



The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
Department of Environmental Quality Engineering

RUSSELL SYLVA
Commissioner
JOHN J. HIGGINS
Regional Environmental Engineer

Western Region

436 Dwight Street, Springfield, Mass. 01103

(413) 785-5327

October 7, 1985

Spalding Corporation
425 Meadow Street
Chicopee, Massachusetts 01013

Attention: George A. Dickerson
President

1 1985
Re: PVAPCD-Chicopee
Application PV-85-IF-019
Regulation 310 CMR 7.18(17)
Spalding Corp.
RACT Compliance Plan

Dear Sir:

On August 28, 1985, the Department of Environmental Quality Engineering received a document titled Process Engineering Technologies to Reduce Volatile Organic Compound Emissions for Regulatory Compliance With Mass. D.E.Q.E. Regulation 310 CMR 7.18 (17): RACT. Prepared for Spalding Corp., 425 Meadow Street, Chicopee, Massachusetts 01013, by Gary P. Alicandro, E. P., Environmental Engineer. This document presents a plan whereby Spalding Corp. will reduce their Volatile Organic Compound (VOC) emissions sufficiently to come into compliance with the subject Regulation. The document, in its present form, has been available for public perusal and comment for a period of 30 days beginning on August 31 when a public notice appeared in the Holyoke Transcript-Telegram. The comment period ended at midnight September 29, 1985.

Regulation 310 CMR 7.18(17) states in part:

(17) Reasonably Available Control Technology (RACT)

- (a) On or after December 31, 1983 no person owning, leasing, or controlling the operation of any facility with the potential to emit 100 tons or more per year of volatile organic compounds, unless such facility is specifically regulated and required to reduce its emissions by another section of 310 CMR 7.18, shall fail to install, and thereafter operate in compliance with, Reasonably Available Control Technology except as provided in 310 CMR 7.18(17)(b).
- (b) The provisions of 310 CMR 7.18(17)(a) shall not apply to persons who document to the satisfaction of the Department that the subject facility cannot feasibly meet the Reasonably Available Control Technology requirement by December 31, 1983 and who submit to the Department by December 31, 1982 a plan which demonstrates



COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL QUALITY

The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
Department of Environmental Quality Engineering

Waltham Region

100 South Street, Waltham, MA 01981

(617) 252-2322

October 3, 1982

100

Spalding Corporation
437 Madison Street
Chicago, Massachusetts 01013
Attention: George A. Dickerson
President

Re: FVWCD-Chicago
Application FV-82-19-019
Regulation 210 CMR 7.18(1)(2)
Spalding Corp.
WACT Compliance Plan

On August 23, 1982, the Department of Environmental Quality Engineering received a document titled Process Engineering Technology to Reduce Volatile Organic Compound Emissions for Regulatory Compliance With Mass. 7.18(1)(2) Regulation 210 CMR 7.18(1)(2). Prepared for Spalding Corp., 437 Madison Street, Chicago, Massachusetts 01013, by Gary P. Alexander, E. P., Environmental Engineer. This document presents a plan whereby Spalding Corp. will reduce their Volatile Organic Compound (VOC) emissions sufficiently to come into compliance with the subject regulation. The document, in its present form, has been available for public review and comment for a period of 30 days beginning on August 31 when a public notice appeared in the Waltham Transcript-Journal. The comment period ended at midnight September 29, 1982.

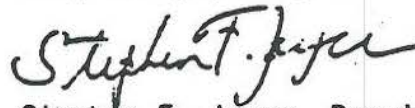
Regulation 210 CMR 7.18(1)(2) states in part:
7.18(1)(2) Reasonably Available Control Technology (RACT).
(a) On or after December 31, 1983 no person owning, leasing or controlling the operation of any facility with the potential to emit 100 tons or more per year of volatile organic compounds, and for each facility is specifically regulated and required to meet such its emissions by another section of 210 CMR 7.18, shall be required to install, and thereafter operate in compliance with, the best Available Control Technology except as provided in 210 CMR 7.18(1)(2)(b). The provisions of 210 CMR 7.18(1)(2) shall not apply to persons who, pursuant to the authorization of the Department, the subject facility cannot feasibly meet the Reasonably Available Control Technology requirement by December 31, 1983 and who submit to the Department by December 31, 1985 a plan which demonstrates

2. that Spalding achieve an overall emission rate for their facility which will yield a "potential credit" of less than 100 tons per year.
3. that Spalding submit to the Department, progress reports detailing increments of progress, and actual emissions each quarter, beginning April 1, 1985.
4. that Spalding agree to perform compliance testing if requested to by the Department.
5. that Spalding operate all equipment in compliance with all applicable "Regulations".

An Environmental Notification Form, for air quality control purposes, was not required for this action since it is categorically exempt pursuant to the Regulations Governing the Preparation of Environmental Impact Reports adopted by the Secretary of Environmental Affairs. This action has been determined to cause no significant damage to the environment.

If there are any questions regarding this approval please contact David Howland or John Matteson of this office.

Very truly yours,



Stephen F. Joyce, Deputy
Regional Environmental Engineer
Air, Hazardous and Solid Materials
Western Region

JHM/ers

cc:R. Donaldson - DEQE /Boston
Chicopee Health Department
M. Brisbois, Spalding Corp..
G. Alicandro, Spalding Corp.



The Commonwealth of Massachusetts

Executive Office of Environmental Affairs
Department of Environmental Quality Engineering
Western Region



DANIEL S. GREENBAUM
Commissioner

JOHN J. HIGGINS
Regional Director

436 Dwight Street, Springfield, Mass. 01103

413-784-1100

July 12, 1989

Spalding Sports Worldwide
425 Meadow Street
P.O. Box 901
Chicopee, MA 01021-0901

Attention: George A. Dickerson
President

Re: PVAPCD - Chicopee
Application No. PV-85-IF-019
Regulation 310 CMR 7.18(17)
Spalding - RACT Compliance Plan

AMENDMENT TO CONDITIONAL APPROVAL

Dear Sir:

A conditional approval for Spalding Sports Worldwide's plan (Plan) for coming into compliance with Regulation 310 CMR 7.18 (17) Reasonably Available Control Technology (RACT) was issued by the Department of Environmental Quality Engineering (DEQE, Department) on October 7, 1985.

At that time the Department required Spalding to meet the following emission rates by September 30, 1986:

- (1) 0.0158 pounds VOC per dozen golf ball. ,
- (2) 0.0104 pounds VOC per golf club; and
- (3) 0.0013 pounds VOC per inflatable ball.

The Department acknowledges that on September 30, 1986, Spalding was in compliance with the emission rates stated above on a monthly basis. This approval will require Spalding to be in compliance with the emission rates on a daily (24 hour) basis.

It should be noted that the inflatable ball department has been permanently eliminated from Spalding's Chicopee facility. Should Spalding ever intend to start up such an operation in the Commonwealth in the future a new source review would be required under Regulation 310 CMR 7.02. The emissions attributed to the inflated ball department in 1982 were 52.1 tons of VOC.

Spalding has also met the requirement that VOC emissions from the tool room be reduced to the lowest practical level by the installation of four (4) Safety Kleen metal parts cleaning units. The units must be operated according to the manufacturer's procedures. The standard operating procedures are attached (Attachment No. 1). The 1982 emissions from the tool room were 6.5 tons.

Spalding Sports Worldwide - 2 -

The emissions from the Tool Room/Maintenance Department in 1982 were 7.1 tons of VOC. The compliance emissions from this Department is one (1) ton of VOC.

Spalding, in their document submitted on April 4, 1985, " Process Engineering Technologies to Reduce Volatile Organic Compound Emissions for Regulatory Compliance in accordance With Mass. D.E.Q.E. Regulation 310 CMR 7.18(17): R.A.C.T.", identified five (5) process modification advancements which were successful and several R&D technical projects which were being worked on at that time, which would be expected to bring the source into compliance with Regulation 310 CMR 7.18(17). How those developments affected Spalding's emissions are discussed in a separate confidential appendix (Appendix No. 1).

A public notice describing the Department's intention to approve the plan appeared in the Holyoke Transcript-Telegram on Saturday, August 31, 1985. Comments and testimony were requested in the public notice. None were received.

A public hearing was conducted on March 18, 1986 at the Department's Boston Office at One Winter Street, Boston, Massachusetts 10th floor Conference Room. No testimony was given at that time. A representative of EPA assured the Department that comments on the Plan and the conditional approval would be forthcoming.

Comments on the plan approval letter were issued by the United States Environmental Protection Agency (EPA), Region 1 office, on March 9, 1987.

A draft amendment to the October 7, 1985 Approval was issued by the Department on December 9, 1987, to make the approval conform to the March 9, 1987 comments by EPA. The revision establishes and requires the use of reasonably available control technology (RACT) to reduce volatile organic compound (VOC) emissions from certain processes at Spalding Corporation in Chicopee.

EPA has reviewed the proposed Plan Approval and supporting documents submitted on December 9, 1987, by DEQE regarding this RACT determination. EPA generally concurs with the DEQE's determination for reducing VOCs at Spalding Corporation. However, EPA believes that this RACT determination is not enforceable as written because of the emission limits, compliance date and record keeping and reporting requirements. EPA states that because of the foregoing facts, the RACT reductions may not be achieved.

The EPA, in the Federal Register, Volume 54, No.27, Friday, February 10, 1989, proposed to approve the proposed State Implementation Plan revision submitted

by the Commonwealth of Massachusetts. The intended effect of the action is to propose approval of a source-specific RACT determination made by the Commonwealth of Massachusetts in accordance with commitments of its approved 1982 Ozone Attainment Plan.

The purpose of these amendments to the October 7, 1985 conditional approval letter is to bring the approval into conformance with the requirements laid down by EPA in their February 10, 1989 comments.

Pursuant to the February 10, 1989 comments by EPA, the following amendments are added to the October 7, 1985 conditional approval letter:

1. For the purpose of specifically stating the date of compliance, the date of Spalding's initial formal compliance was September 30, 1986. The emission limits stated above were reached at that time. It should be noted that further reductions in emissions have been achieved. Spalding remains committed to reduce VOC emissions to the lowest possible level commensurate with maintaining the quality of their products.
2. Emission rates for each coating/paint will be calculated according to the attached method (Attachment No. 2) in terms of pounds of VOC emitted per gallon of coating (minus water and photochemically nonreactive solvents).
3. Emission rates will be reviewed by the Department and submitted to EPA for approval as part of the RACT determination. Each coating emission limit will be approved in writing by the EPA and will be stated in pounds of VOC per gallon of coating (minus water and photochemically nonreactive solvents) for each coating/painting process. A list of the enforceable RACT determination emission limits is included in Table No. 1 (Attachment No. 3) attached. Attachment No. 4 identifies each coating listed on Attachment No. 3 by name. This information is CONFIDENTIAL.
4. That Spalding maintain all coating formulations on site and made available to DEQE and/or EPA upon request.
5. That Spalding permit samples of the coatings to be taken from time to time by DEQE and/or EPA at their (DEQE and EPA) convenience. Compliance with the emission limits listed in Table 1 for each approved coating/paint will be determined by Reference Method 24 (or other equivalent methods approved by DEQE/EPA).
- 6A. That Spalding be in compliance with the emission limits stated above on a

continuous basis. Monthly reports will be submitted to the Department's Western Regional Office by the 10th of the following month detailing the following emission data for each day of the previous month; (1) the number of golf balls manufactured during the 24 hour period, (2) the type and amount of each approved coating used during that 24 hour period, (3) the emission rate for each coating used during that 24 hour period, (4) the emission rate for the golf balls made with each type of coating in terms of pounds of VOC's per dozen golf balls, (5) the average emission rate for the coatings used during that 24 hour period and (6) the average emission rate in pounds of VOCs per dozen golf balls made during that 24 hour period. A draft form is attached (Attachment No. 5).

Also, the weight and volume of the solvent, solids, water and photochemically nonreactive solvents content and the density of the coating, photochemically reactive and photochemically nonreactive solvents must be reported. These data are included as part of the draft record keeping form (Attachment No. 6).

Also, the record keeping form must include the transfer efficiency as the number of golf balls coated by a gallon of paint for each process.

6B. That Spalding report as described in condition No. 6, Paragraph A, for six (6) consecutive quarters of continuous compliance after initiation of the reporting process. Subsequently, the records must be maintained on site for 3 years, and quarterly reports will be submitted to the DEQE for excess emissions only.

7. That Spalding strip paint from finished golf balls found to be off-specification by a mechanical process only. No chemical process shall be used to strip paint from finished golf balls.

8. That Spalding use a vertical solvent rinse tank (tank associated with the spray booth) with an 7.4 ft² evaporative surface to dissolve and lift accumulated paint from the spindles.

9. No VOC, excluding water and photochemically nonreactive solvents, shall be used in the compression mold release system.

10. Spray guns and spray gun lines will be cleared by a dipping process.

11. Spalding's finish coating of golf clubs will be limited to "touch-up" application. Emissions attributed to "touch-up" are not to exceed one (1) ton of VOC per year.

Spalding Sports Worldwide - 5 -

Be advised that these amendments are to be considered part of the October 7, 1985, approval. Nothing in these amendments should be construed as in any way changing or limiting the provisos already contained in that approval unless specifically stated.

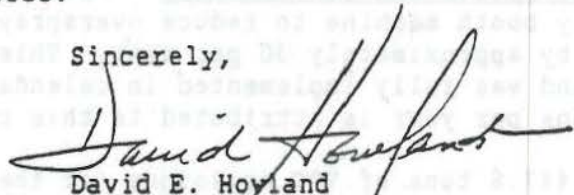
A violation of the conditions of this approval will be considered a violation of the "Regulations."

An Environmental Notification Form, for air quality control purposes, was not required for this action since it is categorically exempt pursuant to the Regulations Governing the Preparation of Environmental Impact Reports adopted by the Secretary of Environmental Affairs.

Please be advised that this RACT determination under 310 CMR 7.18(17) is a revision to the Massachusetts State Implementation Plan and, as such, must be submitted for approval to the United States Environmental Protection Agency.

If there are any questions regarding this approval please contact John E. Kirzec, Acting Air Section Chief, or John Matteson, Environmental Engineer, at the DEQE Western Regional office.

Sincerely,



David E. Hoyland
Regional Environmental Engineer
Bureau of Waste Prevention
Western Region

cc: Board of Health - Chicopee
DAQC Engineering - Walter Sullivan
William Sweetman - Spalding

DEH/jhm/pcv - spalsip.008

APPENDIX No. 1

SPALDING RACT

THIS DOCUMENT CONTAINS CONFIDENTIAL, PROPRIETARY AND/OR TRADE SECRET DATA OR INFORMATION

Spalding has achieved a substantial reduction in the amount of VOC's emitted per unit of manufacture. In the base year of 1982 Spalding emitted 0.1049 pounds of VOC's per dozen golf balls. By September 30, 1986, 0.0158 pounds of VOC's per dozen golf balls. That represents an 85% reduction in VOC emissions per unit of manufacture. The Department feels that representing Spalding's emissions reduction in terms of units of manufacture gives the most valid picture of their accomplishment.

In their compliance plan "Process Engineering Technologies To Reduce Volatile Organic Compound Emissions For Regulatory Compliance In Accordance With Mass. DEQE Regulation 310 CMR 7.18(17) : RACT", which was submitted to the Department on April 8, 1985, Spalding identified five (5) process modification advancements which had been successful in reducing the amount of VOC's emitted per golf ball.

(1) Impregnation of color pigment into Surlyn polymer cover - The color pigment was included in the golf ball cover, eliminating one of the three coats of paint that were formerly applied to each golf ball. This feature was implemented late in 1982. An emission reduction of 75 tons per year is attributed to this change.

(2) Spray Nozzle and Gun Transfer - Spalding modified the spray nozzles on each spray booth machine to reduce overspray. Transfer efficiencies were improved by approximately 30 per cent. This improvement was implemented late in 1982 and was fully implemented in calendar year 1983. An emission reduction of 125 tons per year is attributed to this change.

In 1982, 447.6 tons of VOC emissions (of the total of 534.1 tons for the whole facility) were attributed to manufacturing 8,532, 860 dozen golf balls. Information of the detail requested in EPA's comments of May 25, 1989 is simply not available. The much improved reporting the Department has received began in 1983. What follows is some information designed to give a feeling for the scope of Spalding's improvement since 1983.

In 1983, 41,191 gallons of coating were used to produce 9,679,392 dozen golf balls, which translates into 235 dozen golf balls per average gallon of coating. In 1986, a total of 32,244 gallons of coating were used to coat 11,216,309 dozen golf balls, which translates into 378 dozen golf balls per average gallon of coating.

$((378 - 235)/235)100 = 60.9\%$ increase in the number of balls coated by an average gallon of coating. In 1982 the 447.6 tons of VOC's were emitted by the golf ball department. In 1983 the figure was 205 tons.

One should keep in mind that if one makes a rough calculation of the reduction of coatings used, one gets the following result: $((41,191 - 32,244)/41,191)(100) = 21.7\%$.

The emission limits and averaging times for each coating can be found in Attachments #3 and #4.

The 205 tons figure in 1983 was broken down as follows:

	1983	1984	1986
Coatings -	125.9 tons	104.3 tons	59.7 tons
Liquid Envelope -	3.3 tons	2.8 tons	2.4 tons
Paint Spindle Tanks -	17.9 tons	3.4 tons	3.3 tons
Unicore Mold Release -	35.2 tons	33.2 tons	16.0 tons
Strip Salvage Operating -	9.5 tons	0.0 tons	0.0 tons
Spray Gun and Line Cleaning -	11.7 tons	11.8 tons	7.6 tons
Stamping -	<u>1.5 tons</u>	<u>0.3 tons</u>	<u>2.3 tons</u>
	205.0 tons	155.5 tons	91.3 tons

(3) High-Solids Urethane Topcoat - In July, 1984, Spalding was successful in reducing solvent concentrations in their Urethane Topcoat. This operation was initiated on limited low-end product grades in late 1984 and was applied to all golf ball product grades by september 1985. A 13% solvent content reduction resulted in a 5 ton per year reduction in emissions in 1986 compared with comparable emissions in 1984. Please refer to CONFIDENTIAL attachment No.4 where the present Urethane Topcoat is identified as coating D.

(4) Paint Coat Removal Method - Prior to 1984, Spalding utilized a chemical process (Methanol) to salvage rejected golf balls with cured paint coatings. The VOC utilizing method was replaced with abrasion methodology which emits no VOC's. The new technology was put into use in 1984. This change reduced 1984 VOC emissions by about 10 tons compared to 1983. The 1982 emissions for the cleaning operation was also 10 tons. The value 26.41 given in the confidential attachment does not take into account the amount of methanol shipped off for recycling.

(5) Spray Booth Tank Design - After application of the coating to the golf balls, the spindles, which hold the balls for painting are passed thru a tank of solvent to remove the accumulated coating. By changing the geometry of the way the spindles are put into the solvent rinse tank (from horizontal to vertical), a smaller rinse tank could be used with less evaporation surface as a consequence. The 1982 rinse tank had an evaporative surface of 30.0 ft². The post 1982 rinse tank had an evaporative surface of 7.4 ft². This represents a reduction of 75 per cent. An emission reduction of 5 tons is attributed to this change.

Spalding also described some VOC reduction methods which were in an R&D phase when their RACT compliance document was written, but which have contributed to emission reductions since that time. Descriptions of the most notable of those changes follow.

(1) Compression Molding Release System - Spalding used a naphtha based release system to facilitate the release of the golf ball cores from the mold. That system has been replaced by a release system that used trivial amounts of an exempt solvent. This has achieved a reduction in VOC (naphtha) in the range of 30 to 35 tons per year. A small amount (approximately 1 ton per year) of an exempt solvent is currently use to surface treat the molds for releasing purposes.

(2) Water-based Primer - Spalding has introduced the use of a substantially water-based prime coat which is used on a substantial portion of their production and replaced a previously use solvent-based coating. This change reduced 1984 emissions by about 25 tons as compared to 1983. Please refer to attachments No. 3 and No. 4.

(3) Clearing of Spray Guns and Spray Gun Lines - This process typically consumed about 12 tons of VOC's a year. Spalding uses a dipping process which will reduce VOC usage by about 8 tons per year. Please refer to Proviso No. 10 of the "AMENDMENT TO CONDITIONAL APPROVAL".

(4) Safety Kleen Wash Stations - Spalding is using these wash stations to reduce the use of solvents as cleaners in their tool room area and is decreasing the frequency with which they are replaced. This change reduced VOC emissions by about 6.5 (1982 emissions from the tool room) tons per year.

(5) Golf Club Process - Emissions from the golf club process were reduced by eliminating the finish spray painting operation. The 1982 emissions from this operation were 25 tons. See proviso No. 11 of the "AMENDMENT TO CONDITIONAL APPROVAL".

(5) In response to comments concerning appendix A from EPA, please refer to letter (plus attachments), dated May 18, 1989, from William Sweetman, Senior Environmental Engineer at Spalding to Mr. John H. Matteson (DEQE).

Spalding has made an ongoing commitment to decreasing the amount of solvent they will be using in all parts of their operation. The attached graph (Attachment No.8) will illustrate the success they have achieved to date.

file - confappn.spa

ATTACHMENT #1
PAGE 1 OF 2 PAGES



SAFETY KLEEN PARTS WASHER OPERATING PROCEDURE

To whom it may concern:

To effectively clean a dirty/oily part, first put the piece to be cleaned into the parts washer basin. Reach around the top right hand side of the back lid and you will find a toggle switch that will both turn on the circulating pump and the over head light. As soon as the solvent starts dispensing from the nozzle, place the dirty piece under the flow of the solvent. Using a downward motion with the parts washer brush, remove the debris. A second application may be necessary.

Once completed, reach around to the toggle switch and turn the parts washer off. The washed piece may be allowed to drip dry or may be wiped with a dry cloth.

Respectfully submitted,



Roger V. Bourdeau
Branch Manager

ATTACHMENT #1
PAGE 2 OF 2 PAGES

SPALDING

STANDARD OPERATING PROCEDURE
FOR SAFETY KLEEN PARTS WASHER UNITS

1. All employees using the Safety Kleen Parts Washer must wear safety glasses and protective gloves.
2. No smoking is allowed while in the area of or using the Safety Kleen parts washer units.
3. Tools and equipment to be cleaned must be placed in the parts washer basin.
4. Switch on the circulating pump and overhead light using the toggle switch on the right hand side of the back lid.
5. Place the dirty equipment under the flow of the solvent as soon as it is seen dispensing from the nozzle.
6. Use a downward motion with the parts washer brush to remove the debris.
7. Apply additional applications as necessary.
8. The residual solvent is drained back through a drain in the basin to a storage drum where it is contained for reuse at a later date.
9. The washed piece may be allowed to drip dry or may be wiped with a clean cloth.
10. After the equipment is cleaned, turn off the parts washer using the same toggle switch.
11. Safety Kleen will come in on a scheduled basis to remove the dirty solvent and replace it with clean solvent. The dirty solvent is shipped off site as a hazardous waste and is recycled by Safety Kleen for reuse at a later date.

5/22/89

RACT EQUIVALENCY WORKSHEET I

CALCULATING VOC CONTENT OF A COATING IN POUNDS OF VOC PER GALLON OF COATING MINUS WATER AND PHOTOCHEMICALLY NONREACTIVE SOLVENTS

Hof H

Coating Name	For Volume Percentages				For Mass Percentages						
	A ¹ Gal water per 100 gals ctg	B Gal Photochemically nonreactive solvent per 100 gals ctg	C Gal VOC per 100 gals ctg	D ^{2,3} Density of VOC(s) <u>lbs</u> gal	E Lbs Water per 100 lbs ctg	F Lbs Photochemically nonreactive solvent per 100 lbs ctg	G Lbs VOC per 100 lbs of ctg	H ^{2,3} Density of Photochemically nonreactive solvents <u>lbs</u> gal	I Density of Coating <u>lbs</u> gal	J Lbs VOC Gal Ctg minus water & photochemically nonreactive solvents	K RACT limit <u>lbs VOC</u> gal ctg
Examples: Volume Known	7.2	5.0	75.8	7.36						6.36	2.9
Mass % Known					7.0	5.0	70.0	7.0	10.0	8.2	2.9

1. Check State Implementation Plan for exempt (photochemically nonreactive) solvents
2. Determined by independent lab or manufacturer's specifications
3. If more than one solvent (either reactive or photochemically nonreactive, not both) is in the coating, the density is the weighted average of each solvent in the coating (down to 1/100th solvent content) calculated by the summation of:

$$\frac{(\text{solvent density})(\% \text{ of individual solvent})}{\text{total solvent content}}$$

$$J = \frac{(C/100)(D)}{1 - \frac{(A+B)}{(100)}}$$

$$J = \frac{(G/100)(I)}{1 - \left[\frac{(E)(I)}{(100)(8.34)} + \frac{(P)(I)}{(100)(11)} \right]}$$

To calculate D on Table II, gallons of coating/day minus water and photochemically nonreactive solvents, calculate:

$$\frac{(\text{Galls of coating/day}) - (\text{Gallons of coating/day})(A+B)}{100}$$

TABLE NO. 1

<u>ID</u>	<u>COATING LBS VOC/GAL AS APPLIED</u>	<u>COATING LBS VOC/GAL AS APPLIED</u>	<u>SOLIDS</u>	<u>No.DOZ GOLF BALLS CTD/GAL CTG "</u>	<u>AVERAGING TIME</u>
A	0.9	3.6		375 ± 5%	24 HRS
B	5.2	17.7		250 ± 5%	24 HRS
C	5.6	23.9		225 ± 5%	24 HRS
D	5.2	20.6		250 ± 5%	24 HRS
E	5.6	22.4		250 ± 5%	24 HRS
F	6.5	58.6		NA	
G	0.1	0.2		VARIABLE	VARIABLE

* BASED ON 1986 DATA

file - spalno2a.ch3

THIS TABLE CONTAINS CONFIDENTIAL INFORMATION

TABLE No. 1 (MODIFIED)

<u>COATING ID</u>	<u>SPALDING I.D.</u>	<u>LBS VOC/GAL CTG AS APPLIED</u>	<u>LBS VOC/GAL SLDS AS APPLIED</u>	<u>No.DOZ* GOLF BALLS CTD/GAL CTG</u>	<u>AVE TIME</u>
A	WATER-BASED PRIME	0.9	3.6	375 ± 5%	24 HR
B	AROMATIC CLEAR	5.2	17.7	250 ± 5%	24 HR
C	EPOXY PRIME	5.6	23.9	225 ± 5%	24 HR
D	ALIPHATIC CLEAR	5.2	20.6	250 ± 5%	24 HR
E	ALTERNATE AROMATIC CLEAR	5.6	22.4	250 ± 5%	24 HR
F	GOLF CLUB PRIMER	6.5	58.6	NA	
G	AQUALOID LIQUID ENVELOPE	0.1	0.2	NA	

Coating D is identified as the 1986 high solids compliance topcoat.
* Based on 1986 data (date of compliance)

file - spalno2a.ch4

DRAFT DAILY RECORDING FORM - PROVISIO 6A

	<u>EACH</u>	<u>EACH</u>	<u>EACH</u>	<u>EACH</u>	<u>EACH</u>	<u>EACH</u>	<u>EACH</u>
	<u>CTG</u>	<u>24-HR</u>	<u>CTG</u>	<u>24-HR</u>	<u>CTG</u>	<u>24-HR</u>	<u>CTG</u>
COATING ID							
No. OF GOLF BALLS MFG							
AMT OF CTG USED							
EMISSION RATE							
TRANSFER EFFICIENCY							
GOLF BALLS/GAL CTG							
AVE EMISSION RATE AVE.							
IN LB/GAL CTG APPLIED							
EMISSION RATE IN							
LB/DOZ GOLF BALLS							
AVE EMISSION RATE							
LB VOC/DOZ BALLS							

	<u>EACH</u>	<u>EACH</u>	<u>EACH</u>	<u>EACH</u>	<u>EACH</u>	<u>EACH</u>	<u>EACH</u>
	<u>CTG</u>	<u>24-HR</u>	<u>CTG</u>	<u>24-HR</u>	<u>CTG</u>	<u>24-HR</u>	<u>CTG</u>
COATING ID							
No. OF GOLF BALLS MFG							
AMT OF CTG USED							
EMISSION RATE							
TRANSFER EFFICIENCY							
GOLF BALLS/GAL CTG							
AVE EMISSION RATE AVE.							
IN LB/GAL CTG APPLIED							
EMISSION RATE IN							
LB/DOZ GOLF BALLS							
AVE EMISSION RATE							
LB VOC/DOZ BALLS							

MONTHLY REPORTING FORM FOR SPALDING RACT EMISSION LIMITS

SPALDING SPORTS WORLDWIDE, INC., CHICOPEE, MASS

MONTH, YEAR

ATTACHMENT #6

COATING I.D.	WT VOC GAL. CTG	VOL VOC GAL. CTG	WT VOC GAL VOC	WT SOL GAL. CTG	VOL SOL GAL. CTG	WT WATER GAL. CTG	VOL WATER GAL. CTG	WT XMPT GAL. CTG	VOL XMPT GAL. CTG	WT XMPT GAL XMPT	WT CTG GAL. CTG	WT VOC/ GAL. SOLID
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EXAMPLE
OF REPORTING
FORM (PARTIAL)
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TOTAL #'s VOC/DAY
~~ENTER EACH VOC # USED~~
 GRAND TOTAL VOC's
 0.00
 TOTAL GAL COATING/DAY
 TOTAL GAL SOLIDS/DAY
 DAILY EMISSION RATE

NOTE:
 GALLONS USED = GALLONS COATING USED
 GALLONS SOLIDS = GALLONS SOLIDS USED

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ATTACHMENT # 8
1 PAGE

GB	=	GOLF BALL
GC	=	GOLF CLUB
INF	=	INFLATED

EMISION PER UNIT

