

Minnesota Attorney General: Administrative Rules Proceedings

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214

Frederick S. Suhler
Special Assistant
Attorney General

July 26, 1976

- Saf Ad 181-184

#216

Attorney General

Frederich S. Suhler
Special Assistant
Attorney General

April 15, 1976

296-4692

Michael B. Miller
Special Assistant
Attorney General

Rules of the Department of Public Safety
Saf Ad 181-184

The above-captioned rules are returned herewith without approval as to legality for the following reasons:

1. The rules do not state a standard of conduct or criterion upon which the Commissioner of Public Safety will approve or disapprove safety eyewear; and

2. The rules improperly adopt by reference the rule of another body.

MBM/sr

Enclosures

STATEMENT OF COMPLIANCE WITH

MANUAL OF RULE MAKING PROCEDURES

I, Special Assistant Attorney General Frederick Suhler, do hereby declare that I have examined the proposed rules and all related documents and that, based on them and my personal familiarity with the applicable procedures, the Manual of Rule Making Procedures has been followed.

Frederick Suhler
Special Assistant Attorney General

Dated: 3/16/76

Adopted Rules

Minnesota Department of Public Safety
Safety Administration Division

CHAPTER TWENTY: REQUIREMENTS FOR APPROVAL OF MOTORCYCLE OPERATOR EYE PROTECTIVE DEVICES

SafAd 181 PURPOSE AND SCOPE

(a) The purpose of these rules is to prescribe the procedure for approval by the Commissioner of Public Safety of motorcycle operator eye protective devices.

(b) The scope of these rules is intended to be consistent with the powers relative to eye protective devices conferred on the Commissioner of Public Safety by Minnesota Statutes 1974, Section 169.974, Subdivision 4, as amended by Laws 1975, Chapter 29, Section 4.

SafAd 182 DEFINITIONS

For purposes of these rules:

(a) "A.A.M.V.A." means the American Association of Motor Vehicle Administrators

(b) "E.P.D." means Eye Protective Device

(c) "Commissioner" means the Commissioner of Public Safety for the State of Minnesota.

SafAd 183 APPROVAL OF DEVICES

(a) In accordance with Minnesota Statutes Sec. 169.974 Subd. 4, as amended by Laws 1975, c. 29, Sec. 4, the Commissioner shall approve a list of eye-protective devices for use by motorcycle operators in Minnesota. Thereafter, he may add or delete

specific devices from this list whenever he reasonably deems such action to be necessary in furtherance of the purposes of these rules.

(b) In acting pursuant to subd. (a) of this rule the Commissioner may neither give initial approval to, nor continue in effect any pre-existing approval of a device not contemporaneously certified by the A.A.M.V.A. as meeting the requirements of Regulation VESC-8 of the Vehicle Equipment Safety Commission (which commission was created and exists under the Interstate Vehicle Equipment Safety Compact). Nor may the Commissioner approve any such device containing tinted lenses for use during other than daylight hours.

SafAd 184 PUBLIC AVAILABILITY OF LIST OF APPROVED DEVICES

On and after the date on which these rules become effective, the Commissioner shall at all times maintain and make available to any member of the public upon request a complete list of those devices approved by him pursuant to SafAD 168.

SafAd 185-189

Exhibit A

STATE OF MINNESOTA

BEFORE EDWARD G. NOVAK

COUNTY OF RAMSEY

COMMISSIONER OF PUBLIC SAFETY

In the matter of the Proposed Adoption of Rules of the State Department of Public Safety Governing Requirements for Approval of Motorcycle Operator Eye Protective Devices.

ORDER FOR HEARING

To effectively implement Laws 1975, Chapter 29, which amends M. S. 1974, Section 169.974, Subd. 4, the Minnesota Commissioner of Public Safety deems it necessary to consider adoption of the proposed rules captioned above pursuant to the authority vested in me by M. S. 1974, Section 299A.01, Subdivision 6.

NOW, THEREFORE, IT IS ORDERED this 13th day of November, 1975, that a public hearing on the proposed rules captioned above be held in the State Office Building Auditorium, St. Paul, Minnesota, December 29, 1975, commencing at 9:30 a.m. and continuing until all representatives of associations or other interested groups or persons have had an opportunity to be heard.

IT IS FURTHER ORDERED, that notice of said hearing be given to all representatives of associations or other interested groups or persons who have registered their names with the Secretary of State for that purpose and all persons who are presently members of the Minnesota Legislature.

STATE OF MINNESOTA
DEPARTMENT OF PUBLIC SAFETY

Edward G Novak

COMMISSIONER OF PUBLIC SAFETY

Exhibit B

STATE OF MINNESOTA

BEFORE EDWARD G. NOVAK

COUNTY OF RAMSEY

COMMISSIONER OF PUBLIC SAFETY

In the matter of the Proposed Adoption of Rules of the State Department of Public Safety Relating to Requirement for Approval of Motorcycle Operator Eye Protective Devices

STATEMENT OF NEED

The above captioned rules are not amendments to existing rules of the Minnesota Department of Public Safety.

The need to adopt these rules arises because foreign objects striking or lodging in the eye(s) of a motorcycle operator can cause injury to the eye(s) or impaired vision and, additionally as a result thereof, may precipitate loss of control of the motorcycle.

The authority to adopt the proposed rules lies in Laws 1975, Chapter 29 which provides in part that no person shall operate a motorcycle "---unless he is wearing an eye protective device of a type approved by the Commissioner except when the motorcycle is equipped with a wind screen".

The proposed rules contemplate approval of eye protective devices upon certification of the American Association of Motor Vehicle Administrators that a particular device meets the requirements of Regulation VESC-8 of the Vehicle Equipment Safety Commission. (The Vehicle Equipment Safety Commission is composed of representatives of various states whose purpose is to encourage highway safety through uniform performance requirements for vehicle equipment).

VESC-8 was selected as the basis for eye protective device type approval because VESC-8 was specifically developed to meet the eye protection needs of motorcycle operators. Additionally, 22 of 30 states presently requiring eye protective devices for operators of motorcycles have requirements for such devices based on VESC-8 and problems encountered during interstate travel by motorcycle are minimized by promoting uniform laws and regulations throughout the United States.

STATE OF MINNESOTA
DEPARTMENT OF PUBLIC SAFETY

Edward G Novak
COMMISSIONER OF PUBLIC SAFETY

11-24-75
DATE

Exhibit C

STATE OF MINNESOTA

BEFORE EDWARD G. NOVAK

COUNTY OF RAMSEY

COMMISSIONER OF PUBLIC SAFETY

In the matter of the proposed Adoption of Rules of the State Department of Public Safety Governing Requirements for Approval of Motorcycle Operator Eye Protective Devices.

NOTICE OF HEARING

Notice is hereby given that a public hearing will be held pursuant to M.S. 1974, Section 15.0412, Subdivision 4, in the above-entitled matter in the State Office Building Auditorium, Wabasha St. between Aurora and Fuller, St. Paul, Minnesota, December 29, 1975, commencing at 9:30 a.m., and continuing until all representatives of associations or other interested groups or persons have had an opportunity to be heard concerning adoption of the proposed rules captioned above by submitting either oral or written data, statements or arguments. Statements or briefs may be submitted without appearing at the hearing.

A copy of the proposed rules is attached hereto.

Additional copies of the proposed rules are available and may be obtained by writing to Diane Hamilton, Department of Public Safety, 210A Highway Building, St. Paul, Minnesota, 55155.

STATE OF MINNESOTA
DEPARTMENT OF PUBLIC SAFETY

Edward G Novak

COMMISSIONER OF PUBLIC SAFETY

11-17-75
DATE

Exhibit D

STATE OF MINNESOTA

COUNTY OF RAMSEY

In the matter of the Proposed Adoption of Rules of the State Department of Public Safety Governing Requirements for Approval of Motorcycle Operator Eye Protective Devices.

CERTIFICATE

I hereby certify that the enclosed 445 general labels and Public Safety list constitute the complete list of persons, associations, and other interested groups who as of 4:15 o'clock P.M., this 24th day of November, 1975, have requested pursuant to M.S. 1974, Section 15.0412, Subdivision 4, that their names be placed on file with the Secretary of State for the purpose of receiving notice of public hearing on proposed rules on the subject captioned above.

Secretary of State

Joan Anderson Growe

Joan Anderson Growe

By Ceil Dorin

Exhibit E

STATE OF MINNESOTA

COUNTY OF RAMSEY

In the matter of the Proposed Adoption of Rules of the State Department of Public Safety Governing Requirements for Approval of Motorcycle Operator Eye Protective Devices.

AFFIDAVIT OF MAILING

Diane Hamilton, being first duly sworn, deposes and says:

That on the 26th day of November, 1975, at the City of St. Paul, County of Ramsey, State of Minnesota, she served the attached Notice of Hearing by depositing in the United States mail at said City of St. Paul, a true and correct copy thereof, properly enveloped, with postage prepaid, to all persons and associations at the addresses listed on the attached Certificate of the Secretary of State as well as to all persons presently being members of the Minnesota Legislature.

Diane Hamilton

Subscribed and sworn to before me

this 26th day of November, 1975.

Cheryl E. Waller

CHERYL E. WALLER
NOTARY PUBLIC - MINNESOTA
HENNEPIN COUNTY
My Comm. Expires Jan. 21, 1980

Exhibit F

STATE OF MINNESOTA

COUNTY OF RAMSEY

BEFORE EDWARD G. NOVAK

COMMISSIONER OF PUBLIC SAFETY

In the matter of the Proposed Adoption of Rules of the State Department of Public Safety governing Requirements for Approval of Motorcycle Operator Eye Protective Devices.

APPOINTMENT OF HEARING OFFICER

James Crawford, Chief of the Highway Patrol Division of the Department of Public Safety, is hereby appointed hearing officer for the public hearing to be held in the above-entitled matter, in the State Office Auditorium, St. Paul, Minnesota, December 29, 1975, commencing at 9:30 a.m.

He is authorized and empowered to hear the case, to perform any and all acts incidental thereto, and to recommend findings of fact and final decision.

STATE OF MINNESOTA
DEPARTMENT OF PUBLIC SAFETY

Edward G Novak
COMMISSIONER OF PUBLIC SAFETY

12/11/75
DATE

Proposed Rules

Minnesota Department of Public Safety
Safety Administration Division

CHAPTER NINETEEN: REQUIREMENTS FOR APPROVAL OF MOTORCYCLE OPERATOR EYE PROTECTIVE DEVICES

SafAd 166 PURPOSE AND SCOPE

(a) The purpose of these rules is to prescribe the procedure for approval by the Commissioner of Public Safety of motorcycle operator eye protective devices.

(b) The scope of these rules is intended to be consistent with the powers relative to eye protective devices conferred on the Commissioner of Public Safety by Minnesota Statutes 1974, Section 169.974, Subdivision 4, as amended by Laws 1975, Chapter 29, Section 4.

SafAd 167 DEFINITIONS

For purposes of these rules:

(a) "A.A.M.V.A." means the American Association of Motor Vehicle Administrators

(b) "E.P.D." means Eye Protective Device

(c) "Commissioner" means the Commissioner of Public Safety for the State of Minnesota.

SafAd 168 APPROVAL OF DEVICES

(a) In accordance with Minnesota Statutes Sec. 169.974 Subd. 4, as amended by Laws 1975, c. 29, Sec. 4, the Commissioner shall approve a list of eye-protective devices for use by motorcycle operators in Minnesota. Thereafter, he may add or delete

specific devices from this list whenever he reasonably deems such action to be necessary in furtherance of the purposes of these rules.

(b) In acting pursuant to subd. (a) of this rule the Commissioner may neither give initial approval to, nor continue in effect any pre-existing approval of, a device not contemporaneously certified by the A.A.M.V.A. as meeting the requirements of Regulation VESC-8 of the Vehicle Equipment Safety Commission (which commission was created and exists under the Interstate Vehicle Equipment Safety Compact). Nor may the Commissioner approve any such device containing tinted lenses for use during other than daylight hours.

SafAd 169 PUBLIC AVAILABILITY OF LIST OF APPROVED DEVICES

On and after the date on which these rules become effective, the Commissioner shall at all times maintain and make available to any member of the public upon request a complete list of those devices approved by him pursuant to SafAd 168.

SafAd 170-174 Reserved for future use.

VE
SC

VEHICLE EQUIPMENT SAFETY COMMISSION

Regulation VESC-8

MINIMUM REQUIREMENTS FOR

MOTORCYCLISTS' EYE PROTECTION

ADOPTED AUGUST 5, 1971

Suite 411
1026 17th Street, N.W.
Washington, D.C. 20036

Table of Contents

Purpose and Scope 1
Definitions 1
Eye Protective Devices 2
Materials 2
Optical Properties of Eye Protective Devices 3
Light Transmitting Ability of Eye Protective Devices 5
Lens Strength – Testing Procedures for Eye Protective Devices 6
Flammability Test – Plastics Only 6
Cleansing 7
Labeling and Identification 7

MOTORCYCLISTS' EYE PROTECTION

1. PURPOSE AND SCOPE:

1.1 The purpose of this standard is to provide minimal requirements for motorcyclists' eye protectors, to provide a reasonable degree of protection against foreign objects striking or lodging in the eye, causing eye irritation or damage, distracting or handicapping the operator, and thereby causing accidents.

1.2 The scope of this standard shall include requirements for material, lens size, optical properties, strength, field of vision, flammability, cleansing capabilities, labelling, identification, and testing procedures for eye protective devices for drivers and passengers of motorcycles.

1.2.1 Windshields are the subject of other nationally recognized standards and shall not be included within the scope of this standard.

1.2.2 Contact lenses are not acceptable as eye protective devices and shall not be included within the scope of this standard.

2. DEFINITIONS:

2.1 Eye glasses – shall include spectacles, sunglasses, or goggles having two separately mounted lenses, but shall exclude contact lenses.

2.2 Face shield – an eye protector attached to a helmet or head band(s) and which covers the wearer's eyes and face at least to a point approximately the tip of the nose and whose predominant function is protection of the eyes.

2.3 Frame – those parts of eye glasses or goggles containing the lens housings. The frame may be associated with padding.

2.4 Goggles – an optical device worn before the eyes, the predominant function of which is to protect the eyes without obstructing peripheral vision. They provide protection from the front and sides and may or may not form a complete seal with the face.

2.5 Headband – that part of the device consisting of a supporting band or other structure that either encircles the head or protective helmet, or can be attached thereto.

2.6 Mid-Sagittal Plane – the anteroposterior plane through the longitudinal axis of the body.

3. EYE PROTECTIVE DEVICES:

3.1 To be considered an eye protective device, or EPD, under this regulation, a device must be one of the following:

3.1.1 Goggles

3.1.2 Face shield

3.1.3 Eye Glasses

(a) Each lens shall have a convex frontal surface.

(b) Each lens shall have a minimum area of 3 square inches. The horizontal diameter (or side-to-side measurement) shall be no less than 2 inches. The vertical diameter (or top-to-bottom measurement) shall be no less than 1-1/2 inches. A diameter shall pass through a point on the lens that is intended to be directly in front of the pupil of the eye when the wearer is looking straight ahead.

3.2 Optical correction of a person's vision, where required or desired, may be provided either:

3.2.1 By an EPD that provides the proper optical correction, or

3.2.2 By personal corrective lenses worn under an EPD that does not disturb the adjustment of those lenses.

(NOTE: It is assumed that EPD's will not, in any jurisdiction, be required of operators of three-wheeled motorcycles or other three-wheeled vehicles which are equipped with cabs that include windshields, nor of operators of other motorcycles equipped with approved windshields in those jurisdictions where windshields are accepted in lieu of EPD's.)

4. MATERIALS:

4.1 All parts of an EPD shall be free from sharp edges or projections that could cause harm or discomfort to the wearer.

4.2 A headband shall be capable of holding the EPD securely under normal operating conditions. It shall be capable of easy adjustment and replacement.

4.3 Material(s) utilized in any portion of an EPD shall be of durable quality, i.e., material characteristics shall not undergo appreciable alterations under the influence of aging or of the circumstances of use to which the device is normally subjected (exposure to sun, rain, cold, dust, vibrations, contact of the skin, effects of sweat, or of products applied to skin or hair.)

4.4 Material(s) commonly known to cause skin irritation or disease shall not be used for those parts of the device which come into contact with the skin.

5. OPTICAL PROPERTIES OF EYE PROTECTIVE DEVICES:

5.1 Lenses of EPD's shall comply with the following requirements:

5.1.1 Lenses shall be made of material suitable for ophthalmic use, and shall be free from striae, waves, bubbles, or any other defects which may impair their optical quality.

5.1.2 The prismatic effect of a noncorrective lens shall not exceed 1/8 diopter at any point within the specified minimum field of vision. In the case of eye glasses, each noncorrective lens shall comply with the limitation of prismatic effect.

5.1.3 In any meridian, the refractive power of a noncorrective lens shall not exceed plus or minus 1/8 diopter and the difference between the refractive powers in any two meridians shall not exceed 1/8 diopter.

5.1.4 The definition afforded by a noncorrective lens shall be such that a line pattern with lines separated not more than 24 seconds of angle shall be clearly distinguishable when viewed through the lens.

5.1.5 The compliance of a lens with the prismatic effects, refractive power, and definition requirements of 5.1.2, 5.1.3, and 5.1.4 hereinabove, shall be determined in accordance with those test methods described in Sections 6.3.4.1.1, 6.3.4.1.2, and 6.3.4.1.3 of the American National Standards Institute Standard Z87.1-1968, September 18, 1968, "Eye and Face Protection" and explained in Section 10.1 of the National Bureau of Standards Circular 533, May 20, 1953, "Method for Determining the Resolving Power of Photographic Lenses". In order to maintain consistency in the results of tests conducted by various organizations, the following test requirements must be met:

(a) An 8-power telescope with focusing arrangement to accomodate the refractive effects of both positive (converging) and negative (diverging) lenses placed between the telescope and test chart shall be used. The illuminated target and test chart shall be a central dot and a concentric circle one inch in diameter plus one of the high contrast ("black and white") NBS Resolution Test Charts dated 1952 and printed on "Lens Resolution Chart to Accompany NBS Circular 533." The chart shall be perpendicularly aligned 35 feet from the objective lens of the telescope when the telescope is properly focused with no test, sample, or other lens between the objective lens and the chart. The center dot and the periphery of the concentric circle one inch in diameter shall be used when testing for prismatic effect. The test pattern marked "20" shall be used when testing for refractive power and when testing for definition. Standard lenses of plus or minus 1/8 diopter shall be used when testing for refractive power.

(b) Other standard methods of test or examination that are equivalent or superior, as regards accuracy, quality, and consistency of results, to the above specified National Bureau of Standards methods, may be used to determine compliance only when such methods are approved by the State official to whom such approving authority has been assigned, or delegated, through due process of applicable state law.

5.2 Minimum Horizontal Field of Vision -- Except as provided in 5.2.1 below, each EPD shall not obstruct a horizontal field of vision to at least 105 degrees to the right side of the plane that passes through the pupil of the right eye, and at least 105 degrees to the left side of the plane that passes through the pupil of the left eye and are parallel to the mid-sagittal plane.

5.2.1 The specified minimum horizontal field of vision shall be unobstructed except that the horizontal field provided by spectacles or sunglasses may be obstructed by the frame in a sector no greater than 7-1/2 degrees in horizontal angular width and located between 50 degrees and 80 degrees of the pertinent sagittal plane passing through the eye pupil.

5.2.2 When ascertaining the horizontal field of vision afforded by eyeglasses, the pupil of the eye shall be assumed to be located 17 millimeters behind the point on the rear surface of the lens where the horizontal and vertical diameters intersect. When ascertaining the horizontal field of vision of EPD's other than eyeglasses, the assumed location of the pupil of the eye relative to the structures of the EPD shall be that location which is most likely to occur when the EPD is attached and worn in accordance with its manufacturer's instructions.

5.2.3 No portion of the minimum horizontal field of vision shall be obstructed by a temple piece, headband, helmet, helmet attaching device, or any other supporting or attaching device.

6. LIGHT TRANSMITTING ABILITY OF EYE PROTECTIVE DEVICES:

6.1 A "clear" EPD shall transmit not less than 85% of the incident visible radiation. An EPD transmitting less than 85% of of incident visible radiation shall be considered "tinted".

6.1.1 A "tinted" EPD shall not impair the wearer's ability to discern color.

6.1.2 A "tinted" EPD shall not be used at night.

6.2 All EPD's shall be identified as provided in Section 10 hereinbelow.

6.3 Luminous transmittance test – The standard source of radiant energy used in the measurement of luminous transmittance shall be a Projection Type Lamp No. T-8 (or other high powered gas filled tungsten filament incandescent lamp) operated at the color temperature (2854K) corresponding to CIE Source A. The luminous transmittance shall be determined by one of the following means:

6.3.1 Photometrically by an observer having normal color vision, as determined by recognized color vision chart tests such as those employing pseudo-isochromatic plates.

6.3.2 With a physical photometer consisting of a thermopile (or other radiometer) and a luminosity solution having a special transmittance curve which coincides closely with the luminous efficiency curve of the average eye.

6.3.3 By measuring the spectral transmittance and calculating the luminous transmittance through the use of published data on the spectral radiant energy of CIE Source A and the relative luminous efficiency of the average eye.

7. LENS STRENGTH – TESTING PROCEDURE FOR EYE PROTECTIVE DEVICES:

7.1 Helmet mounted face shields shall be tested while attached to an appropriate medium size helmet supplied by manufacturer of face shield, which shall be mounted on a standard human head form. An EPD not designed to be attached to a helmet shall be tested on a standard human head form. Each EPD shall be located in a position simulating its position in actual use.

7.2 A steel projectile 3/8" in diameter, weighing 1.56 ounces, approximately 2-1/2" long with a conical point of 90° included angle, the point having a spherical radius no greater than .020" and a hardness of 60 (±10) on the Rockwell "C" scale, shall be freely dropped from a height of 14 feet above the EPD. The projectile may be guided, but not restricted, in its vertical fall by dropping it through a tube extending to within approximately 4" of the impact area. The impact area must be on the forward optical surface and within a 1" diameter circle centered over the eye opening. The impact point shall be perpendicular to a plane tangent to the impact area.

7.3 The EPD shall not allow penetration of the projectile through the EPD. Cracking or piercing of the EPD is permissible provided that the projectile does not pass through or remain lodged in the EPD lens, but is repulsed by the EPD, and that no particles of the EPD shall break loose from any eyeward surface of the EPD.

7.4 Tests shall be performed at room temperature (65°F to 85°F) under normal humidity conditions.

8. FLAMMABILITY TEST – PLASTICS ONLY:

8.1 Where plastic materials are used in an EPD, such materials shall be non-combustible or slow-burning. Such plastic items shall be exposed to a test to determine the flame-propagation rate. The specimen shall be ignited by holding one end of specimen horizontally at the top of a luminous 3/4 inch Bunsen burner flame in a draft-free room. The rate of propagation of burning, after removing the flame from the

specimen, determined by a stop watch, shall be one inch or less per 24 seconds. A faster rate of propagation shall be cause for rejection.

8.2 Celulose nitrate, or materials having flammability characteristics approximating those of cellulose nitrate, shall not be used.

9. CLEANSING:

All EPD materials shall be such as to withstand, without visible deterioration, washing in ordinary household detergents and warm water, and rinsing to remove visible traces of detergents.

10. IDENTIFICATION AND LABELING:

10.1 Eye Protective Devices, manufactured to comply with the requirements of this standard, shall be identified and labeled as follows:

10.1.1 The following information shall be permanently marked on the EPD, in a manner not to interfere with the vision of the wearer:

(a) That the device meets this Standard, i.e., VESC-8. Where space is limited, V-8 may be used in lieu of VESC-8.

(b) The manufacturer's or distributor's trade name and model name or number, which shall correspond with the name and number under which the device has been approved or certified.

10.1.2 The information required under 10.1.1 plus the corporate or business name and address of either the actual manufacturer or the marketer assuming the responsibilities of the manufacturer shall be imprinted on the container in which the EPD is packed and on any instruction sheet(s) pertaining to the EPD.

10.2 The following statement shall appear in a prominent location on the container or label accompanying each tinted eye protective device: THIS TINTED EYE PROTECTIVE DEVICE IS FOR DAYTIME USE ONLY.

MOTORCYCLE EYE PROTECTIVE DEVICES

Arthur Fulmer Minneapolis Co.
12035 Riverwood Drive
Burnsville, Minn 55337

Barry Tilley
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State Office Building

David Cummiski
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Soderberg Inc.
84 S. 10th St.
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Department of Natural Resources
Bureau of Planning
3rd floor Centennial Bldg.

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1326 Vermillion Street
Hastings, Minn 55033

Michael Schunk
4024 Sheridan Ave. So.
Minneapolis, Minn. 55410

Interoffice – NOTICES of HEARING

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Special Assistant Attorney General

Commissioner
Deputy Commissioner
Assistant Commissioner

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Division &/or Section Head
of appropriate division(s)
Highway Patrol
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2701 4TH AVE S
MPLS MN
55408

THOMPSON HESSIAN ET AL
1500 MIDWEST PLAZA BLDG
MPLS MN
55402

VAN DRAKE STEPHEN R
BOX 353
PELICAN RAPID MN
56572

VOLDNESS PERRY
IDS 8TH & MARQUETTE
MPLS MN
55402

SHAW ROBERT M
616 MOBIL OIL BLDG
MPLS MN
55402

SMERIKA WN.
BOISE CASCADE PAPERS
INTL FALLS MN
56649

SODERBERG HAROLD J
1500 MIDWEST PLAZA BLDG
MPLS MN
55402

STATE BD VETERINARY EXAMI
C/O DR A C SPANNAUS DVM
WACONIA MN

STUPKA & MCREM
MIDTOWN BLDG
AUSTIN MN
55912

SWANSON BURT E
W-2162 1ST NATL BK BLDG
ST PAUL MN
55101

TIMESAVERS INC ATT R S V
5270 HANSON COURT
MPLS MN
55422

UNION STOCK YARDS
ATTN PRES
SO ST PAUL MN
55075

VAN EVERA MUNDT ET AL
700 TORREY BLDG
DULUTH MN
55802

VOSS REV GORDON O
11120 NE 7TH ST
BLAINE MN
55434

VERRILL JOHN E
DEPT SECONDARY ED UOF M
DULUTH MN
55812

PORT AUTH CITY OF ST PAUL
330 MINNESOTA BLDG
ST PAUL MN
55101

PRAUSE JOS.C.
2220 105TH AVE.N.W.
COON RAPIDS MN
55433

RAUENHORST CORP-C ANDERSON
7900 XERXES S. S-2200
MPLS MN
55431

REINO O LAINE 3M COMPANY
3M CENTER
ST PAUL MN
55101

RICHARDS MONTGOMERY ET AL
1430 RAND TOWER
MPLS MN
55402

ROSS ALFRED
6356 WARE RD
LINO LAKES MN
55014

SANFORD S M
7000 PORTLAND AVE
RICHFIELD MN
55423

ST PAUL BUR HLTH DR P COX
555 CEDAR ST
ST PAUL MN
55101

SCHMIDT D R MN ASSN REALTORS
6101 WAYZATA BLVD
MPLS MN
55416

SCHUTZ LINDA
RM 328 CAPITOL BLDG
ST PAUL MN

PORTER DAVID
3212 LONGFELLOW AVE S
MPLS MN
55407

PROCTOR&GAMBLE L THEOHAROUS
IVORYDALE TECH CENTER
CINCINNATI OH
45217

RADMAN RICHARD-LABOR TEMPLE
418 AUDITORIUM
ST PAUL MN
55102

REAGAN MICHAEL
% MINN LEARNING CTR
BRAINERD MN
56401

RENNER R.H. ST PAUL AREA CC
300 OSBORN BLDG.
ST PAUL MN
55102

ROE DAVID
175 AURORA
ST PAUL MN
55103

RUDY FLOYD
118 AVE C
CLOQUET MN
55720

SATHRE, HARVEY
375 MARION STREET
ST PAUL MN
55103

ST PAUL FOOD RETAILERS ASSN
1220 ARCADE
ST PAUL MN
55106

SCHMIDT H W TCHRS RETIREMENT
302 CAPITOL SQ BLDG
ST PAUL MN
55101

SCHWARTAU NEAL METH HOSP
201 W CENTER ST
ROCHESTER MN
55901

POSS DONALD G
6301 SHINGLE CREEK PKWY
BROOKLYN CTR MN
55430

PULSCHER RBT SPRINGSTED INC
813 OSBORN BLDG
ST PAUL MN
55102

RANALLO CLARENCE
800 CENTRAL AVE N E
MPLS MN
55413

RED OWL STORES INC
215 E EXCELSIOR AVE
HOPKINS MN
55343

RENQUIST ARTHUR NSP CO
414 NICOLLET MALL
MPLS MN
55401

ROBBIE JOSEPH
904 CARGILL BLDG NO CTR
MPLS MN
55402

SAX DOVE & STENSON
310 ENDICOTT BLDG
ST PAUL MN
55101

SCARBOROUGH WILLIAM
DIV.ED. U.M.
MORRIS MN
56267

SCHMIDT LARRY WCCO-TV NEWS
50 S 9TH ST
MPLS MN
55402

SCHWERMAN EARL JR
1535 8TH AVE SE
ROCHESTER MN
55901

POYZER ROBT
BOX 675
FERGUS FALLS MN
56357

RAMSEY CO MEDICAL SOCIETY
1500 LOWRY MEDICAL BLDG
ST PAUL MN
55102

REID DAVID H
5633 WASHBURN AVE S
MPLS MN
55410

RICHARDSON THOS
7851 METRO PKWY S 103
MPLS MN
55420

ROBERTS DAVID E
1260 NW NATL BK BLDG
ST PAUL MN
55101

SAN SIMEON DEVELOP CORP
CLD 1ST STATE BK BLDG
PAYNESVILLE MN

ST PAUL ASSN PLBG HTG M
614 AP NATL BK
ST PAUL MN

SCHLICHT REV ROBT
611 W MAIN ST
BELLE PLAINE MN
56011

SCHNEIDER MAHLON
GREEN GIANT
LESUEUR MN
56058

SCHWINN ROBT.P.
1400 SOO LINE BLDG.
MPLS. MN
55402

MINN WATER RESOURCES BD
RM 206 555 WABASHA ST
ST PAUL MN
55102

MOFFITT R C
RM 301 M MPLS CITYHALL
MPLS MN
55415

MPIRG
BOX 45 ST MARYS COLLEGE
WINONA MN
55987

NASS GEO V HENN CO GEN HOSP
5TH AND PORTLAND AVE
MPLS MN
55415

NAT'L SOLID WASTES-R. GRASSO
1730 RHODE ISLAND AV.NW
WASHINGTON DC
20036

NORTH CENTRAL ELEC ASSN
PO BOX 202
BATTLE LAKE MN
56515

NW BELL TEL CO LEGAL DEPT
224 S 5TH ST RM 2000
MPLS MN
55402

OLD COLONY GAS & OIL COMPANY
17TH AVE N AT 2ND ST
MPLS MN
55411

PETERSON JOHN W
510 NW BK BLDG
ST PAUL MN

MINN-WISC BOUNDARY AREA COMM
600 2ND ST
HUDSON WI
54016

MOOD R BLOOMINGTON HLTH DEPT
10200 PENN SO
BLOOMINGTON MN
55431

MUCK THOS R
160 STATE OFF BLDG
ST PAUL MN
55155

NATL CAR RENTAL ATT D MITZEL
5501 GREEN VALLEY DR
MPLS MN
55437

NCEC INC C/O DR DAHLBERG
CONCORDIA COLLEGE
MOORHEAD MN
56560

NEUMAN RALPH W
RT 2 BOX 125
EMBARRASS MN
55732

NW COUNTRY ELEVATOR ASSN
802 GRAIN EXCH BLDG
MPLS MN
55415

NYQUIST DEAN A
3707 53RD PL N
BROOKLYN CTR MN
55429

OLOFSON ARTHUR MBO & MAINC
927 SOO LINE BLDG
MPLS MN
55402

PATTISON ORVIS
BOX 645
WILLMAR MN
56201

PETERSON GARY
854 MIDLAND BK BLDG
MPLS MN
55401

MN ELECTRICAL ASSN
3100 HUMBOLT SO
MPLS MN
55408

MOONEY, MICHAEL A.
BOX 903, ST.JOHN'S UNIV
COLLEGEVILLE MN
56321

MUELLER SHIRLEY A
787 W COTTAGE AVE
ST PAUL MN
55117

NATL COUNCIL JEWISH WOMEN
4330 CEDAR LK RD
MPLS MN
55416

NEDELL HAROLD - MEINEKE
6300 W LOOP S SUITE 200
BELLAIRE TX
77401

NIELSEN STOCK & BLACKBURN
415 730 BLDG
MPLS MN

NURSING HOME ADMRS BD EXAMRS
RM 340 717 DELAWARE SE
MPLS MN
55414

O'BRIEN J.DENNIS
1100 1ST NATL.BANK BLDG
MINNEAPOLIS MN
55402

OSTRUM DONALD E
PO BOX 33163
COON RAPIDS MN
55433

PAYNE COL ALVIN

DEGRAFF MN
56233

PFEIFER AND SHULTZ, INC
1433 UTICA AVE S
MPLS MN
55416

MN PUB INT RESEARCH GROUP
3036 UNIV AVE SE
MPLS MN
55414

MORTON BUILDINGS INC
R #1
FOLEY MN
56329

NATL FAMILY INS CO
2147 UNIV AVE
ST PAUL MN
55114

NEREN MADONNA
376 NEAL AVE S
AFTON MN
55001

NO SUB MONTESSORI-S SADDL
2487 HELEN COURT
NO ST PAUL MN
55109

NUTTER JULIA
743 W MONTANA
ST PAUL MN
55117

OFFICE OF THE GOVERNOR
130 STATE CAPITOL
ST PAUL MN
55101

OTTER TAIL POWER CO.
215 S. CASCADE ST.
FERGUS FALLS MN
56537

PAYNE WM B
2400 FIRST NATL BK BLDG
MPLS MN
55402

PHAR MFGRS ASSN WM D PATT
1155 15TH ST NW
WASHINGTON DC DC
20005

MPLS CHAMBER COMM TRANSP DPT
15 S 5TH ST
MPLS MN
55402

MIDLAND GLASS-HD SPURLING
PO BOX 69
SHAKOPEE MN
55379

MINN AFL-CIO, L O LA SHOMB
414 AUDITORIUM ST
ST PAUL MN
55102

MINN. ASSN. PET RETAILERS
1115 2ND AVE. SO.
MINNEAPOLIS MN
55403

MINN COMMUNITY DEVELOP SERV
512 ROSSMOR BLDG
ST PAUL MN
55101

MINN ENV LAW INST INC
PO BOX 15076 COMM STA
MPLS MN
55415

MINN. HOTEL & MTR. ASSN
2001 UNIVERSITY AVE
ST PAUL MN

MINN LP GAS ASSN
7515 WAYZATA BLVD 106
MPLS MN
55426

MINN POULTRY & HATCHERY ASSN
BOX 158
MADELIA MN
56062

MINN RETAIL HARDWARE ASSN
3033 EXCELSIOR BLVD 313
MPLS MN
55416

MINN STATE BD PHARMACY
717 DELAWARE ST SE #351
MPLS MN
55414

MPLS CITY ATTORNEY
325M CITY HALL
MPLS MN
55415

MILLER PAUL J PHARMACY SERV
ST MARYS HOSP
ROCHESTER MN
55901

MINN ASPHALT PAVEMENT ASSN
555 WABASHA RM 209
ST PAUL MN
55102

MINN ASSN WATERSHED DIST'S

ADA MN
56510

MINN COUNCIL STATE EMP NO 6
475 RICE ST
ST PAUL MN
55103

MINN FARMERS UNION PRES OFF
1275 UNIV AVE
ST PAUL MN
55104

MINN HOUSING INST N T CARTER
7801 METRO PKWY
MPLS MN
55420

MINNE MINE CREDIT UNION
3000 HUDSON PK S 100
ST PAUL MN
55119

MN REP STATE CENTRAL COMM
555 WABASHA AVE
ST PAUL MN
55102

MINN SOCIETY ARCHITECTS AIA
NW NATL BK BLDG
ST PAUL MN
55101

MINN STATE CAPITOL EMP UNION
PO BOX 3215
ST PAUL MN
55165

MPLS STAR PRESS ROOM
STATE CAPITOL
ST PAUL MN
55101

MINN APT ASSN
GRIGGS-MIDWAY BLDG
ST PAUL MN
55104

MINN ASSN COOPERATIVES
55 SHERBURNE AVE
ST PAUL MN
55103

MINN AUTOMOBILE DEALERS ASSN
GRIGGS MIDWAY BLDG
ST PAUL MN
55104

MINN DEPT HEALTH J C MCKASY
717 DELAWARE S E
MPLS MN
55440

MINN FOOD RETAILERS ASSN
555 WABASHA
ST PAUL MN
55101

MINN HWYS MANAGEMENT SERVICE
407 HWY BLDG
ST PAUL MN
55101

MINN.MTR.TRANSP. .J.N.DENN
1821 UNIV.
ST.PAUL MN
55104

MINN RESTAURANT ASSN
2001 UNIVERSITY AVE.
ST PAUL MN 55
104

MINN SOC CERTIFIED PUB ACCTS
1102 WESLEY TEMPLE BLDG
MPLS MN
55403

MINN STATE MED ASSN
375 JACKSON ST
ST PAUL MN
55101

MPLS TRIBUNE CITY DESK
425 PORTLAND AVE
MPLS MN
55415

MN. ASN.C&IND H.D.PETERSO
480 CEDAR ST.
ST.PAUL MN
55101

MINN ASSN ELEC COOPERATIV
4901 W 77TH ST
MPLS MN
55435

MINN CCMM FOR HANDICAPPED
METRO SQ 492 7TH & ROBT
ST PAUL MN
55101

MINN DENTAL HYGIENISTS
5041 YVONNE TERRACE
MPLS MN
55436

MINN HEREFORD-LJ SCHAFER

BUFFALO LAKE MN
55314

MINN LAND USE COMMITTEE
4344 IDS CENTER
MPLS MN
55402

MINN PETROLEUM COUNCIL
1020 NORTHERN FED BLDG
ST PAUL MN
55102

MINN STATE BAR ASSN
100 MINN FED BLDG
MPLS MN
55402

MINN STATE RETIREMENT SYS
529 JACKSON ST
ST PAUL MN
55101

KLOSTER MARION PEAVEY CO
730 2ND AVE S
MPLS MN
55402

KLUZ STEVEN J
1910 1ST NATL BK BLDG
MPLS MN
55402

KNOPP TIMOTHY
COLLEGE FORESTRY U OF M
ST PAUL MN
55108

KNUTSON DR KEITH, BIOLOGY
ST CLOUD STATE
ST CLOUD MN
56301

KNUTSON R N GRANNIS ETAL
F J SCHULT BLDG
ST ST PAUL MN
55075

KNUDSON ROBT
4375 BROWNDALE AVE
MPLS MN
55424

KOLLER MR & MRS ERWIN A
1568 DULUTH ST
ST PAUL MN
55108

KOPP MRS VERNON
2050 65TH ST E
INVER GR HGHT MN
55075

KRAMER ERNEST W
717 DELAWARE ST SE
MPLS MN
55440

KRONLOKKEN J E
10048 NORD RD
BLOOMINGTON MN
55437

KROON H CLIFTON
210 E WALNUT
MANKATO MN
56001

LAKE SUPERIOR INDUSTRIAL BUR
828 FIRST AM. BK. BLDG.
DULUTH MN
55802

LANAHAN E F - SIBLEY CO
184 E 6TH ST
ST PAUL MN
55101

LANGVIN DAVID
7500 80TH ST S
COTTAGE GROVE MN
55016

LANSING & OAKES
400 SIBLEY ST
ST PAUL MN
55101

LAPP LAZAR LAURIE ET AL
1200 BUILDERS EXCHANGE
MINNEAPOLIS MN
55402

LARSON C L
3800 MINNEHAHA AVE SO
MPLS MN
55406

LARSON HANS P DIV HOSP SERV
717 DELAWARE ST SE
MPLS MN
55440

LEAGUE MN MUNIC
300 HANOVER 480 CEDAR
ST PAUL MN
55101

LEAGUE WOMEN VOTERS OF MINN
555 WABASHA
ST PAUL MN
55102

LIBBEY LEONARD
BOX 17011 NOKOMIS STA
MPLS MN
55417

LINDALL & JONATHAN DEVELOP.
VILLAGE ONE CENTER
CHASKA MN
55318

LOCKNER GARY
R R 1 BOX 23
BAUDETTE MN
56623

LOOS CALVIN J
6809 LYNDALE AVE SO
MPLS MN
55423

LOWE DOUG
2701 N LEXINGTON AVE
ROSEVILLE MN
55113

LYNCH DONALD SIBLEY CO
184 E 6TH ST
ST PAUL MN
55102

MCDONALD PHILIP M
2077 SELBY AVE
ST PAUL MN
55104

MCFADDEN G H DISPATCH-PRESS
55 E 4TH ST
ST PAUL MN
55101

MCKIBBON MRS SHIRLEY
11 EVERGREEN LN
BABBITT MN
55706

MCLELLAN LARKIN
215 ADM BLDG ST CAPITOL
ST PAUL MN
55101

MALONE E I COMM LABOR & INDU
444 LAFAYETTE RD 5TH FL
ST PAUL MN
55101

MANKATO STAT STUDENT SENATE
CENTENNIAL STUDENT UN
MANKATO MN
56001

MANKATO STATE STUDENT AS
BOX 58 MANKATO COLLEGE
MANKATO MN
56001

MANTHEY T J PICKANDS MATHER
1100 SUPERIOR AVE
CLEVELAND OH
44114

MASTOR & MATTSON LTD
315 PEAVEY BLDG
MPLS MN
55402

MAUL WARREN E
320 S 4TH ST
MPLS MN
55415

MAYO FOUNDATION G ORWOLL
200 FIRST AVE NW
ROCHESTER MN
55901

MECCA
867 GRAND AVE
ST PAUL MN
55105

MEIEROTTO, JOAN
1794 SO LEXINGTON
ST PAUL MN
55118

MERRITT GRANT POLLUTION CONT
1935 W CO RD 32
ROSEVILLE MN
55113

MET TFR MEN ASSN A ROSENT
1821 UNIV AVE
ST PAUL MN
55104

HEIM PAUL
1320 SOO LINE BLDG
MPLS MN
55402

HILL JIM ASSOC.MILK PROD.
7850 METRO PARKWAY
MINNEAPOLIS MN
55420

HOLMES EUSTIS ET AL
4610 ICS CENTER
MPLS MN
55402

HOUSE APPROPRIATIONS COMM
RM 109 STATE CAPITOL
ST PAUL MN
55101

HULTMAN WARREN R
C/O BARBAROSSA R3
OSSEO MN
55369

HUTCHISON R.M. ANOKA CO.COMP
COURT HOUSE
ANOKA MN
55303

INGEBRIGTSEN DR K H
23 SE 4TH ST
MPLS MN
55414

IUOE LOC 49 CHAS SWENSON
2580 UNIV AVE
ST PAUL MN
55101

JACKMAN DONALD G
4023 E LAKE ST
MPLS MN
55406

JOHNSON & SANDERSON
ST MARYS HOSPITAL
ROCHESTER MN
55901

JOHNSON LANCE J
265 S LAFAYETTE RD
ST PAUL MN

HEINTZ MARY ELLEN
PO BOX 599
CINCINNATI OH
45201

HINRICHSEN PATRICK
MANKATO FREE PRESS
MANKATO MN
56001

HOPKINS WM.B. DIR.MISCCA
3915 GOLDEN VALLEY ROAD
GOLDEN VALLEY MN
55422

HOUSE ED STANDING SUB COMM
RM 109 STATE CAPITOL
ST PAUL MN
55101

HUMAN RIGHTS
200 CAPITOL SQ BLDG
ST PAUL MN
55101

HYLAND DEAN
1501 W 50TH ST
MPLS MN
55419

INGVALSON VERN MN.FARM BUR.
3110 WOODDALE DR PO 337
OST PAUL MN
55165

IVERSON DR JOS DEPT ED
ST OLAF COLLEGE
NORTHFIELD MN
55057

JAIN NIRMAL ENIV PROCESS
1220 GLENWOOD AVE
MPLS MN
55405

JOHNSON CLARENCE IBEW LU 292
3615 37TH AVE S
MPLS MN
55406

HEISENFELT WM
BOX 516
BEMIDJI MN
56601

HOLDAHL SCOTT
380 N BLDG GRAIN EXCH
MPLS MN
55415

HORNER WALDORF - KAZIUKEWICZ
PO BOX 3260
ST PAUL MN
55165

HOUSE RESEARCH
RM 17 STATE CAPITOL
ST PAUL MN
55155

HUMAN SERVICES
414 LAFFAYETTE RD 5THFL
ST PAUL MN
55101

INS FED OF MINN
902 SOO LINE BLDG
MPLS MN
55402

IZAAK WALTON MN DIV
111 E FRANKLIN RM-210
MPLS MN
55404

JENJS INC
525 LAKE AVE SO
DULUTH MN
55801

JOHNSON LEROY
9939 BLUEBIRD ST NW
COON RAPIDS MN
55433

KABLE RICHARD W

BETHEL MN
55006

HICHINGER-PARK PLANNING
421 WABASHA ST
ST PAUL MN
55102

HOLEY GEO AERONAUTICS
DOWNTOWN AIRPORT
ST PAUL MN
55107

HOULE MELVIN
881 W HWY 96
SHOREVIEW MN
55112

HULSTRAND ANDERSON & LARS
PO BOX 130
WILLMAR MN
56201

HUNT JAMES P JR
11470 GALTIER DR
BURNSVILLE MN
55378

ILLINGWORTH ROBT C
6750 FRANCE AVE S
MPLS MN
55435

INTERSTATE POWER RW STEEL
1000 MAIN ST
DUBUQUE IA
52001

JENSEN CARL A
127 E MAIN ST
SLEEPY EYE MN
56085

JOHNSON M.D. FRUNDT & FRU

BLUE EARTH MN
56013

KAVANEY RICHARD
1220 NORTHERN FED BLDG
ST PAUL MN
55102

FARRELL FRANK BUR NOR
RM 1180 176 E 5TH ST
ST PAUL MN
55101

FLADLAND CLINTON MN L&P BUR
798 RAYMOND AVE
ST PAUL MN
55114

FORSBERG AGR SERV
518 SUMMIT AVE
NEW ULM MN
56073

FREDRIKSON BYRON ET AL
47TH FLR IDS CENTER M
PLS MN
55402

GALVIN M J JR
W2162 1ST NATL BK BLDG
ST PAUL MN
55101

GEORGE K GRANSE CO
1477 SELBY AVE
ST PAUL MN
55104

GODIN RALPH J
3824 47TH AVE SO
MPLS MN
55406

GREEN DEL CITY MGR
BLOOMINGTON CITY HALL
BLOOMINGTON MN
55431

GUSTAFSON DAN-LABOR TEMPLE
312 CENTRAL
MPLS MN
55414

HANFT PHILIP M
1200 ALWORTH BLDG
DULUTH MN
55802

HALLBERG LEE & MCCABE
4927 34TH AVE S
MPLS MN

FELHABER R S
W 1ST NATL BANK BLDG
ST PAUL MN
55101

FLEMING FREDERICK A
1860 HIGHLAND PARKWAY
ST PAUL MN
55116

FOX W.E. LINDQUIST & VENNUM
4200 IDSCTR 80 S.8TH ST
MINNEAPOLIS MN
55402

FURLONG DR JOHN
RT 1
BOVEY MN
55709

GARDNER HDW - R A JOHNSON
515 WASHINGTON AVE N
MPLS MN
55401

GIEL DAVID
RM B-28 STATE CAPITOL
ST PAUL MN
55155

GRAHAM THOS H
854 MIDLAND BK BLDG
MPLS MN
55401

GREEN GARY J
41 SHERBURNE AVE
ST PAUL MN
55102

GUSTAFSON WALLACE
BOX 567
WILLMAR MN
56201

HANSON ETHEL
2813 85TH AVE N
MPLS MN
55444

HAUN DR J W GEN MILLS
PO BOX 1113
MPLS MN

FINLEY JAMES F
920 MINN BLDG
ST PAUL MN
55101

FITZGERALD DR BOB
3007 LYNDALE AVE SO
MPLS MN
55408

FRANKLIN ROBERT B MPLS TRIB
426 PORTLAND
MPLS MN
55415

F W WOOLWORTH CO
3316 W 66TH ST
EDINA MN
55424

GEBERT K L
220 GRAIN EXCH
MPLS MN
55415

GLEESON MICHAEL
909 SOC SC BLDG U OF M
MPLS MN
55455

GRANATH MARVIN -HONEYWELL
2701 4TH AVE SO
MPLS MN
55408

GREEN JANET
9773 N SHORE DR
DULUTH MN
55804

HAROLD J WESTIN CONSTRUCTORS
45 E 8TH ST
ST PAUL MN
55101

HAYES, THOMAS W
700 SELLWOOD BLG
DULUTH MN
55812

FINNEGAN J.R.
55 E. 4TH
ST.PAUL MN
55101

FORBES GORDON MINN RRS AS
203 HANOVER 480 CEDAR
ST PAUL MN
55101

FREDIN CONRAD M
811 FIRST NATL BK BLDG
DULUTH MN
55802

GEO A HORMEL & CO LAW DE
PO BOX 800
AUSTIN MN
55912

GLEN. HILLS HOSP.R.VAN HA
3901 GOLDEN VALLEY RD.
MPLS. MN
55422

GREATER MET AREA HOSPITAL
5152 CEDAR AVE S
MPLS MN
55417

GRLIMMERT REV DONALD
1435 ADAMS ST
MPLS MN
55413

H B FULLER CO
2400 KASOTA AVE
ST PAUL MN
55108

HARVEY MICHAEL
1390 W M HAHA PKWY
MPLS MN
55409

HEALTH MANPOWER C LARSON
717 DELAWARE ST SE
MPLS MN
55440

CITIZENS LEAGUE
530 SYNDICATE BLDG
MPLS MN
55402

CLARKSON J.B.
2350 I.D.S. CENTER
MINNEAPOLIS MN
55402

CLAUSEN PHILLIP
2307 STANDISH ST
ST PAUL MN
55108

CLAWSON CONNIE
HELP CENTER 317-17TH AV
MPLS MN

COLEMAN NICHOLAS D
700 LINWOOD AVE
ST PAUL MN
55105

COLLIN LAURENCE
RT 2
ISANTI MN
55040

COMMUNITY DESIGN CENTER
118 E 26TH ST
MPLS MN
55404

CONCORDIA COLLEGE
DEAN
MOORHEAD MN
56560

CONSUMER SERVICES DEPT COMM
5TH FLR METRO SQ BLDG
ST PAUL MN
55101

COUNTY ATTYS COUNCIL
95 SHERBURNE AVE S203
ST PAUL MN
55103

CRAVEN NORMAN
10637 THOMAS AVE S
BLOOMINGTON MN
55431

CROW WING CO PLANNING & A
COURT HOUSE
BRAINERD MN
56401

CUSHMAN J S DAYTON HUDSON
700 NICOLLET MALL
MPLS MN
55402

DAILEY THOMAS ECONOMICS LAB
370 WABASHA ST
ST PAUL MN
55102

DANIELSON RODNEY L
418 AUDITORIUM
ST PAUL MN
55102

DAYTON CHAS SIERRA CLUB
800 MIDLAND BANK BLDG
MPLS MN
55401

DEVELOP DISABILITIES PROGRAM
STATE PLAN 101 CAP SQ
ST PAUL MN
55155

DICKINSON MRS JOANNE
BOX 1065
MARSHALL MN
56258

DIEHL JOHN
26 KENWOOD PKWY
ST PAUL MN
55105

DISPATCH PIONEER PRESS
PRESS RM STATE CAPITOL
ST PAUL MN
55101

DORSEY MARQUART
2400 1ST NATL BANK BLDG
MPLS MN
55402

DOUGLASS BELL
525 OSBORN BLDG
ST PAUL MN
55102

DOW CHEMICAL
47 BLDG
MIDLAND MI
48640

DOYTON MAURICE, MET SEWER BD
350 METRO SQ BLDG
ST PAUL MN
55101

DUDLEY E H
RT 7 BOX 122
EXCELSIOR MN
55331

DUNN OLIVER PLUMBERS LOC
708 SO 10TH ST
MPLS MN
55404

DZUGAN KEN ST PAUL PLANNING
421 WABASHA ST
ST PAUL MN
55102

EBELING EDWARD H.
161 W. MAIN
PERHAM MN
56573

ELDER DR JAMES B
11140 WASHBURN AVE SO
BLOOMINGTON MN
55431

ELDRED R W ARMOUR & CO
UNION STOCK YARDS
SO ST PAUL MN
55075

ELMER EDWIN W
2901 PLEASANT AVE
MPLS MN
55408

EMERICK RICHARD A
1908 IDS CENTER
MPLS MN
55402

ENNIS A F BOISE CASCADE
PO BOX 713
INTL FALLS MN
56649

ENV SERV-GEN RESOURCE CORP
6340 INDUSTRIAL DR
HOPKINS MN
55343

ERDMAN ROGER TENNANT CO
701 N LILAC DR
MPLS MN
55441

ERNEST K LEHMANN & ASSOC.
1409 WILLOW ST.
MPLS MN
55403

ESSE KENNETH
4801 W 50TH ST
EDINA MN
55424

ETHICS COMM
RM 410 STATE OFF BLDG
ST PAUL MN

EVANS CHAS.L. PRENTICE-HALL
ENGELWOOD CLIFFS
NEW JERSEY

EVERETT JERRY NW PETRO ASSN
512 NICOLLET MALL RM917
MPLS MN
55402

EWALD DOUGLAS MINN HOSP A
2333 UNIV AVE SE
MPLS MN
55414

ASSN RESIDENCES FOR RETARDED
459 RICE SUITE 301
ST PAUL MN
55103

AUTOMOBILE MFRS ASSN INC
55 SHERBURNE AVE
ST PAUL MN
55103

BABCOCK LOCHER NELSON ET
118 E MAIN ST
ANOKA MN
55303

BADALICH JOHN P
2025 THOMPSON AVE
SO ST PAUL MN
55075

BARRETT FRED
ST LOUIS CO COURT HOUSE
DULUTH MN

BARTHOLOW HAROLD E FIRE CHF
2600 109 AVE N W
COON RAPIDS MN
55433

BECK PAT
953 HYACINTH AVE
ST PAUL MN
55106

BECKLIN ROBERT C
447 N W 4TH
CAMBRIDGE MN
55008

BEECHER EVERETT
10 10 1ST ST SO
HOPKINS MN

BEMIDJI STATE COLLEGE
PLACEMENT BUR.J.C.BRADY
BEMIDJI MN
56601

BENSONI PETER USW OF AM
609 PROVIDENCE BLDG.
DULUTH MN

BERGERUD ALF
300 ROANOKE BLDG
MPLS MN
55402

BERGSETH THOMAS
1011 NICOLLET MALL
MPLS MN
55403

BEST FLANAGAN ET AL
4040 IDS CENTER
MPLS MN
55402

BEUTEL ROBERT
2200 SILVER LAKE RD
NEW BRIGHTON MN
55112

BLOMQUIST BARRY L

NORTH BRANCH MN
55056

BLOOMINGTON CITY CLERK
2215 W OLD SHAKOPEE RD
BLOOMINGTON MN
55431

BREHL JAMES W
332 HAMM BLDG
ST PAUL MN
55102

BRIGGS & MORGAN - B F FRI
2200 W 1ST NATL BK BLDG
ST PAUL MN
55101

BRIGHAM E M III
RR4
RED WING MN
55066

BROEKER JOHN
2850METRO DR. SUITE 504
BLOOMINGTON MN
55420

BROOKS WILLIAM F JR
854 MIDLAND BK BLDG
MPLS MN
55401

BROWN D M GOODRIDGE PUB S
IND DIST #561
GOODRIDGE MN
56725

BROWN H D
4961 KINGSBERRY LANE
MINNETONKA MN
55343

BRUBACHER RICHARD COMM ADM
208 ADM BLDG
ST PAUL MN
55101

BRUNING C.R.DEPT.CLINIC.EXP.
BURTON HALL
MPLS. MN
55455

BUCHHOLTZ CHARLES
5044 BRENT AVE E
INV GRV HTS MN
55075

BURGER ALBERT
600 DEGREE OF HONOR BLD
ST PAUL MN
55101

BUR.ENGR.IND.DIV. MR.KIBIGER
219 N. 2ND ST.
MPLS. MN

BUR NATL AFFAIRS INC
1231 25TH ST NW
WASHINGTON DC
20037

BUSCH NOEL
3131 FERNBROOK LANE N
MPLS MN
55441

CAIN RUTH
730 E 38TH ST
MPLS MN
55407

CAIRNS JOHN A
47TH FLR IDS CENTER
MPLS MN
55402

CAPITOL NEWS SERVICE
BOX 17035
ST PAUL MN
55117

CARLSON CARL L
7516 80TH ST S
COTTAGE GROVE MN
55016

CARLSON VERNE E
BOX 755 CITY HALL
WILLMAR MN
56201

CARRISON DALE K
MANKATO STATE COLLEGE
MANKATO MN
56001

CENTRAL BUSINESS DATA
BENSON RADIO ARCADE BLD
BENSON MN
56215

CENTRAL MN REGIONAL DEV COMM
1139 FRANKLIN AVE
SAUK RAPIDS MN
56379

CHAMBER OF COMMERCE
30 SO 1ST AVE EAST
ELY MN
55731

CHAMBERLAIN JOHN L
PO BOX 241
MPLS MN
55440

CHERCHES CHRIS CITY MGR
5005 MTKA BLVD
ST LOUIS PARK MN
55416

AM CAMPING ASSN MRS LEACOCK
~~1235 BRIGHTON SQ~~ 3639-2½ St. N.E.
~~NEW BRIGHTON~~ MN Mpls
~~55112~~ 55418

ANDERSON HERBERT
418 8TH ST. SO.
VIRGINIA MN
55792

ANTHONY DICK WDSM RADIO
230 E SUPR ST
DULUTH MN
55102

ASMUSSEN, DENNIS, MPIRG
3036 UNIV AVE SE
MPLS MN
55414

ALBERT, AA CALDER CORP
366 JACKSON ST
ST PAUL MN
55101

AM INST PROF GEOLOGISTS
2201 PRINCETON AVE
ST PAUL MN
55105

ANDERSON HAROLD
BOX 3047
MANKATO MN
56001

ARNOLD ROBERT MESPA
41 SHERBURNE
ST PAUL MN
55103

ASSOCIATED GEN CONTROF MN
48 E 8TH STREET
ST PAUL MN
55101

ALLENDORF MARSHALL
220 GRAIN EX 400 S 4TH
MPLS MN
55415

ANCHOR BLOCK COMPANY
PO BOX 3360
ST PAUL MN
55165

ANDERSON JAMES
7703 NORMANDALE RD
MPLS MN
55435

ARROWHEAD REGIONAL DEV COMM
900 ALWORTH BLDG
DULUTH MN
55802

ASSOCIATED INDUST OF MPLS
NATIONAL BLDG
MPLS MN
55402

ALTMAN MILTON H
707 DEGREE OF HONOR BLD
ST PAUL MN
55101

ANDERSON GRAHAM
951 E HENN
MPLS MN
55414

ANDERSON STANFORD P
14600 MINNETONKA BLVD
MINNETONKA MN
55343

ARVER JOHN A
2467 COHANCY
ST PAUL MN
55113

ASSN OF MINN COUNTIES
55 SHERBURNE AVE #203
ST PAUL MN
55103



M E M O R A N D U M

TO:

State of Minnesota
Department of Public Safety
Commissioner Edward G. Novak

RE:

Proposed Rules of the State Department of Public Safety Governing Requirements for Approval of Motorcycle Operator Eye Protective Devices.

FROM:

Minnesota Motorcycle Dealers Association

The MMDA objects to the VESC 8 standards as they apply to Minnesota's Eye Protection Law for motorcyclists. Our objections are as follows:

A. The need of an Eye Protection law;

B. The availability and cost of devices approved under the VESC 8 standards;

C. The enforceability of the law using VESC standards; and

D. The discriminatory aspect of the law.

(A.) Is an eye protection law necessary/ The industry's answer is an emphatic, "NO"! To our knowledge there has been only one in depth study of "causes of motorcycle accidents". (The New York Department of Motor Vehicles, "Research Report - No. 1969-12".) This study states that of the 5,184 personal injury and fatal motorcycle accidents investigated, only four (4) were associated with flying debris hitting the motorcyclist. Secondly, the report states that leg injuries account for 58% of the injuries, 29% to the trunk area, 27% to the arm and 18% to the head area. The four injuries associated with flying debris accounts for less than .002% of the injuries.

Mr. Rasmusson, representing the Minnesota Society for the Prevention of Blindness, testified at the public hearing held on this matter. His statement, "I would have to agree that we are indeed dealing with a very small minority", coupled with the undisputed fact that the majority of motorcyclists wear some sort of eye protection, definitely strengthens our argument that there is not a real need for the eye protection law itself. Beyond a doubt, we should attempt to eliminate burdensome regulations.

(B.) Eye protection devices with the VESC 8 endorsement are not readily available and those that are cost 60% to 200% more. There are many adequate eye protection devices that do not have VESC 8 endorsement.

(C.) Enforcement of VESC 8 standards will only come about if the motorcyclist is stopped for another traffic violation which in most cases will take precedent over the lack of wearing approved eye protection equipment. The validity of this statement lies in the fact that there have been to our knowledge no citations issued for not wearing an approved helmet since the inception of that law.

(D.) The discriminatory aspect of the eye protection law is that the law as written, requires an eye protection device at all times. This requirement ignores a major problem for motorcyclists: the fogging and moisture buildup caused while wearing an eye protection device during inclement weather. To our knowledge there is no eye protection device made that does not "fog" during inclement weather. The motorcyclists who wear eye protection devices cure the problem in most instances by removing the protective device to enhance visibility. The law and regulations eliminate this right thereby increasing the danger of an accident due to impaired perception, rather than reducing the dangers as is intended.

In conclusion, the motorcycle industry in Minnesota and the 300,000 motorcyclists feel the law itself if unopposed will accomplish what the state had in mind in passing this law. It will protect the motorcyclist against the very minute possibility of being struct in the eye by a flying particle. However, the passage of burdensome, unenforceable, discriminatory regulations relating to the law, will only enhance the possibility of legal action on behalf of Minnesota's motorcycling industry and population.

Respectfully submitted,

Robert C. Illingworth
Executive Director of
Minnesota Motorcycle Dealers Association

ORIGINAL COPY

MINNESOTA DEPARTMENT OF PUBLIC SAFETY

STATE OFFICE BUILDING, ST. PAUL, MINNESOTA

In re:

Vehicle Equipment Safety Commission
Motorcyclists' Eye Protection
Regulation VESC-8

Transcript of proceedings had on Public Hearing before the Minnesota Department of Public Safety, on Monday, the 29th day of December, 1975, commencing at approximately 9:30 o'clock in the morning, in the Auditorium of the State Office Building, St. Paul, Minnesota.

* * *

APPEARANCES:

COLONEL JAMES CRAWFORD, Chief of State Patrol, State Department of Public Safety.

* * *

WHEREUPON, the following proceedings were duly had: --

* * *

MR. CRAWFORD: My name is Colonel James Crawford. I'm Chief of the State Patrol, State Department of Public Safety. I will be the presiding officer over this hearing. There are no other members of the panel this morning. The Assistant Attorney General is in Grand Rapids, Minnesota, so he won't be here. If there is anyone who hasn't signed the attendance sheet would you please raise your hand and we'll send somebody around to get you to sign it. This hearing is being held the 29th day of December, 1975, in the State Office Building Auditorium, St. Paul, Minnesota, commencing at 9:30 A.M. and will continue until all representatives of associations or other interested groups or persons have had an opportunity to be heard concerning the proposed adoption of the rules of the State Department of Public Safety, governing the requirements for approval of motorcycle operator eye protective devices. I will now read the statement of need for this hearing. The State of Minnesota, County of Ramsey, before Edward G. Novak, Commissioner of Public Safety, in the matter of proposed adoption of rules of the State Department of Public Safety relating to requirement for approval of motorcycle operator eye protective devices. The above-captioned rules are amendments to existing rules of the

FEDERAL COTTON CONTENT

Minnesota Department of Public Safety. The need to adopt these rules arises because foreign objects, striking or lodging in the eyes, or eyes of a motorcycle operator can cause injury to the eye or impaired vision, and additionally as a result, thereof, may participate loss of control of a motorcycle. The authority to adopt the proposed rules lies in laws 1975, Chapter 29, which provides in part that no person shall operate a motorcycle (unless he is wearing an eye protective device of the type approved by the Commissioner except when a motorcycle is equipped with a wind screen.) The proposed rules contemplate approval of eye protective devices upon certification of the American Association of Motor Vehicle Administrators that a particular device meets the requirements of Regulation VESC-8 of the Vehicle Equipment Safety Commission.

The Vehicle Equipment Safety Commission is composed of representatives of various States whose purpose is to encourage highway safety through uniformed performance requirements for vehicle equipment. All interested persons will be given an opportunity to give testimony limited to the subject of this hearing. It is permissible to present written material, which should be marked as an exhibit and introduced for the record. Statements or briefs, typed on eight and a half by

eleven inch paper may be submitted after the hearing to the Commissioner of Public Safety, State Highway Building, St. Paul, Minnesota, 55155. Such statements must be postmarked not later than midnight, January 19th, 1976. Those who have indicated on the attendance sheet their desire to speak will be called upon first. Thereafter, any others will be given the opportunity to speak. Please speak clearly so our Court Reporter does not miss anything. Before making your statement introduce yourself, spell your name and give the name and address of the association you represent. Before taking testimony, normally the Assistant Attorney General makes an introduction of the exhibits of the Department of Public Safety. In his absence, I will make that presentation. Exhibit A is the order for the hearing, signed by Edward G. Novak, Commissioner of Public Safety. It is ordered that notice of said hearing be given to all representatives of the associations or other interested groups or persons who have registered their names with the Secretary of State for that purpose and all persons who are presently members of the Minnesota Legislature. Exhibit B is the statement of need which I previously read, signed by Edward G. Novak, Commissioner of Public Safety. It's dated November 24th, 1975. Exhibit C is a notice of hearing,

signed by Edward G. Novak, Commissioner of Public Safety, dated November 17th, 1975, giving notice of hearing in the State Office Building Auditorium, St. Paul, Minnesota, on December 29th, 1975, commencing at 9:30 A.M. Exhibit D is the Certificate certifying 442 general labels and public safety lists, constitute the complete list of persons, associations and other interested groups who as of 4:15 o'clock P.M. the 24th day of November, 1975 have requested pursuant to Minnesota Statutes, 1974, Section 15.0412, subdivision 4, that their names be placed on file with the Secretary of State for the purpose of receiving notices of public hearing on the proposed rules on the subject caption above. It's signed by Joan Anderson Growe, with no date. Exhibit E is an affidavit of mailing certifying that Diane Hamilton on the 26th day of November, 1975 did deposit and address notices of hearing per the certification of the Secretary of State. It's signed by Diane Hamilton, the 26th of November, 1975. Exhibit F is the appointment of James Crawford, Chief of State Patrol, Division of the Department of Public Safety,as hearing officer to hold the hearing in the State Office Building Auditorium, St. Paul, Minnesota, on December 29th, 1975 commencing at 9:30 A.M. There are no changes or

addendums to the proposed rules as published by the Department of Public Safety. The transcripts and the Exhibits and the testimony which is given today will be held in abeyance for twenty days and after twenty days the Commissioner of Public Safety will rule on the proposed regulations. At this time there is an indication that three people would like to speak this morning. The first one I'll call on is Robert Illingworth to give his testimony.

ROBERT ILLINGWORTH: Robert Illingworth, I-L-L-I-N-G-W-O-R-T-H, 6750 France Avenue South, Minneapolis, 55435. I'm here today representing the Minnesota Motorcycle Dealers Association, the National Motorcycle Dealers Association and the Minnesota Motorcycle Riders Association which is a sole representative of some three hundred thousand motorcyclists in the State of Minnesota. We strongly object to the VESC-8 regulations as they pertain to the eye protection law. Frankly, we object to the eye protection law itself which you may feel is irrelevant at this time but I feel that I can prove that the two definitely intertwine. First I would like to point out that this law was passed contrary to legislative promises. It's another unneeded, unjust, burdensome law. The State of New York has published an indepth study of causes

of motorcycle accidents. Of the 5,184 personal injury and fatal motorcycle accidents in one year, only four, I repeat, only four were associated with flying debris. Secondly, the report states that leg injuries account for 58 percent of the injuries. Twenty-nine percent to the trunk area, twenty-seven percent to the high arm area and finally eighteen percent to the head area. I ask you do we need a burdensome eye protection law. The majority of motorcyclists wear some type of eye protection without a law dictating that they must. The VESC regulations will only up the cost of motorcycling and will most definitely deter many from buying a motorcycle which our industry doesn't need this year with the sloping sales. The enforceability of the VESC-8 regulations will only come about if a motorcyclist is stopped for another traffic violation which in most cases takes precedence over wearing approved equipment. The validity of this statement lays in the fact that there have been to our knowledge no citations issued for not wearing an approved helmet which is another state law. The motorcyclist must decide when and where he should wear an eye protective device. This will depend primarily on the road and weather conditions. This argument is supported by Mr. Joseph Shields, one of the most well versed people in

the country in the area of motorcycle safety. I have ridden a motorcycle myself most of my life. I wear goggles most of the time. I have been forced to remove my eye protection devices many times because of rain, fog, temperature changes which cause fogging to the lenses. To my knowledge there are very few devices sold in the market today that would accommodate all of the uses a motorcyclist must have under the VESC-8 standards. These are priced out of reach and in most cases three to seven times the cost of normal goggles. In conclusion we feel that the cyclist should decide when and where he should wear eye protection. Only he can know if it is safe or not. Our industry asks that you not approve the VESC-8 regulations, that as an alternative simply state that motorcyclists should wear eye protection and should not wear tinted eye protective devices.

MR. CRAWFORD: You're saying that the adoption should be without any standards whatsoever?

ROBERT ILLINGWORTH: Yes.

MR. CRAWFORD: Thank you. The next person I'll call upon is Duane F. Rasmussen.

DUANE F. RASMUSSEN: My name is Duane Rasmussen, R-A-S-M-U-S-S-E-N. I live at 5045 Dawn View Terrace, Golden Valley, 55422. I represent the

Minnesota Society for the Prevention of Blindness. I'm the program director of that agency and in that capacity we are concerned about this legislation and the standards that are going to be set. I must plead ignorance of the content of the VESC-8 standards. Approaching the standard setting situation from perhaps a broader point of view, we would like to encourage this group to -- how do I want to say it -- to set up a minimum standard, or to use as a reference any cover goggles or protective eye wear that meet or exceed the requirements of the American National Standards Institute, standard practice for education or occupational eye and safety protection, identified as ANSIZ 87.1-1968. This standard is referenced from both your Federal and State regulations as well as Minnesota schoolized safety laws. We're concerned about the impact existence, of whatever devices this body elects to establish. I have to bow on Mr. Illingworth's statistics. We have no data on the number of eye injuries whatever. I think the incidents is small. I would not argue with that. But the severity of an eye injury to someone riding a motorcycle, it's beyond comprehension. This is why we are concerned that the adequate impact resistance standards are set. The front surface of the human eye is thirty thousands of an inch thick. It's

about as thick and has about the same impact resistance as the skin on a balloon that we used to blow up when we were children. It will not resist a very great impact at all. Behind the front surface of the eye is a fluid substance just slightly thicker than a pin-point. About five eighths of an inch of it. That will not slow a penetrating missile down very much. The back wall of the eye, the retina, is ten layers thick. All ten put together are about as thick as a single ply piece of tissue paper and about as strong. Any object that strikes the eye with such force as to penetrate all three areas of the eye will enter the brain and that person will die. It's an automatic thing. This is why we are concerned about the severity of this thing. I realize that a june bug, getting a june bug in the eye or getting a gravel chip out of a car tire, a piece of bug off a mud flap, a kernel of corn off the back of a pick-up, the chances of any of these things hitting you in the eye is pretty remote. When they do it's pretty much always fatal. You just don't have a chance. Most of us, if we suffer from an impact like this do not simply have the sense to throttle back our motorcycle, pull over to the side of the road, put your kickstand down, get off and then reach up to our face and say, "Oh my God." When we are hit with

MILLERS FALLS
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a missile like this we are going to react rightly. This is when the motorcycle is spilled, flipped, whatever. As far as only four percent of the injuries that Mr. Illingworth referred to, being specifically related to penetrating wounds of the eye, I would like to just offer one item for consideration. We think in many instances when we are talking about motorcycle fatalities that the individual, the victim does suffer a penetrating wound of the eye is perhaps killed by that impact and then in the sequence of the things that happen, then that individual drives his motorcycle into the rear of a car or off the road or whatever. I have nothing but speculation to back this up but we think it is possible. We are concerned. Eight hundred people a year in Minnesota go blind. Four hundred of them should not have to. This is primarily what our agency is all about. Again, we think that the standards that I have referenced, occupational and educational eye safety are adequate to meet almost any impact that a motorcycle rider should experience. That's all I have, sir. If you have any question, I will be happy to try to respond.

MR. CRAWFORD: In VESC, Vehicle Equipment Safety Commission number 8, in their section 5.15, shall be determined in accordance with those tested

methods described in 63411, 63412, 63413 of the American National Institute Standards V871-1968. Is that the one that you are referring to?

DUANE F. RASMUSSEN: Yes. The test for impact resistance consists in a glass lens of dropping a one inch ball down a fifty inch, down to the surface of the lens. The lens may not shatter or fracture from this impact. With plastic lenses they use the same type of test but they invent a number 25 singer needle in the bottom side of ball and the needle may not penetrate or mar the frontal surface. We think this is inadequate protection, sir.

MR. CRAWFORD: All right, then there is one other reference in that regulation referring to resolution tests by the National Bureau of Standards on lens resolution which also is part of the standard of VESC-8.

MR. RASMUSSEN: I'm not prepared or equipped to respond or comment on this.

MR. CRAWFORD: Those are the ones that you were referring to --

MR. RASMUSSEN: I was referring to the impact resistance standards.

MR. CRAWFORD: Okay, thank you. The next person is Mike Schunk.

MIKE SCHUNK: My name is Mike Schunk, that's S-C-H-U-N-K. I'll make it brief because I have laryngitis and it's going to have to be. My comment, I have about three comments and one question. The first comment concerns the previous gentleman's testimony. I don't believe any of the plastic goggles which I have worn in my 13 years of motorcycle riding experience would not be marred or broken or fractured by a one ounce pellet falling fifty inches with a needle in the bottom of it. In fact, my experience with goggles and safe shields, particularly the wrap around, variety is that normal usage within about a three or four week period will cause severe scratching and just taking the goggles off and lying them on a table or putting them on the back of your motorcycle, as well as the riding causes numerous scratches. This in turn does create a distortion of your vision. In the instances where I have worn goggles over my glasses I have suffered from, in other words, having two artificial mediums between me and the exterior. This does cause distortion. I found that goggles worn 45 to 50 miles an hour will frequently vibrate, this includes the type that buttons to your helmet as well as the type that have a strap around. They move around, they blow around, they obstruct my vision on the side, because

the plastic is usually of such a grade that it does distort your vision. Putting goggles on top of your helmet or your head does create an artificial environment. It's not like a car where you sit back and look around the perimeter. The goggle and the helmet on one's head creates a very small space not unlike a fish bowl. It is not unlike looking out of a fish bowl. As I said in my own experience of riding a motorcycle for 13 years I have found the previous speakers comments very impressive, somewhat frightening but I guess I have to go with Mr. Illingworth. I have never heard of this type of experience happening where someone has been killed on their motorcycle and pounded into something. I have never had any experience like that. My question is would it be legal under the Z87 Standards to wear glasses such as this (indicating) which are an inch and a half in diameter, an inch and a half across and about an inch tall. I'm wondering if anybody can tell me that? They are impact resistant.

MR. CRAWFORD: If they are impact resistant lenses and meet the requirements of the three inches drop and whatever, yes, they would.

MR. SCHUNK: I don't know about the drop. I didn't try that. I measured the glasses and I was told by an optometrist that they are an inch and a half

PREVIEW SECTION CONTENT

and that they are impact resistant. I guess that answers part of my question. I can see a person wearing some type of safety glass or impact resistant plastic but I am very concerned about people legislating laws who for the most part are not motorcyclists. I talked with the representative who initiated this law and he said that he initiated the law because his son was involved in a serious motorcycle accident. I could appreciate his emotions, I reject that type of fraternalism. I think the motorcycle helmet law was fostered in the spirit of fraternalism. I don't think the motorcyclists actively enjoined for that law to be passed. I know a lot of motorcyclists, myself included, and I believe Mr. Illingworth, who I don't know personally, at that time came out against the motorcycle helmet law. As I recall the law was given a one year trial basis and at which point it was pretty hard to get a lot of people together to fight that law and it was passed. I think the visor safety law is a case where people got together and decided that it sounded like a good idea. My personal experience is that wearing goggles obscures my vision, creates distortion to the right and to the left, that the goggles which I bought, which are priced anywhere from $3 to $6, because I thought they were a good idea and

tried, have become marred in about a week or a week and a half merely by setting them down, setting them on your motorcycle or by anything. They are very inferior quality. They're nothing like a glass, like safety glasses. I have ridden for 13 years. I have never had any type of eye injury and I have never had any type of abrasion besides riding in cold weather when your eyes tend to water a bit. I was angry when this law was passed and I called the representative and I talked with Major Luek from the Highway Patrol and he gave me a lot of information which I appreciated. I came today and I hope you don't pass this law. I think it's detrimental to a lot of serious motoroyclists and I also think the distortion and the scratch factor and the fact that you are riding with the equivalent of a fish bowl on your head, with goggles and helmet is very deleterious to the safety of the rider and anyone else he may encounter. Thank you.

MR. CRAWFORD: Mr. Schunk, you're aware that this hearing is for the purpose of setting standards for eye protective devices. It isn't even before the hearing officer on whether or not there are going to be goggles or protective eye devices. It's a matter of setting a standard and you called attention to a couple of areas where the quality of the goggles which are

available will probably not meet that standard. It is imperative that projectiles can't break them so that they don't mar up or scratch up so bad that you can't see through them. That's one of the purposes of this hearing, to set those standards. This VESC-8 and the National Bureau of Standards, regulations and test procedures will help to guarantee probably a better product available in Minnesota. Now, if may end up as Mr. Illingworth said, cause an increased cost. I don't know what the final outcome on the price will be. This hearing is for the purpose of setting those standards, not to determine whether or not they are going to be worn.

MIKE SCHUNK: With that in mind I was disappointed that I never heard about this law until it was passed and until it reached actually this stage and, if that is the case, I guess, everything I have said is after the facts. I think that's unfortunate. I don't think people who are concerned really have an opportunity to speak up on some of the issues which are passed in the legislature. Based on that fact, my suggestion is that this type of protective device be encouraged, wearing regular optical safety eye glasses or an equivalent size without the wrap around feature. If you want wrap around goggles, that's fine. I found

and I have talked to other people who find that the wrap around eye protection or head protection goggles does distort vision. It's inferior grade plastic and it does scratch. I would suggest that a law be stated such that this type of glass, whether or not it's an optical prescription be used because I found that they don't scratch. They deflect all materials that I have encountered in 13 years of riding in the summer. They seem to be very adequate, whereas the other goggles I have had hard times when I have worn them for any length of time. Thank you.

MR. CRAWFORD: Thank you. Is there anyone else who would like to make a presentation at this time?

ROBERT ILLINGWORTH: Robert Illingworth, again. I have to comment on a couple of statements that Mr. Rasmussen brought up. Point one is that I didn't say four percent of the 5,186 accidents, I said four of the 5,186 accidents. Secondly, Mr. Rassmussen admitted, at least he felt that the instance of something hitting somebody in the eye is very, very minimal, but it could happen. I don't think it could happen anymore than a muffler or an exhaust pipe, a piece of rubber or the garbage that comes off of the trucks on our highways every day could hit the

motorcyclist. I'm wondering then if we should have maybe a big table in the front of our motorcycles to ward off anything that might come flying through the air. Thirdly, I would like to comment on the VESC-8 in reply to this gentleman's statement that he just made. I don't believe that the VESC-8 Standards provide anything in them that will eliminate the scratching and marring of the lenses that are required of those standards. I compare the devices that we will have to wear under those standards as to an old convertible window which most of us at some time have seen. The weather and the fact that you have to clean them mar them. Within a few weeks they are worthless and you have to go and buy some more. Also the fact that it was brought up that the cost would not be more. I would be very, very happy to present to this committee goggles that are the standard goggles worn by motorcyclists and have for years compared to the few goggles that are available that are V-8 stamped. I think you can see the difference in the price and both scratch equally as much. Thank you.

MR. CRAWFORD: I will look into that standard in the approval list and coming from the ANVA based upon the standards. Is there anyone else who would like to give some testimony?

DUANE F. RASMUSSEN: In regard to -- Duane Rassmussen again -- in regard to lenses which meet or exceed the NCZ -- 87 standard, lenses/that are designed to provide frontal protection can be the kind that are worn by Mr. Schunk, the kind that I am wearing, any common ordinary kind of eye glass. The difference is primarily in the strength of the lens itself. Be it plastic or be it glass. Now, the super lens or super hard lens, if you want to call it that, is pretty much -- what's the word I want to use -- resistant to scratches and abrasions or things like this because it is an extra hardened lens. Now, every lens made in the United States today is hardened and impact resistant. Most street quality eye glasses are made in accordance with the Z-80 standard. The industrial, occupational, educational, safety glasses are made in accordance with the Z-87 standard. The difference is in the testing procedure. Instead of using the one inch ball that we use to test safety glasses, street glasses are tested with a five eighths ball. I'll grant that with any kind of eye wear, whatsoever, you do have to take care of them. If you bounce them around in a tool kit or saddlebag or whatever, they are going to suffer some abuse. Those of us who do wear glasses have learned to take care of them. There is no

difference in cost, should not be a difference in cost between lenses which meet the Z-87 standard and other impact resistant lenses. I recognize in some cases there is,but this is a matter of local manufacturers. The thing that I am concerned with primarily and that my agency is concerned with, we would like to reduce the possibility of substandard eye wear being offered to motorcyclists in Minnesota, purporting to afford them the protection that they in fact do not have. I think the V-87 standards would eliminate this concern that we have. Thank you.

MR. CRAWFORD: Thank you. Would anyone else like to make any statement.

(No Response.)

MR. CRAWFORD: If not, twenty days will be allowed for post hearing submission of evidence, statements or briefs. Such statements must be typed on eight and a half by eleven inch paper and mailed to the Commissioner of Public Safety, State Highway Building, St. Paul, Minnesota, 55155, postmarked no later than midnight,January 19th, 1976. I will be in the next twenty days reviewing this and I will look into some of the questions which were raised today before the standards are recommended for adoption. I'll declare the hearing adjourned.

* * *

REPORTER'S CERTIFICATE

I, Marie A. Then, do hereby certify that I recorded in stenotype the proceedings in the above matter before Colonel James Crawford, Chief State Patrol, on the 29th day of December, 1976, in the Auditorium of the State Office Building, St. Paul, Minnesota.

I further certify that thereafter and on this date the foregoing transcript of said recorded proceedings were transcribed into typewriting under my direction, which transcript consists of the preceding 21 typewritten pages.

I further certify that said transcript of such proceedings is true and correct to the best of my ability.

Marie A. Then

MARIE A. THEN,
Court Reporter

Dated this 14th day of January, 1976.

MINNESOTA APPROVED FACE SHIELDS FOR MOTORCYCLISTS

MARCH, 1976

Trade Name	Model	Color*	Certificate Exp. Date	Manufacturer
American Safety	FS-25	ABCGeS	1-79	American Safety Equip. Corp.
American Safety	FS-30	ABCGeS	1-79	American Safety Equip. Corp.
American Safety	FS-40	ABCGeS	1-79	American Safety Equip. Corp.
American Safety	FS-45	ABCGeS	1-79	American Safety Equip. Corp.
American Safety	FS-50	CS	9-76	American Safety Equip. Corp.
American Safety	V-50	ABCGeS	1-79	American Safety Equip. Corp.
B & S Plastics	FS-25	ABCGeS	1-79	B & S Plastics, Inc.
B & S Plastics	FS-30	ABCGeS	1-79	B & S Plastics, Inc.
B & S Plastics	FS-40	ABCGeS	1-79	B & S Plastics, Inc.
B & S Plastics	FS-45	ABCGeS	1-79	B & S Plastics, Inc.
B & S Plastics	V-50	ABCGeS	1-79	B & S Plastics, Inc.
Beck/Arnley	FS-25	ABCGeS	1-79	Beck/Arnley Dist. Co.
Beck/Arnley	FS-30	ABCGeS	1-79	Beck/Arnley Dist. Co.
Beck/Arnley	FS-40	ABCGeS	1-79	Beck/Arnley Dist. Co.
Beck/Arnley	FS-45	ABCGeS	1-79	Beck/Arnley Dist. Co.
Beck/Arnley	V-50	ABCGeS	1-79	Beck/Arnley Dist. Co.
Boni-Flip	A-73	C	1-80	Lear Siegler, Inc. (Haas Div.)
Buco	FS-25	ABCGeS	1-79	Buco, Inc.
Buco	FS-25	ABCS	1-79	American Safety Equip. Corp.
Buco	FS-27	C	1-80	American Safety Equip. Corp.
Buco	FS-30	ABCGeS	1-79	Buco, Inc.
Buco	FS-30	ABCS	1-79	American Safety Equip. Corp.
Buco	FS-40	ABCGeS	1-79	Buco, Inc.
Buco	FS-45	ABCGeS	1-79	Buco, Inc.
Buco	FS-50	CS	9-76	Buco, Inc.
Buco	V-50	ABCGeS	1-79	Buco, Inc.
Falcon	29-000	C	7-80	Falcon Enterprises, Inc.
Hydron	380	C	7-78	National Hydron, Inc.
Hydron	381	A	7-78	National Hydron, Inc.
Hydron	382	S	7-78	National Hydron, Inc.
Hydron	460	C	7-78	National Hydron, Inc.
Hydron	461	A	7-78	National Hydron, Inc.
Hydron	462	S	7-78	National Hydron, Inc.
Hydron	475	C	7-78	National Hydron, Inc.
Hydron	476	A	7-78	National Hydron, Inc.
Hydron	477	S	7-78	National Hydron, Inc.
Indy Shields	FS-40-3	ACS	1-79	B & S Plastics, Inc.
Indy Shields	FS-45-6	ACS	1-79	B & S Plastics, Inc.
Lanco	3103	ABC S	7-78	Roper Helmets
Lanco	3104	ABC S	1-79	Roper Helmets
Lanco	3107	ABC S	7-78	Roper Helmets
Norcon	X-50	CS	1-81	Norcon Mfg.
Paulson	3-TP	ABCGeS	7-79	Paulson Manufacturer
Paulson	158	ABCGeS	1-80	Paulson Manufacturer
Super Visor	3101	ABCS	7-78	Roper Helmets
Super Visor	31011	ABCS	7-78	Roper Helmets

* A = Amber
B = Blue
C = Clear
Ga = Gray
Ge = Green
S = Smoke

Note: Only clear or untinted material may be used at night for compliance with the eye protective device requirements of M.S.169.974 Subd. 4.

MINNESOTA APPROVED GOGGLES & SAFETY GLASSES FOR MOTORCYCLISTS MARCH, 1976

Trade Name	Model	Color*	Certificate Exp. Date	Manufacturer
Buco SG-1	1525	ACGeS	1-80	American Safety Equip. Corp.
Buco SG-1	1526	ACGeS	1-80	American Safety Equip. Corp.
Buco SG-1	1527	ACGeS	1-80	American Safety Equip. Corp.
Buco SG-1	1528	ACGeS	1-80	American Safety Equip. Corp.
CMI	CMI	C & tint	6-79	Continental Motorcycle
Hydron	110	ACS	7-78	National Hydron, Inc.
SCI	037	CGe	4-78	Studio Craft, Inc.
SCI	895	CGe	4-77	Studio Craft, Inc.
SCI	895c	Ge	4-77	Studio Craft, Inc.

A = Amber
B = Blue
C = Clear
Ga= Gray
Ge= Green
S = Smoke

Note: Only clear or untinted material may be used at night for compliance with the eye protective device requirements of M.S.169.974 Subd. 4.

A Brief Comparison of ANSI 87.1 - 1968 and VESC-8 (1971) for Eye Protection Devices

ANSI 87.1 - 1968	VESC-8 (1971)
1. Material: Comfortable, snug, durable, non-irritating, provide adequate protection.	1. Material: No sharp edges, no harmful or uncomfortable projections. Headband to hold it securely. Easy to adjust & replace. No undue aging. Non-irritants only.
2. Physical Dim's: Lens thickness - min. = 3 mm, max. = 3.8 mm. Plastic wdw. thickness min. = 04". Faceshield min. height = 6". Min. width = 8½" & 9½", or 2" x 4" in-frame type. Some N.B.S. methods are used. For spectacles; Eye sizes 42-50 mm. 18-26 bridge sizes.	2. Physical Dim's: Eye-glass Lens size = 3 sq. in. Min. of 2" x 1½" for each eye. Faceshield must go to tip of nose.
3. Optical Properties: Faceshield = 85% trans. Prismatic effect within ± 1/16th diopter. Spectacle Lens = 89% transparent. Plano Lenses are to be flat or 6.00 diopter curve.	3. Optical Properties: No defects. Within 1/8 diopter prismatic effect max. or min. A 24-second line definition. Min. 85% light transmittance.
4. Strength: Has heat deformation test for goggles (plastics). Has drop test for plastic faceshield - 1.56 oz. 7/8" ball from 50". 1.56 oz. needle from 50". No damage, penetration, fracture or separation allowed. (At 65° - 85° ambient temp). For spectacles; Street frames are not permitted. Frame must support entire periphery. Frame must have Lens clamps: Temple & nose pad construction is specified.	4. Strength: 3/8" x 2-½" steel point with .02r. & 1.56 oz. dropped 14' to within 1" of eye position. No penetration, no loose particles on eye side. (At 75° ambient temp.) Eye glass lens must be convex.
5. Field of Vision: For goggles, cup type = 105°, cover type = 90°. These are total field, each eye.	5. Field of Vision: Goggles - must not obstruct peripheral vision. Glasses - max. of 7.5° frame obstruction in field 50° - 80° only. 105° (V to outboard) for any E.P.D.
6. Flammability: Burn max. is 3" per min. for plastic wdws.	6. Flammability: 1" each 24 sec. Use no celulose nitrate.
7. Cleansing Capabilities: Detergent & solution safe. Wash in detergent, rinse, then put in solution of modified phenol, hypochlorite, or quarternory ammonium compounds, per mfr.	7. Cleansing Capabilities: Detergent safe.
8. Labeling: "H" on Lens. Wdw's. shaded must be so marked and shade class specified 1, 2 or 3.	8. Labeling: VESC-8 or V-8 on device. "Tinted" must be labeled Tinted, etc. on container.
9. Identification: Mfr's. monogram on lens & wdws.	9. Identification: Mfr's. trade name & model desig. on device.
10. Testing Procedures: Are specified for optical properties, strength, flammability, cleansing capabilities, corrosion & water absorption. Haze for plastics only, 6% max. per Fed. Test Method No. 406.	10. Testing Procedures: Are specified for optical properties including Z87.1 & N.B.S. methods. Strength, flammability & cleansing capabilities test procedures are also specified. Allows equivalent methods to N.B.S. methods, if approved by Comm. of Pub. Safety. No haze test.

STATE OF MINNESOTA

BEFORE EDWARD G. NOVAK

COUNTY OF RAMSEY

COMMISSIONER OF PUBLIC SAFETY

In the matter of the Proposed Adoption of Rules of the State Department of Public Safety Governing Requirements for Approval of Motorcycle Operator Eye Protective Devices.

FINDINGS OF FACT

The above-entitled matter came on for hearing before the Commissioner of Public Safety of the State of Minnesota on the 29th day of December, 1975, at 9:30 a.m. in the State Office Building Auditorium, St. Paul, Minnesota, after proper notice required by M.S. 1974, Section 15.0412 was served upon all persons, associations and other interested groups registered with the Secretary of State for that purpose.

After affording interested persons an opportunity to present written and oral data, statements and arguments, having heard all of the testimony, having considered all of the evidence adduced and upon the records, files and proceedings herein, I find the following:

1.) The Commissioner of Public Safety is specifically authorized, pursuant to Laws 1975, Chapter 29 (amending M.S. 1974, Section 169.974, Subd. 4) to provide by rules and regulations standards for approval of motorcycle operator eye protective devices.

2.) The need for these rules arises because foreign objects striking or lodging in the eye of a motorcycle operator can cause injury or impaired vision, and may precipitate loss of control of the motorcycle thereby creating a general traffic hazard.

3.) Legislative Mandate of Laws 1975, Chapter 29 requires the use of eye protective devices by motorcycle operators and directs the Commissioner of Public Safety to select specific approval requirements. VESC-8 regulation of the Vehicle Equipment Safety Commission is selected as the basis for approval of eye protective devices because it was specifically developed to meet eye protection needs of motorcycle operators. Substantial expertise was involved in formulating the standard, including motorcycle riders, opthamologists, physicists, and safety officials.

4.) Of 30 states requiring eye protective devices for motorcycle operators, 22 have VESC-8 regulation as the basis for approval. Problems encountered during interstate travel by motorcycle are minimized by promoting uniform regulations.

5.) The chapter number and rule numbers of the adopted rules were changed due to an error made when the proposed rules were originally drafted.

6.) No written comments were filed, either at the hearing or subsequent thereto.

7.) At the hearing oral testimony was received pertaining to high scratch susceptibility and distortion of vision of eye protective devices, with the suggestion that the regulation merely require safety-type eyeglasses. Another witness favored the impact resistance test of ANSI Z87.1-1968 standard for eye protective devices.

8.) With respect to impact resistance, the Department of Public Safety has determined that the impact force required for safety glasses under ANSI Z87.1 is only 47% of the impact force achieved under VESC-8. Also VESC-8 contains requirements reasonably assuring optical qualities with respect to refraction. Although there is no test for scratch resistance, moderate care in storing and cleaning VESC-8 approved devices in accordance with manufacturer's instructions should minimize scratching and marring of the optical surface.

STATE OF MINNESOTA
DEPARTMENT OF PUBLIC SAFETY

Edward R Novak

COMMISSIONER OF PUBLIC SAFETY

3-9-76

DATE

STATE OF MINNESOTA

COUNTY OF RAMSEY

BEFORE EDWARD G. NOVAK

COMMISSIONER OF PUBLIC SAFETY

In the matter of the Proposed Adoption of Rules of the State Department of Public Safety Governing Requirements for Approval of Motorcycle Operator Eye Protective Devices.

ORDER ADOPTING RULES

The above-entitled matter came on for hearing before the Commissioner of Public Safety of the State of Minnesota on the 29th day of December, 1975, at 9:30 a.m. in the State Office Building Auditorium, St. Paul, Minnesota, after proper notice required by M.S. 1974, Section 15.0412 was served upon all persons, associations and other interested groups registered with the Secretary of State for that purpose.

After affording interested persons an opportunity to present written and oral data, statements and arguments, having heard all of the testimony, having considered all of the evidence adduced and upon the records, files and proceedings herein, and applicable statutory standards or criteria, and having confirmed the need for the above captioned rules;

NOW, THEREFORE, IT IS ORDERED that these rules identified as Minnesota Department of Public Safety, Safety Administration Division, Chapter Nineteen, Requirements for Approval of Motorcycle Operator Eye Protective Devices, SafAd. 166-174, are adopted this 9th day of March, 19 76, pursuant to authority vested in me by M.S. 1974, Section 299A.01, Subdivision 6.

STATE OF MINNESOTA
DEPARTMENT OF PUBLIC SAFETY

Edward G Novak

COMMISSIONER OF PUBLIC SAFETY

Adopted Rules

Minnesota Department of Public Safety
Safety Administration Division

CHAPTER TWENTY: REQUIREMENTS FOR APPROVAL OF MOTORCYCLE OPERATOR EYE PROTECTIVE DEVICES

SafAd 181 PURPOSE AND SCOPE

(a) The purpose of these rules is to prescribe the procedure for approval by the Commissioner of Public Safety of motorcycle operator eye protective devices.

(b) The scope of these rules is intended to be consistent with the powers relative to eye protective devices conferred on the Commissioner of Public Safety by Minnesota Statutes 1974, Section 169.974, Subdivision 4, as amended by Laws 1975, Chapter 29, Section 4.

SafAd 182 DEFINITIONS

For purposes of these rules:

(a) "A.A.M.V.A." means the American Association of Motor Vehicle Administrators

(b) "E.P.D." means Eye Protective Device

(c) "Commissioner" means the Commissioner of Public Safety for the State of Minnesota.

SafAd 183 APPROVAL OF DEVICES

(a) In accordance with Minnesota Statutes Sec. 169.974 Subd. 4, as amended by Laws 1975, c. 29, Sec. 4, the Commissioner shall approve a list of eye-protective devices for use by motorcycle operators in Minnesota. Thereafter, he may add or delete

specific devices from this list whenever he reasonably deems such action to be necessary in furtherance of the purposes of these rules.

(b) In acting pursuant to subd. (a) of this rule the Commissioner may neither give initial approval to, nor continue in effect any pre-existing approval of a device not contemporaneously certified by the A.A.M.V.A. as meeting the requirements of Regulation VESC-8 of the Vehicle Equipment Safety Commission (which commission was created and exists under the Interstate Vehicle Equipment Safety Compact). Nor may the Commissioner approve any such device containing tinted lenses for use during other than daylight hours.

SafAd 184 PUBLIC AVAILABILITY OF LIST OF APPROVED DEVICES

On and after the date on which these rules become effective, the Commissioner shall at all times maintain and make available to any member of the public upon request a complete list of those devices approved by him pursuant to SafAD 168.

SafAd 185-189

Minnesota Department of Public Safety
Safety Administration Division

CHAPTER TWENTY: REQUIREMENTS FOR APPROVAL OF MOTORCYCLE OPERATOR EYE PROTECTIVE DEVICES

SafAd 181 PURPOSE AND SCOPE

A. The purpose of these rules is to prescribe the procedure for approval by the Commissioner of Public Safety of motorcycle operator eye protective devices.

B. The scope of these rules is intended to be consistent with the powers relative to eye protective devices conferred on the Commissioner of Public Safety by Minnesota Statutes 1974, Section 169.974, Subdivision 4, as amended by Laws 1975, Chapter 29, Section 4.

SafAd 182 DEFINITIONS

For purposes of these rules:

A. "AAMVA" means the American Association of Motor Vehicle Administrators.

B. "Commissioner" means the Commissioner of Public Safety for the State of Minnesota.

C. "VESC" means the Vehicle Equipment Safety Commission (which was created and exists under the Interstate Vehicle Equipment Safety Compact).

SafAd 183 STANDARDS AND APPROVAL OF DEVICES

A. The standard for motorcycle operator eye protective devices as incorporated in Vehicle

Equipment Safety Commission Regulation VESC-8, adopted by the VESC August 5, 1971, is hereby incorporated by reference and made a part of these rules.

B. Motorcycle operator eye protective devices which are approved for use in Minnesota shall be of a type certified by the AAMVA as complying with the specifications of Regulation VESC-8 incorporated herein.

C. On and after the effective date of these rules, the Commissioner shall maintain a current list of specific eye protective devices which have been certified by the AAMVA as complying with Regulation VESC-8. Such list shall at all times be made available to any person upon request.

SafAd 184-187 RESERVED FOR FUTURE USE

APPROVED AS TO FORM AND LEGALITY
JUL 22 1976 19
WARREN SPANNAUS, ATTORNEY GENERAL
BY /s/ Michael B. Miller
SPECIAL ASSISTANT ATTORNEY GENERAL

STATE OF MINNESOTA
DEPARTMENT OF STATE
FILED
JUL 22 1976 - 9:15 am
Joan Anderson Growe
Secretary of State

OFFICE OF THE
STATE REGISTER
JUL 22 1976
RECEIVED
10:13 AM

Exhibit A

STATE OF MINNESOTA

COUNTY OF RAMSEY

BEFORE EDWARD G. NOVAK

COMMISSIONER OF PUBLIC SAFETY

In the matter of the Proposed Adoption of Rules of the State Department of Public Safety Governing Requirements for Approval of Motorcycle Operator Eye Protective Devices.

ORDER FOR HEARING

To effectively implement Laws 1975, Chapter 29, which amends M. S. 1974, Section 169.974, Subd. 4, the Minnesota Commissioner of Public Safety deems it necessary to consider adoption of the proposed rules captioned above pursuant to the authority vested in me by M. S. 1974, Section 299A.01, Subdivision 6.

NOW, THEREFORE, IT IS ORDERED this 13th day of November, 1975, that a public hearing on the proposed rules captioned above be held in the State Office Building Auditorium, St. Paul, Minnesota, December 29, 1975, commencing at 9:30 a.m. and continuing until all representatives of associations or other interested groups or persons have had an opportunity to be heard.

IT IS FURTHER ORDERED, that notice of said hearing be given to all representatives of associations or other interested groups or persons who have registered their names with the Secretary of State for that purpose and all persons who are presently members of the Minnesota Legislature.

STATE OF MINNESOTA
DEPARTMENT OF PUBLIC SAFETY

Edward G Novak

COMMISSIONER OF PUBLIC SAFETY

Exhibit B

STATE OF MINNESOTA

BEFORE EDWARD G. NOVAK

COUNTY OF RAMSEY

COMMISSIONER OF PUBLIC SAFETY

In the matter of the Proposed Adoption of Rules of the State Department of Public Safety Relating to Requirement for Approval of Motorcycle Operator Eye Protective Devices

STATEMENT OF NEED

The above captioned rules are not amendments to existing rules of the Minnesota Department of Public Safety.

The need to adopt these rules arises because foreign objects striking or lodging in the eye(s) of a motorcycle operator can cause injury to the eye(s) or impaired vision and, additionally as a result thereof, may precipitate loss of control of the motorcycle.

The authority to adopt the proposed rules lies in Laws 1975, Chapter 29 which provides in part that no person shall operate a motorcycle "---unless he is wearing an eye protective device of a type approved by the Commissioner except when the motorcycle is equipped with a wind screen".

The proposed rules contemplate approval of eye protective devices upon certification of the American Association of Motor Vehicle Administrators that a particular device meets the requirements of Regulation VESC-8 of the Vehicle Equipment Safety Commission. (The Vehicle Equipment Safety Commission is composed of representatives of various states whose purpose is to encourage highway safety through uniform performance requirements for vehicle equipment).

VESC-8 was selected as the basis for eye protective device type approval because VESC-8 was specifically developed to meet the eye protection needs of motorcycle operators. Additionally, 22 of 30 states presently requiring eye protective devices for operators of motorcycles have requirements for such devices based on VESC-8 and problems encountered during interstate travel by motorcycle are minimized by promoting uniform laws and regulations throughout the United States.

STATE OF MINNESOTA
DEPARTMENT OF PUBLIC SAFETY

Edward G Novak
COMMISSIONER OF PUBLIC SAFETY

11-24-75
DATE

Exhibit C

STATE OF MINNESOTA

BEFORE EDWARD G. NOVAK

COUNTY OF RAMSEY

COMMISSIONER OF PUBLIC SAFETY

In the matter of the proposed Adoption of Rules of the State Department of Public Safety Governing Requirements for Approval of Motorcycle Operator Eye Protective Devices.

NOTICE OF HEARING

Notice is hereby given that a public hearing will be held pursuant to M.S. 1974, Section 15.0412, Subdivision 4, in the above-entitled matter in the State Office Building Auditorium, Wabasha St. between Aurora and Fuller, St. Paul, Minnesota, December 29, 1975, commencing at 9:30 a.m., and continuing until all representatives of associations or other interested groups or persons have had an opportunity to be heard concerning adoption of the proposed rules captioned above by submitting either oral or written data, statements or arguments. Statements or briefs may be submitted without appearing at the hearing.

A copy of the proposed rules is attached hereto.

Additional copies of the proposed rules are available and may be obtained by writing to Diane Hamilton, Department of Public Safety, 210A Highway Building, St. Paul, Minnesota, 55155.

STATE OF MINNESOTA
DEPARTMENT OF PUBLIC SAFETY

Edward G. Novak

COMMISSIONER OF PUBLIC SAFETY

11-17-75

DATE

Exhibit D

STATE OF MINNESOTA

COUNTY OF RAMSEY

In the matter of the Proposed Adoption of Rules of the State Department of Public Safety Governing Requirements for Approval of Motorcycle Operator Eye Protective Devices.

CERTIFICATE

I hereby certify that the enclosed 443 general labels and Public Safety list constitute the complete list of persons, associations, and other interested groups who as of 4:15 o'clock P .M., this 24th day of November, 1975, have requested pursuant to M.S. 1974, Section 15.0412, Subdivision 4, that their names be placed on file with the Secretary of State for the purpose of receiving notice of public hearing on proposed rules on the subject captioned above.

Secretary of State

Joan Anderson Growe

Joan Anderson Growe

By Cecil Dunn

Exhibit E

STATE OF MINNESOTA

COUNTY OF RAMSEY

In the matter of the Proposed Adoption of Rules of the State Department of Public Safety Governing Requirements for Approval of Motorcycle Operator Eye Protective Devices.

AFFIDAVIT OF MAILING

Diane Hamilton, being first duly sworn, deposes and says:

That on the 26th day of November, 1975, at the City of St. Paul, County of Ramsey, State of Minnesota, she served the attached Notice of Hearing by depositing in the United States mail at said City of St. Paul, a true and correct copy thereof, properly enveloped, with postage prepaid, to all persons and associations at the addresses listed on the attached Certificate of the Secretary of State as well as to all persons presently being members of the Minnesota Legislature.

Diane Hamilton

Subscribed and sworn to before me

this 26th day of November, 1975.

Cheryl E. Waller

CHERYL E. WALLER
NOTARY PUBLIC - MINNESOTA
HENNEPIN COUNTY
My Comm. Expires Jan. 21, 1980

Exhibit F

STATE OF MINNESOTA

COUNTY OF RAMSEY

BEFORE EDWARD G. NOVAK

COMMISSIONER OF PUBLIC SAFETY

In the matter of the Proposed Adoption of Rules of the State Department of Public Safety governing Requirements for Approval of Motorcycle Operator Eye Protective Devices.

APPOINTMENT OF HEARING OFFICER

James Crawford, Chief of the Highway Patrol Division of the Department of Public Safety, is hereby appointed hearing officer for the public hearing to be held in the above-entitled matter, in the State Office Auditorium, St. Paul, Minnesota, December 29, 1975, commencing at 9:30 a.m.

He is authorized and empowered to hear the case, to perform any and all acts incidental thereto, and to recommend findings of fact and final decision.

STATE OF MINNESOTA
DEPARTMENT OF PUBLIC SAFETY

Edward G. Novak
COMMISSIONER OF PUBLIC SAFETY

12/11/75
DATE

Proposed Rules

Minnesota Department of Public Safety
Safety Administration Division

CHAPTER NINETEEN: REQUIREMENTS FOR APPROVAL OF MOTORCYCLE OPERATOR EYE PROTECTIVE DEVICES

SafAd 166 PURPOSE AND SCOPE

(a) The purpose of these rules is to prescribe the procedure for approval by the Commissioner of Public Safety of motorcycle operator eye protective devices.

(b) The scope of these rules is intended to be consistent with the powers relative to eye protective devices conferred on the Commissioner of Public Safety by Minnesota Statutes 1974, Section 169.974, Subdivision 4, as amended by Laws 1975, Chapter 29, Section 4.

SafAd 167 DEFINITIONS

For purposes of these rules:

(a) "A.A.M.V.A." means the American Association of Motor Vehicle Administrators

(b) "E.P.D." means Eye Protective Device

(c) "Commissioner" means the Commissioner of Public Safety for the State of Minnesota.

SafAd 168 APPROVAL OF DEVICES

(a) In accordance with Minnesota Statutes Sec. 169.974 Subd. 4, as amended by Laws 1975, c. 29, Sec. 4, the Commissioner shall approve a list of eye-protective devices for use by motorcycle operators in Minnesota. Thereafter, he may add or delete

specific devices from this list whenever he reasonably deems such action to be necessary in furtherance of the purposes of these rules.

(b) In acting pursuant to subd. (a) of this rule the Commissioner may neither give initial approval to, nor continue in effect any pre-existing approval of, a device not contemporaneously certified by the A.A.M.V.A. as meeting the requirements of Regulation VESC-8 of the Vehicle Equipment Safety Commission (which commission was created and exists under the Interstate Vehicle Equipment Safety Compact). Nor may the Commissioner approve any such device containing tinted lenses for use during other than daylight hours.

SafAd 169 PUBLIC AVAILABILITY OF LIST OF APPROVED DEVICES

On and after the date on which these rules become effective, the Commissioner shall at all times maintain and make available to any member of the public upon request a complete list of those devices approved by him pursuant to SafAd 168.

SafAd 170-174 Reserved for future use.

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VEHICLE EQUIPMENT SAFETY COMMISSION

Regulation VESC-8

MINIMUM REQUIREMENTS FOR

MOTORCYCLISTS' EYE PROTECTION

ADOPTED AUGUST 5, 1971

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Table of Contents

Purpose and Scope 1
Definitions 1
Eye Protective Devices 2
Materials 2
Optical Properties of Eye Protective Devices 3
Light Transmitting Ability of Eye Protective Devices 5
Lens Strength – Testing Procedures for Eye Protective Devices 6
Flammability Test – Plastics Only 6
Cleansing 7
Labeling and Identification 7

MOTORCYCLISTS' EYE PROTECTION

1. PURPOSE AND SCOPE:

1.1 The purpose of this standard is to provide minimal requirements for motorcyclists' eye protectors, to provide a reasonable degree of protection against foreign objects striking or lodging in the eye, causing eye irritation or damage, distracting or handicapping the operator, and thereby causing accidents.

1.2 The scope of this standard shall include requirements for material, lens size, optical properties, strength, field of vision, flammability, cleansing capabilities, labelling, identification, and testing procedures for eye protective devices for drivers and passengers of motorcycles.

1.2.1 Windshields are the subject of other nationally recognized standards and shall not be included within the scope of this standard.

1.2.2 Contact lenses are not acceptable as eye protective devices and shall not be included within the scope of this standard.

2. DEFINITIONS:

2.1 Eye glasses – shall include spectacles, sunglasses, or goggles having two separately mounted lenses, but shall exclude contact lenses.

2.2 Face shield – an eye protector attached to a helmet or head band(s) and which covers the wearer's eyes and face at least to a point approximately the tip of the nose and whose predominant function is protection of the eyes.

2.3 Frame – those parts of eye glasses or goggles containing the lens housings. The frame may be associated with padding.

2.4 Goggles – an optical device worn before the eyes, the predominant function of which is to protect the eyes without obstructing peripheral vision. They provide protection from the front and sides and may or may not form a complete seal with the face.

2.5 Headband – that part of the device consisting of a supporting band or other structure that either encircles the head or protective helmet, or can be attached thereto.

2.6 Mid-Sagittal Plane – the anteroposterior plane through the longitudinal axis of the body.

3. EYE PROTECTIVE DEVICES:

3.1 To be considered an eye protective device, or EPD, under this regulation, a device must be one of the following:

3.1.1 Goggles

3.1.2 Face shield

3.1.3 Eye Glasses

(a) Each lens shall have a convex frontal surface.

(b) Each lens shall have a minimum area of 3 square inches. The horizontal diameter (or side-to-side measurement) shall be no less than 2 inches. The vertical diameter (or top-to-bottom measurement) shall be no less than 1-1/2 inches. A diameter shall pass through a point on the lens that is intended to be directly in front of the pupil of the eye when the wearer is looking straight ahead.

3.2 Optical correction of a person's vision, where required or desired, may be provided either:

3.2.1 By an EPD that provides the proper optical correction, or

3.2.2 By personal corrective lenses worn under an EPD that does not disturb the adjustment of those lenses.

(NOTE: It is assumed that EPD's will not, in any jurisdiction, be required of operators of three-wheeled motorcycles or other three-wheeled vehicles which are equipped with cabs that include windshields, nor of operators of other motorcycles equipped with approved windshields in those jurisdictions where windshields are accepted in lieu of EPD's.)

4. MATERIALS:

4.1 All parts of an EPD shall be free from sharp edges or projections that could cause harm or discomfort to the wearer.

4.2 A headband shall be capable of holding the EPD securely under normal operating conditions. It shall be capable of easy adjustment and replacement.

4.3 Material(s) utilized in any portion of an EPD shall be of durable quality, i.e., material characteristics shall not undergo appreciable alterations under the influence of aging or of the circumstances of use to which the device is normally subjected (exposure to sun, rain, cold, dust, vibrations, contact of the skin, effects of sweat, or of products applied to skin or hair.)

4.4 Material(s) commonly known to cause skin irritation or disease shall not be used for those parts of the device which come into contact with the skin.

5. OPTICAL PROPERTIES OF EYE PROTECTIVE DEVICES:

5.1 Lenses of EPD's shall comply with the following requirements:

5.1.1 Lenses shall be made of material suitable for ophthalmic use, and shall be free from striae, waves, bubbles, or any other defects which may impair their optical quality.

5.1.2 The prismatic effect of a noncorrective lens shall not exceed 1/8 diopter at any point within the specified minimum field of vision. In the case of eye glasses, each noncorrective lens shall comply with the limitation of prismatic effect.

5.1.3 In any meridian, the refractive power of a noncorrective lens shall not exceed plus or minus 1/8 diopter and the difference between the refractive powers in any two meridians shall not exceed 1/8 diopter.

5.1.4 The definition afforded by a noncorrective lens shall be such that a line pattern with lines separated not more than 24 seconds of angle shall be clearly distinguishable when viewed through the lens.

5.1.5 The compliance of a lens with the prismatic effects, refractive power, and definition requirements of 5.1.2, 5.1.3, and 5.1.4 hereinabove, shall be determined in accordance with those test methods described in Sections 6.3.4.1.1, 6.3.4.1.2, and 6.3.4.1.3 of the American National Standards Institute Standard Z87.1-1968, September 18, 1968, "Eye and Face Protection" and explained in Section 10.1 of the National Bureau of Standards Circular 533, May 20, 1953, "Method for Determining the Resolving Power of Photographic Lenses". In order to maintain consistency in the results of tests conducted by various organizations, the following test requirements must be met:

(a) An 8-power telescope with focusing arrangement to accomodate the refractive effects of both positive (converging) and negative (diverging) lenses placed between the telescope and test chart shall be used. The illuminated target and test chart shall be a central dot and a concentric circle one inch in diameter plus one of the high contrast ("black and white") NBS Resolution Test Charts dated 1952 and printed on "Lens Resolution Chart to Accompany NBS Circular 533." The chart shall be perpendicularly aligned 35 feet from the objective lens of the telescope when the telescope is properly focused with no test, sample, or other lens between the objective lens and the chart. The center dot and the periphery of the concentric circle one inch in diameter shall be used when testing for prismatic effect. The test pattern marked "20" shall be used when testing for refractive power and when testing for definition. Standard lenses of plus or minus 1/8 diopter shall be used when testing for refractive power.

(b) Other standard methods of test or examination that are equivalent or superior, as regards accuracy, quality, and consistency of results, to the above specified National Bureau of Standards methods, may be used to determine compliance only when such methods are approved by the State official to whom such approving authority has been assigned, or delegated, through due process of applicable state law.

5.2 Minimum Horizontal Field of Vision -- Except as provided in 5.2.1 below, each EPD shall not obstruct a horizontal field of vision to at least 105 degrees to the right side of the plane that passes through the pupil of the right eye, and at least 105 degrees to the left side of the plane that passes through the pupil of the left eye and are parallel to the mid-sagittal plane.

5.2.1 The specified minimum horizontal field of vision shall be unobstructed except that the horizontal field provided by spectacles or sunglasses may be obstructed by the frame in a sector no greater than 7-1/2 degrees in horizontal angular width and located between 50 degrees and 80 degrees of the pertinent sagittal plane passing through the eye pupil.

5.2.2 When ascertaining the horizontal field of vision afforded by eyeglasses, the pupil of the eye shall be assumed to be located 17 millimeters behind the point on the rear surface of the lens where the horizontal and vertical diameters intersect. When ascertaining the horizontal field of vision of EPD's other than eyeglasses, the assumed location of the pupil of the eye relative to the structures of the EPD shall be that location which is most likely to occur when the EPD is attached and worn in accordance with its manufacturer's instructions.

5.2.3 No portion of the minimum horizontal field of vision shall be obstructed by a temple piece, headband, helmet, helmet attaching device, or any other supporting or attaching device.

6. LIGHT TRANSMITTING ABILITY OF EYE PROTECTIVE DEVICES:

6.1 A "clear" EPD shall transmit not less than 85% of the incident visible radiation. An EPD transmitting less than 85% of of incident visible radiation shall be considered "tinted".

6.1.1 A "tinted" EPD shall not impair the wearer's ability to discern color.

6.1.2 A "tinted" EPD shall not be used at night.

6.2 All EPD's shall be identified as provided in Section 10 hereinbelow.

6.3 Luminous transmittance test – The standard source of radiant energy used in the measurement of luminous transmittance shall be a Projection Type Lamp No. T-8 (or other high powered gas filled tungsten filament incandescent lamp) operated at the color temperature (2854K) corresponding to CIE Source A. The luminous transmittance shall be determined by one of the following means:

6.3.1 Photometrically by an observer having normal color vision, as determined by recognized color vision chart tests such as those employing pseudo-isochromatic plates.

6.3.2 With a physical photometer consisting of a thermopile (or other radiometer) and a luminosity solution having a special transmittance curve which coincides closely with the luminous efficiency curve of the average eye.

6.3.3 By measuring the spectral transmittance and calculating the luminous transmittance through the use of published data on the spectral radiant energy of CIE Source A and the relative luminous efficiency of the average eye.

7. LENS STRENGTH – TESTING PROCEDURE FOR EYE PROTECTIVE DEVICES:

7.1 Helmet mounted face shields shall be tested while attached to an appropriate medium size helmet supplied by manufacturer of face shield, which shall be mounted on a standard human head form. An EPD not designed to be attached to a helmet shall be tested on a standard human head form. Each EPD shall be located in a position simulating its position in actual use.

7.2 A steel projectile 3/8" in diameter, weighing 1.56 ounces, approximately 2-1/2" long with a conical point of 90° included angle, the point having a spherical radius no greater than .020" and a hardness of 60 (±10) on the Rockwell "C" scale, shall be freely dropped from a height of 14 feet above the EPD. The projectile may be guided, but not restricted, in its vertical fall by dropping it through a tube extending to within approximately 4" of the impact area. The impact area must be on the forward optical surface and within a 1" diameter circle centered over the eye opening. The impact point shall be perpendicular to a plane tangent to the impact area.

7.3 The EPD shall not allow penetration of the projectile through the EPD. Cracking or piercing of the EPD is permissible provided that the projectile does not pass through or remain lodged in the EPD lens, but is repulsed by the EPD, and that no particles of the EPD shall break loose from any eyeward surface of the EPD.

7.4 Tests shall be performed at room temperature (65°F to 85°F) under normal humidity conditions.

8. FLAMMABILITY TEST – PLASTICS ONLY:

8.1 Where plastic materials are used in an EPD, such materials shall be non-combustible or slow-burning. Such plastic items shall be exposed to a test to determine the flame-propagation rate. The specimen shall be ignited by holding one end of specimen horizontally at the top of a luminous 3/4 inch Bunsen burner flame in a draft-free room. The rate of propagation of burning, after removing the flame from the

specimen, determined by a stop watch, shall be one inch or less per 24 seconds. A faster rate of propagation shall be cause for rejection.

8.2 Celulose nitrate, or materials having flammability characteristics approximating those of cellulose nitrate, shall not be used.

9. CLEANSING:

All EPD materials shall be such as to withstand, without visible deterioration, washing in ordinary household detergents and warm water, and rinsing to remove visible traces of detergents.

10. IDENTIFICATION AND LABELING:

10.1 Eye Protective Devices, manufactured to comply with the requirements of this standard, shall be identified and labeled as follows:

10.1.1 The following information shall be permanently marked on the EPD, in a manner not to interfere with the vision of the wearer:

(a) That the device meets this Standard, i.e., VESC-8. Where space is limited, V-8 may be used in lieu of VESC-8.

(b) The manufacturer's or distributor's trade name and model name or number, which shall correspond with the name and number under which the device has been approved or certified.

10.1.2 The information required under 10.1.1 plus the corporate or business name and address of either the actual manufacturer or the marketer assuming the responsibilities of the manufacturer shall be imprinted on the container in which the EPD is packed and on any instruction sheet(s) pertaining to the EPD.

10.2 The following statement shall appear in a prominent location on the container or label accompanying each tinted eye protective device: THIS TINTED EYE PROTECTIVE DEVICE IS FOR DAYTIME USE ONLY.

STATE OF MINNESOTA

COUNTY OF RAMSEY

BEFORE EDWARD G. NOVAK

COMMISSIONER OF PUBLIC SAFETY

In the matter of the Proposed Adoption of Rules of the State Department of Public Safety Governing Requirements for Approval of Motorcycle Operator Eye Protective Devices.

ORDER ADOPTING RULES

The above-entitled matter came on for hearing before the Commissioner of Public Safety of the State of Minnesota on the 29th day of December, 1975, at 9:30 a.m. in the State Office Building Auditorium, St. Paul, Minnesota, after proper notice required by M.S. 1974, Section 15.0412 was served upon all persons, associations and other interested groups registered with the Secretary of State for that purpose.

After affording interested persons an opportunity to present written and oral data, statements and arguments, having heard all of the testimony, having considered all of the evidence adduced and upon the records, files and proceedings herein, and applicable statutory standards or criteria, and having confirmed the need for the above captioned rules;

NOW, THEREFORE, IT IS ORDERED that these rules identified as Minnesota Department of Public Safety, Safety Administration Division, Chapter Nineteen, Requirements for Approval of Motorcycle Operator Eye Protective Devices, SafAd. 166-174, are adopted this 9th day of March, 19 76, pursuant to authority vested in me by M.S. 1974, Section 299A.01, Subdivision 6.

STATE OF MINNESOTA
DEPARTMENT OF PUBLIC SAFETY

Edward G Novak

COMMISSIONER OF PUBLIC SAFETY