ENVIRONMENTAL PROTECTION AGENGY

[40 CFR Part 426] EFFLUENT LIMITATION GUIDELINES

Proposed Rulemaking Concerning Glass Manufacturing

Notice is hereby given that effluent limitations guidelines for existing sources and standards of performance and pretreatment standards for new sources set forth in tentative form below are proposed by the Environmental Protection Agency (EPA) for the sheet glass manufacturing subcategory (Subpart B), the rolled glass manufacturing subcategory (Subpart C), the plate glass manufacturing subcategory (Subpart D), the float glass manufacturing subcategory (Subpart E), the automotive glass tempering subcategory (Subpart F), and the automotive glass lamination subcategory (Subpart G), of the glass man-ufacturing category of point sources pursuant to sections 301, 304 (b) and (c), 306(b) and 307(c) of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251, 1311, 1314 (b) and (c), 1316(b) and 1317(c); 86 Stat. 816 et seq.; P.L. 92-500) (the "Act").

(a) Legal authority:

(1) Existing point sources. Section 301(b) of the Act requires the achievement by not later than July 1, 1977, of effluent limitations for point sources. other than publicly owned treatment works, which require the application of the best practicable control technology currently available as defined by the Administrator pursuant to section 304(b) of the Act. Section 301(b) also requires the achievement by not later than July 1, 1983, of effluent limitations for point sources, other than publicly owned treatment works, which require the application of best available technology economically achievable which will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants, as determined in accordance with regulations issued by the Administrator pursuant to section 304(b) of the Act.

Section 304(b) of the Act requires the Administrator to publish regulations providing guidelines for effluent limitations setting forth the degree of effluent reduction attainable through the application of the best practicable control technology currently available and the degree of effluent reduction attainable through the application of the best control measures and practices achievable including treatment techniques, process and procedure innovations, operating methods, and other alternatives. The regulations proposed herein set forth effluent limitations guidelines, pursuant to section 304(b) of the Act, for the sheet glass manufacturing subcategory (Subpart B), the rolled glass manufacturing subcategory (Subpart C), the plate glass manufacturing subcategory (Subpart D), the float glass manufacturing subcategory (Subpart E), the automotive glass tempering subcategory (Subpart F), and the automotive glass lamination subcate-

gory (Subpart G), of the glass manufacturing category.

(2) New sources. Section 306 of the Act requires the achievement by new sources of a Federal standard of performance providing for the control of the discharge of pollutants which reflects the greatest degree of effluent reduction which the Administrator determines to be achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants.

Section 306(b)(1)(B) of the Act requires the Administrator to propose regulations establishing Federal standards of performance for categories of new sources included in a list published pursuant to section 306(b)(1)(A) of the Act. The Administrator published in the FEDERAL REGISTER of January 16, 1973. (38 FR 1624) a list of 27 source categories, including the glass manufacturing category. The regulations proposed herein set forth the standards of performance applicable to new sources for the sheet glass manufacturing subcategory (Subpart B), the rolled glass manufacturing subcategory (Subpart C). the plate glass manufacturing subcategory (Subpart D), the float glass manufacturing subcategory (Subpart E), the automotive glass tempering subcategory (Subpart F) and the automotive glass lamination subcategory (Subpart G) of the glass manufacturing category.

Section 307(c) of the Act requires the Administrator to promulgate pretreatment standards for new sources at the same time that standards of performance for new sources are promulgated pursuant to section 306. Sections 426.15, 426.25, 426.35, 426.45, 426.55, and 426.65, proposed below provide pretreatment standards for new sources within the sheet glass manufacturing subcategory (Subpart B), the rolled glass manufacturing subcategory (Subpart C), the plate glass manufacturing subcategory (Subpart D), the float glass manufacturing subcategory (Subpart E), the au-(Subpart F), and the automotive glass lamination subcategory (Subpart G), of the glass manufacturing category.

Section 304(c) of the Act requires the Administrator to issue to the States and appropriate water pollution control agencies information on the processes, procedures or operating methods which result in the elimination or reduction of the discharge of pollutants to implement standards of performance under Section 306 of the Act. The Development Document referred to below provides, pursuant to section 304(c) of the Act, information on such processes, procedures or operating methods.

(b) Summary and Basis of Proposed Effluent Limitations Guidelines for Existing Sources and Standards of Performance and Pretreatment Standards for New Sources.

(1) General methodology. The effluent limitations guidelines and standards of performance proposed herein were developed in the following manner. The point source category was first studied for the purpose of determining whether separate limitations and standards are appropriate for different segments within the category. This analysis in-cluded a determination of whether differences in raw material used, product produced, manufacturing process employed, age, size, waste water constituents and other factors require development of separate limitations and standards for different segments of the point source category. The raw waste characteristics for each such segment were then identified. This included an analysis of (1) the source, flow and volume of water used in the process employed and the sources of waste and waste waters in the operation: and (2) the constituents of all waste water. The constituents of the waste waters which should be subject to effluent limitations guidelines and standards of performance were identified.

The control and treatment technologies existing within each segment were identified. This included an identification of each distinct control and treatment technology, including both inplant and end-of-process technologies. which are existent or capable of being designed for each segment. It also in-cluded an identification of, in terms of the amount of constituents and the chemical, physical, and biological characteristics of pollutants, the effluent level resulting from the application of each of the technologies. The problems, limitations and reliability of each treatment and control technology were also identified. In addition, the non-water quality environmental impact, such as the effects of the application of such technologies upon other pollution problems, including air, solid waste, noise and radiation, was identified. The energy requirements of each control and treatment technology were determined as well as the cost of the application of such technologies.

The information, as outlined above, was then evaluated in order to determine what levels of technology constitute the "best practicable control technology currently available," "the best available technology economically achievable" and the "best available demonstrated control technology, processes, operating methods, or other alternatives." In identifying such technologies, various factors were considered. These included the total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application, the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, non-water quality environmental impact (including energy requirements), and other factors.

The data upon which the above analysis was performed included EPA permit applications, EPA sampling and inspections, consultant reports, and industry submissions.

The pretreatment standards proposed herein are intended to be complementary to the pretreatment standards proposed for existing sources under Part 128 of 40 CFR. The basis for such standards are set forth in the FEDERAL REGISTER OF July 19, 1973, 38 FR 19236. The provisions of Part 128 are equally applicable to sources which would constitute "new sources," under section 306 if they were to discharge pollutants directly to navigable waters, except for § 128.133. That section provides a pretreatment stand-ard for "incompatible pollutants" which requires application of the "best practicable control technology currently available," subject to an adjustment for amounts of pollutants removed by the publicly owned treatment works. Since the pretreatment standards proposed herein apply to new sources, §§ 426.15, 426.25, 426.35, 426.45, 426.55, and 426.65 below amend § 128.133 to require application of the standard of performance for new sources rather than the "best practicable" standard applicable to existing sources under sections 301 and 304(b) of the Act.

(2) Summary of conclusions with respect to the sheet glass manufacturing subcategory (Subpart B), rolled glass manufacturing subcategory (Subpart C), plate glass manufacturing subcategory (Subpart D), float glass manufacturing subcategory. (Subpart E), automotive glass tempering subcategory (Subpart F), and automotive glass lamination subcategory (Subpart G), of the glass manufacturing category of point sources.

(i) Categorization. For the purpose of studying waste treatment and effluent limitations, the glass manufacturing industry was subcategorized into six subcategories. The first four deal with the actual manufacturing of glass, and the last two deal with the fabrication of glass into special products. The categories are as follows: rolled, sheet, plate and float glass manufacturing; and automotive glass tempering and automotive glass lamination. Other glass products such as architectural glass and specialty products are not covered by these regulations. Analvsis of the process employed, waste water pollutants and waste control technologies justified the segmentation of the industry as described above. Factors such as age and size of plant did not justify further segmentation of the glass manufacturing source category.

(1) Subpart B—Sheet Glass Manufacturing Subcategory. Sheet glass is manufactured from sand, soda ash, limestone, dolomite, cullet, and other minor ingredients. These raw materials are mixed, melted in a furnace, and drawn vertically from a melting tank to form sheet glass. No process waste waters are generated from this process.

(2) Subpart C—Rolled Glass Manujacturing Subcategory. The same raw materials used in the manufacture of sheet glass are mixed, melted in a furnace, and cooled by rollers to form rolled glass. No process waste waters are generated from this process.

(3) Subpart D-Plate Glass Manufac-

turing Subcategory. The raw materials mentioned above in sheet glass manufacturing are mixed, melted in a furnace, pressed between rollers, and finally ground and polished to form plate glass. The waste waters generated from this process contain larger amounts of suspended solids than in any of the other subcategories.

(4) Subpart E—Float Glass Manufacturing Subcategory. The manufacture of float glass differs from that of plate glass in the use of a molten tin bath after the melting furnace. The float glass thus produced is of equal quality to that of plate glass and, therefore, does not require grinding or polishing. Process waste waters are generated from washing of the glass, and are relatively low in suspended solids.

(5) Subpart F-Automotive Glass Tempering Subcategory. This subcategory uses mostly float glass which is cut and then passed through a series of processes that grind and polish the edges, bend the glass, and then temper the glass to produce side and back windows for automobiles. Waste waters from these processes contain mainly suspended solids and oil.

Subpart G—Automotive Glass (6) Lamination Subcategory. This subcategory deals with the fabrication of automotive windshields. A typical windshield is fabricated by inserting a vinyl plastic sheet between two layers of glass, and then immersing the assembled windshield in an oil bath. Heat and pressure in the bath are used to complete the lamination. Process waste waters are generated from washing the glass pieces before lamination, washing the vinyl insert, washing the finished laminated windshields, and the seaming and cutting operations. The quantities of oil in the raw waste are substantially higher than in any of the other subcategories.

The (ii) Waste characteristics. significant pollutant parameters contained in waste waters resulting from the manufacture of flat glass and the fabrication of flat glass into automotive glass include: suspended solids, oil and grease, biochemical oxygen demand, chemical oxygen demand, phosphorous, and pH. Of the four basic glass manufacturing processes only float and plate glass produce process waste waters. Both sheet and rolled glass are lower quality glass and can be used directly without washing and other process waste waters. In all cases noncontact cooling water, boller blowdown and incoming raw water pretreatment wastes associated with plants in this industry are not included in these effluent guidelines and standards of performance.

(iii) Origin of waste water pollutants in the glass manufacturing subcategory.—(1) Sheet glass manufacturing subcategory. There are no process waste waters associated with this subcategory.

(2) Rolled glass manufacturing subcategory. There are no process waste waste waters associated with this category.

(3) Plate glass manufacturing subcategory. Plate glass manufacturing generates large quantities of waste water pollutants, and volumes of waste waters. This subcategory of the industry has the highest raw waste load. However, the plate glass process is now being replaced by the float glass process. Only two plants exist at the present time and only one is expected to be in operation by 1977. The plate glass process utilizes the same basic manufacturing process as rolled glass but is followed by a grinding and polishing operation. Cool glass from the rolled process is passed through a series of grinding, polishing and rinsing operations which employ sand. emery, and rouge (or cerium oxide). Sedimentation and coagulation in large lagoons is necessary to remove the suspended solids. No plant at the present timo has adequate treatment.

(4) Float glass manufacturing subcategory. Float glass manufacturing produces high quality glass without grinding and pollshing. The glass is formed on a bed of molten tin and then cooled. Washing may then be required depending on customer requirements. The waste water generated contains suspended solids and oil. There is no treatment of this waste at the present time in the industry.

(5) Automotive glass tempering subcalegory. Automotive glass tempering is a series of processes which produces automobile "back lights" (back windows) and "side lights" (side windows). Water is used in the fabrication processes for seaming, grinding, drilling, quenching, cooling and washing. Edge grinding requires an oil-water emulsion known as a "coolant solution." Waste from the op-eration is settled and skimmed and completely recycled to the process. However, oll adhering to the glass is carried over into subsequent washing steps and enters the waste water streams. An exemplary plant will have concentrations of 13 mg/l of oil and 100 mg/l of suspended solids in the combined waste streams from the processes mentioned above. No further treatment is now practiced.

(6) Automotive glass lamination subcategory. In the fabrication of automotive windshields, water is used for cooling, seaming and washing of the glass, and for washing of the plastic sheet be-fore insertion between two sheets of glass. All major windshield manufacturers presently use oil autoclayes and the oll process is considered typical. Oil adhering to the glass after lamination must be washed off and this causes the major pollution problem in this subcategory. The best post lamination washing method is a hot water wash. This reduces the requirements for detergents in some cases by 95 percent. The hot water wash is treated by air flotation and other oil separation methods. This treated waste stream is combined with the wash waters from the cutting and seaming opera-tions, washing of the vinyl sheets, and the final rinse after lamination. The resultant waste contains oil, suspended solids, surfactants and phosphates. No further treatment is presently practiced.

(iv) Treatment and control technology. The treatment and control technologies described below are either presently practiced by the industry: such as coagulation, sedimentation, oil separation, pH control, etc.: or easily transferable technology, such as diatomaceous earth filtration.

(v) Treatment and control technology within subcategories. Waste water treatment and control technologies have been studied for each subcategory of the industry to determine what is: (a) The best practicable control technology currently available, (b) the best available technology economically achievable, and (c) the best available demonstrated control technology, processes, operating methods or other alternatives.

(1) Treatment in the sheet and rolled glass manufacturing subcategories. No process wastes are associated with rolled and sheet glass manufacturing. Therefore, no treatment is necessary for these subcategories.

(2) Treatment in the plate glass manufacturing subcategory. Waste treatment in the plate glass subcategory was found to be uniformly inadequate. The data examined showed excessive fluctuations in effluent quality that can be controlled by demonstrated technology and operational procedures. The recommended limitations can be met by partitioning existing one-celled lagoons into two cells with polyelectrolyte addition at the entrance to each cell. This will provide more efficient coagulation and reduce the effects of short circuiting and wind action on sedimentation. Effluent levels in terms of concentration from a typical plant would be 30mg/l, a reduction in raw waste load of 99.8%.

The best available technology economically achievable for the plate glass subcategory will further reduce the effluent levels recommended for the 1977 standards to 5 mg/l for a typical plant. This can be accomplished by recycling 80 percent of the lagoon effluent to the grinding operation, sand filtration of the remaining 20 percent and return of the filter backwash to the head of the lagoon system. The recycled effluent will have a higher quality than the river water presently being used in most cases and therefore reuse should be technically feasible.

(3) Treatment in the float glass manufacturing subcategory. The best practicable control technology currently available for the float glass subcategory is elimination of detergents in the float washer. Exemplary plants utilizing this in-house control were examined in developing the limitations. Although no further treatment of these wastes is practiced in the industry, the effluent levels for a typical plant of 15 mg/l suspended solids and 0.5 mg/l phosphorous are low. Further treatment is not considered to be best practicable control technology currently available.

The best available technology economically achievable for the float glass subcategory is no discharge of process waste water pollutants to navigable wa-

ters. With elimination of detergents in in the float washer, the waste water will be of sufficient quality to be recycled as batch water or cooling tower makeup. Batch water is used to control dust in the mixing of the raw materials for glass and is evaporated in the furnace.

(4) Treatment in the automotive glass tempering subcategory. In the automotive glass tempering subcategory no treatment is presently practiced in the industry. To meet the limitations mentioned above, known coagulation and sedimentation technologies-from other industries will be necessary. The effluent quality from a typical plant using the recommended best practicable control technology currently available will be approximately 25 mg/1. Although the recommended limitations do not assume any oil removal, coagulation and sedimentation should remove a portion of the oil and result in an effluent concentration of less than the 13 mg/l of oil.

In addition to the technologies described for the 1977 limitations, the 1983 limitations for the automotive glass tempering subcategory will require diatomaceous earth filtration. Waste solids will be disposed of in a landfill. Effluent oil and suspended solids should be reduced to well below the 5 mg/l used to determine the limitations. However, no data is available to suggest a lower value. Sand filtration may also be able to achieve the limitations above. Some development by the industry will be necessary to determine the best alternative.

(5) Treatment in the automotive glass lamination subcategory. The best practicable control technology currently available for the windshield fabrication subcategory represents technology presently practiced by some plants in the industry. This technology is a modification of the post lamination washer sequence to provide a continuously recycling initial hot water rinse, oil removal by centrifugation of the recirculating hot rinse water, recycle of oil back to the process, and treatment of the post lamination rinse waters by gravity oil separation.

The best available technology economically achievable for the windshield fabrication subcategory is diatomaceous earth filtration in addition to the best practicable control technology currently available. The overall reduction for these technologies will be over 99 percent for oil, and 80 percent for suspended solids for a typical plant. Further reduction of COD over the 1977 levels was considered not to be economically achievable.

With the exception of the plate glass subcategory, the standards of performance for new sources are the same as the 1983 limitations requiring the best available technology economically achievable. New sources in the plate glass subcategory should achieve no discharge of process waste water pollutants to navigable waters. This regulation will most probably prevent the construction of any new plate glass plants. The float process can produce a glass of equal quality more

economically and with almost no water pollution. For this reason, the no discharge effluent limitations attainable for new float glass manufacturing sources should also be applied to new plate glass manufacturing sources.

(vi) Cost estimates for control of waste water pollutants in the glass manufacturing category. The costs and energy requirements associated with tho control and treatment technologies have been considered. The costs for inplant controls are largely those associated with capital investment for process and equipment modifications and are minimal when compared to total plant investment. It is estimated that the invest-ment costs of achieving the 1977 limitations by all plants in the industry is less than \$900.000 excluding costs of additional land acquisition. The costs of achieving the 1983 level is estimated to be an additional \$2,300,000 over the 1977 level.

Added energy requirements for the treatment technologies recommended for the subcategories producing glass are less than 1 percent of the daily energy requirements for a typical plant. It is less than 10 percent for automotive glass fabrication plants. The larger percentago is not due to higher energy requirements for treatment, but because of lower overall energy requirements of the fabrication plants.

(vii) Establishing daily maximum limitations. The daily maximum limitations for the effluent characteristics for each subcategory are no more than 2.0 times the 30 day limitations. These limitations were based on an analysis of the data gathered during the preparation of the Development Document.

(viii) Non-water quality environmental impact. The principal non-water quality environmental impact attributable to the control and treatment technologies proposed is disposal as a solid waste of the sludge generated in the various sedimentation and filtration technologies. With the exception of the plate glass subcategory, the volume of sludge generated is small. In the solid tempered automotive glass subcategory the typical volume produced is estimated to be 0.38 cu m/day (13.5 cu ft/day). Where diatomaceous earth filters are used, the estimated production of solid wasto is less than 0.23 cu m/day (8 cu ft/day). No significant addition to plate glass solid wastes will result from the recommended technologies. All of the sludges resulting from the flat glass segment are innocuous and should require only minimal custodial care in disposal sites.

(ix) Economic impact analysis. A study conducted by EPA has concluded that the proposed elluent limitations will not seriously threaten the economic viability of the Flat Glass Industry. In fact, there will be no production, employment, community, balance of trade or industry growth effects due to the proposed elluent limitations. Price increases ranging from 0.0 to the 0.4 percent are expected to be reflected in almost negligible price increases.

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The report entitled "Development Document for Proposed Effluent Limitations Guidelines and New Source Performance Standards for the Flat Glass Segment of the Glass Manufacturing Point Source Category" details the analvsis undertaken in support of the regulations being proposed herein and is available for inspection in the EPA Information Center, Room 227, West Tower, Waterside Mall, Washington, D.C., at all EPA regional offices, and at State water pollution control offices. A supplementary analysis prepared for EPA of the possible economic effects of the proposed regulations is also available for inspection at these locations. Copies of both of these documents are being sent to persons or institutions affected by the proposed regulations, or who have placed themselves on a mailing list for this purpose (see EPA's Advance Notice of Public Review Procedures, 38 FR 21202, August 6, 1973). An additional limited number of copies of both reports are available. Persons wishing to obtain a copy may write the EPA Information Center, Environmental Protection Agency, Wash-ington, D.C. 20460, Attention: Mr. Philip B. Wisman.

(c) Summary of public participation. Prior to this publication, the agencies and groups listed below were consulted and given an opportunity to participate in the development of effluent limitations guidelines and standards proposed for the glass manufacturing category. All participating agencies have been informed of project developments. An initial draft of the Development Document was sent to all participants and comments were solicited on that report. The following are the principal agencies and groups consulted: (1) Effluent Standards and Water Quality Information Advisory Committee (established under section 515 of the Act); (2) All State and U.S. Territory Pollution Control Agencies: (3) Ohio River Valley Sanitation Commission: (4) New England Interstate Water Pollution Control Commission; (5) Delaware River Basin Commission; (6) Hudson River Sloop Restoration, Inc.; (7) Conservation Foundation; (8) Environmental Defense Fund, Inc.; (9) Natural Resources Defense Council; (10) The American Society of Civil Engineers; (11) Water Pollution Control Federa-tion; (12) National Wildlife Federation; (13) The American Society of Mechanical Engineers; (14) U.S. Department of Commerce; (15) U.S. Department of the (17) PPG Industries, Inc.; (18) Libbey-Owens-Ford Company; (19) ASG Industries, Inc.; (20) Glass Containers Manufacturers Institute; (21) C. E. Glass Co.; (22) Fourco Glass Company; (23) Guardian Industries; (24) Safelite Industries; (25) Shatterproof Glass Cor-poration; (26) Chrysler Corp.; (27) Safetee Glass Co. Inc.; and (28) United States Water Resources Council.

The following organizations responded with comments: (1) ASG Industries Inc.; (2) Libbey-Owens-Ford Company; (3) Ford Motor Company; (4) PPG Indus-

tries, Inc.; (5) Illinois Environmental Protection Agency; (6) Delaware River Basin Commission; (7) Department of Commerce; (8) California State Water Resources Control Board; (9) New York State Department of Environmental Conservation; (10) Texas Water Quality Board; (11) Pennsylvania Department of Environmental Resources; and (12) U.S. Department of the Interior.

The primary issues raised in the development of these proposed effluent limitations guidelines and standards of performance and the treatment of these issues herein are as follows:

(1) A general criticism was made on the exclusion of auxiliary wastes, such as noncontact cooling water, boller water treatment, etc., from the guidelines. This exclusion was said to make the application of guidelines difficult when issuing discharge permits. EPA considered this problem when the study was initiated. However, at that time it was decided that since these auxiliary wastes are common to many industries, it would be appropriate to apply separate guidelines for these generic wastes. The size and extent of these waste waters would require more extensive study than was possible in the development of the initial guidelines.

(2) Another comment was that in some cases not all products from multiproduct plants were covered. Guidelines will be prepared later for all products not presently covered by the proposed regulations in this document.

(3) A common question was the technical feasibility of the 1983 no discharge standard for float glass. Objection was made to the suggestion that float glass wash water could be disposed of by use in batch make-up, and as make-up for cooling water. It was claimed that oil and dissolved solids in the wash water would interfere with cooling tower operation. Also, water can not always be added to the batch make-up because in some cases liquid caustic is used. These comments were considered carefully and are answered in the Development Document as follows: (i) The amount of oil found in the wash water during the sampling program carried out by EPA was very low, ranging from 1 to 3 mg/l and should not cause any problem in the cooling tower; (ii) The dissolved solids content in cooling water will increase because of the addition of wash water, but the cooling tower make-up water should result in only a slightly higher blowdown rate; and (iii) during the in-dustry survey, EPA did not find any instance of the use of liquid caustic in glass batch make-up; however, if liquid caustic must be used when soda ash is not available, the use of dry caustic would permit the addition of the wash water to the batch make-up.

(4) The elimination of detergents from float glass washer by 1977 was objected to by the float glass industry. The main reason was the necessity for higher quality glass in the light and heat reflecting glass manufacturing operations. While EPA recognizes this need, the

guidelines refer only to the manufacture of float glass. If subsequent detergent washing is needed, this can be carried out during fabrication of the special products mentioned. EPA is now developing guidelines for those products not included in the regulations proposed in this document.

(5) Industry also claimed that the cost of implementing the proposed regulations are much higher than reported by EPA in the Development Document. The EPA cost figures have been developed from the best available information supplied by industry and the literature. EPA has reexamined the cost data and economic impacts and found that these data substantiate the reasonableness of the proposed regulations. No alternative cost breakdown was supplied by the industry.

(6) The regulations for the plate glass manufacturing subcategory were criticized as the polishing of plate glass may not be carried out simultaneously with grinding. This results in much higher loadings to the treatment systems during certain times, allegedly resulting in higher final effuent concentrations. Also the raw waste loadings vary depending on the glass thickness being ground. When thinner glass is being ground, the raw waste loadings will be higher than during manufacture of thicker glass. The average raw waste loadings reported by EPA in the Development Documents were questioned. The data reported and standard's numbers recommended by EPA are from averages of data supplied by industry. Simple coagulation and sedimentation in lagoons of proper design will handle surges in raw waste loads and volumes.

(7) It was claimed that consultant's studies have shown that multi-stage lagoons (as suggested by EPA) can not attain 30 mg/l of suspended solids in the final effuent, with concentrations of 50 to 100 mg/l claimed to be more realistic. It must be pointed out that no plant within the industry is practicing exemplary treatment. Lagoons often are overloaded, affected by wind action (due to poor design) and lack adequate routine removal of settled solids. During periods of good operation, effluent concentrations of less than 30 mg/l are obtained. With proper operation and modest design changes this effuent concentration can be attained routinely.

Interested persons may participate in this rulemaking by submitting written comments in triplicate to the EPA Information Center, Environmental Protection Agency, Washington, D.C. 20460, Attention: Mr. Philip B. Wisman. Comments on all aspects of the proposed regulations are solicited. In the event comments are in the nature of criticisms as to the adequacy of data which is available, or which may be relied upon by the Agency, comments should identify and, if possible, provide any additional data which may be available and should indicate why such data is essential to the development of the regulations. In the event comments address the approach taken by the agency in establishing an effluent limitation guideline or standard of performance. EPA solicits suggestions as to what alternative approach should be taken and why and how this alternative better satisfies the detailed requirements of sections 301, 304(b), 306, and 307 of the Act.

A copy of all public comments will be available for inspection and copying at the EPA Information Center, Room 227, West Tower, Waterside Mall, 401 M Street SW., Washington, D.C. A copy of preliminary draft contractor reports, the Development Document and economic study referred to above, and certain supplementary materials supporting the study of the industry concerned will also be maintained at this location for public review and copying. The EPA information regulation, 40 CFR Part 2, provides that a reasonable fee may be charged for copying.

All comments received by November 16, 1973, will be considered. Steps previously taken by the Environmental Protection Agency to facilitate public response within this time period are outlined in the advance notice concerning public review procedures published on August 6, 1973 (38 FR 21202).

Dated October 3, 1973.

JOHN QUARLES, Acting Administrator.

426---EFFLUENT LIMITATIONS PART GUIDELINES FOR EXISTING SOURCES AND STANDARDS OF PERFORMANCE AND PRETREATMENT STANDARDS FOR NEW SOURCES FOR THE GLASS MANU-FACTURING POINT SOURCE CATEGORY

Subpart B—Sheet Glass Manufacturing Subcategory

- Sec.
- 426.10 Applicability; description of sheet glass manufacturing subcategory.
- 426.11 Specialized definitions.
- 426.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 426.13 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.
- 426.14 Standards of performance for new sources.
- 426.15 Pretreatment standards for new sources.

Subpart C—Rolled Glass Manufacturing Subcategory

- 426.20 Applicability; description of rolled glass manufacturing subcategory. Specialized definitions.
- 426.21
- Effluent limitations guidelines rep-426.22 resenting the degree of effluent reduction attainable by the application of the best practicable control technology currently available.
- 426.23 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available tech-nology economically achievable.
- 426.24 Standards of performance for new sources.
- 426.25 Pretreatment standards for new sources.

Subpart D-Plate Glass Manufacturing Subcategory

Sec.

- 426.30 Applicability; description of plate glass manufacturing subcategory. Specialized definitions. 426.31
- Effluent limitations guidelines rep-426.32 resenting the degree of effluent reduction attainable by the applica-tion of the best practicable control technology currently available.
- 426.33 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. 426.34 Standards of performance for new
- sources. 426.35 Pretreatment standards for new sources.
 - Subpart E—Float Glass Manufacturing Subcategory
- Applicability: description of float 426.40 glass manufacturing subcategory. 426.41 Specialized definitions.
- 426.42 Effluent limitations guidelines representing the degree of effluent re-duction attainable by the application of the best practicable control technology currently available.
- 426.43 Effluent limitations guidelines representing the degree of effluent re-duction attainable by the application of the best available technology economically achievable.
- 426.44 Standards of performance for new sources. 426.45 Pretreatment standards for new
- sources.

–Automotive Glass Tempering Subcategory Subpart F-

- 426.50 Applicability; description of automotive glass tempering subcategory. 426.51 Specialized definitions.
- Effluent limitations guidelines repre-426.52 senting the degree of effluent reduction attainable by the appli-cation of the best practicable con-426.53 Effluent limitations guidelines repre-
- senting the degree of effluent reduction attainable by the application of the best available technology economically achievable. Stanards of performance for new 426.54
- sources. 426.55 Pretreatment standards for new
- sources.
 - Subpart G—Automotive Glass Lamination Subcategory
- 426.60 Applicability; description of auto-motive glass lamination subcategory.
- 426.61 Specialized definitions.
- 426.62 Effluent limitations guidelines representing the degree of effluent re-duction attainable by the application of the best practicable control technology currently available.
- 426.63 Effluent limitations guidelines representing the degree of effluent re-duction attainable by the application of the best available technology economically achievable.
- 426.64 Standards of performance for new sources.
- 426.65 Pretreatment standards for new sources.
- Sheet Glass Manufacturing Subpart B-Subcategory
- § 426.10 Applicability; description of sheet glass manufacturing subcategory.

The provisions of this subpart are applicable to discharges resulting from the

process in which several mineral ingredients, sand, soda ash, limestone, dolomite, cullet and other ingredients, are mixed, melted in a furnace, and drawn vertically from a melting tank to form sheet glass.

§ 426.11 Specialized definitions

For the purposes of this subpart:

(a) The term "process waste water" shall mean any water which, during the manufacturing process, comes into di-rect contact with any raw material, intermediate product, by-product or prod-uct used in or resulting from the manu-

facture of sheet glass. (b) The term "process waste water pollutants" shall mean pollutants contained in process waste waters.

(c) The term "cullet" shall mean any broken glass generated in the manufacturing process.

§ 426.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged after application of the best practicable control technology currently available by a point source subject to the provisions of this subpart: no discharge of process waste water pollutants to navigable waters.

§ 426.13 Effluent limitations guidelines representing the degree of effluent reduction attainable by the applica-tion of the best available technology economically achievable.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged after application of the best technology economically available achievable by a point source subject to the provisions of this subpart: no discharge of process waste water pollutants to navigable waters.

§ 426.14 Standards of performance for new sources.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged reflecting the greatest degree of effluent reduction achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants by a new point source subject to the provisions of this subpart: No discharge of process waste water pollutants to navigable waters.

§ 426.15 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act, for a source within the sheet glass manufacturing subcategory which is an industrial user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act. if it were to discharge pollutants to navigable waters), shall be the standard set forth in Part

128, 40 CFR, except that for the purposes of this section, § 128.133, 40 CFR shall be amended to read as follows: "In addition to the prohibitions set forth. in § 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works by a major contributing industry shall be the standard of performance for new sources specified in § 426.14, 40 CFR Part 426. provided that, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall be corresponding. reduced for that pollutant."

Subpart C—Rolled Glass Manufacturing Subcategory

§ 426.20 Applicability; description of rolled glass manufacturing subcategory.

The provisions of this subpart are applicable to discharge resulting from the process in which several mineral ingredients, sand, soda ash, limestone, dolomite, cullet, and other ingredients are mixed, melted in a furnace, and cooled by rollers to form rolled glass.

§ 426.21 Specialized definitions.

For the purposes of this subpart:

(a) The term "process waste water" shall mean any water which, during the manufacturing process, comes into direct contact with any raw material, intermediate product, by-product or product used in or resulting from the manufacturing and processing of rolled glass.

(b) The term "process waste water pollutants" shall mean pollutants contained in process waste waters. (c) The term "cullet" shall mean any

(c) The term "cullet" shall mean any broken glass generated in the manufacturing process.

§ 426.22 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged after application of the best practicable control technology currently available by a point source subject to the provisions of this subpart: no discharge of process waste water pollutants to navigable waters.

§ 426.23 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the hest available technology economically achievable.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged after application of the best available technology economically achievable by a point source subject to the provisions of this subpart: no discharge of process waste water pollutants to navigable wâters.

§ 426.24 Standards of performance for new sources.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged reflecting the greatest degree of effluent reduction achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants by a new point source subject to the provisions of this subpart: no discharge of process waste water pollutants to navigable waters.

§ 426.25 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act, for a source within the rolled glass manufacturing subcategory which is an industrial user of a publicly owned treatment works. (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to navigable waters), shall be the standard set forth in Part 128, 40 CFR, except that for the purposes of this section, § 128.133, 40 CFR shall be amended to read as follows: "In addition to the prohibitions set forth in § 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works by a major contributing industry shall be the standard of performance for new sources specified in § 426.24, 40 CFR Part 426, provided that, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall be correspondingly reduced for that pollutant."

Subpart D—Plate Glass Manufacturing Subcategory

§ 426.30 Applicability; description of plate glass manufacturing subcategory.

The provisions of this subpart are applicable to discharge resulting from the process in which several mineral ingredients, sand, soda ash, limestone, dolomite, cullet and other ingredients are melted in a furnace, pressed between rollers, and finally ground and polished to form plate glass.

§ 426.31 Specialized definitions.

For the purposes of this subpart:

(a) The term "process waste water" shall mean any water which, during the manufacturing process, comes into direct contact with any raw material, intermediate product, by-product or product used in or resulting from the manufacturing and processing of plate glass.

(b) The term "process waste water pollutants" shall mean pollutants contained in process waste waters.

(c) The term "cullet" shall mean any broken glass generated in the manufacturing process. (d) The following abbreviations shall have the following meanings: (1) "TSS" shall mean total suspended nonfilterable solids; (2) "COD" shall mean chemical oxygen demand; (3) "kg" shall mean kilogram(s); (4) "kkg" shall mean 1000 kilograms; and (5) "lb" shall mean pound(s).

§ 426.32 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currenly available.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged after application of the best practicable control technology currently available by a point source subject to the provisions of this subpart:

Efluent

characteristic	Effluent limitations
TSS	Maximum for any one day 2.76 kg/kkg of product (5.52 lb/ton).
	Maximum average daily values for any period of thirty concecutive days 1.38 kg/kkg of product (2.76 lb/ton).
COD	Maximum for any one day 0.90 kg/kkg of product (1.80 lb/ton).
	Maximum average daily values for any period of thirty consecutive days, 0.45 kg/kkg of product (0.90 lb/ton).
рН	Within the range of 6.0 to 9.0.

§ 426.33 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged after application of the best available technology economically achievable by a point source subject to the provisions of this subpart:

Efluent characteristic	Effluent Nmitations
TSS	Maximum for any one day 0.045 kg/kkg of product
	(0.030 lb/ton).
COD	Maximum for any one day 0.03 kg/kkg of product
	(0.018 lb/ton).
pH	Within the range of 6.0 to 9.0.

§ 426.34 Standards of performance for new sources.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged reflecting the greatest degree of effluent reduction achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants by a new point source subject to the provisions of this subpart: no discharge of process waste water pollutants to navig- § 426.42 Effluent limitations guidelines able waters. representing the degree of effluent

§ 426.35 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act, for a source within the plate glass manufacturing subcategory which is an industrial user of a publicly owned treatment works, (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to navigable waters) shall be the standard set forth in 40 CFR Part 128. Section 128.133 shall be amended to read as follows: "In addition to the prohibitions set forth in § 128.131 the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works by a major contributing industry shall be the standard of performance for new sources specified in § 426.34, 40 CFR Part 426, provided that, if the publicly owned 'treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall be correspondingly reduced for that pollutant."

Subpart E—Float Glass Manufacturing Subcategory

§ 426.40 Applicability; description of float glass manufacturing subcategory.

The provisions of this subpart are applicable to discharges resulting from the process in which several mineral ingredients, sand, soda ash, limestone, dolomite, cullet, and other ingredients are mixed, melted in a furnace, and floated on a molten tin bath to produce float glass.

§ 426.41 Specialized definitions.

For the purpose of this subpart:

(a) The term "process waste water" shall mean any water which, during the manufacturing process, comes into direct contract with any raw material, intermediate product, by-product or product used in or resulting from the manufacturing and processing of float glass.

(b) The term "process waste water pollutants" shall mean pollutants contained in process waste waters.

(c) The term "cullet" shall mean any broken glass generated in the manufacturing process.

(d) The term "oil" shall mean any substances extractable by the standard procedure using petroleum ether.

(e) The term "phosphorous" shall mean total phosphorous.

(f) The following abbreviations shall have the following meanings: (1) "TSS" shall mean total suspended nonfilterable solids; (2) "COD" shall mean chemical oxygen demand; (3) "g" shall mean gram(s); (4) "kkg" shall mean 1,000 kilograms; and (5) "lb" shall mean pound(s). 26.42 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged after application of the best practicable control technology currently available by a point source subject to the provisions of this subpart.

characteristic limitations n TSS Maximum for any one day 2.0 g/kkg of product (0.004 lb/ton). COD Maximum for any one day 2.0 g/kkg of product (0.004 lb/ton). OII Maximum for any one day 0.7 g/kkg of product (0.0014 lb/ton). Hosphorus Maximum for any one day 0.05 g/kkg of product (0.001 lb/ton). Maximum for any one day 0.05 g/kkg of product (0.001 lb/ton).		the provisions	of this subpart:
2.0 g/kkg of product (0.004 lb/ton). COD Maximum for any one day 2.0 g/kkg of product (0.004 lb/ton). Oll Maximum for any one day 0.7 g/kkg of product (0.0014 lb/ton). Hosphorus Maximum for any one day 0.05 g/kkg of product (0.0011 lb/ton). Hosphorus Within the range of 6.0 to	, 		
2.0 g/kkg of product (0.004 lb/ton). Oll Maximum for any one day 0.7 g/kkg of product (0.0014 lb/ton). d Phosphorus Maximum for any one day 0.05 g/kkg of product (0.0001 lb/ton). e pH Within the range of 6.0 to		TSS	2.0 g/kkg of product (0.004
- 0.7 g/kkg of product (0.0014 lb/ton). d Phosphorus Maximum for any one day 0.05 g/kkg of product (0.0001 lb/ton). c pH Within the range of 6.0 to	- r	COD	2.0 g/kkg of product (0.004
d Phosphorus Maximum for any one day 0.05 g/kkg of product (0.0001 lb/ton). PH Within the range of 6.0 to			0.7 g/kkg of product (0.0014 lb/ton).
		Phosphorus	0.05 g/kkg of product
	_ f _	рH	Within the range of 6.0 to

§ 426.43 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged after application of the best available technology economically achievable by a point source subject to the provisions of this subpart: no discharge of process waste water pollutants to navigable waters.

§ 426.44 Standards of performance for new sources.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged reflecting the greatest degree of effluent reduction achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants by a new point source subject to the provisions of this subpart: no discharge of process waste water pollutants to navigable waters.

§ 426.45 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act, for a source within the float glass manufacturing subcategory which is an industrial user of a publicly owned treatment works, (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to navigable waters), shall be the standard set forth in 40 CFR, Part 128, except that for the purposes of this section, § 128.133, 40 CFR shall be amended to read as follows: "In addition to the prohibitions set forth in § 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works by a major contributing industry shall be the standard of performance for new sources specified in § 426.44, 40 CFR Part 426, provided that, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works should be correspondingly reduced for that pollutant."

Subpart F—Automotive Glass Tempering Subcategory

§ 426.50 Applicability; description of the automotive glass tempering subcategory.

The provisions of this subpart are applicable to discharges resulting from the processes in which glass is cut and then passed through a series of processes that grind and polish the edges, bend the glass, and then temper the glass to produce side and back windows for motor vehicles.

§ 426.51 Specialized definitions.

For the purposts of this subpart:

(a) The term "process waste water" shall mean any water which, during the manufacturing process, comes into direct contact with any raw material, intermediate product, by-product or product used in or resulting from the manufacturing and processing of tempered automotive glass.

(b) The term "process waste water pollutants" shall mean pollutants contained in process waste waters.

(c) The term "tempering" shall mean the process whereby glass is heated near the melting point and then rapidly cooled to increase its mechanical and thermal endurance.

(d) The term "oil" shall mean any substances extractable by the standard procedure using petroleum ether.

(e) The following abbreviations shall have the following meanings: (1) "BOD5" shall mean biochemical oxygon demand measured after a five day incubation period; (2) "TSS" shall mean total suspended nonfilterable solids; (3) "g" shall mean gram(s); (4) "sq m" shall mean square meter; (5) "lb" shall mean pound(s); and (6) "sq ft" shall mean square feet.

§ 426.52 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged after application of the best practicable control technology currently available by a point source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations	ì
TSS	Maximum for any one day	1
	1.95 g/sq m of product	
•	(0.40 lb/1,000 mg ft).	1
	Maximum average of daily	
	values for any period of	
	thirty consecutive days	
	1.22 g/sq m of product	
· · ·	(0.25 lb/1,000 sq ft).	,
BOD	Maximum for any one day	
	0.73 g/sq m of product	,
	(0.15 lb/1,000 sq ft).	
Oil	Maximum for any one day	1
•	0.64 g/sq m of product	
	(0.13 1b/1,000 sq ft).	1
рнн	Within the range of 6.0 to	-
	9.0.	-

§ 426.53 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged after application of the best available technology economically achievable by a point source subject to the provisions of this subpart:

Effluent	Effluent
characteristic	
TSS	Maximum for any one day
*	0.24 g/sq m of product
	(0.05 lb/1,000 sq ft).
BOD`	Maximum for any one day
	0.49 g/sq m of product
	(0.10 lb/1,000 sq ft).
Oil	Maximum for any one day
	0.24 g/sq m of product
	(0.05 lb/1,000 sq ft).
pH	Within the range of 6.0 to
	9.0.

§ 426.54 Standards of performance for new sources.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged reflecting the greatest degree of effluent reduction achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants by a new point source subject to the provisions of this subpart:

Effluent charasteristic	Efluent limitations
TSS	Maximum for any one day 0.24 g/sq m of product
BOD	(0.05 lb/1,000 sq ft). Maximum for any one day 0.49 g/sq m of product (0.10 lb/1,000 sq ft).
Oi1	Maximum for any one day 0.24 g/sq m of product
pH	(0.05 lb/1,000 sq ft). Within the range of 6.0 to 9.0

§ 426.55 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act, for a source

subcategory which is an industrial user of a publicly owned treatment works, (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to navigable waters), shall be the standard set forth in 40 CFR Part 128, except that for the purposes of this section, § 128.133 shall be amended to read as follows: "In addition to the prohibitions set forth in § 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works by a major contributing industry shall be the standard of performance for new sources specified in § 426.54, 40 CFR Part 426, provided that, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall be correspondingly reduced for that pollutant."

Subpart G-Automotive Glass Lamination Subcategory

§ 426.60 Applicability; description of automotive glass lamination subcategory.

The provisions of this subpart are applicable to discharges resulting from the processes which laminate a plastic sheet between two layers of glass, and which prepare the glass for lamination such as cutting, bending, and washing, to produce laminated automotive glass.

§ 426.61 Specialized definitions.

For the purposes of this subpart:

(a) The term "process waste water" shall mean any water which, during the manufacturing process, comes into direct contact with any raw material, intermediate product, by-product or product used in or resulting from the manufacturing and processing of laminated automotive glass.

(b) The term "process waste water pollutants" shall mean pollutants contained in process waste waters.

(c) The term "oil" shall mean any substances extractable by the standard procedure using petroleum ether.

(d) The term "phosphorous" shall mean total phosphorous.

(e) The following abbreviations shall have the following meanings: (1) "TSS" shall mean total suspended nonfilterable solids; (2) "g" shall mean gram(s); (3) "sq m" shall mean square meter; (4) "lb" shall mean pound(s); (5) "sq ft" shall mean square feet; and (6) "COD" shall mean chemical oxygen demand.

§ 426.62 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be diswithin the automotive glass tempering charged after application of the best

practicable control technology currently available by a point source subject to the provisions of this subpart:

Effluent characteristic	Effluent limitations
T3S	Maximum for any one day 4.4 g/sq m of product
COD	(0.90 lb/1,090 sq. ft). Maximum for any one day 4.9 g/sq m of product
011	(1.0 lb/1,000 sq ft). Maximum for any one day 1.76 g/sq m of product
Phosphorous _	(0.36 lb/1,000 sq ft). Maximum for any one day 0.98 g/sq m of product
Ph	(0.20 lb/1,000 sq ft). Within the range of 6.0 to 9.0

§ 426.63 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged after application of the best available technology economically achievable by a point source subject to the provisions of this subpart:

-	-
Efluent	Effluent
charasteristic	limitations
TSS	Maximum for any one day 0.83 g/sq m of product
	(0.18 lb./1,000 sq ft).
COD	Maximum for any one day
	4.9 g/sq m of product
	(1.0 lb/1,000 sq ft).
Oil	Maximum for any one day
	0.83 g/sq m of product
	(0.18 lb/1,000 sq ft).
Phosphorous _	Maximum for any one day
	0.20 g/sq m of product
	(0.04 lb/1,000 sq ft).
рН	Within the range of 6.0 to
	9.0.

§ 426.64 Standards of performance for new sources.

The following limitations constitute the quantity or quality of pollutants or pollutant properties which may be discharged reflecting the greatest degree of effluent reduction achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable a standard permitting no discharge of pollutants by a new point source subject to the provisions of this subpart:

Effluent charasteristic	Effluent limitations
TSS	Maximum for any one day 0.83 g/sq m of product
COD	(0.18 lb/1,000 sq ft). Maximum for any one day 4.9 g/sq m of product
ou	(1.0 lb/1,000 sq ft). Maximum for any one day
Phosphorus	0.83 g/sq m of product (0.18 lb/1,000 sq ft). Maximum for any one day
рH	0.20 g/sq m of product (0.04 lb/1,000 sq ft). Within the range of 6.0 to 9.0.
	<i>G</i> . <i>V</i> .

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§ 426.65 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act, for a source within the automotive glass lamination subcategory which is an industrial user of a publicly owned treatment works, (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to navigable

waters), shall be the standard set forth in Part 128, 40 CFR, except that for the purposes of this section, § 128.133, 40 CFR shall be amended to read as follows: "In addition to the prohibitions set forth in § 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works by a major contributing industry shall be the standard of performance for new sources specified in

§ 426.64, 40 CFR, Part 426, provided that, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall be correspondingly reduced for that pollutant."

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