(2) requires that Federal agencies revise their specifications to require the use of recovered materials to the maximum extent possible without jeopardizing the intended end-use of the item. Section 6002(d)(1) further requires Federal agencies responsible for drafting or reviewing specifications to review all of their product specifications to eliminate both provisions prohibiting the use of recovered materials and requirements specifying the exclusive use of virgin materials. This revision process should have been completed by May 8, 1986.

Once EPA designates an item, responsibility for complying with RCRA section 6002 rests with the procuring agencies. For each item designated by EPA, RCRA section 6002(i) requires each procuring agency to develop an affirmative procurement program, which sets forth the agency's policies and procedures for implementing the requirements of RCRA section 6002. The program must assure that the agency purchases items composed of recovered materials to the maximum extent practicable and that these purchases are

made consistent with applicable provisions of Federal procurement law. In accordance with RCRA section 6002(i), the affirmative procurement program must contain at least four elements:

(1) A recovered materials preference program;

(2) An agency promotion program;

(3) A program for requiring vendors to reasonably estimate, certify, and verify the recovered materials content of their products; and

(4) A program to monitor and annually review the effectiveness of the affirmative procurement program.

Finally, RCRA section 6002(g) requires the Office of Federal Procurement Policy to implement the requirements of RCRA section 6002 and to coordinate this policy with other Federal procurement policies in order to maximize the use of recovered materials. RCRA further requires OFPP to report to Congress every two years on actions taken by Federal agencies to implement such policy.

2. Executive Order 12873

Executive Order 12873, entitled "Federal Acquisition, Recycling, and Waste Prevention," was signed by President Clinton on October 20, 1993. Section 502 of the Order establishes a new, two-part process for EPA to use when developing and issuing the procurement guidelines for products containing recovered materials, as required by RCRA section 6002(e). The first part, the Comprehensive Procurement Guideline, involves designating items that are or can be made with recovered materials, an activity requiring rulemaking. As with the previous guidelines, the CPG is to be developed using formal notice-and-comment rulemaking procedures. The final CPG is to be codified in the *Code of Federal Regulations*. Today's proposed CPG is being developed under the procedures established in the Executive Order.

The second part, the Recovered Materials Advisory Notice, provides recommendations to procuring agencies on purchasing the items designated in the CPG. The E.O. directs EPA to propose the RMAN in the **Federal Register** and to take comment on the proposal. The RMAN for items proposed for designation in today's CPG also appears in today's **Federal Register**.

EPA is also required to provide guidance to Executive agencies on procuring environmentally-preferable products. Section 503 of the Executive Order requires EPA to develop and issue guiding principles that Executive agencies should use in purchasing environmentally-preferable products. EPA is developing these guiding principles separately from the CPG and RMAN and will provide an opportunity for the public to participate in their development.

Section 401 requires Executive agencies to consider the use of recovered materials and other environmental factors in acquisition planning for all procurements and in the evaluation and award of contracts.

Section 402 directs the head of each Executive agency to implement the affirmative procurement program requirements of RCRA section 6002(i) and to include in the affirmative procurement programs a requirement that all purchases of EPA-designated items meet or exceed the EPA-recommended levels. It further requires agency affirmative procurement programs to encourage that (1) documents be transferred electronically, (2) all government documents printed internally be printed double-sided, and (3) contracts, grants, and cooperative agreements issued after October 20, 1993, include provisions that require documents to be printed double-sided on recycled paper that meets or exceeds the standards established in the Executive Order or in future EPA Recovered Materials Advisory Notices.

Sections 501, 504, 505, and 506 of the Executive Order describe requirements for Executive agencies to incorporate the provisions of RCRA section 6002(d)(1) and requires specific actions to be taken by certain agencies. Section 501 of the Executive Order requires Executive agencies to review and, where applicable, revise their specifications, product descriptions, and standards to enhance Federal procurement of products containing recovered materials. When agencies convert to Commercial Item Descriptions (CIDs), they are required to ensure that the CIDs meet or exceed the recovered materials requirements of the specifications or product descriptions that they replace.

Section 504 requires Executive agency heads to purchase uncoated printing and writing paper with a minimum of 20 percent postconsumer content beginning December 31, 1994. Section 505 further requires the General Services Administration and other Federal agencies to revise their paper specifications to eliminate barriers, unrelated to performance, to purchasing paper or paper products made by production processes that minimize emissions of harmful by-products.

Section 506 reinforces the procurement guidelines for re-refined oil and retread tires by requiring commodity managers to finalize specification revisions for the products and to develop and issue specifications for tire retreading services. Once these specifications are finalized, commodity and fleet managers are required to take affirmative steps to procure retread tires and re-refined oil.

Section 602 of the Executive Order directs Executive agencies to set goals for purchasing recycled and other environmentally-preferable products and to maximize the number of recycled products purchased, relative to non-recycled alternatives.

Finally, section 301 requires the Federal Environmental Executive to submit an annual report to the Office of Management and Budget on the actions taken by agencies to comply with the requirements of the Executive Order, including the affirmative procurement program requirements set forth in RCRA section 6002. To enable the Federal Environmental Executive to develop this report, Executive agencies are required to provide information on their implementation actions.

3. Other Requirements and Policies

There are several other policies and procedures that may affect the procurement of products containing recovered materials by Federal and other government agencies. For the convenience of the reader, EPA has briefly summarized requirements and policies set forth in the Federal Acquisition Regulation, OFPP Policy Letter 92–4, and OMB Circulars A–102, A–119, and A–131.

a. Federal Acquisition Regulation. The Federal Acquisition Regulation (FAR) (48 CFR part 1) is the primary regulation used by Executive agencies in their acquisition of supplies and services. Part 23 sets forth requirements and procedures for Federal agencies to use when procuring EPA-designated items.

b. OFPP Policy Letter 92–4. OFPP's Policy Letter 92–4, "Procurement of Environmentally-Sound and Energy-Efficient Products and Services" (57 FR 53362), establishes Executive branch policies for the acquisition and use of environmentally-sound, energy-efficient products and services. In addition to reiterating the requirements of RCRA section 6002, the Policy Letter requires Executive agencies to: (1) Identify and procure products and services that, all factors taken into consideration, are environmentally-sound and energy-efficient, and (2) employ life cycle cost analysis to assist in making product and service selections.

c. OMB Circular A–102. On August 5, 1992, OMB published proposed revisions to OMB Circular A–102,

"Grants and Cooperative Agreements with State and Local Governments" (57 FR 34599). If finalized as proposed, paragraph 7(h) of the proposed revision will require state and local government recipients of Federal assistance funding to comply with RCRA section 6002.

d. OMB Circular A–119. OMB Circular A–119, "Federal Participation in the Development and Use of Voluntary Standards" (54 FR 57645), sets forth policy for Executive agencies to follow in working with voluntary standards bodies and in adopting and using voluntary standards. Paragraph 7(a)(4) recommends that Federal agencies give preference to adopting and using standards that "foster materials, products, systems, or practices that are environmentally-sound and energy-efficient."

e. OMB Circular A–131. OMB Circular A–131, "Value Engineering" (58 FR 31056), requires Executive agencies to use value engineering as a management tool to reduce program and acquisition costs. Paragraph 8(b) requires agencies to develop guidelines for both in-house personnel and contractors to identify programs/projects with the most potential to yield savings from the application of value engineering techniques. Paragraph 3(b)(4) further requires this guidance to ensure that the application of value engineering to construction and other projects/programs includes consideration of environmentally-sound and energy-efficient results.

D. Criteria for Selecting Items for Designation

RCRA section 6002(e) requires EPA to consider the following criteria when determining which items it will designate:

(1) Availability of the item;

(2) Potential impact of the procurement of the item by procuring agencies on the solid waste stream;

(3) Economic and technological feasibility of producing the item; and

(4) Other uses for the recovered materials used to produce the item.

EPA also consulted with Federal procurement and requirement officials to identify other criteria to consider when selecting items for designation. Based on the information obtained from these sources, the Agency decided that the limitations set forth in RCRA section 6002(c) should also be factored into its selection decisions. The criteria of RCRA section 6002(c) fit within the considerations of availability called for by RCRA section 6002(e). That section requires each procuring agency that procures an item designated by EPA to procure the item composed of the highest percentage of recovered materials practicable, while maintaining a satisfactory level of competition. The decision not to procure an EPA-designated item containing recovered materials may be based only on the following:

(1) The item is not reasonably available within a reasonable period of time;

(2) The item fails to meet the performance standards set forth in the agency's specification; or

(3) The item is available only at an unreasonable price.

EPA recognized that the above limitations could restrict procuring agencies from purchasing EPA-designated items with recovered materials content, and thereby, could limit the potential impact of an individual item designation. For this reason, EPA considered the limitations cited in RCRA section 6002(c) along with the statutory criteria when selecting items for designation in today's proposed CPG. Thus, the Agency developed the following considerations to use as guidance when selecting items for designation: use of materials found in solid waste, economic and technological feasibility and performance, impact of government procurement, availability and competition, and other uses for recovered materials.

1. Use of Materials Found in Solid Waste

All items that EPA designates in the CPG are manufactured with materials recovered or diverted from the solid waste stream. These include both materials recovered from municipal solid waste and materials recovered from other solid waste streams, such as construction and demolition debris and other non-hazardous industrial waste streams. Once recovered or diverted, these materials are reclaimed and refined, disassembled and remanufactured, or separated and processed for use as feedstock to manufacture a new product.

The potential impact that procuring agencies may have on the solid waste stream by procuring an EPA-designated item varies depending on the sophistication of the process used to recover or refine the material used in the manufacture of the item and on the recovered materials content of the final product. Additionally, although designating a single item may not have a significant impact on the amount of solid waste recovered or diverted from the waste stream, EPA believes that designating several items made from the same recovered material in the CPG can lead to the diversion of substantial quantities of that material from the waste stream.

Information on the materials used to produce each item EPA proposes for designation is presented in subsection a, "Use of Materials in Solid Waste," in the individual item designation discussions in sections VIII–XV of this preamble.

2. Economic and Technological Feasibility and Performance

Before selecting an item for designation, EPA determines that, based on its market research, it is economically and technologically feasible to use recovered materials to produce the item. EPA uses several indicators in making this determination. Availability of the item in the marketplace and procurement of the item by Federal and/or other government agencies are primary indicators that it is economically and technologically feasible to produce that product with recovered materials content. Other indicators include ability of the item to meet performance specifications, general acceptance of the item by consumers and purchasers, and use of recovered feedstock by manufacturers.

Prior to selecting an item for designation, EPA also considers the ability of the item to meet the standards, specifications, or commercial item descriptions set forth by Federal agencies or national standard-setting organizations.

Information on the economic and technological feasibility of producing each item EPA proposes for designation, including the availability of the item and the number of manufacturers that produce the item, the ability of the item to meet Federal or national specifications, the recovered materials content levels used by manufacturers to produce the item, and other information relevant to the economic and technological feasibility of producing and using the item, is discussed in subsection b, "Technically Proven Uses," in the individual item designation discussions in sections VIII–XV of this preamble.

3. Impact of Government Procurement

The impact of government procurement of products containing recovered materials is a combination of: (1) Direct purchases by Federal agencies, (2) purchases made by state and local agencies using Federal monies, and (3) purchases made by contractors to these government agencies. Thus, when considering items for designation, EPA examines whether

government agencies and their contractors purchase the items.

Government procurement also has an impact that extends far beyond the Federal, state, and local levels. As encouraged in Executive Order 12873, the Federal government often serves as a model for private and other public institutions. Because of this secondary effect, EPA includes items that are not unique to or primarily used by government agencies. Many of the items that EPA selects for designation are selected because they have broad application both in government and in the private sector.

Information on the potential impact of government procurement for each item EPA proposes for designation is presented in subsection c, "Impact of Government Procurement," in the individual item designation discussions in sections VIII–XV of this preamble.

4. Availability and Competition

The items EPA selects for designation are available nationally either from national distributors or manufacturers or from regional or local sources. The relative availability of an item influences the ability of a procuring agency to secure an adequate level of competition when procuring an item. In the event that a satisfactory level of competition is unattainable, a procuring agency may elect to waive the requirement to purchase an EPA-designated item with recovered materials content based on the limitations listed in RCRA section 6002(c).

Information on the availability of each item EPA proposes for designation, including the number of manufacturers that produce the items, is presented in subsection b, "Technically Proven Uses," in the individual item designation discussions in sections VIII–XV of this preamble.

5. Other Uses for Recovered Materials

In selecting items for designation, EPA also considers the following:

(1) The possibility of one recovered material displacing another recovered material as feedstock, thereby resulting in no net reduction in materials requiring disposal;

(2) The diversion of recovered materials from one product to another, possibly creating shortages in feedstocks for one or both products; and

(3) The ability of manufacturers to obtain recovered materials in sufficient quantity to produce the item under consideration.

While other uses for recovered materials are a consideration, they were not a determining factor when selecting items for designation in today's proposed rule because there is a need for additional markets for all recovered materials used to manufacture the proposed designated items.

6. Other Considerations

As mentioned in the introduction to section II.D, EPA also considers price as a factor affecting the availability of an item. However, the price of products, whether virgin or recycled, is affected by many variables, including availability and costs of material feedstocks, energy costs, labor costs, rate of return on capital, transportation charges, and the quantity of the item ordered. In addition, price may vary depending on whether the product is a common stock item or requires a special order. Price can also be affected by the geographical location of the purchaser because some products may not be uniformly available throughout the United States. Therefore, the best sources of current price information for quantities of items to be delivered to specific locations are the manufacturers and vendors of the recycled products.

Relative prices of recycled products compared to prices of comparable virgin products also vary. In many cases, recycled products may be less expensive than their virgin counterparts. In other cases, virgin products may have lower prices than recycled products. However, other factors can also affect the price of virgin products. For example, temporary fluctuations in the overall economy can create oversupplies of virgin products, leading to a decrease in prices for these items. Therefore, while price is a consideration, in most cases, it is not a determining factor when selecting items for designation. It becomes a determining factor only when EPA obtains evidence that the relative price of an item with recovered materials content is significantly higher than the relative price of a comparable virgin product. For this reason, EPA did not address price in the individual item designation discussions presented in sections VIII–XV of this preamble.

EPA also considered the feasibility of designating experimental or developmental products containing recovered materials. In the Agency's experience, such designations do not result in Federal procurement of products containing recovered materials, because the items are not reasonably available, or there is only one source; this leads to an unsatisfactory level of competition. For this reason, EPA does not intend to designate experimental or developmental products until it can be shown that they meet all of EPA's selection criteria, as described above. (For additional discussion of designating experimental and developmental products, see EPA's comments on General Accounting Office Report No. B–251080, "Solid Waste: Federal Program to Buy Products with Recovered Materials Proceeds Slowly.")

E. Methodology for Selecting Items for Designation

As described in section II.C.2, Executive Order 12873 directs EPA to propose a Comprehensive Procurement Guideline and related Recovered Materials Advisory Notice. This section explains the methodology EPA used to select items for designation and the rationale used to develop the recommended recovered materials content levels for the items proposed for designation in today's CPG. The recommended recovered materials content levels can be found in the related RMAN, which also appears in today's **Federal Register**.

1. Selection of Items for Designation

EPA began its efforts to develop the CPG and RMAN by first creating an interagency working group consisting of technical, research and development, environmental, and procurement officials from several of the major Federal purchasing agencies.

The Agency then compiled a broad list of potential products made from recovered materials. In developing this list, EPA initially consulted publicly-available sources of information including the "Official Recycled Products Guide," GSA's "Recycled Products Guide," the McDonald's Corporation's "McRecycle® Database," and over 50 other information sources. To this list, EPA added items which, prior to the issuance of the Executive Order, EPA considered designating (i.e., fiberboard, hydraulic mulch, plastic pipe, geotextiles, and compost). EPA next distributed its broad list of candidate items to the working group for review and evaluation. Working group representatives, based on their experiences in setting product specifications and their knowledge of the marketplace and the procurement practices of their respective agencies, identified other items to be added to the candidate list of products. Finally, based on a review of publicly-available information, EPA's own product research, and input from the working group, EPA developed a final candidate list.

Next, for each item on the final candidate list, EPA considered the following questions that relate to the

key criteria described previously in section II.D:

(1) Use of Materials in Solid Waste:

• Is the item made using a material that represents a significant portion of the solid waste stream or presents a solid waste disposal problem?

(2) Economic and Technological Feasibility and Performance:

• Does the item perform as well as necessary to meet a procuring agency's needs?

• Are there standards or specifications that would enable a procuring agency to buy the item containing recovered materials?

• Is the item available at a reasonable price considering normal market fluctuations?

(3) Impact of Government Procurement:

• Is the item purchased in appreciable quantities by the Federal government or by State and local governments?

(4) Availability and Competition:

• Is the item available from an adequate number of sources to ensure competition?

• Is the item generally available, rather than available in a limited market area?

For each item meeting one or more of these key criteria, EPA sought additional information and conducted further analyses to determine whether the item met all or most of the remaining criteria. For some items, EPA was unable to obtain sufficient information to determine if all or most of the criteria were met. These products are still under investigation at this time. Thus, based on product reviews and additional analyses, EPA developed three product lists:

(1) A list of items that EPA is proposing for designation in today's Federal Register,

(2) A list of items that might be designated in the near future pending receipt of additional information and further review, and

(3) A list of items that EPA determined cannot be designated at this time because of limited availability, unreasonable price, or the inability of manufacturers at this time to produce these items with recovered materials content.

The items in the first list are discussed in detail in sections VIII–XV of today's preamble. The second list, those that may be designated pending the receipt of additional relevant information, is presented in section XVI. The third list, those that cannot be designated at this time, is presented in section XVIII, along with a brief explanation of the basis for EPA's determination that the item cannot be designated at this time.

2. Recommended Recovered Materials Content Levels

For most of the item designations proposed today, EPA is proposing recommended recovered materials content levels. These recommendations are contained in the RMAN, which is also published in today's **Federal Register**. The purpose of the recommendations is to assist procuring agencies in fulfilling their obligations under RCRA section 6002 and Executive Order 12873 to purchase designated items composed of the highest percentages of recovered materials practicable. To determine the percentages of recovered materials contained in the proposed items, EPA identified and evaluated pertinent data sources and information. First, for the items EPA previously considered for designation, EPA reviewed the previously-gathered data. EPA also gathered and evaluated publicly-available information and information provided by other Federal agencies. Additionally, in the case of items considered for designation subsequent to issuance of the Executive Order, EPA reviewed and evaluated information obtained from product manufacturers. Based on this information, EPA established a range of recovered materials content levels within which each of the designated items is available. In establishing the range, EPA's objective was to ensure the availability of the item, while challenging manufacturers to increase their use of recovered materials.

EPA believes that a range of content levels is appropriate at this time for three reasons. First, EPA has only limited information on recovered materials content levels for the newly-designated items. Second, rather than being purchased centrally, many of the newly-designated items will be purchased locally, meaning that the recovered materials content of these designated items is likely to vary substantially, making it problematic to recommend a single content level at this time. Third, the Executive Order directs EPA to propose a Recovered Materials Advisory Notice that presents "the range of recovered materials content levels within which the designated recycled items are currently available." In recommending a range, EPA believes that it is providing sufficient information to enable procuring agencies to set appropriate procurement specifications when purchasing newly-designated items.

It is EPA's intention to provide procuring agencies with the best and most current information available to assist them in fulfilling their statutory obligations under RCRA section 6002. To do this, EPA will monitor the progress made by procuring agencies in purchasing designated items with the highest recovered materials content practicable and revise the recommended content ranges accordingly. Revisions to recovered materials content ranges will be published in a RMAN. EPA anticipates that, over time, the recommended ranges will narrow.

Today, EPA also proposes to increase the recommended recovered materials content level for rock wool insulation and add recommended content levels for fiberglass insulation. Both items were designated in the existing building insulation guideline. In the existing procurement guidelines, EPA recommended a single content level for each designated item. When proposing changes to these recommendations today, in those instances where there is sufficient information on current manufacturing practices to determine that a single recovered materials content level is appropriate (e.g., rock wool insulation), EPA will propose one. In other instances, EPA will recommend a range of recovered materials content levels (e.g., for fiberglass insulation).

3. Updates of the CPG and RMAN

Section 502 of Executive Order 12873 directs EPA to quickly propose a list of items that are available with recovered materials content and to recommend recovered materials content levels for these items. As described above, EPA relied on a streamlined process for conducting research and obtaining product information. To meet the 180-day deadline, EPA determined that it would be necessary to rely on information already in its possession or readily available. Therefore, EPA focused its efforts on obtaining publicly-available information, and information that EPA could quickly obtain from other Federal agencies.

The E.O. requires EPA to update the CPG annually. EPA will also update the RMAN periodically to reflect changes in market conditions. The Agency will establish a process for the public to suggest items for consideration and to provide information on products made from recovered materials. EPA intends to issue a **Federal Register** notice that will describe this process and provide information on how the public can participate. Today, the Agency is soliciting options for increasing public participation in developing the updates of the CPG and the RMAN.

F. Request for Comments

EPA requests information and comment throughout this preamble. In general, the Agency is requesting comments on: (1) The items selected for designation in sections VIII–XV; (2) the items selected for potential future designation as listed in section XVI; and (3) the accuracy of the information presented in the item designations themselves. Requests for specific comments and information are included in the narrative discussions for each of the designated items, which follow in sections VIII–XV.

In addition to the proposed CPG, EPA is requesting comment on a draft RMAN. The RMAN, which can be found in the notice section of today's **Federal Register**, recommends recovered materials content levels or ranges of levels and methods of procuring each of the items EPA is proposing to designate.

III. Consolidation of Procurement Guidelines Into 40 CFR Part 247

Currently, EPA's five existing procurement guidelines are codified in 40 CFR parts 248, 249, 250, 252, and 253. In addition, 40 CFR part 247 contains general guidance for purchasing products containing recovered materials; however, part 247 pre-dates the 1984 amendments to RCRA and, therefore, does not address the statutory provisions requiring agencies to establish affirmative procurement programs.

Today, EPA proposes to delete the outdated general guidance in part 247 and to consolidate the existing five guidelines and new item designations into a new part 247. The proposed new part 247, Comprehensive Procurement Guideline, will contain two subparts: Subpart A—General, which will include the requirements of RCRA section 6002 and definitions, and Subpart B—Item Designations. This consolidation will allow EPA to: (1) Specify the statutory requirements once, instead of repeating them in each individual guideline, (2) define all applicable terms in one subpart, instead of in each individual guideline, and (3) provide procuring agencies with one, central list of the designated products. Consolidating these provisions into one Part will make them easier for procuring agencies to locate and use. In addition, each of the five existing guidelines contains general sections addressing its purpose, scope, and applicability. The applicability sections of the guidelines do not contain identical text, which has created confusion among procuring agencies. By consolidating the procurement guidelines into one part, EPA will be avoiding duplication and ambiguity.

RCRA section 6002 and Executive Order 12873 require agencies to establish affirmative procurement programs for items designated by EPA. In addition, section 6002 requires agencies to review their specifications for designated items and revise them as necessary to permit the use of recovered materials to the maximum extent practicable. These requirements have been explained in each of EPA's earlier guidelines and will be found in subpart A of the proposed part 247. Subpart A also will contain applicable definitions found in RCRA, definitions used in the five existing procurement guidelines, and definitions for the items that EPA proposes to designate today. Subpart B will contain EPA's designated list of items that are or can be made with recovered materials. The items will be grouped into eight product categories: paper and paper products, vehicular products, construction products, transportation products, park and recreation products, landscaping products, non-paper office products, and miscellaneous products. The first category will contain the existing designation of paper and paper products, while the existing designations of lubricating oil containing re-refined oil and retread tires will be found in the vehicular products category, and the construction products category will include the existing designations of cement and concrete containing fly ash and building insulation products containing recovered materials.

While this proposal includes both existing and new designations and existing and new definitions, EPA is specifically requesting comment on the proposed framework of part 247 and the proposed item designations and definitions. The existing designations and definitions were included today for convenience, to enable the reader to see all of the contents of the proposed new part. It is not EPA's intent to re-examine the existing provisions.

The following sections of the preamble discuss each of the sections of the proposed part 247. They indicate which provisions are consolidations of the existing procurement guidelines and which sections are proposed additions.

IV. Purpose, Scope, and Applicability

Subpart A of proposed part 247 is primarily a consolidation of the general provisions of the five existing guidelines. As discussed in the previous section of the preamble, it is not EPA's intent to use today's proposal to re-examine the existing guidelines. Instead, these provisions are included in proposed part 247 for the convenience of the reader. In the following discussion, EPA discusses the provisions of subpart A, identifying which regulatory provisions and preamble discussions are repeated from earlier procurement guidelines and which are new provisions for which EPA requests comment.

A. Purpose and Scope

Proposed § 247.1 is primarily a consolidation of the purpose and scope sections of the five existing procurement guidelines. In addition, paragraph (b) references the Recovered Materials Advisory Notice, consistent with the procurement guidelines process being implemented today.

B. Applicability

Proposed § 247.2 is a consolidation of the applicability sections of the five existing procurement guidelines. This section of the preamble addresses who is a "procuring agency" and to which purchases the statutory requirements apply. Most of the following discussion is repeated from the preambles of the five existing procurement guidelines for the convenience of the reader. The only change is in subsection 2, which is new and responds to concerns raised by other Federal agencies regarding the applicability of RCRA section 6002 to private party recipients of Federal monies other than through contracts.

1. Statutory Provisions

Many of the requirements of RCRA section 6002 apply to "procuring agencies," which are defined in RCRA section 1004(17) as "any Federal agency, or any State agency or agency of a political subdivision of a State that is using appropriated Federal funds for such procurement, or any person contracting with any such agency with respect to work performed under such contract." Under the statute, responsibility for complying with RCRA section 6002 rests with each individual procuring agency.

Under RCRA section 6002(a), the procurement requirements apply to any purchase by procuring agencies of an item costing more than $10,000 or when the procuring agencies purchased $10,000 worth of the item or of functionally equivalent items during the preceding fiscal year. The requirements apply to both direct and indirect purchases.

2. Who is a Procuring Agency?

The statutory definition of procuring agency identifies three types of "agencies": (1) Federal agencies, (2)

State or local agencies using appropriated Federal funds, and (3) contractors. Based on the statutory language, EPA believes that government agencies and their contractors are "procuring agencies," but private recipients of Federal funds other than through contracts are not procuring agencies and, therefore, are not subject to RCRA section 6002.

EPA concluded that, under the statutory definition, Federal agencies are always procuring agencies because the requirements of RCRA section 6002 apply to Federal agencies whether or not appropriated Federal funds are used for procurement of designated items. It should be noted, however, that the requirements of section 6002 apply only when Federal agencies procure designated items. The statutory requirements do not apply to Federal agencies when they simply disburse funds to State or local agencies because, in that instance, the Federal agencies are not purchasing or acquiring anything. In this case, the State or local agencies are procuring agencies and must comply with these guidelines if they use the appropriated Federal funds for procurement of designated items.

The statutory definition of procuring agency also includes any person contracting with the defined Federal, State, or local agencies. A contractor is a "procuring agency" and subject to section 6002 when procuring designated items for work performed under contracts with Federal agencies, or contracts with State and local agencies where appropriated Federal funds are used.

Because RCRA is explicit in identifying only government agencies and their contractors as "procuring agencies," EPA concluded that private party recipients (e.g., non-profit organizations, individuals) of Federal loans, grants, or funds under a cooperative agreement are not procuring agencies. This is true whether the originator of the grant, loan, or cooperative agreement is a Federal agency or a State or local agency recipient of Federal funds. In proposed § 247.2, EPA is adding a new subparagraph (c)(2) regarding private party recipients of Federal funds to reflect this revised interpretation of RCRA section 6002. EPA requests comment on this interpretation.

3. To Which Purchases Does Section 6002 Apply?

As previously noted, the following discussion is a consolidation of similar discussions in the existing procurement guidelines and is included for the convenience of the reader.

Purchases made as a result of a solicitation by procuring agencies for their own general use or that of other agencies (e.g., purchases by GSA's Federal Supply Service) are "direct" purchases. Purchases of items as part of a contract are also "direct" purchases.

The definition of "procuring agency" makes it clear that the requirements of section 6002 also apply to "indirect purchases," i.e., purchases by a State or local agency using appropriated Federal funds or, in some instances, its contractors. In other words, section 6002 applies to purchases of designated items meeting the $10,000 threshold made by States, political subdivisions of States, or their contractors.

However, the guideline does not apply to such purchases if they are unrelated to or incidental to the Federal funding, i.e., not the direct result of the grant, loan, or funds disbursement. For example, if an entity has a Federal grant or contract to do research and builds or expands a laboratory to conduct the research, the construction is incidental to the grant or contract, as is the purchase of construction materials.

The guideline applies whenever Federal monies, including block grants, are used, whether or not they are commingled with non-Federal funds.

4. What is the $10,000 Threshold?

As previously noted, the following discussion is a consolidation of similar discussions in the existing procurement guidelines and is included for the convenience of the reader.

RCRA section 6002(a) provides that the procurement requirements of the statute apply: (1) When the purchase price of an item exceeds $10,000 or (2) when the quantity of such items or of functionally equivalent items purchased during the preceding fiscal year was $10,000 or more. Thus, RCRA section 6002 clearly sets out a two-step procedure for determining whether the $10,000 threshold has been reached. First, procuring agencies must determine whether they purchased $10,000 worth of a designated item or functionally equivalent items during the preceding fiscal year. If so, the requirements of section 6002 apply to all purchases of these items occurring in the current fiscal year. Second, if the procuring agencies did not procure $10,000 worth of a designated item during the preceding fiscal year, they are not subject to RCRA section 6002 unless, in the current fiscal year, they make a purchase of the item exceeding $10,000. The requirements of RCRA section 6002 then apply to the $10,000 purchase of the designated item; to all subsequent purchases of the item made during the current fiscal year, regardless of size; and to all procurements of the designated item made in the following fiscal year.

Section 6002(a) does not specify that the procurement requirements are triggered when the aggregate quantity of items purchased during the current fiscal year is $10,000 or more. Therefore, EPA does not believe that Congress intended to require procuring agencies to keep a running tally during the year of procurements of designated items. Maintaining such a running tally would be very burdensome. Rather, procuring agencies need only compute their total procurements of a designated item once at the end of the fiscal year and only if they intend to claim an exemption from the requirements of RCRA section 6002 in the following fiscal year.

Finally, Federal agencies should note that the requirements of RCRA section 6002 apply to each Federal agency as a whole. This point is particularly important in determining whether the $10,000 threshold has been reached. During each fiscal year, each major Federal agency as a whole, purchases, or causes the purchase of, more than $10,000 worth of many of the designated items. Therefore, the requirements of section 6002 will apply to all procurements of these items by these agencies and their subunits.

V. Definitions

Most of the definitions found in § 247.3 are the same as those used in the five existing procurement guidelines. The terms "recovered materials," "procuring agency," "person," and "Federal agency" are defined the same as in RCRA. "Postconsumer material" is defined as in Executive Order 12873, while "Postconsumer paper" has the same definition as currently provided in EPA's paper procurement guideline. Other terms are standard industry or purchasing definitions (e.g., purchasing, purchasing activities, Commercial Item Description, Invitation for Bid, Request for Proposal, specification). EPA requested comment on these definitions and the definition of "practicable" during the development of the existing five procurement guidelines and, therefore, is not requesting comment on them today.

EPA is proposing to add the following item-specific new terms: fittings, geotextiles, hydraulic mulch, hydroseeding, laminated paperboard, plastic pipe and fittings, and structural fiberboard. They are based on industry definitions, including ASTM or other standard specifications, or represent descriptions of the scope of items being

designated. EPA specifically requests comment on each of these definitions.

VI. The Affirmative Procurement Program

Within one year after EPA designates an item, RCRA section 6002(i) requires each procuring agency purchasing more than $10,000 of that item, or functionally equivalent items, in a fiscal year to establish an affirmative procurement program for that item. ("Procuring agency" is discussed in section IV.B.2; $10,000 threshold and functionally equivalent are discussed in section IV.B.4) section 402 of Executive Order 12873 reinforces this requirement and further provides that Executive agencies "shall ensure that their affirmative procurement programs require that 100 percent of their purchases of products meet or exceed the EPA guideline standards," considering the limitations set forth in section 6002(c)(1) (A) through (C) (i.e., competition, price, availability, and performance). As described in section II.E.2, EPA is proposing, in a Recovered Materials Advisory Notice, recommended recovered materials content levels within which the designated items are available. These content levels, referred to as "standards" in section 402 of the Executive Order, are proposed in the RMAN that also appears in today's **Federal Register**.

An affirmative procurement program is an agency's strategy for maximizing its purchases of an EPA-designated item. The affirmative procurement program should be developed in a manner that assures that items composed of recovered materials are purchased to the maximum extent practicable consistent with Federal procurement law. RCRA section 6002(i) requires that, at a minimum, an affirmative procurement program consist of four elements: (1) A preference program; (2) a promotion program; (3) procedures for obtaining estimates and certifications of recovered materials content and, where appropriate, reasonably verifying those estimates and certifications; and (4) procedures for monitoring and annually reviewing the effectiveness of the affirmative procurement program. In addition, section 402 of Executive Order 12873 requires an agency affirmative procurement program to encourage the electronic transfer of documents, the two-sided printing of government documents, and the inclusion of provisions in contracts, grants, and cooperative agreements that require documents to be printed two-sided on recycled paper.

In previous guidelines, EPA recommended that specific actions be taken by requesting officials, contracting officers, and architects and engineers when purchasing designated items. In consulting with acquisition policy and requirements officials from several major Federal agencies, EPA determined that these item-specific recommendations did not provide enough flexibility for procuring agencies to determine the appropriate delineation of responsibilities for implementing the requirements of RCRA section 6002. Based on this information and because of the broad array of products proposed for designation in today's rule, EPA will no longer make specific recommendations for individuals within an agency to implement the requirements of RCRA section 6002 and Executive Order 12873. Instead, EPA is recommending that the Environmental Executive within each major procuring agency take the lead in developing the agency's affirmative procurement program and in implementing the requirements set forth in this CPG. This recommendation is consistent with the basic responsibilities of an Agency Environmental Executive as described in sections 302 and 402 of Executive Order 12873. Section 302 charges each Agency Environmental Executive with coordinating all environmental programs in the areas of acquisition, standard and specification revision, facilities management, waste prevention, recycling, and logistics. Section 402(c) of the E.O. further requires each Agency Environmental Executive to track and report, to the Federal Environmental Executive, agency purchases of EPA-designated items. In the absence of such an individual, EPA recommends that the head of the implementing agency appoint an individual who will be responsible for ensuring the agency's compliance with RCRA section 6002 and Executive Order 12873.

RCRA and the Executive Order require procuring agencies to establish affirmative procurement programs for each item EPA designates. In fulfilling this requirement, EPA recommends that each agency develop one comprehensive affirmative procurement program with a structure that provides for the integration of new items as they are designated. EPA encourages agencies to implement preference programs for non-designated items as well, in order to maximize their purchases of recycled products and foster markets for recovered materials.

A. Specifications

RCRA section 6002(d)(1) requires Federal agencies responsible for drafting and reviewing specifications for procurement items purchased by Federal agencies to review and revise their specifications and remove requirements specifying virgin materials only or excluding the use of recovered materials. This revision process should have been completed by May 8, 1986. For items designated by EPA, section 6002(d)(2) directs Federal agencies to revise their specifications to require the use of recovered materials to the maximum extent possible without jeopardizing their intended end-use. For the items previously designated by EPA (i.e., paper and paper products, re-refined lubricating oil, retread tires, building insulation, and cement and concrete containing fly ash), procuring agencies were required to have completed their revisions within one year of each item designation. For items proposed for designation in today's CPG, agencies must complete these revisions within one year after the date of publication of the final CPG, as required by RCRA section 6002(d)(2).

As discussed in section II.C.2, sections 501, 504, 505, and 506 of Executive Order 12873 also address Federal specification requirements. Section 501 of the Order requires Executive agencies to review and revise their specifications, product descriptions, and standards to enhance Federal procurement of products containing recovered materials. When agencies convert to Commercial Item Descriptions, they are required to ensure that the Commercial Item Descriptions meet or exceed the recovered materials requirements in the specifications or product descriptions they replace.

Section 505 requires the General Services Administration and other Executive agencies to revise their paper specifications to eliminate barriers, unrelated to performance, to purchasing paper or paper products made by production processes that minimize emissions of harmful by-products. Section 504 requires Executive agency heads to purchase uncoated printing and writing paper with a minimum of 20 percent postconsumer content beginning December 31, 1994, and 30 percent postconsumer content beginning December 31, 1998. In lieu of these postconsumer content levels for paper, Section 504(c) of the Order allows Executive agencies, under specific circumstances, to purchase printing and writing paper that contains 50 percent recovered materials. The levels contained in the Executive Order

replace the corresponding standards now contained in the paper guideline. In the next several months, EPA intends to issue a draft RMAN which will contain revisions to EPA's recommended recovered materials content levels for paper and paper products. The draft RMAN will incorporate the recovered materials content levels required in the Executive Order. Executive agencies should note, however, that, beginning December 31, 1994, the standards in the Executive Order are applicable to their paper purchases even if EPA does not incorporate them into the paper guideline.

Section 506 reiterates the requirements in the procurement guidelines for re-refined lubricating oil and retread tires. This section specifically requires commodity managers for tires and lubricating oils to finalize their specification revisions for those products, to develop and issue specifications for tire retreading services, and to take affirmative steps to procure these items. It also requires fleet managers to take affirmative steps to procure retread tires and re-refined oil once they become available.

B. Preference Program

A preference program is the system by which an agency implements its stated "preference" for purchasing products containing recovered materials. RCRA section 6002(i)(3) requires procuring agencies to consider the following options when implementing their preference programs: minimum content standards, case-by-case policy development, or a substantially equivalent alternative.

To assist procuring agencies in establishing their preference programs, when EPA designates an item, it examines these statutory options and recommends the approach it believes to be the most effective for purchasing the designated item. Procuring agencies may elect either to adopt EPA's recommended approach or to develop their own approaches, provided that, in accordance with section 402 of the Executive Order, the selected approach meets or exceeds EPA's recommended approach. The approach that EPA recommends for each of the items designated in today's CPG is described in the Recovered Materials Advisory Notice which also appears in today's **Federal Register**.

1. Minimum Content Standards

One approach that RCRA section 6002(i)(3) requires procuring agencies to consider is the establishment of minimum content standards. When a procuring agency establishes a minimum recovered materials content standard for an item designated by EPA, RCRA section 6002(i)(3)(B) requires the procuring agency to assure that its standard requires the maximum amount of recovered materials content available for that item, without jeopardizing the intended end use of the item.

To assist procuring agencies with establishing their minimum content standards, EPA recommends recovered materials content levels, where appropriate, for most of the items it designates. EPA notes that under RCRA section 6002(i), it is the procuring agency's responsibility to establish minimum content standards, while EPA provides recommendations regarding the levels of recovered materials in the designated items. To make it clear that EPA does not establish minimum content standards for other agencies, EPA will no longer refer to its recommendations as "minimum content standards," as was done in previous guidelines. Instead, EPA will refer to its recommendations as "recovered materials content levels," consistent with RCRA section 6002(e) and Executive Qrder 12873.

EPA also notes a change in its approach to establishing recovered materials content levels. For items designated in previous guidelines, with the exception of retread tires, EPA recommended single number recovered materials content levels that represented the national minimum levels for procuring agencies to use when requesting designated items. Henceforth, EPA is recommending recovered materials content ranges within which the items are available. EPA recommends that procuring agencies use these ranges, in conjunction with their own research into the recovered materials content of items available to them, to establish their minimum content standards. In some instances, EPA will recommend one level (e.g., 100 percent recovered materials), rather than a range, because the item is universally available at the recommended level. The methodology that EPA uses to establish recovered materials content ranges for the items that the Agency designates is described in section II.E. The recommended recovered materials content levels for the items proposed for designation in this CPG can be found in the RMAN which also appears in today's **Federal Register**.

2. Case-by-Case Policy Development

A second approach that RCRA section 6002(i)(3) requires procuring agencies to consider is case-by-case policy development. RCRA section 6002(i)(3)(A) describes case-by-case policy development as "a policy of awarding contracts to the vendor offering an item composed of the highest percentage of recovered materials practicable," subject to the limitations of RCRA section 6002(c)(1)(A) through (C) (i.e., competition, price, availability, and performance). The case-by-case approach is appropriate where a procuring agency determines that the minimum content standard it has established for a particular designated item is not appropriate for a specific procurement action (i.e., the procuring agency is unable to acquire the item within the limitations described in RCRA section 6002(c)(1)(A) through (C)). The case-by-case approach allows a procuring agency to specify different (usually lower) minimum content standards for specific procurement actions, while still ensuring that the agency fulfills its responsibility to procure the designated item containing the highest amount of recovered materials practicable.

This approach is not intended to obviate the need for an agency minimum recovered materials content standard. It should be applied to singular procurement actions only where the agency's minimum content standard is unattainable. If a procuring agency determines that it is consistently unable to procure an EPA-designated item using the minimum content standard it establishes, then the agency should evaluate its needs and adjust its content standard accordingly.

3. Substantially Equivalent Alternative

A third approach that RCRA section 6002(i)(3) requires procuring agencies to consider is a substantially equivalent alternative to minimum content standards and case-by-case policy development. For some items, the use of minimum content standards is inappropriate because the product is remanufactured, reconditioned, or rebuilt (e.g., remanufactured toner cartridges). In these instances, EPA will recommend that procuring agencies use a substantially equivalent alternative. For example, as discussed in the draft RMAN which also appears in today's **Federal Register**, in the case of toner cartridges, EPA recommends that procuring agencies establish a two-pronged program consisting of: (1) Remanufacturing their expended toner cartridges and (2) purchasing remanufactured toner cartridges when new cartridges are needed. Minimum content standards are inapplicable because the recovered material is the expended toner cartridge, rather than

the individual components used to produce a new cartridge.

4. Requirements for Contractors and Grantees

Government contractors and State and local government agency recipients of appropriated Federal funds, including assistance funds, are also subject to the requirements of RCRA section 6002. These requirements are applicable where the contractor or state or local government agency uses $10,000 of appropriated Federal funds, or used $10,000 or more of appropriated Federal funds the previous year, to purchase an EPA-designated item. Section IV.B.2 describes the applicability of RCRA section 6002 to government contractors and state and local governments in further detail.

5. Exceptions

A procuring agency may not always be able to purchase a designated item with recovered materials content. RCRA section 6002(c)(1) allows a procuring agency to except its purchase of an EPA-designated item with recovered materials content based on the following determinations:

(1) The agency is unable to secure a satisfactory level of competition.

(2) The item is not reasonably available within a reasonable period of time.

(3) The item fails to meet the performance standards set forth in the agency's specification.

(4) The item is available only at an unreasonable price.

Section 402 of Executive Order 12873 further requires that, if a procuring agency waives its requirement to purchase an EPA-designated item with recovered materials content, it must provide a written justification specifying one or more of the exceptions listed above.

C. Promotion Program

RCRA section 6002(i)(2)(B) requires each procuring agency to adopt a program to promote its preference to buy EPA-designated items with recovered materials content. The promotion component of the affirmative procurement program educates staff and notifies an agency's current and potential vendors, suppliers, and contractors of the agency's intention to buy recycled products.

In the previous guidelines, EPA targeted its recommendations for promoting the affirmative procurement program at the agency's vendors and contractors. EPA has determined that the education of an agency's employees is also an important part of the promotion program. Therefore, EPA believes that an agency's promotion program should consist of two components: An internal promotion program and an external promotion program.

1. Internal Promotion

There are several methods that procuring agencies can use to educate their employees about their affirmative procurement programs. These methods include preparing and distributing agency affirmative procurement policies, publishing articles in agency newsletters and publications, including discussions of an agency's affirmative procurement program in staff and technical manuals, and conducting workshops and training sessions to educate employees about their responsibilities under an agency's affirmative procurement program.

2. External Promotion

Methods for educating existing contractors and potential bidders of an agency's preference to purchase products containing recovered materials include publishing articles in appropriate trade publications, participating in vendor shows and trade fairs, placing statements in solicitations, and discussing an agency's affirmative procurement program at bidders' conferences.

D. Estimation, Certification, and Verification

RCRA section 6002(i)(2)(C) requires the affirmative procurement program to include procedures for estimating, certifying, and, where appropriate, reasonably verifying the amount of recovered materials content utilized in the performance of a contract. RCRA section 6002(c)(3) further provides "the contracting officer shall require that vendors: (A) Certify that the percentage of recovered materials to be used in the performance of the contract will be at least the amount required by applicable specifications or other contractual requirements and (B) estimate the percentage of the total material utilized for the performance of the contract which is recovered materials."

E. Procedures to Monitor and Review the Procurement Program

Procuring agencies should monitor their affirmative procurement programs to ensure that they are fulfilling their requirements to purchase items composed of recovered materials to the maximum extent practicable. RCRA section 6002(i)(2)(D) requires the affirmative procurement program to include procedures for annually reviewing and monitoring the effectiveness of an agency's affirmative procurement program. Section 402 of Executive Order 12873 requires the Environmental Executive of each Executive agency to track and report on agency purchases of EPA-designated items. Additionally, RCRA section 6002(g) requires the Office of Federal Procurement Policy (OFPP) to submit a report to Congress every two years on actions taken by Federal agencies to implement the affirmative procurement requirements of the statute. Also, section 301 of Executive Order 12873 requires the Federal Environmental Executive to submit a report annually, at the time of agency budget submission, to the Office of Management and Budget (OMB) on Executive agency compliance with the Order. In order to fulfill their responsibilities, EPA anticipates that the Federal Environmental Executive and OFPP will request information from appropriate agencies on their affirmative procurement practices. Therefore, it is important for agencies to monitor their affirmative procurement programs to ensure compliance with RCRA section 6002 and Executive Order 12873.

In order to comply with the Executive Order, agencies will need to evaluate their purchases of products made with recovered materials content. This will also allow them to establish benchmarks from which progress can be assessed. To evaluate their procurements of products containing recovered materials, procuring agencies may choose to collect data on the following:

(1) The percentages of recovered materials content in the items procured or offered;

(2) Comparative price information on competitive procurements;

(3) The quantity of each item procured over a fiscal year;

(4) The availability of each item with recovered materials content; and

(5) Performance information related to recovered materials content of an item.

EPA recognizes that a procuring agency may be unable to obtain accurate data for all items designated by EPA. However, EPA believes that estimates will be sufficient to determine the overall effectiveness of an agency's affirmative procurement program. In the cost estimates for this proposal, EPA estimates that Federal agencies will spend an average of 10 hours per product per year to perform recordkeeping and reporting tasks associated with this affirmative procurement program requirement and potential information requests from EPA, OMB, and the Federal Environmental Executive.

VII. Proposed Categories of Item Designations

To organize the products that EPA selected for designation, we developed the following product categories: Paper and office paper, vehicular, construction, transportation, park and recreation, landscaping, non-paper office, and miscellaneous. The categories were developed to describe the application of each designated item.

- Paper and Office Paper Products—as defined in 40 CFR 250.4(aa). This category does not include paper and paper products used in construction applications.
- Vehicular Products—products used in repairing and maintaining automobiles, trucks, and other vehicles. Examples of vehicular products include lubricants, bumpers, mud flaps, and engine coolant.
- Construction Products—products used in constructing roads and the interior and exterior components of commercial and residential buildings.
- Transportation Products—products used for directing traffic, alerting drivers, and containing roadway noise and pollution. Examples of transportation products include safety cones, traffic signs, and sound barriers.
- Park and Recreation Products—products used in operating and maintaining parks and recreational areas. Examples of park and recreation products include playground equipment and running tracks.
- Landscaping Products—products used to contain, maintain, or enhance decorative and protective vegetation or areas surrounding buildings and roadways. Examples of landscaping products include compost, garden implements, and landscape timbers.
- Non-Paper Office Products—equipment and accessories used by government agencies and businesses to perform daily operational and administrative functions of an office. Examples of non-paper office products include toner cartridges, desktop accessories, and waste receptacles.
- Miscellaneous Products—includes all other products not covered by the categories listed above.

VIII. Paper and Paper Products

As previously discussed, EPA issued a paper procurement guideline in 1988. The guideline establishes recovered materials content levels for various paper products, including printing and writing paper. In addition, section 504 of Executive Order 12873 establishes minimum content standards for specified uncoated printing and writing papers purchased by Federal executive agencies. These standards replace the corresponding standards in the paper guideline.

In today's proposed CPG, EPA includes the existing paper and paper products designation and related definitions only for purposes of showing readers what will be included in the final CPG. In the draft Recovered Materials Advisory Notice published elsewhere in the **Federal Register** today, however, EPA is not including revisions to the existing recommended recovered materials content levels for paper products. In the next several months, EPA intends to issue another draft Recovered Materials Advisory Notice for public comment. This additional draft RMAN will incorporate the minimum content standards established by the Executive Order, amend the recommended recovered materials levels for other paper products, and address a variety of issues that have been raised as procuring agencies have implemented affirmative procurement programs for paper products containing recovered materials. Federal executive agencies should note, however, that, beginning December 31, 1994, the standards in the Executive Order are applicable to their paper purchases even if EPA does not incorporate them into the paper guideline.

IX. Vehicular Products

A. Re-Refined Lubricating Oil and Retread Tires

EPA issued procurement guidelines for re-refined lubricating oil and retread tires in 1988. Proposed § 247.12 will include the existing designations of these two items and a new designation of engine coolants. EPA is including the existing designations and definitions of re-refined lubricating oil and retread tires in the proposed part 247 today only for purposes of showing readers where they will be placed in the new CPG. EPA is not re-opening the item designations or related definitions for public comment.

B. Engine Coolants

1. Background

Engine coolant, also known as antifreeze, is a necessary automotive chemical. Engine coolants are manufactured from one of two chemicals: Ethylene glycol or propylene glycol. Coolant additives are then added to inhibit corrosion within the engine.

Spent engine coolants can be reclaimed by removing contaminants and breakdown products of the original ingredients and replacing corrosion inhibitors. Engine coolant reclamation results in both waste reduction and materials recovery benefits.

Engine coolant reclamation units are readily available in a range of capacities and prices. GSA offers engine coolant reclamation units from three sources through the New Item Introductory Schedule program.

There is one potential impediment to reclamation of engine coolants: the mixing of the two types of engine coolant, ethylene glycol and propylene glycol. Propylene glycol-based engine coolant has just recently been marketed nationwide for consumer purchase. Reclaimers will reject spent engine coolants if they contain more than one percent propylene glycol because it interferes with reclamation of ethylene glycol due to differences in the chemistry of the two materials.

2. Rationale for Designation

EPA believes that engine coolant satisfies the statutory criteria for selecting items for designation.

a. *Use of materials in solid waste.* As discussed above in section II.A, significant quantities of spent engine coolants require disposal annually. In some instances, spent engine coolant can exhibit the toxicity characteristic of hazardous waste by failing EPA's Toxicity Characteristic Leaching Procedure (TCLP). If a procuring agency determines that its spent engine coolant is a hazardous waste, it must manage the engine coolant in accordance with applicable Federal or state hazardous waste management requirements, including the generator requirements found in 40 CFR Part 262 and the requirements for recyclable materials found in 40 CFR § 261.6. Because state hazardous waste regulations generally apply in lieu of the Federal regulations, procuring agencies should contact their state environmental agency (or, if the state is not authorized, the appropriate EPA Regional Office) for specific information on applicable requirements.

b. *Technically proven uses.* Reclamation of engine coolants is done in one of two ways: filtration or distillation. Data from both types of reclamation strongly support the designation of reclaimed engine coolants. Both the Navy and the Postal Service are reclaiming engine coolants and have not encountered performance problems with the reclaimed product. The American Society for Testing and Materials' (ASTM) D15 committee on engine coolants has published standards for reclaimed engine coolants (see ASTM D 3306, D 4985).

c. *Impact of government procurement.* Government agencies operate a large number of vehicles. The Federal

government alone, including the U.S. Postal Service, operates a fleet of more than 500,000 vehicles of all types: passenger vehicles, light and heavy trucks, buses, ambulances, off-road vehicles, etc.

Military installations, the Postal Service, and some Federal civilian agencies have motor pools or vehicle maintenance facilities at which vehicles are serviced. The Navy informed EPA that it established engine coolant reclamation at some installations to recover this material and reduce liability if spent engine coolants were to be mismanaged. Limited EPA research revealed that one naval shipyard has been able to recover 6,000 gallons of engine coolant annually, resulting in a cost savings of about $5 per gallon, factoring in avoided disposal costs and the cost of purchasing new engine coolant. If all government agencies were to establish engine coolant reclamation programs, the potential recovery of used engine coolant could be significant.

However, not all agencies have motor pools or vehicle maintenance centers where engine coolant recycling could be established. In fact, maintenance of the majority of the Federal civilian fleet occurs at commercial service centers. Nevertheless, EPA believes that it is important to begin to establish engine coolant reclamation programs throughout the Federal fleet in order to recover this material. EPA further believes that state and local government fleets and private sector fleets will follow the Federal lead, thus reducing the amount of engine coolants requiring disposal each year.

3. Designation

Today, in § 247.12(c), EPA proposes to designate reclaimed engine coolant as an item that is or can be made with recovered materials.

X. Construction Products

In proposed part 247, § 247.13 contains designations of the following construction products: building insulation, structural fiberboard and laminated paperboard, plastic pipe and fittings, geotextiles, cement and concrete, carpet, and floor tiles and patio blocks. The following subsections discuss each of these items. EPA previously designated building insulation products and cement and concrete containing fly ash in 1989 and 1983 procurement guidelines, respectively. These designations are included in § 247.13 (a) and (e) for the convenience of the reader and, therefore, EPA is not requesting comment on them. However, as explained in sections X.A and X.E below, EPA today proposes to amend the scope of these two item designations.

A. Building Insulation Products

The 1989 building insulation products procurement guideline designated a variety of insulation products, including loose-fill, blanket and batt, board, and spray-in-place. These products are made with a variety of materials, including cellulose fiber, mineral wool (fiberglass and rock wool), perlite composite board, and plastic foams. Today, in subparagraph (3) of proposed § 247.13(a), EPA is proposing to add structural fiberboard and laminated paperboard products to the list of board insulations. EPA discusses these two products in section X.B below and requests comment on adding them to the building insulation products designation.

Further, EPA notes that there has been confusion about whether the 1989 procurement guideline included fiberglass insulation, although it was listed in the item designation under both loose-fill and blanket and batt insulations, because the Agency did not recommend recovered materials content levels for it. Procuring agencies should note that an item is designated if it is listed in the designation, whether or not EPA recommends a recovered materials level. Procuring agencies should further note that, in the companion Recovered Materials Advisory Notice published in the **Federal Register** today, EPA is recommending recovered materials content levels for fiberglass insulation.

B. Structural Fiberboard and Laminated Paperboard

1. Background

a. *Prior proposal to designate "cellulosic" fiberboard.* In the proposal to the building insulation products procurement guideline (53 FR 29165, August 2, 1988), EPA proposed to designate "cellulose fiberboard" and recommend a recovered materials content level of 50 percent postconsumer recovered paper for this item. Cellulose fiberboard was not included in the final building insulation guideline, because several questions regarding definitions and recovered materials content were unresolved.

Specifically, there are several categories of fiberboard: particleboard, medium density fiberboard, hardboard, and structural fiberboard. Of these, EPA's proposed "cellulose fiberboard" is a type of structural fiberboard. Because "structural fiberboards" have both insulating and structural applications, however, commenters stated that it was unclear whether EPA was proposing to include both applications. They also stated that it was unclear whether the proposed guideline applied to laminated paperboard, which also can be made with recovered materials, because structural fiberboard and laminated paperboard have different definitions and recovered materials content. They pointed out that EPA proposed a definition of "cellulosic fiberboard" based on ASTM Standard Specification C 208, "Insulating Board (Cellulosic Fiber), Structural and Decorative," which does not apply to laminated paperboard.

In light of the commenters' concerns, EPA decided to conduct additional research into "cellulose fiberboard" products. Based on this research and additional information provided by product manufacturers, EPA now proposes to designate both structural fiberboard and laminated paperboard products for both insulating and structural applications.

b. *Overview of structural fiberboard and laminated paperboard products.* Structural fiberboard products have a lower density than other fiberboards. Historically, both structural fiberboard and laminated paperboard were considered to be insulating products. Because they have structural applications, as well, the industry considers them to be "structural fiberboard," rather than "cellulosic" or "insulating" fiberboard. Therefore, EPA now proposes to use the term "structural" fiberboard, rather than "cellulosic" fiberboard.

The industry further differentiates laminated paperboard products because of their higher densities than structural fiberboard products. ASTM specification C 208 defines "cellulosic" fiberboard products as having a density between 10 lbs/ft^3 and 31 lbs/ft^3. By contrast, laminated paperboard products have a density in the range of 42 lbs/ft^3.

Structural fiberboard and laminated paperboard products are used in construction for both insulating and structural purposes. They can be used as overlay board in built-up roofing, wall sheathing, sound-deadening under flooring and in wall assemblies, acoustical and non-acoustical wall and ceiling coverings, and insulation board.

c. *Use of recovered materials in other board products.* Manufacturers of particleboard, hardboard, and medium density fiberboard also are beginning to use recovered materials. EPA knows of one manufacturer producing hardboard from wood recovered from demolition debris and one manufacturer producing particleboards using recovered cotton

stalks and cotton burrs. METRO Portland reports that one-fourth of the wood recovered in the metropolitan Portland area in 1992 was processed into feedstock for hardboard, particleboard, and medium density fiberboard. (See "1992/93 Wood Market Profile," METRO Solid Waste Department, August 1993.) EPA requests additional information about the use of recovered materials to produce particleboard, hardboard, and medium density fiberboard. In particular, EPA requests comment on the following issues:

- What is the size (in expenditures or volume) of the Federal government market for these items?
- What is the availability of each of these items produced with recovered materials—national, regional, or local?
- What type(s) of recovered materials are used? What volume of these materials is used to produce each item?
- What are the applicable ASTM or other performance standards for each item? Do the standards preclude the use of recovered materials? Do items containing recovered materials meet the performance requirements in these standards?
- What is the price of these items relative to the price of similar items made with virgin materials?
- How many manufacturers of each item are there?

2. Rationale for Designation

EPA believes that structural fiberboard and laminated paperboard products satisfy the statutory criteria for selecting items for designation.

a. *Use of materials in solid waste.* As discussed above in section II.A, both paper and wood are significant components of municipal solid waste, and wood is a significant component of construction and demolition debris. Although recovered paper is used by the pulp and paper industry, there continues to be a need for additional markets for this material.

b. *Technically proven uses.* Both structural fiberboard and laminated paperboard can be produced with high levels of recovered materials without compromising product performance. Five of the seven manufacturers of structural fiberboard and all of the laminated paperboard manufacturers use recovered materials, and the other two structural fiberboard manufacturers are experimenting with using recovered materials.

In addition, both structural fiberboard and laminated paperboard containing recovered materials are established products with established specifications. ASTM specification C 208 applies to structural fiberboard products containing recovered materials. Both structural fiberboard and laminated paperboard meet other applicable performance requirements, such as those established by the American National Standards Institute (ANSI), American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), Federal Housing Administration, and the various building code organizations.

c. *Impact of government procurement.* Government agencies purchase structural fiberboard and laminated paperboard products for residential, institutional, and commercial applications. In 1990, $5.3 million worth of these products were purchased with appropriated Federal funds. Many Federal agencies disburse funds to State and local agencies for using in building construction, renovation and repair—activities for which use of structural fiberboard and laminated paperboard are appropriate. Therefore, EPA expects both direct and indirect procurement of these items to increase as a result of today's proposed designation.

3. Designation

Today, in § 247.13(b), EPA proposes to designate structural fiberboard and laminated paperboard products, including building board, insulating formboard, sheathing, shingle backer, sound-deadening board, roof insulating board, acoustical and non-acoustical ceiling tile, insulating wallboard, acoustical and non-acoustical lay-in panels, floor underlayments, and roof overlay (coverboard). The proposed designation includes both insulating and structural uses of structural fiberboard and laminated paperboard products.

C. Plastic Pipe and Fittings

1. Background

Plastic pipe is used to collect and transport liquids, gases, and slurries from one point to another. Plastic fittings are used when installing piping systems. Plastic pipe is used in drain, waste, and vent (DWV) applications, sewer systems, water distribution, gas distribution, oil and gas production, electrical conduit, and industrial, agricultural, and mining operations. The use of plastic pipe in various applications increased dramatically in the last 20 years, due primarily to its ability to resist corrosion.

Plastic pipe applications predominantly fall into two categories: pressure and non-pressure uses. Pressure-rated applications include the oil, gas and mining industries, and pipe used for the transport of potable water. Pressure-rated pipe must be able to handle significant internal pressure, necessitating greater structural strength than non-pressure applications.

Most pressure-rated pipe and pipe rated for carrying potable water uses are not currently good candidates for using recovered resins. Several industry experts have expressed concern about potential contamination of potable water from pipe made from non-virgin plastic materials. Also, because the quality and performance of recovered resins in plastic pipe are only now being evaluated, manufacturers generally have been unwilling to risk the use of recovered resins in pressure-rated pipe. The fear of pipe failure, which could result in physical and chemical hazards and expensive repairs, has led manufacturers to concentrate primarily on non-pressure and non-potable water pipe applications for recovered plastic. Therefore, applications requiring pressure-rated pipe are not included in today's proposed guideline.

Compared to pressure applications, non-pressure applications, including sewer, drainage, DWV, and conduit, generally have lower stresses and, thus, would not impede the use of recovered materials in plastic pipe and fittings. Sewer pipe is used in sanitary and storm sewer applications. Drainage pipe is used in surface and subsurface applications, such as building foundations, highway construction, and general land drainage to collect and convey water by gravity flow. DWV pipe is somewhat similar to drainage pipe, but is used primarily in residential housing and other building projects. Conduit is used in power and communications ducts and to house electrical wires.

Plastic pipe is classified as either reinforced thermosetting resin pipe or thermoplastic pipe, depending on the manufacturing processes and resins used. EPA found no information indicating that pipe made from thermoset resins is being made with recovered materials.

Thermoplastic pipe has the largest share of the plastic pipe market. Thermoplastic resins include polyvinyl chloride (PVC), polyethylene (PE), acrylonitrile-butadiene-styrene (ABS), polypropylene (PP), polybutylene (PB), and chlorinated polyvinyl chloride (CPVC). The resins are formed into pipe by an extrusion process in which molten resins are continuously forced through a mold. The formed pipe is then sized and hardened by cooling the pipe with water. Fittings are manufactured using an injection-molding process that forces the molten plastic under pressure

into metal molds and then cools the mold. Recovered materials may be used in either the extrusion or the injection-molding process.

A few variations in the manufacturing processes for thermoplastic pipe are used to increase the stiffness of the pipe. Two types of thermoplastic pipe are corrugated and smoothwall. Corrugated pipe is extruded and vacuum-suctioned into molds to make the corrugations (i.e., ridges and recesses). The corrugation adds strength to the pipe and makes it flexible so that it may be rolled onto spools for transport. Smoothwall pipe is extruded and sent through a sizing ring to obtain the desired thickness. Strength is obtained by increasing the thickness of the wall. For the purposes of this guideline, thermoplastic pipe includes both corrugated and smoothwall pipes.

PVC and HDPE resins alone comprise over 90 percent of the total thermoplastic pipe market. The majority of all plastic pipe (about 75 percent) is made from PVC materials. About 3.1 billion pounds of PVC pipe were manufactured in 1991. The largest use (48 percent) of PVC pipe is in sewer and drain applications, including sanitary and storm sewers, subsurface drain systems, building connections, drainage, and DWV systems. PVC pipe also is used as conduit in power and communications ducts. Conduit, or electrical conduit, is a type of plastic tubing with predominantly smaller diameters than typical pipe applications and is used to house buried or submerged wire and cable.

Pipe produced from polyethylene, mainly HDPE, occupies the second largest domestic market for plastic pipe. Corrugated drain pipe accounts for about 18 percent of the HDPE pipe market and is used in surface and subsurface drainage applications for collecting and conveying water by gravity flow. Corrugated drain pipe is used in building foundations, highways, land and agricultural drainage applications, and communications ducts. Installation involves placement in soil and gravel beds which provide support to the flexible pipe walls. Solid wall HDPE pipe is inserted into existing pipes for slip-lining applications and is used in the rehabilitation of existing systems and in new drainage systems.

2. Rationale for Designation

EPA believes that plastic pipe and fittings satisfy the statutory criteria for selecting items for designation.

a. *Use of materials in solid waste.* Non-pressure plastic pipe manufacturers can use recovered HDPE and PVC. As discussed above in section II.A, plastics are a significant component of municipal solid waste, and PVC is present in construction and demolition debris (e.g., scraps from installation of vinyl siding).

b. *Technically proven uses.* Recovered plastics have been used successfully in the manufacture of non-pressure plastic pipe and fittings for use in sewer, drainage, DWV, and electrical conduit applications. PVC is the predominant resin used to manufacture all of these except drainage pipe, which is commonly made of HDPE. EPA has identified 10 manufacturers of plastic pipe that use recovered resins.

Pipe fittings are manufactured by the injection-molding process, a process which generally can use recovered resins. The information available to EPA indicates that no technical barriers preclude the use of recovered PVC or HDPE resin in the manufacture of fittings.

EPA is seeking information about use of recovered materials in the manufacture of conduit. Although it is technically feasible to manufacture conduit with recovered resins, EPA has been unable to identify manufacturers marketing their conduit as containing recovered materials. EPA believes that at least one manufacturer currently uses recovered resin in producing conduit, but the manufacturer does not market the product as such. Therefore, EPA requests information on the extent to which conduit is produced from recovered resins.

Numerous organizations set performance and product specifications for plastic pipe, including ASTM. There are currently about 20 ASTM standards for non-pressure HDPE and PVC pipe. The materials specifications in some of these standards explicitly require the use of virgin resin; others neither allow nor disallow recovered materials content. However, all of these standards allow the use of rework materials (e.g., industrial scrap commonly reused within the manufacturing process). While manufacturers using recovered resin cannot meet the virgin materials requirements of some ASTM standards, they can receive verification by independent testing labs that their products meet the performance requirements contained within those standards. For the past few years, many ASTM members have been interested in allowing the use of recovered materials, either by revising existing materials requirements or developing new standards. However, the process of revising or developing an ASTM standard often takes several years. There are currently a few projects within ASTM to develop new standards for non-pressure pipe containing recovered resin.

Some industry opponents of the use of recovered resin in pipe manufacturing claim that performance tests designed for virgin resin may not adequately assess recovered materials, because requirements for virgin resin (e.g., molecular weight, stabilizers) may not be equivalent for the mixed characteristics of recovered resin. They contend that it may be incorrect to state that a product containing recovered materials "passes ASTM performance specifications" because the original tests were designed only to account for the consistency of virgin resin inputs. Further, they claim that the tests do not guarantee long-term performance because they are conducted over a short time period. Of course, the validity of short-term testing is also at issue for virgin materials.

Several pipe manufacturers have conducted research demonstrating that pipe made with recovered materials meets ASTM performance specifications. One company has demonstrated repeatedly that its HDPE corrugated drain pipe meets the requirements of ASTM standard F 405, "Standard Specification for Corrugated Polyethylene (PE) Tubing and Fittings," including the ultra-violet additive test, crush test, and stress-crack test, with no recorded failures. In 1993, the University of Toledo Polymer Institute conducted testing, funded in part by an EPA grant, on the suitability of using recovered HDPE resin for drainage pipe applications. The results showed that pipes manufactured from postconsumer resin blends of 25–75 percent (virgin resin comprised the remaining material) demonstrated acceptable performance in terms of stiffness, flattening, brittleness, and environmental stress crack resistance.

While there remains some disagreement among industry experts on the appropriate testing of pipe containing recovered materials, EPA believes there is sufficient performance evidence to propose designating certain non-pressure plastic pipe. EPA seeks information on performance testing relating to sewer, drainage, DWV and conduit plastic pipes and fittings made of recovered materials.

c. *Impact of government procurement.* Several Federal agencies purchase, either directly or indirectly, plastic pipe and fittings. Federal agencies are not required to track the level of detailed information on purchases of individual construction materials necessary to determine the Federal government's actual share of the pipe market. Direct purchases of some materials are tracked

by the General Services Administration's Federal Procurement Data System (FPDS), which tracks direct purchases of $25,000 or greater made by Federal agencies. FPDS indicated that $1.1 million was spent on plastic pipe products in 1991.

The direct purchases recorded by any agency in FPDS are only a fraction of the total purchases made through actions taken by the Federal government. The majority of the Federal government's plastic pipe purchases are made indirectly through grants or contracts. Because Federal expenditures on pipe products are not well-tracked, and because pipe products and their uses are so diverse, it is not possible to assess the extent to which Federal purchasing power can influence the market for plastic pipe containing recovered materials. However, anecdotal information obtained from discussions with Federal purchasing officials indicates that the Federal government purchases large quantities of plastic pipe. Federal agencies expected to be the largest purchasers of plastic pipe and fittings, and their uses of plastic pipe, are described below.

The Federal Highway Administration (FHWA) disburses approximately $19 billion per year in Federal funding for highway projects. Plastic pipe is an integral part of many of these projects, serving primarily drainage functions on bridges and under and along roads. One manufacturer alone claimed to have supplied approximately $40 million of plastic pipe to Federally-funded highway projects.

The Department of Housing and Urban Development (HUD) funds several programs for the renovation of existing housing and the construction of new housing, including the installation and renovation of water and sewer systems. The Public Housing Development Program, the Public Housing Modernization Program, and the Community Development Block Grants Program account for over $4.5 billion of HUD's total budget. Many of these projects involve the installation of plastic pipe.

In the Department of Agriculture, one branch of the U.S. Forest Service is responsible for maintenance and construction projects on National Forest lands, including the building of public facilities, irrigation and planting projects, and drainage systems. In addition, the Soil Conservation Service uses corrugated HDPE drainage pipe and corrugated and solid wall PVC drain and sewer pipe in subsurface drainage systems.

While exact data are not available on Federal market share, this anecdotal information indicates that the Federal government may have a substantial impact on the procurement of non-pressure plastic pipe made with recovered materials.

3. Designation

Today, in § 247.13(c), EPA proposes to designate plastic pipe and fittings made from thermoplastic resins, including PVC and HDPE, for the following applications: sewer, drainage, conduit, and drain, waste and vent (DWV).

D. Geotextiles

1. Background

Geotextiles are permeable civil engineering fabrics that are used in a variety of construction applications. The four main functions of a geotextile are separation, drainage, filtration, and slope reinforcement. Depending on the application, a geotextile may serve one or more of these functions. The five main applications for geotextiles are: road building, drainage, erosion control, soil stabilization, and waste containment (e.g., landfill construction).

The physical, mechanical, and hydraulic properties of a geotextile depend on the materials used to make the fiber, and the manufacturing process used to construct the fiber. Most geotextiles are made of plastic polymers, although some are made of natural fibers such as jute. Of the many different types of plastic polymers that can be used to make geotextiles, polyolefins and polyesters are used most often. Currently, in North America, 83 percent of all geotextiles are made of polypropylene, 14 percent of polyester, 2 percent of polyethylene, and 1 percent of other plastic resins.

Geotextiles may be made of woven or nonwoven fabrics. Woven geotextiles generally are stronger than nonwoven fabrics of the same weight, and dominate the drainage, asphalt overlay, and lining systems markets. Nonwoven geotextiles generally are permeable to moisture, resistant to rot and mildew, and conform to the subgrade soils. Nonwoven fabrics dominate the stabilization and separation, and subgrade and base reinforcement markets. Both woven and nonwoven geotextiles are produced using postconsumer recovered plastic and in-house plastic scrap, including postconsumer PET bottles.

Products related to geotextiles include geogrids, geonets, and geocomposites. These products are used in similar applications as geotextiles, but they have distinctly different basic properties. Geogrids are used in high-strength applications, primarily for reinforcement. They are made from either high density polyethylene, high tenacity polyester, or polypropylene. Geogrids are distinguished from other geotextile products by their large openings (called "apertures") which allow soil to pass through from one side of the geogrid to the other. Geonets are similar in appearance to geogrids; however, geonets have diamond-shaped apertures rather than square apertures and are almost always made of polyethylene. Geonets are used almost exclusively for their drainage capability and are always used in conjunction with another geosynthetic material, such as a geotextile. Specifications do not prohibit the use of recovered materials in these products. EPA has not identified any manufacturers of geogrids or geonets that use recovered resin. Although there appear to be no technical reasons why recovered resins cannot be used to manufacture these products, EPA understands that manufacturers may be reluctant to use recovered resins in geonets and geogrids because of their higher strength applications (e.g., reinforcement). Therefore, EPA requests information on manufacturers of geogrids or geonets using recovered materials, and information on their performance.

Geocomposites combine the best features of different civil engineering materials. They are almost always made of synthetic materials; however, it is also possible to make a geocomposite by combining a synthetic material with a nonsynthetic material, such as bentonite clay. Examples of synthetic geocomposites include geotextile-geomembrane composites, geotextile-geonet composites, geotextile-polymer-core composites, and geomembrane-geogrid composites. Like geotextiles and related products, geomembranes are classified as a geosynthetic material. However, geomembranes are not considered in this guideline because there are no technically proven examples of geomembranes made with recovered materials, and there are specifications that prohibit the use of recovered plastic in the manufacture of geomembrane liners.

Geocomposites may be formed either by laying one material over the other or by welding them together. For example, geotextiles and geonets can be laid next to each other to form a geotextile-geonet-geotextile "sandwich" for conveying landfill leachate or conducting air beneath pond liners. In contrast, geomembranes and geogrids made of the same polymer can be welded together to form a geocomposite with enhanced strength and friction

capabilities. Two geocomposite manufacturers advertise their products as being made with postconsumer recovered materials. These manufacturers reportedly make their geocomposites using a polyester geotextile that contains postconsumer PET.

2. Rationale for Designation

EPA believes that geotextiles satisfy the statutory criteria for selecting items for designation.

a. *Use of materials in solid waste.* Both woven and nonwoven geotextiles are produced using postconsumer recovered PET and recovered PP. As discussed above in section II.A, plastics are a significant component of municipal solid waste.

b. *Technically proven uses.* EPA has identified seven geotextile manufacturers and two geocomposite manufacturers who claim to use recovered plastic to make their products. Three geotextile manufacturers produce needlepunched, nonwoven polyester geotextiles from recovered PET. Another company produces woven and nonwoven geotextiles containing postconsumer polypropylene. A fifth manufacturer produces geotextiles from recovered polypropylene scrap for use in erosion control applications. Two other companies reportedly use recovered plastic to make geotextiles. Two manufacturers of geocomposites use recovered PET as well. These products are available to government procuring agencies, as they are made by some of the largest geotextile manufacturers. No manufacturers of geogrids or geonets containing recovered materials have been identified.

Standards for the manufacture and use of geotextiles are governed primarily by ASTM's Committee D–35 on Geosynthetics, which has developed 13 applicable to geotextiles. All but one of these geotextile standards describe procedures for testing geotextiles for certain properties, such as tensile strength and ultraviolet light resistance. These test methods are used mainly to compare different types of geotextiles and for acceptance testing. The one ASTM geotextile standard that is not a test method provides instructions on how to accept, store, and handle geotextiles. None of these standards preclude the manufacture of geotextiles from recovered resin.

Other organizations that oversee the use of geotextiles include the American Association of State Highway and Transportation Officials (AASHTO), State departments of transportation, and several Federal agencies such as the Federal Highway Administration and EPA. None of these organizations require that geotextiles be made of virgin resin.

EPA has been extensively involved in the research and application of geosynthetic materials for use in waste containment systems. Any use of geotextiles in municipal solid waste or hazardous waste containment applications must comply with applicable EPA regulations and technical guidance.[1] Although these regulations do not specifically require their use, geotextiles are being used for several purposes in waste containment applications.[2] Application of geosynthetics to the containment of municipal or hazardous waste involves a variety of screening tests to properly select a material for use at a specific location to contain a specific waste. EPA has found that virtually no data exist on the performance of geotextiles containing recovered materials in waste containment applications. The EPA guidance document entitled, "Technical Guidance Document—Quality Assurance and Quality Control for Waste Containment Facilities" (EPA/600/R–93/182), states that geotextiles containing recovered materials may be appropriate, for example, in the gas collection layer above the waste and in the protection layer between the drainage stone and geomembrane, taking into consideration the design parameters. EPA seeks information on performance data of geotextiles containing recovered materials in waste containment applications, and requests comment on whether geotextiles containing recovered materials should be recommended for other uses in waste containment applications.

c. *Impact of government procurement.* Government agencies purchase geotextiles and related products. EPA estimates the 1990 expenditures for these products purchased with appropriated Federal dollars to be $216 million, or about 63 percent of the Agency's estimate of the geotextile industry's total output value. The Federal government represents such a large share of the geotextile market because geotextiles are used extensively in highway construction. Eighty percent of highway construction and maintenance is funded from the Federal Highway Trust Fund, which is distributed to States by the Federal Highway Administration.

Other Federal agencies that use geotextiles include the Department of Defense, Army Corps of Engineers, and the U.S. Forest Service. Uses of geotextiles by these agencies include drainage applications, building roads, constructing retaining walls, supporting backfill, landfill applications and constructing dams.

3. Designation

Today, in § 247.13(d), EPA proposes to designate geotextiles for use in road building, drainage, erosion control, and soil stabilization, and for use in the gas collection layer and the protection layer between the drainage stone and the geomembrane liner in waste containment systems. EPA is not proposing to designate geocomposites as a separate guideline item; however, a geotextile layer of a geocomposite would be covered under this designation.

E. Cement and Concrete

1. Background

In 1983, EPA issued a procurement guideline designating cement and concrete containing fly ash generated by coal burning utilities for use in concrete products such as pipe and block (48 FR 4229, January 28, 1983). In the preamble to that guideline, EPA noted that it considered including the use of ground granulated iron blast furnace slag (GGBF slag) in cement and concrete. EPA stated that GGBF slag was not sufficiently available to warrant a guideline on a national scale. EPA further noted that GGBF slag was being reused at a very high rate as an aggregate and as fill material.

In the 1983 guideline, EPA encouraged procuring agencies to apply the general provisions of the guideline in those cases where GGBF slag suitable for use in cement becomes available (48 FR 4236). However, it has since been EPA's experience that, as a general rule, procuring agencies are unwilling to try a product containing recovered materials unless EPA specifically designates that product in a procurement guideline. Despite the language in the 1983 guideline encouraging its use and despite the availability of ASTM and AASHTO specifications for its use, EPA was recently informed that fewer than 10 states have specifications which include or allow GGBF slag. One slag producer informed EPA that it has experienced significant hesitance on the part of state

[1] EPA's municipal solid waste landfill regulations are found in 40 CFR part 258. EPA's regulations for hazardous waste landfills, surface impoundments, and waste piles are found in 40 CFR part 264, subparts N, K and L, respectively.

[2] Additional information on the use of geotextiles in waste containment applications is provided in the background information document, "Procurement Guideline for Geosynthetic Materials: Draft Final Feasibility Study" which has been placed in the RCRA docket.

transportation agencies to use cement and concrete containing GGBF slag.

The GGBF slag producers are located in the Eastern U.S. and, because of transportation costs, their products generally are available in the Eastern states. However, the slag producers recently informed EPA that Portland cement manufacturers are able to produce GGBF slag, which expands the national availability of cement and concrete containing GGBF slag. According to the slag producers, GGBF slag is available in over 30 states.

GGBF slag clearly falls within the statutory definition of "recovered materials." It is a by-product of the production of iron in a blast furnace and is not reused within the original manufacturing process.

Based on this information and the information presented below, EPA now concludes that the scope of the cement and concrete guideline should include GGBF slag.

2. Rationale for Designation

EPA believes that cement and concrete containing GGBF slag satisfy the statutory criteria for selecting items for designation.

a. *Use of materials in solid waste.* As discussed in section II.A of this preamble, approximately 75 percent of the GGBF slag generated annually is used in aggregate applications, but significant additional quantities are not currently used and must be stockpiled.

b. *Technically proven uses.* It is technologically and economically feasible to process blast furnace slag into an additive for cement and concrete. The slag is ground into a consistency somewhat finer than Portland cement. In concrete, GGBF slag replaces a portion of the Portland cement. In some concrete mixtures, GGBF slag can replace up to 75 percent of the Portland cement, on a pound for pound basis. Most concrete mixtures containing GGBF slag use between 25 and 50 percent slag.

Like coal fly ash, GGBF slag can improve the performance of concrete. According to information provided by the slag producers, GGBF slag can result in higher strength; lower heat; lower permeability; better durability in marine, salt, and chemical environments; and lighter color. The producers also state that GGBF slag can be used compatibly with coal fly ash and other cementitious and pozzolanic materials when used in concrete.

There are approximately 1.2 million tons of domestic cement industry grinding capacity specifically devoted to the manufacture of GGBF slag. In addition, several Portland cement manufacturers have devoted grinding capacity to GGBF slag. Currently, five companies operate six grinding plants to produce GGBF slag. Additionally, two Portland cement companies may begin producing GGBF slag at three locations, and a third company recently bought a GGBF slag plant.

Consensus and state specifications are evidence of the performance of GGBF slag in cement and concrete. ASTM and AASHTO each have two specifications applicable to use of GGBF slag: ASTM C 989, Ground Granulated Blast-Furnace Slag for Use in Concrete Mortars; ASTM C 595, Blended Hydraulic Cements; AASHTO M 302, Ground Granulated Blast Furnace Slag for Use in Concrete and Mortars; and AASHTO M 240, Blended Hydraulic Cements. In addition, there is an American Concrete Institute Standard Practice, ACI 226.R1, Ground Granulated Blast-Furnace Slag as a Cementitious Constituent in Concrete. The States of Maryland, West Virginia, Pennsylvania, Virginia, Georgia, South Carolina, and Florida also have adopted specifications which allow use of GGBF slag.

c. *Impact of government procurement.* In the 1983 guideline, EPA noted that almost one-half of total U.S. cement consumption is in public construction projects, many of which are funded with Federal funds. Factoring in usage of cement containing fly ash and uses for which recovered materials may be inappropriate, the potential impact of designating GGBF slag still could be substantial.

3. Designation

Today, in § 247.13(e), EPA proposes to add GGBF slag to the existing designation of cement and concrete containing fly ash.

F. Carpet

1. Background

Broadloom carpet, meaning roll goods in 12-foot widths, for wall-to-wall installation, generally is comprised of face fibers (made of nylon, polyester, wool, or polyethylene) inserted into a primary backing, which is usually made of polypropylene materials. The fiber is then locked or glued into place by a layer of latex adhesive; a secondary backing made of polypropylene or jute fiber then is applied to provide stability. Carpet squares or tiles are manufactured first as broadloom carpet; however, after inserting the fiber into the primary backing, a sheet made of polypropylene or other material is added for stability, and a secondary backing made of PVC, polyurethane, or other hardback material is applied. Finally, the carpet is cut into squares, usually 18" x 18".

The majority of carpet manufactured in the U.S. is made of nylon carpet fibers, with a smaller percentage (about 10 percent) being made of polyester. Currently, recovered materials are being used to produce carpet fiber, carpet backing, and carpet cushioning.

Although nylon comprises a much larger share of the carpet fiber market than polyester, at this time, carpet containing recovered materials is being manufactured only from recovered PET. In addition, one major manufacturer of nylon and nylon carpet fibers has initiated a pilot project to recover nylon from old carpet and remanufacture it into new products, including new carpet fiber. Because this process is only now being developed, it is premature to include carpet made from recovered nylon within the scope of the item designation proposed today. EPA seeks information regarding other manufacturers of carpet fiber, or other carpet components, that are or can be made with recovered materials (e.g., recovered polypropylene or rubber backing).

EPA is aware of only one manufacturer that uses recovered materials to make carpet backing; this company uses its own waste. The Agency aware of one company that makes carpet cushioning of recovered materials, including postconsumer materials. EPA requests information on other manufacturers of carpet backing or cushioning using recovered materials. EPA currently is not considering these items for designation because only one manufacturer of each has been identified.

2. Rationale for Designation

EPA believes that polyester carpet fiber meets the statutory criteria for selecting items for designation.

a. *Use of materials in solid waste.* Both manufacturers identified by EPA make carpet fiber from postconsumer PET (i.e., polyester). The main source of postconsumer PET is recovered soft drink bottles, which are washed, ground, melted, and then spun into fiber. As discussed above in section II.A, plastic, including PET, is a significant portion of the nation's municipal solid waste.

b. *Technically proven uses.* Of the two manufacturers of carpet containing recovered PET, one offers carpet in one commercial style and 100 to 150 residential styles of carpet; the carpet is marketed nationally. The other manufacturer offers carpet in 1,800 patterns and in 70 colors; the carpet also is marketed nationwide. This

manufacturer currently has a contract under GSA's New Item Introductory Schedule for polyester carpet containing recovered materials. Additionally, carpet containing recovered materials has been installed in at least two Federal government buildings, and several State government buildings. Both companies claim that their products meet applicable performance requirements.

There are numerous specifications that must be considered when purchasing carpet; however, EPA is not aware of any specifications that explicitly prohibit the use of carpet fiber made of recovered materials.

ASTM has several test methods for carpet fiber, including abrasion resistance, electrostatic propensity, flammability, specific optical density of smoke, colorfastness, pilling and fuzzing resistance, and fiber tuft bind. Other organizations that have standards pertaining to carpet include the American Association of Textile Chemists and Colorists, and the Carpet and Rug Institute. ASTM does not have any standards that preclude the use of recovered materials in carpet, and EPA is not aware of such standards from any other organizations.

EPA knows of one Federal agency specification (issued by the Department of Army, Army Corps of Engineers) that requires the use of only nylon or wool carpet, and thereby prohibits the purchase of polyester carpet. The requirement to use nylon or wool carpet may be due to the particular application, and differences in the material's resiliency, appearance retention, and other properties. EPA requests information on whether there are specific carpet applications for which use of polyester carpet is inappropriate.

c. *Impact of government procurement.* Although EPA was not able to obtain any quantitative information, virtually all Federal agencies purchase carpet. Use of polyester carpet containing recovered materials both will create a market for this item and demonstrate its performance.

3. Designation

Today, in § 247.13(f), EPA proposes to designate carpet made of polyester fiber for use in low- and medium-wear applications. The proposed designation does not include polyester carpet for use in heavy-wear applications.

G. Floor Tiles and Patio Blocks

1. Background

a. *Floor tiles.* Floor tiles are used in a variety of applications, including office spaces, entranceways, bathrooms, laboratories, and hallways. EPA has identified 10 manufacturers and/or distributors of floor tiles containing recovered materials. The recovered materials used in these products include rubber derived from old tires, and various plastic resins, most commonly PVC (i.e., vinyl). Five of the 10 companies make floor tiles with postconsumer tire rubber. Some of the companies add a small amount of virgin rubber, adhesive fabric, or coloring agents to their products. All five companies market their products nationally for applications such as entrance ways in airports and stores, furniture showrooms, skating rinks, and fitness centers. In addition, five companies nationally market floor tiles made from recovered PVC, including some postconsumer resin. A few types of floor tile are made with preconsumer PVC from swimming pool liners, roof membranes, and automobile dashboard cutouts. These interlocking tiles are used in various applications, such as fitness centers, bathrooms, and cafeterias. Another type of tile is made of postconsumer PVC from car doors and fender strips. These interlocking tiles are used for heavy-duty applications such as entrance vestibules, work areas behind cashier counters, and under heavy equipment in fitness centers.

b. *Patio blocks.* Patio blocks are used in the construction of patio areas and walkways for gardens and trails. EPA has identified six manufacturers of patio blocks made with recovered materials. The recovered materials used to make these products include rubber derived from old tires and blends of plastics resins (e.g., HDPE and LDPE), rubber/plastic, and rubber/wood.

2. Rationale for Designation

EPA believes that floor tiles and patio blocks containing recovered rubber or plastic meet the statutory criteria for selecting items for designation.

a. *Use of materials in solid waste.* As discussed above in section II.A, both plastic and tires are significant components of solid waste. While both are being recovered, additional markets are needed.

b. *Technically proven uses.* Floor tiles made of recovered rubber or plastic have been used in a variety of applications, including fitness centers, bathrooms, cafeterias, entrance vestibules, work areas, and laboratories. These uses are consistent with the potential uses by procuring agencies. Patio blocks made of recovered materials have been used in the construction of garden walkways and trails. EPA is not aware of any specifications that prohibit the use of recovered materials in the manufacture of floor tiles or patio blocks; thus, the Agency requests comment on this issue.

c. *Impact of government procurement.* Floor tiles are used by Federal agencies in a variety of building applications. Patio blocks are used in the design of walkways, such as for gardens or trails. Federal agencies that may use patio blocks include the U.S. Park Service, U.S. Forest Service, and Housing and Urban Development.

3. Designation

Today, in § 247.13(g), EPA proposes to designate floor tiles and patio blocks containing rubber or plastic. This designation does not preclude a procuring agency from purchasing floor tiles or patio blocks manufactured using other materials. It simply requires that a procuring agency, when purchasing floor tiles or patio blocks manufactured from rubber or plastic, purchases such items made with recovered materials. EPA requests comment on whether there are any particular uses or applications of floor tiles and patio blocks that would preclude the use of recovered materials.

XI. Transportation Products

A. Temporary Traffic Control Devices

1. Background

Temporary traffic control devices are used in a variety of situations where it is necessary to re-direct, channel, or restrict traffic in areas of highway construction or repairs. They may also be used to mark a road hazard that may exist in the way of traffic. For purposes of controlling traffic, such devices must be stable and clearly visible. Traffic cones must be able to withstand impact without damage to themselves or to vehicles. In addition, temporary traffic control devices must be manageable by work crews responsible for transporting, handling, and storing them. Definitions, applications, and requirements for traffic control devices are found in the "Manual on Uniform Traffic Control Devices" (MUTCD), which is published by the Federal Highway Administration.

Today, EPA proposes to designate two types of temporary traffic control devices—traffic cones and traffic barricades.

a. *Traffic cones.* Traffic cones are conical in shape with a broadened and weighted base, making them able to withstand significant wind gusts without tipping or blowing away. In order to be able to withstand an impact without damaging a vehicle, the upper component of a traffic cone is typically

made from LDPE or PVC. The lower component of the traffic cone is typically made from a rubber or plastic material capable of providing ballast and friction with the surface of the roadway. Typical applications for traffic cones are described in section 6C–4 of the MUTCD.

EPA identified several manufacturers and distributors of traffic cones containing postconsumer LDPE and PVC resins, as well as crumb rubber from scrap tires. In general, both recovered and postconsumer recovered plastics are used in the upper component of the cones, and crumb rubber is used in the base. EPA requests information on use of other recovered materials in the manufacture of traffic cones.

b. *Traffic barricades.* There are three types of traffic barricades: Type I, Type II, or Type III. Type I or Type II barricades are intended for use in situations where traffic is maintained through an area being constructed and/or reconstructed. Type III barricades are used when a road section is closed-off to traffic. Applications for traffic barriers are described in section 6C–9 of the MUTCD.

Traffic barricades are typically made from wood, metal, plastic, or a combination of these materials. The traditional design of the barricades typically involves the use of metal in the supporting frame and wood in the cross rails. In past years, many manufacturers of traffic barricades have shifted to the use of recovered materials in both the supporting frame and rails of the barricades. Manufacturers use recovered materials to manufacture the housing and lenses used in lighting devices affixed to the barricades as well.

EPA identified several manufacturers and distributors of Type I and Type II traffic barricades containing recovered fiberglass and plastics, including HDPE, and blends of HDPE and PET or LDPE. EPA requests information on use of other recovered materials in the manufacture of Type I, Type II, or Type III traffic barricades.

EPA acknowledges that the metal frames and wood panels used in the manufacture of certain traffic barricades may contain recovered scrap metal or wood. EPA does not intend to limit the use of such items and requests information on the use of recovered metals or wood in the manufacture of traffic barricades.

c. *Other devices.* Other temporary traffic control devices, such as tubular markers, drums, or vertical panels, can serve the same purposes as traffic cones and barricades. Tubular markers are defined in section 6C–3, vertical panels in section 6C–5, and drums in section 6C–7 of the MUTCD.

EPA identified one manufacturer of vertical panels using recovered polypropylene and crumb rubber and one manufacturer of tubular markers using recovered PVC and crumb rubber. Because there would be insufficient competition in supplying these two items containing recovered materials, EPA is not proposing to designate them today. In addition, because EPA was unable to identify any manufacturers of drums using recovered materials, the Agency also is not proposing to designate drums today.

Although no manufacturers of drums containing recovered materials were identified, EPA recognizes the common practice of using recovered commercial tire sidewalls around the base of drums to stabilize them on the roadway. EPA requests information on use of recovered materials in the manufacture of traffic control drums, tubular markers, or vertical panels.

2. Rationale for Designation

EPA believes that temporary traffic control devices satisfy the statutory criteria for selecting items for designation.

a. *Use of materials in solid waste.* As discussed above in section II.A, plastic and rubber are significant components of the solid waste stream. Both of these materials are technically and economically feasible to recover for reuse, and additional markets for them are needed.

Many manufacturers of traffic control devices are currently working to increase the amounts of postconsumer plastic and rubber used in their products.

b. *Technically proven uses.* Temporary traffic control devices made with recovered materials have been produced in the U.S. for several years. Manufacturers have been using high percentages of crumb rubber buffings in the lower component of traffic cones since the conception of this device, but have not advertised this fact. The substitution of recovered resins in the plastic components of traffic control devices is technically and economically feasible in this application. This is evidenced by the substantial increase in the procurement of these items by state agencies. A recent multi-state procurement led by the State of New York involved more than 30,000 traffic cones made with 50 percent total recovered materials and 6 percent postconsumer materials. A recent procurement by a large city involved more than 300 traffic barricades made with 100 percent postconsumer recovered content.

As previously stated, temporary traffic control devices must be stable and clearly visible. Traffic cones must be able to withstand impact without damage to themselves or to vehicles. In addition, temporary traffic control devices must be manageable by work crews transporting, handling, and storing them. General performance requirements for temporary traffic control devices involve appearance, size, weight, and durability. Manufacturers are currently able to use recovered materials successfully in the production of these devices and meet applicable performance specifications.

Section 635 of "Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP–85" contains the Federal specifications for temporary traffic control devices. EPA examined the specifications, and found that section 635.02 does not preclude the use of recovered materials in temporary traffic control devices. Further, the Federal specifications reference the requirements contained in the MUTCD, which also do not preclude the use of recovered materials.

In addition to the Federal specifications, state procuring agencies may have additional materials or performance requirements for temporary traffic control devices. Several state procuring agencies have additional requirements and programs to test or confirm material properties of traffic control devices prior to acceptance of shipment. Most of the currently available traffic barricades containing recovered materials are able to meet or exceed specific state requirements. In addition, at least five states explicitly specify a preference for traffic control devices made from recovered materials.

EPA believes that, as procuring agencies begin to obtain current information about traffic control devices made with recovered materials, they will find that these devices meet their performance requirements and will increase usage of these products.

c. *Impact of government procurement.* Government agencies purchase, or use appropriated Federal funds to purchase, temporary traffic control devices. The Federal government represents a large share of the market for traffic control devices, including traffic cones and barricades. State highway departments use monies from the Federal Highway Trust Fund to complete major construction and renovation projects, in which the use of traffic control devices is extensive. Other major users of traffic control devices include the Department

of Transportation, Army Corps of Engineers, and Department of Interior. EPA requests information on other government entities that use temporary traffic control devices.

3. Designation

Today, in § 247.14, EPA proposes to designate two types of temporary traffic control devices used in controlling or restricting vehicular traffic—traffic cones and traffic barricades. As discussed above, EPA also requests information about the use of recovered materials in the manufacture of other types of temporary traffic control devices.

XII. Park and Recreation Products

A. Playground Surfaces and Running Tracks

1. Background

a. *Playground surfaces.* EPA has identified 20 manufacturers/distributors of playground surfaces made with recovered materials. These companies offer products made of postconsumer rubber derived from old tires. Three of these companies use other recovered materials as well, including blends of rubber/asphalt, rubber/compost, and rubber/PVC. One of these companies also makes playground surfaces containing postconsumer PVC.

Playground surfaces made of rubber are often more desirable than other surfacing materials, such as wood chips, sand, and asphalt, because they can provide more cushioning, reduce injuries and abrasions, and may be safer for children.

b. *Running tracks.* Some of the companies that make playground surfaces also make running tracks containing postconsumer tire rubber. EPA obtained information from four of these companies, which indicated that they offer running tracks made of high percentages of postconsumer rubber. Some of the companies use either a layer of virgin resin to provide added spike resistance, or small percentages of preconsumer recovered rubber for coloring. One of these companies constructed the 1984 Olympic running tracks with recovered materials, and has constructed running tracks for universities, schools, and state governments.

2. Rationale for Designation

EPA believes that playground surfaces and running tracks satisfy the statutory criteria for selecting items for designation.

a. *Use of materials in solid waste.* Playground surfaces and running tracks can contain recovered rubber and PVC. As discussed above in section II.A, both of these materials are significant components of municipal solid waste, and PVC is also found in construction and demolition debris.

b. *Technically proven uses.* The companies surveyed by EPA have sold playground surfaces made with recovered materials for a variety of installations, including McDonalds' playgrounds, schools, and military bases. Running tracks made of recovered rubber have also been constructed at universities, schools, military bases, the U.S. Olympics, and the White House.

GSA does not have specifications for playground surfaces or running tracks; however, Federal agency installations of these products must comply with applicable State or local construction codes, as well as the Consumer Product Safety Commission standards and the Americans With Disabilities Act. The Consumer Products Safety Commission requires that playground surfaces meet certain performance standards to reduce head injuries, including ASTM specification F 1292, pertaining to impact attenuation standards. Playground surfacing and running tracks must also comply with the Americans With Disabilities Act, which provides that mobility-impaired persons cannot be prohibited from access to public places.

EPA requests information on any other specifications that apply to the use and manufacture of playground surfaces and running tracks, and what impact these specifications would have on the use of recovered materials in the manufacture of these items.

c. *Impact of government procurement.* Playground surfaces and running tracks are used by Federal agencies for installation at military bases and parks and recreation facilities. Playground surfaces are also used in day care centers and housing developments.

3. Designation

Today, in § 247.15, EPA proposes to designate playground surfaces and running tracks containing recovered rubber or plastic. This designation does not preclude a procuring agency from purchasing playground surfaces or running tracks manufactured using other materials. It simply requires that a procuring agency, when purchasing playground surfaces or running tracks manufactured from rubber or plastic, purchases such items made with recovered materials.

XIII. Landscaping Products

A. Hydraulic Mulch

1. Background

Hydraulic mulch is a landscaping and erosion control product. It is made of small pieces of cellulose fibers, which can be either wood or paper. It is applied to a soil surface by mechanical spraying, usually in a process known as hydroseeding, which involves spraying a mixture of water, seeds, and the hydraulic mulch over soil. The mulch provides stability for the soil, preventing erosion, and provides protection and warmth for the seeds, facilitating germination. Other ingredients also may be added to the mixture, such as a non-toxic green dye, fertilizer, a tacking agent, or a wetting agent.

a. *Paper-based hydraulic mulch.* Paper-based hydraulic mulch is produced using recovered paper as a feedstock. Old newspapers are the primary recovered paper used, but some manufacturers also are mixing in over-issue newspapers and/or magazines, and postconsumer corrugated containers, office paper, and telephone books.

Paper-based hydraulic mulch is manufactured primarily by cellulose insulation manufacturers. EPA is aware of 37 manufacturers that produce both cellulose insulation and hydraulic mulch. In 1990, hydraulic mulch manufacturers consumed 98,000 tons of recovered newspaper, and the American Forest & Paper Association (AFPA) projects consumption to increase to 180,000 tons by 1995. The majority of these manufacturers use up to 100 percent postconsumer and recovered paper.

b. *Wood-based hydraulic mulch.* Wood-based hydraulic mulch generally is manufactured with wood fibers, which are recovered from wood scraps, wood chips, and bark. At least one manufacturer of wood-based hydraulic mulch produces a blended product containing 50 percent recovered paper. Another manufacturer produces wood-based hydraulic mulch containing 100 percent postconsumer recovered wood and blends of postconsumer recovered wood and paper.

c. *Applications.* Hydraulic mulch is used for re-seeding and soil stabilization during highway construction; seeding during mine site reclamation, pipeline installation, and landfill closure; residential and industrial landscaping; temporary erosion control at construction sites; and seeding of athletic fields and golf courses.

It can be used alone or in conjunction with straw or hay. Hydraulic mulch is preferred for steep slopes and embankments where seed is blown into place, rather than applied with mechanical seeding machines. It also works best with low-growing ground cover seeds that are frequently planted for erosion control. In general, straw mulch is considered the best product for erosion control and promoting vegetative growth; however, depending on climate, hydraulic mulch or a combination of straw and hydraulic mulch is preferred. In the latter situation, hydraulic mulch is used to anchor the straw to prevent it from blowing away.

2. Rationale for Designation

EPA believes that hydraulic mulch products satisfy the statutory criteria for selecting items for designation.

a. *Use of materials in solid waste.* As discussed above in section II.A, paper is a significant component of the solid waste stream, but one that is technically and economically feasible to recover for reuse. Construction and demolition debris contains a significant percentage of wood. Although recovered paper is used by the pulp and paper industry, there continues to be a need for additional markets for this material.

b. *Technically proven uses.* Production of hydraulic mulch products has grown steadily over the past six years. There are at least 37 manufacturers of paper-based hydraulic mulch located throughout the U.S. There also are several manufacturers of wood-based hydraulic mulch using recovered wood.

The hydraulic mulch industry is divided on the benefits and drawbacks of paper-based and wood-based hydraulic mulch. Manufacturers of each item claim superior performance of their products. It is EPA's understanding that the International Erosion Control Association is developing performance standards for hydraulic mulch to resolve the dispute over performance. The standards will be based on the amount of vegetation produced, not on physical specifications of the product. As of early 1994, these standards were still under development.

c. *Impact of government procurement.* Government agencies purchase, or use appropriated Federal funds to purchase, hydraulic mulch products. EPA estimated the 1990 expenditures for these products to be $10–15 million, or approximately 50 percent of the hydraulic mulch industry's total revenues. The Federal government represents a large share of this market, because hydraulic mulch products are used extensively in highway construction, funded with monies from the Federal Highway Trust Fund. Other major users of seeding products are the General Services Administration, Forest Service, Army Corps of Engineers, and several bureaus within the Department of Interior. In addition, Federal grant monies from the Department of Housing and Urban Development can be used in landscaping and other soil management activities.

Federal and state specifications can be a barrier to increased use of hydraulic mulch products. A 1990 survey conducted by a mulch manufacturer revealed that 19 states either disallowed the use of paper-based hydraulic mulch or had specifications that did not specifically include this product in the list of approved materials. EPA examined this information and found that some state and Federal specifications prohibit the use of paper-based hydraulic mulch. Reasons provided ranged from lack of information to previous performance problems with paper-based hydraulic mulch. Some of the agencies' experience with performance was more than ten years old, however, and did not reflect improvements to quality made by manufacturers of paper-based hydraulic mulch since the agencies last tested the product.

Other states and Federal agencies permit paper-based hydraulic mulch to be used. Limited research conducted for EPA revealed that at least the States of California, Illinois, Michigan, Pennsylvania, Texas, Virginia, and Washington allow the use of paper-based hydraulic mulch. EPA requests information about other state specifications allowing the use of paper-based hydraulic mulch.

Based on the successful usage of paper-based hydraulic mulch by these other states and by Federal agencies, EPA believes that usage of this product will increase as procuring agencies begin to obtain current information about the performance characteristics of paper-based hydraulic mulch, and begin to use the products currently available.

3. Designation

Today, in § 247.16(a), EPA proposes to designate hydraulic mulch products used for landscaping and erosion control in hydroseeding applications and as an over-spray for straw mulch. This designation includes both paper-based hydraulic mulch and wood-based hydraulic mulch containing recovered materials. Potential uses include re-seeding and soil stabilization during highway construction; seeding during pipeline installation, mine site reclamation, and landfill closure; residential, institutional, and commercial landscaping; temporary erosion control at construction sites; and seeding of athletic fields and golf courses.

B. Yard Trimmings Compost

1. Background

Composting is a biological process of stabilizing organic matter under controlled conditions into a product that is rich in humus and provides organic matter and nutrients to the soil. Compost has been defined by the Compost Council, the trade association for the composting industry, in its "Composting Glossary," as follows:

> Compost is the stabilized and sanitized product of composting; compost is largely decomposed material and is in the process of humification (curing). Compost has little resemblance in physical form to the original material from which it was made. Compost is a soil amendment, to improve soils. Compost is not a complete fertilizer unless amended, although composts contain fertilizer properties, e.g., nitrogen, phosphorus, and potassium, that must be included in calculations for fertilizer application.

Composting serves as an alternative method of managing those organics that would otherwise be landfilled. Although up to 60 percent of municipal solid waste is potentially compostable (including food and paper), yard trimmings are the least controversial feedstock for compost. Yard trimmings composting returns yard trimmings and leaves to the soil. When grass clippings are included with leaves and other yard trimmings, the resulting compost can serve as a suitable nitrogen source with an optimal carbon/nitrogen ratio for most applications.

The amount of compost produced from mixed municipal solid waste produced in the U.S. is currently not high. As of February 1993, there were 20 mixed municipal solid waste composting facilities in operation, 10 pilot programs, and about 60 projects under development. The amount of compost being produced from food scraps is even smaller, with much of the current production coming from pilot projects. For this reason, EPA is not including compost made with mixed municipal solid waste and/or food scraps in today's proposed item designation.

High quality compost is fully "mature," which means that the composting process is completed. Mature compost is free of pathogens and weed seeds. Compost is used as a soil conditioner, soil amendment, lawn top dressing, potting soil mixture, rooting

medium, and mulch for shrubs and trees, and for improvement of golf and other sports turf. It can also be used in erosion control and soil reclamation. Compost can be used in agriculture, horticulture, silviculture (growing of trees), and in landscaping. Compost can also be used in land reclamation and revegetation of roadsides after road construction. As a result, compost should have wide applicability to procuring agencies for landscaping, gardening, seeding, and other applications.

An important consideration for the compost purchaser is the availability of sufficient quantities of high quality compost and certainty that it is of sufficiently high quality for its intended use. Because of the high volume of yard trimmings currently discarded each year, there is no shortage of raw materials that would preclude composting facilities from supplying large volumes of yard trimmings compost. A significant portion of the yard trimmings is being composted, and the percentage is increasing. Only 651 yard trimmings composting facilities were operating in 1988. This increased to more than 2,200 yard trimmings composting facilities at the end of 1991, continuing to increase to nearly 3,000 facilities at the end of 1992. Thus, the quantity of compost available from local sources is expected to increase in the near future.

2. Rationale for Designation

EPA believes that yard trimmings compost satisfies the statutory criteria for selecting items for designation.

a. *Use of materials in solid waste.* As discussed above in section II.A, yard debris (leaves, lawn clippings, bush and tree trimmings) comprise 18 percent of the municipal waste stream. These materials can be composted and used as soil amendments, rather than landfilled or incinerated. Thus, the use of compost can significantly reduce the amount of yard trimmings, grass clippings, and leaves disposed in landfills.

b. *Technically proven uses.* Adding compost to soils can improve their suitability for plant growth. The organic matter in compost is particularly beneficial in poor soils. Adding compost to clay soils reduces soil density and compaction, increases aeration, and increases soil porosity and drainage. These changes lessen the danger of root rot disease. Compost added to sandy soils binds soil particles to increase water and nutrient retention, as well as resistance to drought and erosion.

The Composting Council is helping to define and develop industry-wide standards for composts made from various combinations of these materials. The standards will include a Standard Operating Guide for composting facilities, which is currently available in draft form from The Composting Council, as well as standards for suitability of different types of composts for different markets, depending on the content of the compost.

Other advantages of compost, in addition to organic materials and nutrients being returned to the soil are the following:

- The soil tilth and soil structure are improved.
- Soil temperature is moderated, so that plant roots are warmed in winter and, through water retention, are cooled in dry, hot conditions.
- Increased organic content increases soil microbial activity, which fosters plant growth.
- Compost creates a favorable environment for earthworms that aerate soil and allow water to reach plant roots.
- Mature composts suppress some plant diseases, such as wilt and root rot, which reduces the need for chemical pesticides and fungicides.
- All compost nutrients, such as nitrogen, are in organic form and, therefore, are released slowly over time. The use of compost can reduce the need for fertilizer by 30 percent.
- Because less fertilizer and fewer pesticides are needed, non-point source run-off can be reduced.

(i) *Disease control.* Research conducted at Ohio State University and verified in Florida, Pennsylvania, Alabama, and elsewhere, shows that compost can replace part and, in some cases, all of the fumigants and fungicides used on food crops or landscape projects on Federal lands. When compost of bark and other materials is used in potting mixes, this will prevent rotting of seedlings and roots caused by certain organisms. Also, compost has been shown to be important in controlling wilt disease in certain flowers commonly grown for indoor use. Specifically, compost prevents fusarium wilt disease on cyclamens, which is important because there are no fungicides available which can do so. Other projects have demonstrated that the use of compost can control disease and result in reduced use of fertilizers, which can leach into surface waters.

(ii) *Benefits for soil reclamation.* Compost can be used in soil reclamation projects. The fine organic composition increases the soil's water-holding capacity. Compost also increases water infiltration into the soil. The formation of compost-soil aggregates reduces soil compaction, increases soil friability and, therefore, decreases the erodability of soil. The nutrient and organic carbon content of compost serve as a food source for soil microbes, thus increasing the availability of the soil's organic and nutrient content to plants and aiding faster recycling of nutrients within the system. Finally, there are water-stable aggregates that are formed from the microbial by-products that prevent the formation of surface crusts on soil, which can inhibit seedling growth.

c. *Impact of government procurement.* Military installations alone have about 20 million acres of land. The potential compost usage (at 40 cubic yards per acre) for even part of this acreage would be immense. In addition, the Forest Service and Park Service maintain 500,000 miles of roadsides and embankments. Therefore, the Federal market for compost made with yard trimmings, leaf compost, and/or grass clippings could be substantial.

3. Designation

Today, in § 247.16(b), EPA proposes to designate compost made from yard trimmings, leaves, and/or grass clippings for use in landscaping, seeding of grass or other plants on roadsides and embankments, as a nutritious mulch under trees and shrubs, and in erosion control and soil reclamation.

XIV. Non-Paper Office Products

A. Office Recycling Containers and Office Waste Receptacles

1. Background

Office recycling containers and office waste receptacles are similar in their manufacture and basic materials content. The most common types of these containers are made from paper, plastic, or steel. They include all indoor receptacles used for the collection and transport of waste and/or recyclable materials, such as deskside containers, centralized containers, and other containers for collecting and transporting waste and/or recyclables. Desk tray style recycling containers are covered under section XIV.B, which discusses plastic desktop accessories.

a. *Paper containers.* GSA has fiberboard office recycling containers available through its Special Order Program. Recycling containers made from fiberboard or other papers are covered under the paperboard section of EPA's procurement guideline for paper and paper products (40 CFR part 250).

Currently, EPA has information on fiberboard recycling containers only. However, since office recycling

containers and office waste receptacles are similar in their manufacture and basic materials content, this information is also applicable to office waste receptacles made from recovered paper.

b. *Plastic containers.* Plastic office recycling containers and office waste receptacles are made primarily from HDPE or LDPE, but EPA is aware of at least one vendor that manufactures the product using commingled plastic resins.

c. *Steel containers.* EPA does not have specific data on office recycling containers or office waste receptacles made from recovered steel. However, all steel products are universally made with at least some recovered steel. EPA requests information on the levels of recovered materials contained in steel containers and receptacles.

2. Rationale for Designation

EPA believes that office recycling containers and office waste receptacles satisfy the statutory criteria for selecting items for designation.

a. *Use of materials in solid waste.* As discussed in Section II.A, plastics and paper are significant components of the solid waste stream. Steel is also a significant component of the solid waste stream. It is recovered in significant quantities and used in the manufacture of most new steel products.

b. *Technically proven uses.* EPA is aware of at least four manufacturers that produce office recycling containers and office waste receptacles using recovered plastic. In addition, containers are available through GSA's Federal Supply Schedule 72 VII B, "Recycling Collection Containers and Specialty Waste Receptacles." Also, GSA has fiberboard recycling containers available through its Special Order Program. EPA is aware that there are manufacturers that produce office recycling containers and office waste receptacles made from steel and is interested in obtaining information on these items.

According to the information available to EPA, there are no national or Federal specifications that preclude the use of recovered materials in the manufacture of office recycling containers and office waste receptacles. In lieu of referencing national or Federal specifications, procuring agencies usually incorporate recovered materials content requirements into their solicitation or contract documents when purchasing these products.

c. *Impact of government procurement.* Government agencies purchase, or use appropriated Federal funds to purchase, office recycling containers and office waste receptacles. EPA does not have specific data on the number of office recycling containers and office waste receptacles procured by government agencies, although EPA expects that the quantities are significant. Thus, the Agency believes that these items are procured in sufficient quantities to support the designation of these items.

3. Designation

Today, in § 247.17(a), EPA proposes to designate office recycling containers and office waste receptacles made from plastic, paper, and steel, as items that are or can be made with recovered materials. This designation includes all indoor receptacles used for the collection and transport of waste and/or recyclable materials, such as deskside containers, centralized containers, and other containers for collecting and transporting waste and/or recyclables, and other items as determined by the procuring agency. This designation does not preclude a procuring agency from purchasing containers or receptacles manufactured using other materials, such as wood. It simply requires that a procuring agency, when purchasing office recycling containers or office waste receptacles manufactured from plastic, paper, or steel, purchase such containers made with recovered materials.

B. Plastic Desktop Accessories

1. Background

Plastic desktop accessories include desk organizers, desk sorters, desk trays, letter trays, memo pad holders, note pad holders, and pencil holders. They are typically made from polystyrene and are manufactured by injection-molding. These items are grouped together due to their similarity in manufacture and composition.

Currently, EPA has information on plastic desktop accessories made from postconsumer recovered polystyrene only. EPA requests information on desktop accessories made from other recovered materials and the recovered materials content levels of those products.

2. Rationale for Designation

EPA believes that plastic desktop accessories satisfy the statutory criteria for selecting items for designation.

a. *Use of materials in solid waste.* As discussed in Section II.A, plastics are a significant component of the solid waste stream.

b. *Technically proven uses.* EPA is aware of at least three manufacturers that produce plastic desktop accessories with postconsumer recovered materials content. In addition, several office products distributors carry these accessories as part of their product lines. GSA also makes these products available through its Federal Supply Schedule.

According to the information available to EPA, there are no national or Federal specifications that preclude the use of recovered materials in the manufacture of plastic desktop accessories. In lieu of referencing national or Federal specifications, procuring agencies usually incorporate recovered materials content requirements into their solicitation or contract documents when purchasing these products.

c. *Impact of government procurement.* Government agencies purchase, or use appropriated Federal funds to purchase, plastic desktop accessories. EPA does not have specific data on the number of plastic desktop accessories procured by government agencies. However, EPA believes that these items are procured in sufficient quantities to support the designation of these items.

3. Designation

Today, in § 247.17(b), EPA proposes to designate plastic desktop accessories as items that are or can be made with recovered materials. This designation includes desk organizers, desk sorters, desk trays, letter trays, memo pad holders, note pad holders, and pencil holders, and other items as determined by the procuring agency. This designation does not preclude a procuring agency from purchasing desktop accessories manufactured from another material, such as wood. It simply requires that a procuring agency, when purchasing plastic desktop accessories, purchase these accessories made with recovered materials. EPA encourages agencies purchasing desktop accessories made with other materials to seek these items containing recovered materials as well.

C. Remanufactured Toner Cartridges

1. Background

For purposes of today's rule, remanufactured toner cartridges are defined as toner cartridges used in laser printers, photocopiers, facsimile machines, or microphotographic printers that have been remanufactured in accordance with the procedures set forth in GSA's Standard Procedure FCG-STD-111.

Section 630 of the Treasury, Postal Service, and General Government Appropriations Act, 1993 (Pub. L. 102-123), amended 42 U.S.C. 6962 by adding a new section requiring Federal agencies to purchase recycled toner cartridges (42 U.S.C. 6962j). Section 401 of the

Treasury, Postal Service and General Government Appropriations Act, 1994 (Pub. L. 103–123), amended and replaced 42 U.S.C. 6962j. Federal agencies are no longer "required" to purchase recycled toner cartridges, but they are "authorized to give preference to" remanufactured toner cartridges.

It is clear that remanufacturing toner cartridges diverts a significant number of expended toner cartridges from the solid waste stream and that they are readily available in the marketplace. Therefore, today EPA is proposing to designate remanufactured toner cartridges for purchase by procuring agencies.

2. Rationale for Designation

EPA believes that remanufactured toner cartridges satisfy the statutory criteria for selecting items for designation.

a. *Use of materials in solid waste.* Although EPA does not have specific data on the actual number of expended toner cartridges requiring disposal each year, the Agency is convinced that a significant number of expended toner cartridges are diverted from the solid waste stream by toner cartridge remanufacturing efforts.

b. *Technically proven uses.* Remanufactured toner cartridges are commonly used by government agencies and private businesses. Toner cartridge remanufacturing services are available and increasing in usage as well. Over the past few years, the number of vendors that offer toner cartridge remanufacturing services has increased substantially. As of January 1994, GSA maintained a New Item Introductory Schedule for remanufactured toner cartridges. In addition, GSA has two vendors that provide remanufactured toner cartridges to its supply program.

The performance of a remanufactured toner cartridge can vary based on the condition of the cartridge and the process used to remanufacture it. Currently, there is no Federal testing program for remanufactured toner cartridges. However, GSA has set forth procedures by which remanufacturers providing remanufactured toner cartridges to its supply program are to disassemble, clean, refill, and reassemble expended cartridges. Several states, including Wisconsin, Connecticut, and Mississippi, also have performance requirements in their specifications for remanufactured toner cartridges.

c. *Impact of Government procurement.* Government agencies purchase, or use appropriated Federal funds to purchase, toner cartridges. EPA does not have specific data on the number of toner cartridges procured by government agencies, although EPA anticipates that the quantities are substantial. Thus, the Agency believes that these items are procured in sufficient quantities to support the designation of these items.

3. Designation

Today, in § 247.17(c), EPA proposes to designate toner cartridges as items that are or can be made with recovered materials. This designation includes both remanufactured toner cartridges and toner cartridge remanufacturing services.

D. Binders

1. Background

According to the information available to EPA, there are three types of binders: chipboard, vinyl or plastic-covered chipboard or paperboard, and cloth-covered chipboard or paperboard. The paperboard or chipboard component of all three binder types is made from high percentages of postconsumer recovered cardboard or paper. Many binders, such as the three-ring binders, also contain steel components which, as explained previously in this section, are universally made from recovered steel.

EPA is interested in obtaining information on other types of binders made with recovered materials and the levels of recovered materials contained in these binders.

a. *Chipboard binders.* Chipboard binders are manufactured with high percentages of postconsumer recovered cardboard or paper. Chipboard binders are covered under the paperboard section of EPA's guideline for paper and paper products (40 CFR part 250).

b. *Plastic-covered binders.* In plastic-covered binders, the paperboard or chipboard is usually covered with vinyl or plastic, such as polyethylene, and may have another clear plastic coating over the vinyl or plastic. The chipboard or paperboard component of a plastic-covered binder is covered under the paperboard section of EPA's guideline for paper and paper products (40 CFR part 250).

c. *Cloth-covered binders.* The chipboard or paperboard component of a cloth-covered binder is made with high percentages of postconsumer recovered cardboard or paper. Chipboard and paperboard are covered under the paperboard section of EPA's guideline for paper and paper products (40 CFR part 250). EPA is not aware of any manufacturers of cloth-covered binders that use recovered materials when producing the cloth cover and requests comment on the validity of this information

2. Rationale for Designation

EPA believes that binders satisfy the statutory criteria for selecting items for designation.

a. *Use of materials in solid waste.* As discussed in Section II.A, plastics and paper are significant components of the solid waste stream.

b. *Technically proven uses.* EPA is aware of at least three manufacturers that produce plastic-covered binders with recovered plastic content in the covering, and two manufacturers that produce chipboard binders with recovered paper content. At least one of the manufacturers of plastic-covered binders with recovered plastic content sells its binders through GSA's New Item Introductory Schedule. As previously discussed, the paperboard or chipboard component of the binders for which EPA has information is made from high percentages of postconsumer recovered cardboard or paper. Several states have also issued solicitations for plastic-covered and chipboard binders containing recovered materials.

According to the information available to EPA, there are no national or Federal specifications that preclude the use of recovered paper in the manufacture of chipboard binders. GSA's specification for binders, A–A–2549A, "Binder, Loose-Leaf (Ring)," covers four types of binders, including cloth bound, flexible cover; cloth bound, stiff cover; plastic bound, flexible cover; and plastic bound, stiff cover. In the specification, GSA requires its binders to contain "a minimum of 100% waste paper, including a minimum of 30% postconsumer recovered materials." Based on EPA's information, there are no requirements in this specification that preclude the use of recovered materials in the plastic covering of plastic-covered binders. However, one manufacturer stated that one test method cited in the specification, the Cold Crack test, may prohibit the use of recovered plastic in the covering for plastic-covered binders. EPA requests information on the ability of vendors to meet this specification.

c. *Impact of government procurement.* Government agencies purchase, or use appropriated Federal funds to purchase, binders. EPA does not have specific data on the number of binders procured by government agencies, although EPA anticipates that the quantities are significant. Thus, EPA believes that these items are procured in sufficient quantities to support the designation of these items.

3. Designation

Today, in § 247.17(d), EPA proposes to designate binders as items that are or can be made with recovered materials. This designation includes plastic-covered binders with recovered plastic content and chipboard binders with postconsumer recovered paper content. This designation does not preclude a procuring agency from purchasing a binder covered with or manufactured using another material, such as cloth. It simply requires that a procuring agency, when purchasing plastic-covered or chipboard binders, purchase these binders made with recovered materials.

E. Plastic Trash Bags

1. Introduction

Plastic trash bags, also called trash can liners, are widely available with recovered materials content. They come in a wide variety of colors, ranging from clear to black; sizes, ranging from 11 gallon to 55 gallon; and thicknesses, ranging from 0.5 mil to 1.7 mil. According to the information available to EPA, HDPE, LDPE, and LLDPE are the recovered materials most commonly used to manufacture these items. The actual amount of recovered materials contained in a bag is affected by the color, size, and thickness of the bag.

Currently, EPA has information on trash bags made from postconsumer recovered plastic only. EPA is interested in obtaining information on trash bags made from other recovered materials and the recovered materials content levels of those products.

2. Rationale for Designation

EPA believes that plastic trash bags satisfy the statutory criteria for selecting items for designation.

a. *Use of materials in solid waste.* As discussed in Section II.A, plastics are a significant component of the solid waste stream.

b. *Technically proven uses.* EPA is aware of at least five manufacturers that produce trash bags with recovered materials content. In addition, trash bags with recovered materials content are available from the GSA "Supply Catalog." Also, the National Association of State Purchasing Officials' Recycled Product Database, which provides detailed information on state purchases of products containing recovered materials, lists 88 different contracts for plastic liners with recovered materials content.

GSA's Commercial Item Description (CID) for general purpose plastic bags, A–A–2299B, covers plastic trash bags. This CID is based on performance requirements. According to the information available to EPA, CID A–A–2299B does not preclude the use of recovered materials in the manufacture of plastic trash bags. In addition, several states, including Michigan, Nebraska, Minnesota, Delaware, and Wisconsin, have their own specifications for plastic trash bags containing recovered materials.

c. *Impact of government procurement.* Government agencies purchase, or use appropriated Federal funds to purchase, trash bags. EPA does not have specific data on the number of trash bags procured by government agencies, although EPA anticipates that the quantities are significant. Thus, the Agency believes that these items are procured in sufficient quantities to support the designation of these items. As previously discussed, the National Association of State Purchasing Officials' Recycled Product Database lists 88 different contracts for plastic liners with recovered materials content.

3. Designation

Today, in § 247.17(e), EPA proposes to designate plastic trash bags as items that are or can be made with recovered materials. This designation does not preclude a procuring agency from purchasing a trash bag manufactured using another material, such as paper. It simply requires that a procuring agency, when purchasing trash bags, purchase these items made from recovered materials. EPA encourages agencies purchasing trash bags made with other materials to seek these items containing recovered materials as well.

XV. Miscellaneous

In the proposed Part 247, EPA is establishing § 247.18 for item designations that do not fall within any other product category. However, EPA is not currently proposing to designate any items in this category.

XVI. Other Items Considered for Designation

As explained above in section II.E, in selecting the list of items to designate today, EPA began with a broad list of items known to contain recovered materials. EPA developed three smaller lists from this broad list: items to designate today, items potentially to designate depending on receipt of further information, and items that are not candidates for designation. This section addresses the second and third list.

As also discussed in section II.E, EPA plans to establish a process for the public to provide us with information about use of recovered materials to manufacture products. This process will enable us to obtain current information about designated items, the items discussed in this section, and any other products that are or can be made with recovered materials. EPA will issue a separate **Federal Register** notice regarding this process.

EPA believes that the following items are potential candidates for designation, but the Agency currently has insufficient information about them. For many of these items, EPA has information pertinent to only one or two of the item selection criteria. The available information has been placed in the RCRA docket. EPA requests that product manufacturers, vendors, government agencies, and others, provide information pertinent to all of the selection criteria, the types and percentage(s) of recovered materials used in the items, and applicable specifications or specifications provisions that present a barrier to use of recovered materials in the items. Refer to Section II.D of this preamble for the selection criteria.

Vehicular Products—grease containing re-refined oil, truck bed mats containing recovered rubber or plastic, and mud flaps containing recovered rubber.

Construction Products—plastic lumber products, shower dividers containing recovered HDPE, carpet runners, curbing/parking stops containing recovered plastic, snow fence containing recovered plastic, stoneware and other floor tile, acoustical panels other than fiberboard panels, particleboard, hardboard, medium density fiberboard, downspout splashblocks, wall coverings, and asphalt patching and paving materials made from recovered asphalt roofing materials.

Landscaping Products—garden and soaker hoses, and lawn and garden edging containing recovered plastic.

Non-paper Office Products—Tyvek envelopes, reinked printer ribbons, audio/video cassette tape cases, and rulers and other accessories containing recovered materials.

Miscellaneous Products—dock bumpers, latex paint, mattresses/mattress pads/pillows, and absorbents containing recovered paper and other recovered materials.

In addition, EPA considered the following items for designation but, based on the available information, has determined that it would be inappropriate to designate them at this time. Included is a brief description of the basis for this determination. EPA requests additional information about these products that would demonstrate that they are candidates for designation

as procurement items under RCRA section 6002.

Glass Fiber—Glass fiber is a component of a product rather than a product itself. The existing building insulation products procurement guideline applies to two items containing glass fiber: fiberglass insulation and glass fiber-reinforced plastic rigid foam.

Pallet Stretch Wrap—According to the information available to EPA, this item is recyclable but is not currently available containing recovered materials.

Sheet Glass—According to the information available to EPA, this item currently is not commonly available containing recovered materials.

Strapping—According to the information available to EPA, there is only one source for strapping containing recovered materials.

XVII. Availability

Once the item designations in today's proposed CPG are finalized, EPA will develop lists of manufacturers or vendors of these items. These lists will be updated periodically as new sources are identified and product information changes. Procuring agencies should contact the manufacturers directly to discuss their specific needs and to obtain detailed information on the availability and price of recycled products meeting those needs. To assist procuring agencies, the lists will be made available at no charge by calling EPA's RCRA Hotline at (800) 424–9346, or, in the Washington, DC area, at (703) 412–9810. They also will be available for review in the RIC. For additional details about the location and schedule of the RIC, see the ADDRESSES section at the beginning of this preamble.

The General Services Administration (GSA) also publishes "Environmental Products Guide," which lists items available through its Federal Supply Service. This Guide is updated periodically as new items become available. Copies of the GSA "Environmental Products Guide" can be obtained by contacting GSA's Centralized Mailing List Service in Fort Worth, Texas at (817) 334–5215.

In addition to the information provided by EPA and GSA, there are other publicly-available sources of information about products containing recovered materials. For example, the "Official Recycled Products Guide" (RPG) was established in March 1989 to provide a broad range of information on recycled products. Listings include product, company name, address, contact, telephone, fax, type of company (manufacturer or distributor), and minimum recycled content. Price information is not included. The RPG is available on a subscription basis from American Recycling Market, Inc., (800) 267–0707. Private corporations that have researched recycled product availability may also be willing to make this information publicly available. For instance, as part of their McRecycle USA® program, the McDonald's Corporation established a Registry Service for manufacturers and suppliers of recycled products. The Corporation has compiled a database of registrants and makes this information available upon request. More information on the McRecycle USA® Registry Service is available by calling (800) 220–3809.

State and local recycling programs are also a potential source of information on local distributors and availability. In addition, state and local government purchasing officials that are contracting for recycled products may have relative price information. A list of state purchasing/procurement officials has been placed in the RCRA public docket and will be updated periodically. Also included in the public docket is a list of States with recycled products purchasing programs, current as of April 1994.

Information is also available from trade associations whose members manufacture or distribute products containing recovered materials. A list of trade associations with members that manufacture or distribute recycled products is included in the RCRA public docket for this notice.

XVIII. Economic Impact Analysis

A. Requirements of Executive Order 12866

Executive Order 12866 requires agencies to determine whether a regulatory action is "significant." The Order defines a "significant" regulatory action as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of $100 million or more or adversely affect, in a material way, the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) Create serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

The cost of the proposed rule is below the $100 million threshold. However, EPA believes that the rule may raise policy issues and, therefore, is considering it a significant regulatory action. To enable the Agency to evaluate the potential impact of today's action, EPA has conducted an Economic Impact Analysis (EIA), discussed below. For more information on the EIA, see the technical background document for the CPG in the docket for today's proposed rule.

B. Summary of Benefits

As stated in Section II.B, "Benefits of Recycling," there are many benefits to this rule. In particular, this rule will result in more efficient use of natural resources by encouraging recycling and preventing waste. By purchasing products containing recovered materials pursuant to the guidelines established under RCRA and Executive Order 12873, the Federal government will be increasing the amount of recovered materials used in making these designated products, thus increasing markets for recovered materials.

These guidelines may further stimulate the purchase of recycled products nationwide, since many State and local governments, as well as members of the private sector, use these guidelines as a framework for their purchases. Because of the increased Federal and State demand for products made from recovered materials, EPA anticipates that this rule will stimulate recycling businesses and local government recycling programs. Finally, the increase in recovery of post-consumer materials will result in a conservation of municipal landfill and incineration capacity since less material will be going to these disposal facilities.

C. Summary of Costs

EPA estimates that the annualized costs of today's proposed rule will range from $1.6 to $4 million, with costs being spread across procuring agencies (i.e., Federal agencies, State and local agencies that use appropriated Federal funds to procure designated items, and contractors to both). EPA estimates that the annualized cost for each product designated in the CPG will average approximately $430 for each Federal agency ($600 for each Federal agency that writes product specifications), $140 for each State, $50 for each local government entity, and approximately $20 per contractor.

Table 5 below presents the estimated annualized costs to procuring agencies for today's proposed rule. The table

presents costs annualized over 10 years at a three percent discount rate. Because there is considerable uncertainty regarding several of the parameters that drive the costs, EPA conducted a sensitivity analysis to identify the range of potential costs of this rule. Thus, high-end and low-end estimates are presented along with the best estimate. The primary parameters affecting the range of cost estimates are the number of products each procuring agency is assumed to procure each year and the number of contractors that will be affected by this rule. EPA is requesting comment on both these variables and any other assumptions in the analysis. Details on specific assumptions are presented in the technical background document.

TABLE 5.—SUMMARY OF ANNUALIZED COSTS OF PROPOSED CPG

Procuring agency	Total annualized costs ($1000)	Best estimate total annualized costs ($1000)	Best estimate average annual costs per item per entity
Federal Agencies	$340–170	$340	$430
States	160–80	160	140
Local Governments	2,700–1,300	2,110	50
Contractors	800–20	240	20
Total	4,000–1,600	2,900	

D. Impacted Entities

RCRA section 6002 applies to procuring agencies that use at least a portion of Federal funds to procure over $10,000 worth of a designated product in a given year. EPA estimates that this would apply to 35 Federal agencies, all 56 States and territories and 1900 local governments. EPA based the assumptions on the number of local entities that would be impacted on information regarding the amount of Federal funds that are dispersed to specific counties. A description of this information is provided in the technical background document for this proposed rule. In addition, EPA assumed that between 100 and 1,000 contractors may be affected. EPA requests comments on these assumptions.

E. CPG Requirements

Cost incurred by procuring agencies are divided into five subsections relating to the affirmative procurement program requirements of RCRA section 6002(i). The subsections are initial review; affirmative procurement program modification; specification review; estimation, certification, and verification; and recordkeeping and reporting. A summary of each requirement is presented below. Costs were developed assuming a 10-year time frame, a social discount rate of three percent and an average loaded hourly wage of approximately $32 per hour (the equivalent of a mid-level Federal Grade Series—GS–12).

1. Initial Review

EPA estimates that costs to procuring agencies to complete their initial review in the first year would be $1.2 million. These costs include the costs incurred by a procuring agency to review today's proposed rule and determine the actions needed to implement the rule. EPA estimates that Federal, State, and local governments will require approximately 18 hours to complete this initial review activity. This cost will be incurred in the first year only.

2. Affirmative Procurement Modification

EPA estimates that the costs to procuring agencies to modify their affirmative procurement programs to incorporate the requirements of today's proposed rule would be $1.4 million and would occur in the first year. These activities can include developing or modifying agency policies and procedures; revising staff, contracts, and grants manuals; and including requirements in assistance agreements and standard solicitation documents. EPA estimates that procuring agencies will require approximately two hours per item designated in the CPG to accomplish these activities.

3. Specification Review

EPA estimates that the costs to procuring agencies to review their specifications to incorporate the requirements of today's proposed rule would be $240,000. These costs include the costs incurred by Federal procuring agencies to review and revise their specifications for designated items to incorporate recovered materials content standards, as required in RCRA section 6002(d)(2). Specification review can include reviewing specifications to identify provisions requiring revision, conducting necessary research to support specification revisions, and revising the specifications. Of the 35 Federal agencies that could be significantly impacted by today's proposed rule, EPA estimates that 11 agencies will revise their specifications to incorporate recovered materials content requirements.

For most product categories, EPA estimates the potential time for a Federal specification-writing agency to review and revise its product specifications would average 40 hours per product in the first year. However, for construction products, the potential cost could be more significant because of the complexity of the specifications for these products. Therefore, EPA has estimated that the time required to review and revise specifications for construction products would be twice that required for the other product categories (i.e., an average of 80 hours). Table 6 below presents the potential costs to Federal agencies for reviewing and revising specifications. EPA requests comment on its estimate of the number of hours allocated for each category of items.

The statute does not require State and local governments and contractors to review and revise their specifications for designated items. However, State and local governments will have to consider the inclusion of requirements for procuring designated items in solicitation documents and other contract vehicles. EPA anticipates that these costs would be the incremental cost of incorporating these additional requirements into existing documents where procurement of designated items is a concern. EPA believes that these costs would be minimal.

Contractors will be affected by the incorporation of recovered materials requirements in government solicitations and contract documents. All potential contractors will spend

additional resources reading the additional procurement language in these documents. Potential contractors must seek out information about products that contain recovered materials and must verify that they conform with the content standards required in the solicitation. They also must ensure that the use of recovered materials is compatible with other aspects of their proposal. Thus, the incorporation of these additional requirements in solicitation and contract documents will increase the potential contractor's cost of preparing a bid. All bidders, including unsuccessful bidders, will bear these additional information collection costs, which may be passed on to the government in the form of higher bid prices. EPA requests comment on the additional time necessary for contractors to construct bids involving products containing the proposed recovered materials content requirements. The Agency also requests comment on the number of contracts and contractors that will be affected by this proposal and asks for additional information in order to estimate more accurately the costs that may be borne by contractors as a result of today's proposal.

TABLE 6.—POTENTIAL FEDERAL COSTS FOR SPECIFICATION REVISIONS

Product category	No. of items	Total No. of agencies potentially affected	Specification review and revision time per item (in hours)	Costs per product category (In $1000)
Vehicular Products	1	2	40	$3
Construction Products	8	10	80	207
Transportation Products	2	1	40	3
Park and Recreation Products	2	4	40	10
Landscaping Products	2	5	40	13
Non-Paper Office Products	6	1	40	8

Since today's proposed rule does not address paper and paper products, there will be no costs incurred in this category.

4. Estimation, Certification and Verification

EPA estimates that the costs to procuring agencies to perform the estimation, certification, and verification requirements resulting from today's proposed rule are $1.4 million. These costs include costs incurred by establishing procedures for estimating, certifying, and, where appropriate, verifying the amount of recovered materials utilized in the performance of a contract. EPA estimates that procuring agencies will require approximately two hours per item per year to accomplish these activities.

5. Annual Review and Preference Program Modification

EPA estimates that the annual costs to procuring agencies to annually review and modify their preference programs are $750,000. These costs include costs incurred by procuring agencies to annually review and modify their preference programs to ensure that when they purchase designated items, they purchase them containing the highest percentage of recovered materials practicable. EPA anticipates that as procuring agencies determine, through their market research, that products are available with higher percentages of recovered materials, that they will adjust their preference programs, including their minimum content standards, accordingly, and that this process will occur on a continual, rather than annual basis. Where this is the case, procuring agencies then modify their preference programs to incorporate the new recovered materials content levels. To accomplish this task, EPA estimates that procuring agencies will require approximately one hour per product per year.

6. Recordkeeping and Reporting

EPA estimates that the annual costs to procuring agencies for additional recordkeeping and reporting requirements resulting from today's proposed rule are $240,000. These costs include costs incurred by procuring agencies to ensure their compliance with RCRA section 6002 and Executive Order 12873. Based on the Office of Federal Procurement Policy's current reporting format, EPA anticipates that Federal agencies would expend approximately 10 hours per item to complete this activity. Other procuring agencies are not subject to this requirement.

F. Product Cost

Another potential cost of today's proposed action is the possible price differential between an item made with recovered materials and equivalent item manufactured using virgin materials. As discussed in section II.D.6, relative prices of recycled products compared to prices of comparable virgin products vary. In many cases, recycled products may be less expensive than their virgin counterparts. In other cases, virgin products may have lower prices than recycled products. However, other factors can also affect the price of virgin products. For example, temporary fluctuations in the overall economy can create oversupplies of virgin products, leading to a decrease in prices for these items. Under RCRA section 6002(c), procuring agencies are not required to purchase a product containing recovered materials if it is only available at an unreasonable price. However, the decision to pay more or less for such a product is left to the procuring agency which may or may not incur additional costs due to price differentials. EPA requests comment on the potential impact of today's proposed rule on the costs to procuring agencies to purchase designated items containing recovered materials versus those same items made with virgin materials.

G. Regulatory Flexibility Analysis

The primary purpose of the Regulatory Flexibility Analysis is to identify if there is an adverse impact to small businesses that are directly regulated by the rule and to examine regulatory alternatives that fall within the scope of the statutory requirements that would reduce impacts to small businesses, small organizations, or small governmental jurisdictions subject to the regulation. The RCRA procurement requirements apply to procuring agencies that procure more than $10,000 of a designated product. No exemption is included in the statute for small businesses. Therefore, EPA has decided that alternative regulatory approaches for small businesses are not appropriate for this rule.

With regard to possible impacts to small businesses, there may be both positive and negative impacts to individual businesses. EPA anticipates that this rule will provide additional opportunities for small recycling

businesses to begin supplying recovered materials to manufacturers and products made from recovered materials to procuring agencies. In addition, other small businesses that do not directly contract with procuring agencies may be affected positively by the increased demand for recovered materials. These include small businesses involved in materials recovery programs and materials recycling. Municipalities that run recycling programs are also expected to benefit from the increased demand for certain recovered materials.

EPA is unable to determine the number of small businesses that may be adversely impacted by this proposed rule. It is possible that if a small business that currently supplies products to a procuring agency uses virgin materials only, today's proposed CPG may reduce its ability to compete for future contracts. However, the proposed CPG will not affect existing purchase orders, nor will it preclude businesses from adapting their product lines to meet new specification or solicitation requirements for products containing recovered materials. Thus, many small businesses that market to procuring agencies have the option to adapt their product lines to meet specifications.

XIX. Supporting Information

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"Military Specification, MIL-M–17321F, Markers, Traffic," U.S. Army, September 30, 1985.

Product information, Utility Plastic Recycling Inc., January 31, 1994.

Product information, WLI Industries, Inc.

Product information, The Roadmarket Company.

Product information, The Plastic Lumber Co., Inc.

Product information, Don Zwiers & Associates

Product information, Fender Enterprises.

Product information, Scientific Developments, Inc.

Excerpt from "Detailed Product Listings," Indiana Energy Policy.

Hydraulic Mulch

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"Paper Fiber Hydraulic Mulch Use and Performance," prepared for EPA by Science Applications International Corporation, Inc., September 1991.

Compost

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"Environmental Impact of Composting Yard Trimmings," Michael A. Cole, Indiana Yard Waste Solutions Conference, January 27, 1993.

List of Subjects

40 CFR Part 247

Carpet, Cement industry, Engine coolant, Floor tiles, Geotextiles, Government procurement, Insulation, Landscaping industry, Office products, Paper and paper products industry, Park and recreations, Patio blocks, Petroleum, Pipe, Recycling, Tires, Traffic control devices.

40 CFR Parts 248, 249, 250, 252, and 253

Cement industry, Government procurement, Insulation, Paper and paper products industry, Petroleum, Recycling.

Dated: April 13, 1994.

Carol M. Browner,

Administrator.

For the reasons set out in the preamble, under the authority at 42 U.S.C. 6912 and 6962 and EO 12873, subchapter I of title 40 of the Code of Federal Regulations is proposed to be amended as set forth below.

PARTS 248, 249, 250, 252, and 253 [REMOVED]

1. Parts 248, 249, 250, 252 and 253 are removed.

2. Part 247 is revised to read as follows.

PART 247—COMPREHENSIVE PROCUREMENT GUIDELINE FOR PRODUCTS CONTAINING RECOVERED MATERIALS

Subpart A—General

Sec.
247.1 Purpose and scope.
247.2 Applicability.
247.3 Definitions.
247.4 Affirmative procurement programs.

Subpart B—Item Designations

247.10 General.
247.11 Paper and paper products.
247.12 Vehicular products.
247.13 Construction products.
247.14 Transportation products.
247.15 Park and recreation products.
247.16 Landscaping products.
247.17 Non-Paper office products.
247.18 Miscellaneous products. [reserved]

Authority: 42 U.S.C. 6912(a) and 6962; E.O. 12873, 58 FR 54911.

Subpart A—General

§ 247.1 Purpose and scope.

(a) The purpose of this guideline is to assist procuring agencies in complying with the requirements of section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, 42 U.S.C. 6962, and Executive Order 12873, as they apply to the procurement of the items designated in subpart B of this part.

(b) This guideline sets forth the requirements of RCRA section 6002, the U.S. Environmental Protection Agency's (EPA) designation of items that are or can be made with recovered materials, and definitions. EPA's recommendations for procuring the designated items are found in the companion Recovered Materials Advisory Notice(s).

(c) EPA believes that adherence to the recommendations in the Recovered Materials Advisory Notice(s) constitutes compliance with RCRA section 6002. However, procuring agencies may adopt other types of procurement programs consistent with RCRA section 6002.

§ 247.2 Applicability.

(a)(1) This guideline applies to all procuring agencies and to all procurement actions involving items designated by EPA in this part, where the procuring agency purchases $10,000 or more worth of one of these items during the course of a fiscal year, or where the cost of such items or of functionally equivalent items purchased during the preceding fiscal year was $10,000 or more.

(2) This guideline applies to Federal agencies, to State and local agencies using appropriated Federal funds to procure designated items, and to persons contracting with any such agencies with respect to work performed under such contracts. Federal procuring agencies should note that the requirements of RCRA section 6002 apply to them whether or not appropriated Federal funds are used for procurement of designated items.

(3) The $10,000 threshold applies to procuring agencies as a whole rather than to agency subgroups such as regional offices or subagencies of a larger department or agency.

(b) The term "procurement actions" includes:

(1) Purchases made directly by a procuring agency and purchases made directly by any person (e.g., a contractor) in support of work being performed for a procuring agency, and

(2) Any purchases of designated items made "indirectly" by a procuring agency, as in the case of procurements resulting from grants, loans, funds, and similar forms of disbursements of monies.

(c)(1) This guideline does not apply to purchases of designated items which are unrelated to or incidental to Federal funding, i.e., not the direct result of a contract or agreement with, or a grant,

loan, or funds disbursement to, a procuring agency.

(2) This guideline also does not apply to purchases made by private party recipients (e.g., individuals, non-profit organizations) of Federal funds other than contracts (i.e., grants, loans, cooperative agreements, and other funds disbursements).

§ 247.3 Definitions.

As used in this Comprehensive Procurement Guideline and the related Recovered Materials Advisory Notice(s):

Act or *RCRA* means the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, as amended, 42 U.S.C. 6901 *et seq;*

Blanket insulation means relatively flat and flexible insulation in coherent sheet form, furnished in units of substantial area. Batt insulation is included in this term;

Bleached papers means paper made of pulp that has been treated with bleaching agents;

Board insulation means semi-rigid insulation preformed into rectangular units having a degree of suppleness, particularly related to their geometrical dimensions;

Bond paper means a generic category of paper used in a variety of end use applications such as forms (see *form bond*), offset printing, copy paper, stationery, etc. In the paper industry, the term was originally very specific but is now very general;

Book paper means a generic category of papers produced in a variety of forms, weights, and finishes for use in books and other graphic arts applications, and related grades such as tablet, envelope, and converting papers;

Brown papers means papers usually made from unbleached kraft pulp and used for bags, sacks, wrapping paper, and so forth;

Building insulation means a material, primarily designed to resist heat flow, which is installed between the conditioned volume of a building and adjacent unconditioned volumes or the outside. This term includes but is not limited to insulation products such as blanket, board, spray-in-place, and loose-fill that are used as ceiling, floor, foundation, and wall insulation;

Ceiling insulation means a material, primarily designed to resist heat flow, which is installed between the conditioned area of a building and an unconditioned attic as well as common ceiling floor assemblies between separately conditioned units in multi-unit structures. Where the conditioned area of a building extends to the roof, ceiling insulation includes such a material used between the underside and upperside of the roof;

Cellular polyisocyanurate insulation means insulation produced principally by the polymerization of polymeric polyisocyanantes, usually in the presence of polyhydroxl compounds with the addition of catalysts, cell stabilizers, and blowing agents;

Cellular polystyrene insulation means an organic foam composed principally of polymerized styrene resin processed to form a homogenous rigid mass of cells;

Cellular polyurethane insulation means insulation composed principally of the catalyzed reaction product of polyisocyanurates and polyhydroxl compounds, processed usually with a blowing agent to form a rigid foam having a predominantly closed cell structure;

Cellulose fiber loose-fill means a basic material of recycled wood-based cellulosic fiber made from selected paper, paperboard stock, or ground wood stock, excluding contaminated materials which may reasonably be expected to be retained in the finished product, with suitable chemicals introduced to provide properties such as flame resistance, processing and handling characteristics. The basic cellulosic material may be processed into a form suitable for installation by pneumatic or pouring methods;

Coarse papers means papers used for industrial purposes, as distinguished from those used for cultural or sanitary purposes;

Commercial Item Descriptions means a series of simplified item descriptions under the Federal specifications-and-standards program used in the acquisition of commercial off-the-shelf and commercial type products;

Computer paper means a type of paper used in manifold business forms produced in rolls and/or fan folded. It is used with computers and word processors to print out data, information, letters, advertising, etc. It is commonly called computer printout;

Conditioned means heated and/or mechanically cooled;

Corrugated boxes means boxes made of corrugated paperboard, which, in turn, is made from a fluted corrugating medium pasted to two flat sheets of paperboard (linerboard); multiple layers may be used;

Cotton fiber content papers means paper that contains a minimum of 25 percent and up to 100 percent cellulose fibers derived from lint cotton, cotton linters, and cotton or linen cloth cuttings. It is also known as rag content paper or rag paper. It is used for stationery, currency, ledgers, wedding invitations, maps, and other specialty papers;

Cover stock or *cover paper* means a heavyweight paper commonly used for covers, books, brochures, pamphlets, and the like;

Doilies means paper place mats used on food service trays in hospitals and other institutions;

Duplicator paper means writing papers used for masters or copy sheets in the aniline ink or hectograph process of reproduction (commonly called spirit machines);

Engine lubricating oils means petroleum-based oils used for reducing friction in engine parts;

Envelopes means brown, manila, padded, or other mailing envelopes not included with *stationery;*

Facial tissue means a class of soft absorbent papers in the sanitary tissue group;

Federal agency means any department, agency, or other instrumentality of the Federal government; any independent agency or establishment of the Federal government including any government corporation; and the Government Printing Office;

Fiber or fiberboard boxes means boxes made from containerboard, either solid fiber or corrugated paperboard (general term); or boxes made from solid paperboard of the same material throughout (specific term);

Fiberglass insulation means insulation which is composed principally of glass fibers, with or without binders;

Fittings refers to a piping component used to join or terminate sections of pipe, or to provide changes in direction or branching in a pipe system;

Floor insulation means a material, primarily designed to resist heat flow, which is installed between the first level conditioned area of a building and an unconditioned basement, a crawl space, or the outside beneath it. Where the first level conditioned area of a building is on a ground level concrete slab, floor insulation includes such as material installed around the perimeter of or on the slab. In the case of mobile homes, floor insulation also means skirting to enclose the space between the building and the ground;

Foam-in-place insulation is rigid cellular foam produced by catalyzed chemical reactions that hardens at the site of the work. The term includes spray-applied and injected applications such as spray-in-place foam and pour-in-place;

Folding boxboard means a paperboard suitable for the manufacture of folding cartons;

Form bond means a lightweight commodity paper designed primarily for business forms including computer printout and carbonless paper forms (see manifold business forms);

Foundation insulation means a material, primarily designed to resist heat flow, which is installed in foundation walls between conditioned volumes and unconditioned volumes and the outside or surrounding earth, at the perimeters of concrete slab-on-grade foundations, and at common foundation wall assemblies between conditioned basement volumes;

Gear oils means petroleum-based oils used for lubricating machinery gears;

Geotextiles means any permeable textile material used with foundation, soil, rock, earth, or any other geotechnical engineering related material, as an integral part of a manmade project, structure, or system;

Glass fiber reinforced polyisocyanurate/polyurethane foam means cellular polyisocyanurate or cellular polyurethane insulation made with glass fibers within the foam core;

Hydraulic fluids means petroleum-based hydraulic fluids;

Hydraulic mulch means a mulch that is a cellulose-based (paper or wood) protective covering that is mixed with water and applied through mechanical spraying in order to aid the germination of seeds and to prevent soil erosion;

Hydroseeding means the process of spraying seeds mixed with water through a mechanical sprayer (hydroseeder). Hydraulic mulch, fertilizer, a tacking agent, or a wetting agent can also be added to the water/seed mix for enhanced performance;

Industrial wipers means paper towels especially made for industrial cleaning and wiping;

Invitation for Bids means the solicitation for prospective suppliers by a purchaser requesting their competitive price quotations;

Laminated paperboard means board made from one or more plies of kraft paper bonded together, with or without facers, that is used for decorative, structural, or insulating purposes;

Ledger paper means a type of paper generally used in a broad variety of recordkeeping type applications such as in accounting machines;

Loose-fill insulation means insulation in granular, nodular, fibrous, powdery, or similar form, designed to be installed by pouring, blowing or hand placement;

Manifold business forms means a type of product manufactured by business forms manufacturers that is commonly produced as marginally punched continuous forms in small rolls or fan folded sets with or without carbon paper interleaving. It has a wide variety of uses such as invoices, purchase orders, office memoranda, shipping orders, and computer printout;

Mill broke means any paper waste generated in a paper mill prior to completion of the papermaking process. It is usually returned directly to the pulping process. Mill broke is excluded from the definition of *recovered materials;*

Mimeo paper means a grade of writing paper used for making copies on stencil duplicating machines;

Mineral fiber insulation means insulation (rock wool or fiberglass) which is composed principally of fibers manufactured from rock, slag or glass, with or without binders;

Newsprint means paper of the type generally used in the publication of newspapers or special publications like the Congressional Record. It is made primarily from mechanical wood pulps combined with some chemical wood pulp;

Office papers means note pads, loose-leaf fillers, tablets, and other papers commonly used in offices, but not defined elsewhere;

Offset printing paper means an uncoated or coated paper designed for offset lithography;

Paper means one of two broad subdivisions of paper products, the other being paperboard. Paper is generally lighter in basis weight, thinner, and more flexible than paperboard. Sheets 0.012 inch or less in thickness are generally classified as paper. Its primary uses are for printing, writing, wrapping, and sanitary purposes. However, in this guideline, the term paper is also used as a generic term that includes both paper and paperboard. It includes the following types of papers: bleached paper, bond paper, book paper, brown paper, coarse paper, computer paper, cotton fiber content paper, cover stock or cover paper, duplicator paper, form bond, ledger paper, manifold business forms, mimeo paper, newsprint, office papers, offset printing paper, printing paper, stationery, tabulating paper, unbleached papers, writing paper, and xerographic/copy paper;

Paper napkins means special tissues, white or colored, plain or printed, usually folded, and made in a variety of sizes for use during meals or with beverages;

Paper product means any item manufactured from paper or paperboard. The term *paper product* is used in this guideline to distinguish such items as boxes, doilies, and paper towels from printing and writing papers. It includes the following types of products: corrugated boxes, doilies, envelopes, facial tissue, fiberboard boxes, folding boxboard, industrial wipers, paper napkins, paper towels, tabulating cards, and toilet tissue;

Paper towels means paper toweling in folded sheets, or in raw form, for use in drying or cleaning, or where quick absorption is required;

Paperboard means one of the two broad subdivisions of paper, the other being paper itself. Paperboard is usually heavier in basis weight and thicker than paper. Sheets 0.012 inch or more in thickness are generally classified as paperboard. The broad classes of paperboard are containerboard, which is used for corrugated boxes; boxboard, which is principally used to make cartons; and all other paperboard;

Perlite composite board means insulation board composed of expanded perlite and fibers formed into rigid, flat, rectangular units with a suitable sizing material incorporated in the product. It may have on one or both surfaces a facing or coating to prevent excessive hot bitumen strike-in during roofing installation;

Person means an individual, trust, firm, joint stock company, corporation (including a government corporation), partnership, association, Federal agency, State, municipality, commission, political subdivision of a State, or any interstate body;

Phenolic insulation means insulation made with phenolic plastics which are plastics based on resins made by the condensation of phenols, such as phenol or cresol, with aldehydes;

Plastic pipe and fittings means non-pressure rated uses of plastic pipe and fittings made from thermoplastic resins, including polyvinyl chloride (PVC) and high density polyethylene (HDPE), for the following applications: sewer, drainage, conduit, and drain, waste and vent (DWV);

Plastic rigid foam means cellular polyurethane insulation, cellular polyisocyanurate insulation, glass fiber reinforced polyisocyanurate/polyurethane foam insulation, cellular polystyrene insulation, phenolic foam insulation, spray-in-place foam and foam-in-place insulation;

Postconsumer material means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. *Postconsumer material* is a part of the broader category of *recovered materials.*

Postconsumer recovered paper means:

(1) Paper, paperboard and fibrous wastes from retail stores, office buildings, homes and so forth, after they

have passed through their end-usage as a consumer item including: Used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards and used cordage; and

(2) All paper, paperboard and fibrous wastes that enter and are collected from municipal solid waste;

Practicable means capable of being used consistent with: Performance in accordance with applicable specifications, availability at a reasonable price, availability within a reasonable period of time, and maintenance of a satisfactory level of competition;

Printing paper means paper designed for printing, other than newsprint, such as offset and book paper;

Procurement item means any device, good, substance, material, product, or other item, whether real or personal property, which is the subject of any purchase, barter, or other exchange made to procure such item;

Procuring agency means any Federal agency, or any State agency or agency of a political subdivision of a State, which is using appropriated Federal funds for such procurement, or any person contracting with any such agency with respect to work performed under such contract;

Purchasing means the act of and the function of responsibility for the acquisition of equipment, materials, supplies, and services, including: Buying, determining the need, selecting the supplier, arriving at a fair and reasonable price and terms and conditions, preparing the contract or purchase order, and follow-up;

Purchasing activities means all activities included in the purchasing function;

Recovered materials means waste materials and byproducts which have been recovered or diverted from solid waste, but such term does not include those materials and byproducts generated from, and commonly reused within, an original manufacturing process;

Recovered materials, for purposes of purchasing paper and paper products, means waste material and by-products that have been recovered or diverted from solid waste, but such term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process. In the case of paper and paper products, the term *recovered materials* includes:

(1) Postconsumer materials such as—

(i) Paper, paperboard, and fibrous wastes from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: Used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; and

(ii) All paper, paperboard, and fibrous wastes that enter and are collected from municipal solid waste, and

(2) Manufacturing, forest residues, and other wastes such as—

(i) Dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and trimming of the paper machine reel in smaller rolls of rough sheets) including: Envelope cuttings, bindery trimmings, and other paper and paperboard waste, resulting from printing, cutting, forming, and other converting operations; bag, box, and carton manufacturing wastes; and butt rolls, mill wrappers, and rejected unused stock; and

(ii) Finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others;

(iii) Fibrous byproducts of harvesting, manufacturing, extractive, or wood-cutting processes, flax, straw, linters, bagasse, slash, and other forest residues;

(iv) Wastes generated by the conversion of goods made from fibrous material (that is, waste rope from cordage manufacture, textile mill waste, and cuttings); and

(v) Fibers recovered from waste water which otherwise would enter the waste stream.

Recyclable paper means any paper separated at its point of discard or from the solid waste stream for utilization as a raw material in the manufacture of a new product. It is often called *waste paper* or *paper stock*. Not all paper in the waste stream is recyclable; it may be heavily contaminated or otherwise unusable;

Request for Proposal means a request for an offer by one party to another of terms and conditions with reference to some work or undertaking; the initial overture or preliminary statement for consideration by the other party to a proposed agreement;

Re-refined oils means used oils from which the physical and chemical contaminants acquired through previous use have been removed through a refining process;

Retread tire means a worn automobile, truck, or other motor vehicle tire whose tread has been replaced;

Rock wool insulation means insulation which is composed principally from fibers manufactured from slag or natural rock, with or without binders;

Specification means a description of the technical requirements for a material, product, or service that includes the criteria for determining whether these requirements are met. In general, specifications are in the form of written commercial designations, industry standards, and other descriptive references;

Spray-in-place insulation means insulation material that is sprayed onto a surface or into cavities and includes cellulose fiber spray-on as well as plastic rigid foam products;

Spray-in-place foam is rigid cellular polyurethane or polyisocyanurate foam produced by catalyzed chemical reactions that hardens at the site of the work. The term includes spray-applied and injected applications;

State means any of the several states, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands;

Stationery means writing paper suitable for pen and ink, pencil, or typing. Matching envelopes are included in this definition;

Structural fiberboard means a fibrous-felted, homogenous panel made from lignocellulosic fibers (usually wood, cane, or paper) and having a density of less than 31 lbs/ft^3 but more than 10 lbs/ft^3. It is characterized by an integral bond which is produced by interfelting of the fibers, but which has not been consolidated under heat or pressure as a separate stage of manufacture;

Tabulating cards means cards used in automatic tabulating machines;

Tabulating paper means paper used in tabulating forms for use on automatic data processing equipment;

Tire means the following types of tires: Passenger car tires, light- and heavy-duty truck tires, high speed industrial tires, bus tires, and special service tires (including military, agricultural, off-the-road, and slow speed industrial);

Toilet tissue means a sanitary tissue paper. The principal characteristics are softness, absorbency, cleanliness, and adequate strength (considering easy disposability). It is marketed in rolls of varying sizes or in interleaved packages;

Unbleached papers means papers made of pulp that have not been treated with bleaching agents;

Wall insulation means a material, primarily designed to resist heat flow, which is installed within or on the walls between conditioned areas of a building and unconditioned areas of a building or the outside, as well as common wall

assemblies between separately conditioned units in multiple unit structures;

Waste paper means any of the following materials:

(1) Postconsumer materials such as:

(i) Paper, paperboard, and fibrous wastes from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: Used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; and

(ii) All paper, paperboard, and fibrous wastes that enter and are collected from municipal solid waste, and

(2) Manufacturing wastes, forest residues, and other wastes such as—

(i) Dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and trimming of the paper machine reel in smaller rolls of rough sheets) including: Envelope cuttings, bindery trimmings, and other paper and paperboard waste, resulting from printing, cutting, forming, and other converting operations; bag, box, and carton manufacturing wastes; and butt rolls, mill wrappers, and rejected unused stock; and

(ii) Finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others;

Writing paper means a paper suitable for pen and ink, pencil, typewriter or printing; and

Xerographic/copy paper means any grade of paper suitable for copying by the xerographic process (a dry method of reproduction).

§ 247.4 Affirmative procurement programs.

(a) RCRA section 6002(d) required Federal agencies that have the responsibility for drafting or reviewing specifications for procurement items procured by Federal agencies to revise their specifications by May 8, 1986, to eliminate any exclusion of recovered materials and any requirement that items be manufactured from virgin materials.

(b) RCRA section 6002(d) further requires that within one year after the effective date of each item designation by the EPA, each procuring agency must assure that its specifications for these items require the use of recovered materials to the maximum extent possible without jeopardizing the intended end use of these items.

(c) RCRA section 6002(i) provides that each procuring agency which purchases items designated by EPA must establish an affirmative procurement program, containing the four elements listed below, for procuring such items containing recovered materials to the maximum extent practicable:

(1) Preference program for purchasing the designated items;

(2) Promotion program;

(3) Procedures for obtaining estimates and certifications of recovered materials content and for verifying the estimates and certifications; and

(4) Annual review and monitoring of the effectiveness of the program.

(d)(1) For the items previously designated by EPA, procuring agencies were required to establish affirmative procurement programs by the following dates: Paper, 6/22/89; lubricating oil, 6/30/89; retread tires, 11/17/89; and building insulation products, 2/17/90.

(2) For each additional item designated by EPA, procuring agencies must establish affirmative procurement programs within one year after EPA promulgates the item designation as a final rule.

Subpart B—Item Designations

§ 247.10 General.

EPA designates the items listed in this subpart as items which are or can be produced with recovered materials and whose procurement by procuring agencies will carry out the objectives of RCRA section 6002.

§ 247.11 Paper and paper products.

Paper and paper products, excluding building and construction paper grades.

§ 247.12 Vehicular products.

(a) Lubricating oils containing re-refined oil, including engine lubricating oils, hydraulic fluids, and gear oils, excluding marine and aviation oils.

(b) Tires, excluding airplane tires.

(c) Reclaimed engine coolants.

§ 247.13 Construction products.

(a) Building insulation products, including the following items:

(1) Loose-fill insulation, including but not limited to cellulose fiber, mineral fibers (fiberglass and rock wool), vermiculite, and perlite;

(2) Blanket and batt insulation, including but not limited to mineral fibers (fiberglass and rock wool);

(3) Board (sheathing, roof decking, wall panel) insulation, including but not limited to structural fiberboard and laminated paperboard products, perlite composite board, polyurethane, polyisocyanurate, polystyrene, phenolics, and composites; and

(4) Spray-in-place insulation, including but not limited to foam-in-place polyurethane and polyisocyanurate, and spray-on cellulose.

(b) Structural fiberboard and laminated paperboard products for applications other than building insulation, including the following: Building board, sheathing, shingle backer, sound deadening board, roof insulating board, insulating wallboard, acoustical and non-acoustical ceiling tile, acoustical and non-acoustical lay-in panels, floor underlayments, and roof overlay (coverboard).

(c) Plastic pipe and fittings made from thermoplastic resins, including PVC and HDPE, for the following non-pressure applications: sewer, drainage, conduit, and drain, waste and vent (DWV).

(d) Geotextiles for use in road building, drainage, erosion control, and soil stabilization, and for use in the gas collection layer and the protection layer between the drainage stone and the geomembrane liner in waste containment systems.

(e) Cement and concrete, including concrete products such as pipe and block, containing coal fly ash or ground granulated blast furnace (GGBF) slag.

(f) Carpet made of polyester fiber for use in low- and medium-wear applications.

(g) Floor tiles and patio blocks containing recovered rubber or plastic.

§ 247.14 Transportation products.

Traffic barricades and traffic cones used in controlling or restricting vehicular traffic.

§ 247.15 Park and recreation products.

Playground surfaces and running tracks containing recovered rubber or plastic.

§ 247.16 Landscaping products.

(a) Hydraulic mulch products containing recovered paper or recovered wood used for landscaping and erosion control hydroseeding applications and as an over-spray for straw mulch.

(b) Compost made from yard trimmings, leaves, and/or grass clippings for use in landscaping, seeding of grass or other plants on roadsides and embankments, as a nutritious mulch under trees and shrubs, and in erosion control and soil reclamation.

§ 247.17 Non-paper office products.

(a) Office recycling containers and office waste receptacles containing recovered plastic, paper, or steel.

(b) Plastic desktop accessories.

(c) Remanufactured toner cartridges.

(d) Binders.

(e) Plastic trash bags.

§ 247.18 Miscellaneous products. [Reserved]

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