

STATE OF COLORADO

DEPARTMENT OF TRANSPORTATION



DATE: January 3, 2014

TO: Transportation Commission

FROM: Herman Stockinger / Anthony DeVito

SUBJECT: Request to Open Permanent Rules Governing the Use of Tunnels on Colorado State Highways, 2 CCR 601-8 and Delegate Authority to an Administrative Hearing Officer to Preside over a Rule-Making Hearing.

Purpose

To open the rule-making process regarding CDOT's Rules Governing the Use of Tunnels on Colorado State Highways, 2 CCR 601-8 ("Tunnel Rules"). The Commission is authorized to promulgate this set of rules under § 43-1-106(8)(k), C.R.S., § 42-4-106 (7)(a) and (b), C.R.S., § 42-20-301(3), C.R.S.

Action Requested

The Commission is requested to approve a resolution opening the Tunnel Rules and delegate authority to an administrative hearing officer to conduct a public rule-making hearing. By taking this action, the Commission authorizes the Department to move forward on all required rule-making steps in compliance with the State Administrative Procedure Act ("APA"), § 24-4-103, C.R.S.

Executive Summary

The Tunnel Rules govern the use of tunnels on state highways. The rules include the process motor carriers must follow regarding the use of the Eisenhower Johnson Memorial Tunnel ("EJMT") when Loveland Pass is closed. They also include reference to those hazardous materials which are prohibited from using the EJMT at all times in accordance with federal regulations. While the Colorado State Patrol has authority over the transport of hazardous materials throughout the state, CDOT is charged with supervision of traffic through tunnels located on state highways. The main goal for the rules is to improve the flow of traffic through the EJMT, while at the same time taking safety precautions to segregate the passage of hazardous materials through the EJMT from the motoring public, and ensuring that goods and services are provided to the communities west of the EJMT in as expeditious manner as possible.

Background

The Commission most recently adopted the Tunnel Rules in 1986, with a subsequent adoption making minor changes in 2008. These minor changes did not include updating the rules to conform to federal regulations; therefore, the regulations referenced in the rules, which have changed significantly since 1986, are currently obsolete. Besides conforming the

rules to federal regulations regarding the transport of hazardous materials, the proposed rules are based on Colorado State Patrol recommendations and align with the recently updated State Patrol rules, 8 CCR 1507-25 “Rules and Regulations Concerning the Permitting, Routing & Transportation of Hazardous and Nuclear Materials and the Intrastate Transportation of Agricultural Products in the State of Colorado.” Finally, the proposed rules are much easier to understand.

CDOT has worked over the past year to revise a draft of the rules and to analyze the rules’ impact on industry. Key stakeholders have given their time to work with CDOT on the rules, including the Colorado Motor Carriers Association, the Colorado/Wyoming Petroleum Marketers Association, Tim Gablehouse, Esq. of Gablehouse Granberg, LLC, and Captain Joshua Downing of the Colorado State Patrol. CDOT has also sought input from the groups and individuals identified as the “representative group” which is a group of key stakeholders requested to review the rules prior to the formal commencement of rule-making.

Details

Following is a list of the primary differences between the current rules and the proposed rules:

1. What hazmat is prohibited from EJMT at all times?

Current rules:

- Loads carrying radioactive materials in any quantity and flammable compressed gases in quantities of 1,000 lbs or more gross weight. Current rule 5.3.2

Proposed Rules:

- Most dangerous explosives: mass explosion hazard, projection hazard, predominantly fire hazard, detonators, blasting agents (ammonium nitrate-fuel oil mixture), dangerous when wet, organic peroxides, inhalation hazard, poisonous materials, radioactive HRCQ (highway route controlled quantity). Proposed rule 3.03

2. What hazmat is permitted to use EJMT when LP is closed?

Current rules:

- Hazmat allowed under certain conditions (e.g. on the hour metering) except loads carrying radioactive materials in any quantity and flammable compressed gases in quantities of 1,000 lbs or more gross weight. Current rule 5.3.1

Proposed Rules:

- Extremely insensitive explosives, radioactive materials (except HRCQ), flammable gas, non-flammable, non-poisonous gases, flammable liquids, flammable solids, combustible materials, oxidizers, poisons (except inhalation hazards) infectious substances, corrosive substances, and other regulated materials. Proposed rule 3.04.1

3. What hazmat is treated differently in the proposed rules from current rules?

- Explosives will be prohibited
 - Flammable gas (propane) will be permitted
 - Radioactive materials (except HRCQ) will be permitted
 - Inhalation hazard poisons, organic peroxides, dangerous when wet will be prohibited
4. Proposed rules will conform to staging practice of winter 2012-13.
- When LP is closed, staging required using Officer's Gulch, Vail Pass rest area and Herman's Gulch. Proposed rule 3.04.2 – C and D.
5. Proposed rules do not change peak travel times, but language is clarified at State Patrol's suggestion. Compare current rule 5.3.1.2 to proposed rule 3.04.2:

No hazardous material loads allowed:

Westbound: Saturday and Sunday mornings, from 7:01 a.m. to 9:59 a.m. and National Holidays when they fall on a Friday from 7:01 a.m. to 9:59 a.m.

Eastbound: Sunday afternoons, from 2:01 p.m. to 6:59 p.m. and National Holidays when they fall on Mondays, from 2:01 p.m. to 6:59 p.m.

6. Proposed rules will conform parking to practice of winter 2012-13. Parking prohibited outside tunnel at peak times when Loveland Pass is closed. (Minimal impact: only 5 trucks impacted for less than 2 hours during winter of 2012-13). Proposed rule 3.04.2 D
7. Current rules allow purged tankers to use tunnel, but are silent on empty hazmat transporters. Proposed rules will permit/prohibit empty transporters depending on the placard when Loveland Pass is closed. Compare current rule 10.0 (last paragraph marked with asterisk **) with proposed rules which are based on placarded loads. If a tanker is purged, it will not be placarded. If it is empty but not purged, it is required under federal regulations to be placarded.
8. All non-compliant Motor Vehicles, Commercial Vehicles and Persons will be referred to law enforcement officials.

Key Benefits

The Tunnel Rules impact the travelling public generally, and specifically motor carriers. The clarity of the proposed rules will aid CDOT and State Patrol personnel in the management of hazardous material loads, and will ultimately aid in the goal of keeping traffic moving through the EJMT. Staging and metering during peak periods when Loveland Pass is closed, a practice currently in place, seeks to provide reliable scheduling to motor carriers while causing the least possible impact to drivers on I-70. Revising the rules at this point will provide a foundation for a future revision, if needed, when the fire suppression system is installed in the EJMT.

Next Steps

Following the Commission's opening of the rules, the Department will file the rules with the Secretary of State and the Department of Regulatory Agencies ("DORA"), which in turn notifies anyone requesting to be notified of rules. The Department will then notify interested parties of the rules and the public rule-making hearing date of March 3, 2014, welcome further input, and invite testimony at a rule-making hearing. At the hearing, the administrative hearing officer will consider the written record and any testimony, and make findings and a recommendation to the Commission. The Commission will then be requested to adopt the rules at its meeting in April.

**Current CDOT
Tunnel Rules
Adopted 9.30.2008**

DEPARTMENT OF TRANSPORTATION

Transportation Commission

TRAFFIC REGULATIONS GOVERNING THE USE OF THE TUNNELS ON THE STATE HIGHWAY SYSTEM

2 CCR 601-8

1.0 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE

On April 18, 1985, the Highway Commission authorized the Executive Director to prepare proposed rules updating the Traffic Regulations Governing the Use of the Eisenhower Memorial Tunnels, effective January 1, 1981, and to develop any new proposed rules and regulations for all tunnels on the State Highway system. Effective January 30, 1986 Rule 2 CCR 601-8, titled "Traffic Regulations Governing the Use of the Tunnels On the State Highway System" [hereinafter "the Rules"] were adopted and replaced "Traffic Regulations Governing the Use of the Eisenhower Memorial Tunnels."

In 1992 through statutory recodification, the Colorado Highway Department became the Colorado Department of Transportation and the Highway Commission became the Transportation Commission. The specific authority for the Colorado Department of Transportation to promulgate rules pertaining to the operation of motor vehicles through tunnels on the State Highway system and the transportation of dangerous articles or hazardous materials through such tunnels, is contained in Section 42-4-106, C.R.S.

On May 14, 2008 the Transportation Commission authorized the Rules to be updated only for the purposes of replacing antiquated language, updating the Table of Tunnels and making other administrative or grammatical changes to make the Rules current and relevant. No other changes were authorized by the Transportation Commission. A rulemaking was held in July 2008 and the effective date of these Rules is September 30, 2008 unless adopted later by the Transportation Commission.

The purpose of the Rules is to set forth general definitions and definitions of hazardous materials, to set forth the general responsibilities of motor vehicle operators using the tunnels, to set forth restrictions on the use of tunnels, to regulate the operation of vehicles or devices through the tunnels, to provide for application of local ordinance or regulation, Title 49 of the Code of Federal Regulations, and other material incorporated by reference in these rules, and to identify the classes of hazardous materials and the tunnels subject to regulation under these Rules.

2.0 DEFINITIONS

As used in these Rules, unless the context otherwise requires or unless the definition is in conflict with 49 CFR (in which case 49 CFR shall control), the terms found in these Rules shall have the following meanings:

- 2.1 Cargo: shall mean materials which are transported as loads of freight over the State Highway system.
- 2.2 Combustible Liquid: See 49 CFR 173.115(b); shall mean any liquid, not otherwise defined herein, with a flash point at or above 100 degrees F (37.8 degrees C) and below 200 degrees F (93.3 degrees C) except any mixture having one component or more with a flash point at 200 degrees F (93.3 degrees C) or higher, that makes up at least 99% of the total volume of the mixture subject to certain exceptions under 49 CFR 173.115(b).
- 2.3 Commercial Vehicle: Shall mean Commercial Vehicle as defined in 42-4-235, C.R.S.

- 2.4 Corrosive Materials: See 49 CFR 173.240; shall mean those solids and liquids that cause visible destruction or irreversible alterations in human skin tissue at the site of contact, or in the case of leakage from its packaging, a liquid that has a severe corrosion rate on steel.
- 2.5 Driver or Operator: Shall mean the person who is in physical control of the vehicle.
- 2.6 Explosive: Shall mean any chemical compound, mixture or device, the primary or common purpose of which is to function by explosion (i.e. with substantially instantaneous release of gas and heat) unless such compound, mixture or device is otherwise classified in these Rules. Explosives as further defined in 49 CFR are classified as follows:
- 2.6.1 Forbidden Explosives are explosive compounds, mixtures or devices which are forbidden from transportation pursuant to DOT Regulations, See 49 CFR 173.51.
- 2.6.2 Class A are detonating explosives or otherwise of maximum hazard, See 49 CFR 173.53.
- 2.6.3 Class B are explosives which create a flammable hazard, See 49 CFR 173.88.
- 2.6.4 Class C are explosives which are of minimum hazard, See 49 CFR 173.100.
- 2.6.5 Blasting Agents are materials designated for blasting which have very little probability of accidental explosion, See 49 CFR 173.114a.
- 2.7 Flammable Compressed Gas: See 49 CFR 173.300; shall mean any material or mixture having in the container an absolute pressure exceeding 40 pounds per square inch at 70 degrees F or, regardless of the pressure at 70 degrees F, having an absolute pressure exceeding 104 pounds per square inch at 130 degrees F; or any liquid flammable material having a vapor pressure exceeding 40 pounds per square inch absolute at 100 degrees F as determined by ASTM* Test D-323. (*American Society for Testing Materials Method of Test for Vapor Pressure of Petroleum Products. D-323). In addition this shall mean any compressed gas which has any one of the following characteristics:
- 2.7.1 Either a mixture of 13% or less (by volume) with air forms a flammable mixture or the flammable range with air is wider than 12% regardless of the lower limit. These limits shall be determined at atmospheric temperature and pressure.
- 2.7.2 Using the Bureau of Explosives' Flame Protection Apparatus, (see note) the flame projects more than 18 inches beyond the ignition source with valve opened fully, or, the flame flashes back and burns at the valve with any degree of valve opening.
- 2.7.3 Using the Bureau of Explosives' Open Drum Apparatus, (see note) there is any significant propagation of flame away from the ignition source.
- 2.7.4 Using the Bureau of Explosives' Closed Drum Apparatus, (see note) there is any explosion of the vapor-air mixture in the drum.
- NOTE: A description of the Bureau of Explosives' Flame Protection Apparatus, Open Drum Apparatus, Closed Drum Apparatus and method of tests may be procured from the Bureau of Explosives, Association of American Railroads.
- 2.8 Flammable Liquid: See 49 CFR 173.115(a); shall mean any liquid having a flash point below 100 degrees F (37.8 degrees C), subject to certain exceptions under 49 CFR 173.115(a).
- 2.9 Flammable Solid: See 49 CFR 173.150; shall mean any solid material, other than one classified as an explosive, which is liable to cause fires through friction, retained heat from manufacturing or

processing, or which can be ignited readily and which when ignited burns vigorously and persistently to create a serious transportation hazard, including spontaneously combustible material and water-reactive material which shall be labeled as "Dangerous When Wet" .

- 2.10 Gross Weight: shall mean the total weight of the containers and contents. Net weight refers to the contents of packages or containers. When two or more articles with the weight restrictions as given in these Rules are transported in the same vehicle, the combined weight shall not exceed the weight limitations of the maximum-rated article. Where contents (gallons) are known, it shall take precedence over gross weight (pounds) in limiting quantity per vehicle.
- 2.11 Hazardous Materials: shall mean any substances or materials which have been determined by the US DOT or the Colorado Public Utilities Commission, to be capable of posing an unreasonable risk to health, safety and property which include but are not limited to: explosives, flammable liquids, combustible liquids, flammable solids, oxidizing materials, corrosive materials, compressed gasses, poisonous substances, irritating materials, organic peroxides, and radioactive materials, except a highway route controlled quantity of radioactive material, or any other article classified as dangerous or hazardous.
- 2.12 Highway Route Controlled Quantity of Radioactive Material: See 49 CFR 173.403(1); shall mean those radioactive materials in quantities for which the US DOT has established preferred transportation routes which include the Interstate System, 49 CFR 177.825.
- 2.13 Irritating Material: See 49 CFR 173.381; shall mean any liquid or solid substance which upon contact with fire or when exposed to air gives off dangerous or intensely irritating fumes and which is not otherwise classified as a Class A Poison.
- 2.14 Motor Vehicle: Shall mean Motor Vehicle as defined in 42-1-102 (58), C.R.S. as any self-propelled vehicle which is designed primarily for travel on the public highways and which is generally and commonly used to transport persons and property over the public highways, but the term does not include motorized bicycles as defined in paragraph (b) of subsection (59) of this section, wheelchairs as defined by subsection (113) of this section, or vehicles moved solely by human power. "Motor vehicle" includes a neighborhood electric vehicle operated pursuant to section 42-4-111 (1) (aa). For the purposes of the offenses described in sections 42-2-128, 42-4-1301, and 42-4-1401 for farm tractors and off-highway vehicles, as defined in section 33-14.5-101 (3), C.R.S., operated on streets and highways, "motor vehicle" includes a farm tractor or an off-highway vehicle which is not otherwise classified as a motor vehicle.
- 2.15 Nonflammable Compressed Gas: See 49 CFR 173.300; shall mean any material or mixture having in the container an absolute pressure exceeding 40 pounds per square inch at 70 degrees F or, regardless of the pressure at 70 degrees F, having an absolute pressure exceeding 104 pounds per square inch at 130 degrees F; or any liquid flammable material having a vapor pressure exceeding 40 pounds per square inch absolute at 100 degrees F, and which is not otherwise classified as a flammable compressed gas.
- 2.16 Organic Peroxide: See 49 CFR 173.151a; shall mean any organic compound containing the bivalent -O-O- structure and which may be considered a derivative of hydrogen peroxide where one or more of the hydrogen atoms have been replaced by organic radicals, subject to certain exceptions under 49 CFR 173.151a.
- 2.17 Oxidizing Material: See 49 CFR 173.151; shall mean any substance such as chlorate, permanganate, inorganic peroxide, or a nitrate that yields oxygen readily to stimulate the combustion of organic matter.
- 2.18 Peace or Police Officer: shall mean every officer authorized to direct or regulate traffic or to make arrests for violations of traffic regulations.

- 2.19 Permit: shall mean written authority expressing specific use of the highways and tunnels.
- 2.20 Person: shall mean every natural person, firm, partnership, association or corporation.
- 2.21 Planned Winter Closure: shall mean any scheduled closure of a segment of the State Highway system to provide for winter maintenance operations such as avalanche control.
- 2.22 Poison A: See 49 CFR 173.326; shall mean poisonous gases or liquids of such a nature that a very small amount of the gas, or vapor of the liquid, mixed with air is dangerous to life.
- 2.23 Poison B: See 49 CFR 173.343; shall mean any substance, liquid or solid, other than Class A poisons or any irritating materials, which are known to be so toxic to man as to afford a hazard to health during transportation, or which are presumed to be toxic to man.
- 2.24 Radioactive Materials: See 49 CFR 173.403; shall mean any material or combination of materials that spontaneously emits ionizing radiation, except highway route controlled quantities of radioactive materials.
- 2.25 Signal or Signals: shall mean any mechanical or electronic devices used to regulate the flow of traffic.
- 2.26 Tunnel: shall mean the tunnels or snowsheds on the State Highway system as outlined in Appendix A.

3.0 GENERAL RESPONSIBILITIES OF MOTOR VEHICLE OPERATORS USING THE STATE HIGHWAY TUNNELS

Any person operating a motor vehicle in any tunnel on the State Highway system shall comply with Titles 40 and 42, C.R.S., and any rules and regulations adopted by another Colorado agency pursuant to those provisions.

4.0 GENERAL RESTRICTIONS ON USE OF THE TUNNELS

- 4.1 No vehicle shall travel through any tunnel in violation of these Rules.
- 4.2 Motor vehicles transporting hazardous materials loads are subject to the restrictions outlined in Section 5.0.
- 4.3 Any vehicle or device may be prohibited, pursuant to Section 42-4-106 (4), C.R.S., from using the tunnels when traffic, road, or weather conditions are such that the Colorado Department of Transportation deems it in the best public interest to further restrict traffic.
- 4.4 The following persons, vehicles, devices or other means of conveyance are prohibited from using any tunnel on the State Highway system unless a special activity permit has been granted by the State:
 - 4.4.1 Motor driven cycles, motorcycles, and motor scooters, with a motor which produces five (5) horsepower or less and bicycles with a motor attached.
 - 4.4.2 This subsection d. shall not apply to any persons, vehicles or devices owned or controlled by or under contract to the State of Colorado, Department of Transportation, while engaged in construction, reconstruction, or maintenance of a tunnel.

5.0 USE OF EISENHOWER/JOHNSON TUNNELS

- 5.1 The provisions set forth in section 4.0 apply to this section 5.0.
- 5.2 Motor vehicle transporting hazardous materials loads, as designated in Section 10.0 of the Rules, are prohibited from operating through the Eisenhower/Johnson Tunnels, unless otherwise specified in subsection 5.3.
- 5.3 All traffic prohibited from using the Eisenhower/Johnson Tunnels will be required to use the existing Loveland Pass surface route, except that:
- 5.3.1 At times when the Loveland Pass surface route may be closed due to planned winter closure, severe storms, or other blockage, motor vehicles transporting hazardous material loads, as designated in Section 10.0 of these Rules, except radioactive materials in any quantity and flammable compressed gases in quantities of 1000 pounds or more gross weight, may be allowed to use the tunnels under the following conditions:
- 5.3.1.1 Such motor vehicles shall pull into the truck-parking area and may proceed through the tunnel only after authorization and specific directions are given by Tunnel Maintenance Personnel.
- 5.3.1.2 Such motor vehicles shall be allowed to transit the tunnels seven (7) days a week "On the Hour" except as follows:
- Westbound Saturday and Sunday mornings, 8–9 A.M.
- Eastbound Sunday afternoons, 3, 4, 5, and 6 P.M.
- National Holidays when falling on Friday, 8–9 A.M.
- National Holidays when falling on Monday, 3, 4, 5, and 6 P.M.
- 5.3.2 At times when the Loveland Pass surface route may be closed due to planned winter closure, severe storms, or other blockage, motor vehicles carrying radioactive material in any quantity or flammable compressed gases in quantities of 1000 pounds or more gross weight, will not be allowed to use the tunnels. Motor vehicle operators shall contact the Colorado State Patrol, Port of Entry or Colorado Department of Transportation for information on alternative routes.
- 5.4 All motor vehicles transporting hazardous material loads, as designated on Table 2 in Section 10.0 of these Rules in amounts of more than 500 pounds and less than 1000 pounds gross weight, shall stop in the truck-parking areas at the Eisenhower/Johnson Tunnels and declare to the Tunnel Maintenance Personnel the type of cargo being transported prior to entering the tunnels.
- 5.5 Tunnel Maintenance Personnel at the Eisenhower/Johnson Tunnels shall have the authority to stop motor vehicles upon reasonable cause that such vehicles are in violation of these Rules and shall have the authority to review shipping papers, or their equivalent which set forth the nature of the material being transported and the quantity of the material, for the purpose of determining whether a regulated hazardous material load is being transported.
- 5.6 Tunnel Maintenance Personnel shall have the authority to regulate the manner (e.g. reduced speed, convoy) in which access is granted or to prohibit access to the Eisenhower/Johnson Tunnels when access would present a hazard to the tunnels or to other persons using the tunnels.

- 5.7 All vehicles operating under overwidth permits, as provided for in Section 6.0, shall stop in the truck-parking areas at the tunnel portals and proceed through the tunnels as directed by the Tunnel Maintenance Personnel.

6.0 OVERWEIGHT/OVERSIZE VEHICLES THROUGH TUNNELS

Only motor vehicles in compliance with the size and weight limits established, in accordance with Sections 42-4-501 through 511, C.R.S., for operation of motor vehicles on the State Highway system, will be allowed to operate through tunnels without a permit. Height restrictions for each tunnel are set forth in Appendix A.

7.0 OPERATION OF VEHICLES AND DEVICES IN THE TUNNELS

- 7.1 Stopping in the Tunnels: No vehicle shall stop, park, or impede the flow of traffic in the tunnels except in the case of emergency or when directed to do so by traffic signals, Peace or Police Officers or Tunnel Maintenance Personnel.
- 7.2 Emergencies in the Tunnels: For the Eisenhower/Johnson Tunnels, persons having emergencies such as flat tires, mechanical breakdowns, accidents or other difficulties necessitating stopping in the tunnel, shall remain in their vehicle, unless it is life threatening to do so, and wait for assistance from the Tunnel Maintenance Personnel.
- 7.3 Use of Vehicle Lights in the Tunnels: All motor vehicles transporting hazardous material loads, as designated in Section 10.0 of these Rules, through tunnels on the State Highway system, shall operate with their vehicle lights on while in the tunnels unless otherwise posted.
- 7.4 Use of Horns or Warning Devices on Motor Vehicles in the Tunnels: No person, at any time shall use a horn or other warning device in any tunnel other than to provide a reasonable warning. Unreasonably loud or harsh sounds with the horn or other noisemaking devices are strictly prohibited in the tunnels.
- 7.5 Traffic Regulatory Signs, Signals and Pavement Markings: All persons using the tunnels must at all times comply with signs, signals, pavement markings or other traffic control devices erected or installed for the purpose of regulating traffic in the tunnels.
- 7.5.1 All signs, signals and markings erected or installed in the tunnels shall conform to the size, design, and color, specified in the Manual On Uniform Traffic Control Devices For Streets And Highways and the Colorado Supplement thereto. In cases of emergency or unusual circumstances, peace or patrol officers or Highway Department Personnel may direct traffic.

8.0 APPLICATION OF LOCAL ORDINANCES AND REGULATIONS

The provisions of these Rules, governing the transportation of hazardous material loads, shall not apply to tunnels on the State Highway system within the jurisdiction of a city, city and county, or incorporated town where by ordinance, or by regulation adopted pursuant to ordinance, either of which has not been disapproved by the Colorado Department of Transportation pursuant to its statutory review under Section 42-4-511, C.R.S., the entity governs transportation of hazardous material loads through such tunnels or otherwise regulates transportation of hazardous material loads on a highway segment which includes a tunnel although the tunnel itself has not been regulated.

9.0 MATERIAL INCORPORATED BY REFERENCE

- 9.1 The Colorado Department of Transportation adopts and incorporates by reference those provisions of Title 49 CFR parts 100 to 177, cited in these Rules, and the Manual On Uniform

Traffic Control Devices For Streets And Highways, issued by the Federal Highway Administration, U.S. DOT, effective October 2003, and the Colorado supplement thereto, adopted by the Colorado Department of Transportation in November 2003. These Rules do not include later amendments to, or editions of, the above incorporated material.

9.2 Certified copies of the complete text of the incorporated material are maintained and are available for public inspection during regular business hours at the Colorado Department of Transportation, 4201 E. Arkansas, Denver, Colorado 80222. For information regarding how the incorporated material may be obtained or examined, contact the Chief Engineer, 4201 E. Arkansas, Denver Colorado 80222. Certified copies of the material incorporated shall be provided at cost upon request.

10.0 REGULATED HAZARDOUS MATERIALS

Following are the Tables and classes of materials which, when transported as cargo loads by a motor vehicle, are subject to regulation under these Rules as more fully set forth in Section 4.0. These Tables conform to the Tables found in 49 CFR 172.504*, except that expressly excluded from any regulation under these Rules are highway route controlled quantities of radioactive material.

TABLE 1

Class A Explosives	Class B Explosives
Forbidden Explosives*	Flammable Solid (Dangerous When Wet label only)
Poison A	.
Radioactive Material	Radioactive Material:
.	Uranium hexafluoride fissile (containing more than 1.0% U 235)
.	Uranium hexafluoride, low-specific activity. (containing 1.0% or less U 235)

SUCH VEHICLE OR DEVICE CONTAINING ANY QUANTITY OF CARGO BELONGING TO THE HAZARDOUS MATERIAL CLASSES IN TABLE 1 SHALL BE SUBJECT TO REGULATION AS MORE FULLY SET FORTH IN SECTION 4.0.

*Forbidden explosives are not subject to DOT placarding requirements, but are expressly prohibited from transportation under 49 CFR and therefore are added here as prohibited in any quantities.

TABLE 2

Class C Explosives	Blasting Agents
Nonflammable Gas	Nonflammable Gas (Chlorine)
Nonflammable Gas (oxygen, cryogenic liquid)	Flammable Solids

Nonflammable Gas
(Flourine)

Combustible Liquid

Corrosive Material

Flammable Gas

Oxidizer

Poison B

Irritating Material

Flammable Liquid

Organic Peroxide

SUCH VEHICLE OR DEVICE CONTAINING 1000 POUNDS OR MORE GROSS WEIGHT ** OF CARGO BELONGING TO THE HAZARDOUS MATERIAL CLASSES IN TABLE 2 SHALL BE SUBJECT TO REGULATION AS MORE FULLY SET FORTH IN SECTION 3.

**If the empty cargo unit has been purged, as provided in 49 CFR 172.328, of any residue of the hazardous material, the motor vehicle will not be subject to any restriction relating to transportation of hazardous material loads under these Rules.

APPENDIX A TUNNELS SUBJECT TO THESE RULES

	TUNNEL NAME & LOCATION	DESCRIPTION	HEIGHT RESTRICTIONS	OTHER RESTRICTIONS
1	Interstate 70, MP 50.38, Beavertail Tunnels	Two bores, 13.75 miles east of Grand Junction in DeBeque Canyon	22' 7" EB & 21' 1" WB	No
2	Interstate 70, MP 117.83, No Name tunnels	Two bores .5 miles East of SH 82- Grand Ave., Glenwood Springs	16' 7" EB & 6' 8" WB	No
3	Interstate 70, MP 125.7, Hanging Lake Tunnels	Two bores, Glenwood Canyon, 8.1 miles east of Glenwood Springs	16' 6" EB & WB	No
4	Interstate 70, MP 127.12 Reverse Curve	One bore WB only, 10.5 miles east of Glenwood Springs	19' 3" WB	No
5	Interstate 70, MP 213, Eisenhower/ Johnson Memorial tunnels	Two bores, under the Continental Divide, 60 miles west of Denver	13' 11" EB & WB	Yes – See Section 5 for Restrictions on Time/Day/ Hours usage. All Haz Mat listed in Tables 1,2 Apply.
6	Interstate 70, MP 242, Twin tunnels	One bore each tunnel, 1.8 miles east of Idaho Springs (2.6 miles	14' 6" EB & WB	No

		east of junction with SH 103)		
7	Interstate 225 MP 0.02 at Jctn. with Interstate-25 SB MP 200	One bore, Junction I-225 southbound only with I-25 Southbound only	17' 4" SB	No
8	US 6 - MP259 to 270,	One bore each tunnel, Five tunnels in Clear Creek Canyon beginning 4 miles west of Golden for 15 miles	13' 6" EB & WB	No
9	US 160 - MP 168.5 Wolf Creek Pass	One bore, Snowshed, 25.56 miles east of Pagosa Springs	16' 8" EB & WB	No
10	US160 - MP 174.8 Wolf Creek Pass Tunnel	One bore, 31.15 miles east of Pagosa Spgs (located on west side of Wolf Creek Pass)	17' 6" EB & WB	No
11	US 550 - MP 90.86	One bore, 1.2 miles south of Ouray in Ouray county	13' 9" EB & WB	No
12	US 550 – MP 88.17 Riverside Slide Snowshed	One bore, Snowshed, 3.9 miles south of Ouray on Red Mountain Pass	14' 6" EB & WB	No
13	SH 14 - MP 107.2	One bore, 27.48 miles west of Fort Collins in Roosevelt National Forest	14' 5" EB & WB	No
14	SH 119 - MP 37.6	One bore, in Boulder Canyon, 4.2 miles west of Jct with SH 7 & SH 93	14' 9" EB	No

Proposed
CDOT
Tunnel Rules

DEPARTMENT OF TRANSPORTATION

Transportation Commission

Rules Governing the Use of Tunnels on Colorado State Highways

2 CCR 601-8

Statement of Basis and Purpose and Statutory Authority

The Transportation Commission has revised the Rules Governing the Use of the Tunnels on State Highways in order to update state and federal statutory references, clarify and simplify language, and provide an easily understandable guide for use of the Tunnels on state highways and specifically the Eisenhower-Johnson Memorial Tunnels. Section 42-4-106(7)(a), C.R.S., provides the authority to the Transportation Commission to adopt rules concerning the operation of any motor vehicle and commercial vehicle in any Tunnel which is a part of the state highway system. Pursuant to § 42-4-106(7)(b), C.R.S., the Department may prohibit or regulate the operation of any motor vehicle and commercial vehicle which transports any article, deemed to be dangerous, in any Tunnel which is part of the state highway system. Further, § 42-20-301(3), C.R.S., provides authority to the Transportation Commission to regulate hours of operation of the Eisenhower-Johnson Tunnels on Interstate 70.

These rules shall be interpreted consistently with the requirements of Title 49 CFR parts 100 to 177. Additionally, these rules should be read together with 8 CCR 1507-25 “Rules and Regulations Concerning the Permitting, Routing & Transportation of Hazardous and Nuclear Materials and the Intrastate Transportation of Agricultural Products in the State of Colorado.” These rules are promulgated by the Department of Public Safety, Chief of the Colorado State Patrol pursuant to § 42-20-108 (1) and (2), C.R.S. These rules also regulate the safe transportation of nuclear materials by motor vehicle within the State of Colorado pursuant to §§ 42-20-403, 504 and 508, C.R.S., and exempt agricultural products from the rules pursuant to § 42-20-108.5, C.R.S.

The transport of hazardous materials is strictly governed by federal and state regulations and CDOT must adhere to these legal requirements. CDOT’s proposed rules 3.03 and 3.04 are based on federal regulations which CDOT has no authority to modify.

Applicability. These rules apply to all Commercial Vehicles, Motor Vehicles and Persons utilizing the Tunnels under the Colorado Department of Transportation’s jurisdiction.

1.00 Definitions

1.01 “Commercial Vehicle” as set forth in § 42-4-235, C.R.S., shall mean (I) any self-propelled or towed vehicle bearing an apportioned plate or having a manufacturer's gross vehicle weight rating or gross combination rating of ten thousand one pounds or more, which vehicle is used in commerce on the public highways of this state or is designed to transport sixteen or more

passengers, including the driver, unless such vehicle is a school bus regulated pursuant to section 42-4-1904, C.R.S., or any vehicle that does not have a gross vehicle weight rating of twenty-six thousand one or more pounds and that is owned or operated by a school district so long as such school district does not receive remuneration for the use of such vehicle, not including reimbursement for the use of such vehicle; (II) any motor vehicle designed or equipped to transport other motor vehicles from place to place by means of winches, cables, pulleys, or other equipment for towing, pulling, or lifting, when such motor vehicle is used in commerce on the public highways of this state; and (III) a motor vehicle that is used on the public highways and transports materials determined by the secretary of transportation to be hazardous under 49 U.S.C. Sec. 5103 in such quantities as to require placarding under 49 CFR parts 172 and 173.

1.02 “Department” or “CDOT” shall mean the Colorado Department of Transportation established pursuant to § 43-1-103, C.R.S.

1.03 "Enforcement Official" shall mean, and is limited to, a peace officer who is an officer of the Colorado State Patrol as described in §§ 16-2.5-101 and 114, C.R.S., a certified peace officer who is a certified port of entry officer as described in §§ 16-2.5-101 and 115, C.R.S., a peace officer who is an investigating official of the transportation section of the public utilities commission as described in §§ 16-2.5-101 and 143, C.R.S., or any other peace officer as described in section § 16-2.5-101, C.R.S. [§ 42-20-103 (2), C.R.S.]

1.04 “Hazardous Materials” (also known as “Hazmat”) shall mean those materials listed in Tables 1 and 2 of Title 49, Code of Federal Regulations, 172.504 (49 CFR 172.504), excluding highway route controlled quantities of radioactive materials as defined in 49 CFR 173.403 (1), excluding ores, the products from mining, milling, smelting, and similar processing of ores, and the wastes and tailing therefrom, and excluding special fireworks when the aggregate amount of flash powder does not exceed fifty pounds. [§ 42-20-103 (3), C.R.S.]

1.05 “Motor vehicle” shall mean any self-propelled vehicle that is designed primarily for travel on the public highways and that is generally and commonly used to transport persons and property over the public highways or a low-speed electric vehicle; except that the term does not include low-power scooters, wheelchairs, or vehicles moved solely by human power.

1.06 "Person" shall mean an individual, a corporation, a government or governmental subdivision or agency, a partnership, an association, or any other legal entity; except that separate divisions of the same corporation may, at their request, be treated as separate persons. [§ 42-20-103 (6), C.R.S.]

1.07 “Staging” shall mean the parking of a Motor Vehicle or Commercial Vehicle at a specific location to facilitate its safe passage through the Eisenhower-Johnson Memorial Tunnel according to the specific timing requirements of rule 3.04

1.08 “State Highway” shall consist of the federal-aid primary roads, the federal-aid secondary roads, and the interstate system, including extensions thereof within urban areas. [§ 43-2-201(1), C.R.S.]

1.09 “Tunnel” shall mean enclosed roadways with vehicle access that is restricted to portals regardless of type of structure or method of construction. Tunnels do not include highway bridges, railroad bridges or other bridges over a roadway. Tunnels are structures that require special design considerations that may include lighting, ventilation, fire protection systems, and emergency egress capacity based on the owners’ determination.

2.00 General Requirements for Use of All CDOT Tunnels

2.01 These Rules apply to all facilities identified below in Rule 4.00.

2.02 Any person operating a Motor Vehicle or Commercial Vehicle in any Tunnel on the State Highway System shall comply with all governing state and federal law and regulations. Any Motor Vehicle, Commercial Vehicle or Person failing to abide by all applicable law and regulations will be referred to law enforcement officials.

2.03 CDOT, including Tunnel Personnel, may prohibit any Motor Vehicle or Commercial Vehicle or device, pursuant to § 42-4-106 (7), C.R.S., from using a Tunnel when the health or safety of the public warrants such action.

2.04 Pedestrians shall not be permitted in Tunnels without the express permission of the Department.

2.05 Electrical assisted bicycles, electric personal assistive mobility devices, low-power scooters, low-speed electric vehicles, motor driven cycles, motorcycles, or motor scooters, with a motor which produces five (5) horsepower or less, and bicycles or other means of conveyance are prohibited from using any Tunnel unless a special use permit has been granted by the Colorado State Patrol. [§ 42-1-102, (28.5) (28.7) (48.5)(a), and (48.6), C.R.S.]

2.06 The Department shall be authorized to schedule any closure of a segment of the State Highway system or at the request of the Colorado State Patrol in order to provide for the safety of the public and including but not limited to maintenance operations, avalanche control, rock fall mitigation, and roadway construction. The CDOT Maintenance Superintendent or his/her designee, in consultation with the Regional Transportation Director, may exercise discretion related to the use of CDOT tunnels as specified in these rules to provide for the health, safety and welfare of the public.

3.00 Requirements Specific to the Eisenhower-Johnson Memorial Tunnels (EJMT)

3.01 CDOT Personnel at the EJMT shall have the authority to:

A. Direct Motor Vehicles or Commercial Vehicles to staging/parking areas and enlist the assistance of an Enforcement Official to review shipping papers or their equivalent to protect the health, safety and welfare of the public.

B. Establish and post restricted access requirements (e.g., speed limit reductions, convoy escort operations, vehicle convoys, and Tunnel closures) granting or denying highway

and/or EJMT access, when access would present a hazard to the Tunnels or to persons using the Tunnels.

3.02 All Commercial Vehicles, Motor Vehicles and Persons transporting placarded quantities of hazardous materials are required to use Loveland Pass (US 6) when the Pass is open.

3.03 Commercial Vehicles, Motor Vehicles and Persons are prohibited at all times from transporting the following placarded hazardous materials through the EJMT, and may not park in the parking lots outside of EJMT.

PROHIBITED AT ALL TIMES FROM EJMT	
	<p>Division 1.1 Placard Explosives With a Mass Explosion Hazard</p>
	<p>Division 1.2 Placard Explosives With a Projection Hazard</p>
	<p>Division 1.3 Placard Explosives With Predominantly a Fire Hazard</p>
	<p>Division 1.4 Placard Explosives With No Significant Blast Hazard</p>
	<p>Division 1.5 Placard Very Insensitive Explosives: Blasting Agents</p>

PROHIBITED AT ALL TIMES FROM EJMT

	<p style="text-align: center;">Division 4.3 Placard Dangerous When Wet Materials</p>
	<p style="text-align: center;">Division 5.2 Placard Organic Peroxides</p>
	<p style="text-align: center;">Division 2.3 Inhalation Hazard</p>
	<p style="text-align: center;">Division 6.1 Placard Poisonous Materials (inhalation hazards only)</p>
 <p>The HRCQ placard has the square background behind the point on point placard. Compare Class 7 Placard Radioactive Materials under Rule 3.04.</p>	<p style="text-align: center;">Highway Route-Controlled Quantity (HRCQ)</p>

3.04 Materials Permitted to Use EJMT when Loveland Pass (US 6) is closed.

3.04.1 Subject to the requirements of these rules and all state and federal laws, Commercial Vehicles, Motor Vehicles and Persons may transport the following hazardous materials through the EJMT only when Loveland Pass (US 6) is closed.

PERMITTED TO USE EJMT WHEN LOVELAND PASS (US 6) IS CLOSED

SUBJECT TO RESTRICTION

	<p>Division 1.6 Placard Extremely Insensitive Detonating Substances</p>
 <p>This is a point-on-point placard as distinguished from HRCQ placard which has a square background. HRCQ is prohibited at all times</p>	<p>Class 7 Placard Radioactive Materials</p>
	<p>Division 2.1 Placard Flammable Gases</p>
	<p>Division 2.2 Placards Non-Flammable, Non Poisonous Gases</p>
	<p>Class 3 Placards Flammable Liquids</p>

PERMITTED TO USE EJMT WHEN LOVELAND PASS (US 6) IS CLOSED

SUBJECT TO RESTRICTION

	<p>Class 3 Placards Combustible Liquids</p>
	<p>Division 4.1 Placard Flammable Solids</p>
	<p>Division 4.2 Placard Spontaneously Combustible Materials</p>
	<p>Division 5.1 Placard Oxidizing Substances</p>
	<p>Division 6.1 Placards Poisonous or Toxic Materials (excludes inhalation hazards)</p>
	<p>Division 6.2 Label Infectious Substances</p>

PERMITTED TO USE EJMT WHEN LOVELAND PASS (US 6) IS CLOSED	
SUBJECT TO RESTRICTION	
	Class 8 Placard Corrosive Substances
	Class 9 Placard Miscellaneous Hazardous Materials
	Dangerous Placard Dangerous Hazardous Materials
	ORM-D Label Other Regulated Materials

3.04.2 Restrictions when Loveland Pass (US 6) is Closed.

A. Off-Peak Period Operations. Once authorization and specific direction is given by CDOT personnel, Motor Vehicles, Commercial Vehicles and Persons transporting placarded quantities of hazardous materials under this rule may use the EJMT seven days a week on the hour.

B. Peak Period Operations.

1. Peak Periods are those times of increased vehicle traffic counts determined by the Department which warrant restrictions on the transporting of placarded quantities of permitted hazardous materials. National Holidays referenced below are: New Year's Day (January 1); Martin Luther King, Jr; Day (3rd Monday of January); President's Day (3rd Monday in February); Memorial Day (last Monday in May); Independence Day (July 4); Labor Day (1st Monday in September); Columbus Day (2nd Monday in October); Veteran's Day (November 11);

Thanksgiving Day (4th Thursday in November) and Christmas Day (December 25)

2. No vehicles containing placarded quantities of hazardous materials are allowed to use EJMT during the following time frames:

Westbound

Saturday and Sunday mornings, from 7:01 a.m. to 9:59 a.m.

National Holidays when they fall on a Friday from 7:01 a.m. to 9:59 a.m.

Eastbound

Sunday afternoons, from 2:01 p.m. to 6:59 p.m.

National Holidays when they fall on Mondays, from 2:01 p.m. to 6:59 p.m.

C. During Peak Periods, Motor Vehicles, Commercial Vehicles and Persons intending to transport authorized hazardous materials through the EJMT will be required to Stage in the designated areas described below. Such vehicles may not park in the lots at the EJMT entrances. After the Peak Period has expired, staged vehicles will be escorted from the staging areas to the EJMT by a CDOT representative.

D. The Peak Period Staging areas are:

Westbound: the Herman Gulch interchange (Exit 218)

Eastbound: the Vail Pass Rest Area (exit 189); or along the ramps of Officers Gulch interchange (exit 198);

3.05 All Motor Vehicles, Commercial Vehicles and Persons transporting authorized Hazardous Materials through the EJMT shall:

Travel at speeds no faster than 30 miles per hour;

Not pass other vehicles; and

Maintain a minimum distance of 800 feet from other vehicles.

3.06 Hazmat Routes

3.056.1 The EJMT is not located on a designated hazardous materials route section. The designated hazardous materials routes within the State of Colorado may be found at

<http://dtdapps.coloradodot.info/staticdata/Downloads/StatewideMaps/HazMatMap.pdf>. See also
<http://www.coloradodot.info/business/hazmat-routing>.

4.00 CDOT Tunnels and Snow Sheds

Structure No.	Tunnel Name & Location	Description	Route	Mile Post	NHS (Y/N)
H-03-BT	Interstate 70, MP 50.38, Beavertail Tunnels	Bore 13.75 miles east of Grand Junction in DeBeque Canyon	070A	50.38	Y
H-03-BU	Interstate 70, MP 50.38, Beavertail Tunnels	Bore 13.75 miles east of Grand Junction in DeBeque Canyon	070A	50.37	Y
F-07-Q	Interstate 70, MP 117.83, No Name tunnels	Bores 1.5 miles East of SH 82-Grand Ave., Glenwood Springs	070A	117.81	Y
F-07-R	Interstate 70, MP 117.83, No Name tunnels	Bores 1.5 miles East of SH 82-Grand Ave., Glenwood Springs	070A	117.8	Y
F-08-AP	Interstate 70, MP 125.7, Hanging Lake Tunnels	Glenwood Canyon, 8.1 miles east of Glenwood Springs	070A	125.23	Y
F-08-AQ	Interstate 70, MP 125.7, Hanging Lake Tunnels	Bores, Glenwood Canyon, 8.1 miles east of Glenwood Springs	070A	125.24	Y
F-08-AT	Interstate 70, MP 127.12 Reverse Curve	One bore WB only, 10.5 miles east of Glenwood Springs	070A	127.09	Y
F-13-X	Interstate 70, MP 213, Eisenhower/Johnson Memorial tunnels	Bores, under the Continental Divide, 60 miles west of Denver	070A	213.61	Y
F-13-Y	Interstate 70, MP 213, Eisenhower/Johnson Memorial	Bores, under the Continental Divide, 60 miles west of Denver	070A	213.61	Y

Structure No.	Tunnel Name & Location	Description	Route	Mile Post	NHS (Y/N)
	tunnels				
F-15-BN	Interstate 70, MP 242, Twin tunnels	One bore each tunnel, within the city limits of Idaho Springs (2.6 miles east of junction with SH 103)	070A	242.11	Y
F-15-BO	Interstate 70, MP 242, Twin tunnels	One bore each tunnel, within the city limits of Idaho Springs (2.6 miles east of junction with SH 103)	070A	242.11	Y
F-17-FW	Interstate 225 MP 0.02 at Jctn. with Interstate-25 SB MP 200	Cut and cover Structure, Junction I-225 southbound only with I-25 Southbound only	225A		
F-15-AW	US 6 - MP259 to 270,	One bore each tunnel, Five tunnels in Clear Creek Canyon beginning 4 miles west of Golden for 15 miles	006G	264.76	N
F-15-AX	US 6 - MP259 to 270,	One bore each tunnel, Five tunnels in Clear Creek Canyon beginning 4 miles west of Golden for 15 miles	006G	265.13	N
F-15-AY	US 6 - MP259 to 270,	One bore each tunnel, Five tunnels in Clear Creek Canyon beginning 4 miles west of Golden for 15 miles	006G	270.37	N
F-15-X	US 6 - MP259 to 270,	One bore each tunnel, Five tunnels in Clear Creek Canyon beginning 4 miles west of Golden for 15 miles	006G	258.94	N

Structure No.	Tunnel Name & Location	Description	Route	Mile Post	NHS (Y/N)
F-15-Y	US 6 - MP259 to 270,	One bore each tunnel, Five tunnels in Clear Creek Canyon beginning 4 miles west of Golden for 15 miles	006G	259.46	N
N-09-F	US160 - MP 174.8 Wolf Creek Pass Tunnel	One bore, 31.15 miles east of Pagosa Spgs (located on west side of Wolf Creek Pass)	160A	174.19	Y
L-06-P	US 550 - MP 90.86 Bear Creek Tunnel	One bore, 1.2 miles south of Ouray in Ouray county	550B	90.84	Y
B-15-E	SH 14 - MP 107.2	One bore, 27.48 miles west of Fort Collins in Roosevelt National Forest	014B	107.23	N
D-15-AS	SH 119 - MP 37.6	One bore, in Boulder Canyon, 4.2 miles west of Jct with SH 7 & SH 93	119A	37.69	N
M-06-AG	US 550 – MP 88.16 East Riverside Snow Shed	Snow Shed	550B	88.16	Y
O-09-K	US 160 – MP 168.47 Alberta Snow Shed	Snow Shed	160A	168.47	Y

5.00 Materials Incorporated by Reference

A copy of the rules and of all other incorporated materials are available for public inspection during regular business hours at the Colorado Department of Transportation, Office of Policy and Government Relations, 4201 E Arkansas Avenue, Denver, Colorado 80222. Incorporated materials are also maintained at the State Publications Depository and Distribution Center, 201 East Colfax Avenue, Denver, CO 80203, and may be examined at any other state publications library via inter-library loan. The following regulations and materials are incorporated by reference; such incorporation does not include later amendments or editions of any incorporated material: Title 49 CFR parts 100 to 177; 8 CCR 1507-25 “Rules and Regulations Concerning the Permitting, Routing & Transportation of Hazardous and Nuclear Materials and the Intrastate Transportation of Agricultural Products in the State of Colorado” dated 4.30.2013.

CDOT Tunnel Rules

Representative Group (gray text indicates attendance at December 10, 2013 meeting)

Company / Agency Name	Contact Name
Clear Creek County Commissioners	Tim Mauck
BLM Hazmat Specialist	David Jevons
Bureau of Land Management	Larry Bagley
Clear Creek County	Kathleen Krebs
Clear Creek County Fire Dept.	Kelly Babeon
CMCA	Greg Fulton
CMCA	Tracy Sakaguchi
CMCA	Art Ballah
CO/Wyo. Petroleum Marketers Association (CWPMA)	Mark Larson
CO/Wyo. Petroleum Marketers Association (CWPMA)	Grier Bailey
CO/Wyo. Petroleum Marketers Association (CWPMA)	Al Butler
Colorado Counties, Inc.	Eric Bergman
Colorado Municipal League	Mark Radtke
Colorado State Patrol	Capt. Josh Downing
Gablehouse Granberg, LLC	Tim Gablehouse
I-70 Coalition	Margaret Bowes
Jefferson County	Glenn Grove
Lake Dillon Fire Dept.	Fire Chief Dave Parmely
Lake Dillon Fire Dept.	Deputy Fire Chief Jeff Berino
Loveland Ski Area	Rob Goodell
Rule Making subject matter expert	Julia Pine
Rule Making subject matter expert	Jim Higgins
Ski Country USA	Patrick Byrne
Summit County Commissioners	Dan Gibbs
Summit County, Director of Emergency Management	Joel Cochran
U.S. Forest Service	Carol Kruse (12.02.13)
Vail Resorts	Brendan McGuire

Comparative Chart Analyzing Existing CDOT Tunnel Rules, Current Practice, and Proposed Rule Changes

Analysis of Potential Impact on Hazmat Vehicles under Proposed Rules. Potential Rule changes: A portion of vehicles carrying Class 1, 2, 4, 5 and 6 hazardous materials are prohibited from using EJMT when Loveland Pass is closed. Other placarded vehicles will be escorted through the tunnels. Determination: Less than 150 vehicles per year will be prohibited from EJMT. This is less than 0.02% of all commercial vehicles using EJMT. Approximately 10 vehicles would be delayed given a 24 hour closure of Loveland Pass. Data Sources: 2011 AADT, CDOT / October 2006 Hazmat Flow, Colorado State Patrol / Loveland Pass Closure Information, 1999 – 2011, CDOT. Disclaimer: The circumstances which may lead to the closure of Loveland Pass, such as weather, crashes, and avalanche, are highly unpredictable and vary greatly from year to year. Commodity movement is determined by market demands, operational decisions made by private transportation companies, and other factors. Due to these variables, this analysis is not a predictor of future occurrences and only an estimate of the likely outcome given certain factors.

Assumptions:

- Percentage of vehicles by hazmat class is constant from 2006 to 2011
- In this analysis, half of vehicles placarded Class 1, 2, 4, 5 and 6 are prohibited from entering EJMT at all times. Available data does not indicate division of commodities below the class level. Fifty percent was determined to be a reasonable assumption based on anecdotal information.
- Vehicle volume is distributed equally by hour
- Loveland Pass is closed 350 hours per year

Process and conclusion: The total annual truck volume for Loveland Pass is 81,030. According to the CSP study, 76.6% or 62,069 of these are placarded to carry hazardous materials. Given the distribution of placard class types, annually, there are 3,724 vehicles carrying materials which are prohibited from using EJMT when Loveland Pass is closed. Assuming the vehicles are distributed evenly, there is potential for about 10 prohibited vehicles per day. Given total closure time of 350 hours, only 149 trucks could be delayed in passing over the Continental Divide; or less than 0.02% of total truck traffic. More than ninety-nine percent of the total commercial vehicles would be permitted to go through EJMT when the pass is closed, including gasoline, diesel, and other fuel products.

Comparison to other Similar Tunnels: A comparison of other state departments of transportations' approach to regulating hazardous materials through tunnels under their jurisdictions revealed a wide spectrum of circumstances and methods. Almost every tunnel had a characteristic that made it unique from the others. Each state addressed regulating the tunnels differently. Many tunnels throughout the country, such as those in New York, Massachusetts, and Virginia completely prohibit all placarded vehicles carrying hazardous materials. This complete prohibition is feasible because alternate routes are available without unreasonable burden to hazmat carriers.

Alternative Routing. EJMT has a feasible alternate route of Hwy 6 over Loveland Pass only adding a total of 20 miles round trip. If Loveland Pass is closed there are multiple alternative routes to EJMT depending on the destination. One alternate route which will return the vehicle to I-70 at Silverthorne adds approximately 168 miles round trip. A second route which would return the vehicle to I-70 at Edwards adds approximately 74 miles round trip (74 miles reflects the additional miles using an alternate route compared to taking I-70). The most comparable tunnel to EJMT is the Caldecott Tunnels in Oakland, California. The tunnels consist of three bores of more than 3600 feet in length, with each bore carrying 2 lanes of traffic. The third bore is reversible. An alternate, yet less preferable route is available. Due to an accident which killed seven people in 1982, hazardous materials are no longer permitted through the tunnel, except by escort between the hours of 3am and 5am. It should be noted that the Hanging Lake Tunnel has no feasible alternative route. If prohibition of hazardous materials were applied to this tunnel, a carrier hauling hazardous materials would have to add at least 100 miles to a trip in order circumvent using the tunnel. Considering hours-of-service rules and likely origins and destinations, a day trip to deliver hazardous materials would be highly unlikely. This could potentially add cost and time to carrying hazmat across the state.

Current Rule	Current Practice	Proposed Rule	Impact
Rule 5.2 Hazmat is prohibited from EJMT unless LP closed.	Current practice.	Hazmat load use of EJMT, only when LP is closed, may be permitted / prohibited based on federal regulations and CSP recommendations.	n/a
Rule 5.3.1 When LP closed, hazmat loads listed in rule 10.00 may use EJMT. Loads carrying radioactive materials in any quantity and flammable compressed gases in quantities of 1,000 lbs or more gross weight are prohibited from using EJMT.	<ul style="list-style-type: none"> Any radioactive material that is not HRCQ will be allowed to use the tunnel when LP is closed. Compressed gases in any quantity are allowed to use tunnel when LP is closed. Practice not standardized at present given unclear language in rules. 	<ul style="list-style-type: none"> Any radioactive material that is not HRCQ will be allowed to use the tunnel when LP is closed. Compressed gases in any quantity are allowed to use tunnel when LP is closed. 	n/a Note: All references to <u>1,000</u> lbs. or more are incorrect according to current federal hazardous material regulations. Change conforms proposed rules with federal regulations.
10.00 Regulated hazmat: <u>Table 1</u> :	Permitted except for “forbidden explosives”	At CSP’s suggestion, proposed rules do not divide hazmat restrictions in terms of “Table 1 and Table 2.” All Table 1 hazmat in current rules discussed below. Forbidden explosives prohibited.	No change regarding forbidden explosives. Other hazmat described as Table 1 compared below. <ul style="list-style-type: none"> Table 1 references in current rule are out of date and out of compliance with federal regulations. “Forbidden explosives” are defined in CFR 173.54 and include explosives forbidden from transport.
Table 1: Class A Explosives. Permitted when LP closed.	Permitted to use EJMT when LP closed.	Prohibited “Class A” explosives are now called Division 1.1	Minimal impact. On average, less than 150 placarded vehicles per year will be prohibited from using EJMT when Loveland Pass is closed. Less than one quarter of a percent of total trucks would be prohibited from using EJMT. Note: “Class A” is a term no longer used in federal Hazmat regulations. Current classification: (refers to class name prior to Jan. 1, 1991) Division 1.1 Class A explosives. Division 1.2 Class A or Class B explosives. Division 1.3 Class B explosive. Division 1.4 Class C explosives. Division 1.5 Blasting agents. Division 1.6 No applicable hazard class.
Table 1: Class B Explosives. Permitted when LP closed.	Permitted to use EJMT when LP closed.	Prohibited “Class B is now Division 1.2	Minimal impact. On average, less than 150 placarded vehicles per year will be prohibited from using EJMT when Loveland Pass is closed. Less than one quarter of a percent of total trucks would be prohibited from using EJMT. Note: “Class B” is a term no longer used in federal Hazmat regulations.
Table 1: Flammable Solid (Dangerous When Wet label only). Permitted when LP closed.	Permitted when LP closed.	Prohibited Under current federal regulations, designated as Hazard Class 4.3	Minimal impact. On average, less than 150 placarded vehicles per year will be prohibited from using EJMT when Loveland Pass is closed. Less than one quarter of a percent of total trucks would be prohibited from using EJMT.
Table 1: Poison A. Permitted when LP closed.	Permitted when LP closed.	Prohibited Division 6.1 with Inhalation Hazard	Minimal impact. On average, less than 150 placarded vehicles per year will be prohibited from using EJMT when Loveland Pass is closed. Less than one quarter of a percent of total trucks would be prohibited from using EJMT
Table 1: Radioactive Material. <ul style="list-style-type: none"> Highway Route Controlled Quantities (HRCQ) 	Prohibited. HRCQ placards are required to remain on hazmat route	Prohibited Hazard Class 7.	No change. No impact.

Current Rule	Current Practice	Proposed Rule	Impact
prohibited in rule 10.00. <ul style="list-style-type: none"> Due to the route control, HRCQ commodities should never be requesting use of EJMT. 	so would never be at the EJMT.		
Table 1: Radioactive Material: <ol style="list-style-type: none"> Uranium hexafluoride fissile (containing more than 1.0% U235) Uranium hexafluoride, low-specific activity, (containing 1.0% or less U235). Low-specific activity usually does not reach the limits to be designated HRCQ. All radioactive materials prohibited under current rule 5.3.1/ 5.3.2: both route controlled and not route controlled.	Permitted when LP is closed.	<ul style="list-style-type: none"> Uranium hexafluoride fissile. If above 1000TBq then it is HRCQ and prohibited. Uranium hexafluoride. Most likely not HRCQ so permitted when LP closed. 	No impact. Radioactive 7 placards permitted when LP is closed, HRCQ not permitted. Less restrictive than current rules. Discussed with CSP. No adequate comparison between old radioactive regulatory references and current regulations. Note: Categories in current rules no longer exist in federal regulations.
Table 2: Class C Explosives. Permitted when LP closed.	Permitted when LP is closed.	Prohibited Division 1.4 Explosives See Footnote 1 below.	Minimal impact. On average, less than 150 placarded vehicles per year will be prohibited from using EJMT when Loveland Pass is closed. Less than one quarter of a percent of total trucks would be prohibited from using EJMT. Note: "Class C" in current rules no longer exist in federal regulations. Current classification: (Class name prior to Jan. 1, 1991) Division 1.1 Class A explosives. Division 1.2 Class A or Class B explosives. Division 1.3 Class B explosive. Division 1.4 Class C explosives. Division 1.5 Blasting agents. Division 1.6 No applicable hazard class.
Table 2: Blasting Agents. Permitted when LP closed.	Permitted when LP is closed.	Prohibited "Blasting Agents" are now called Division 1.5 explosives. See Footnote 2 below.	Minimal impact. On average, less than 150 placarded vehicles per year will be prohibited from using EJMT when Loveland Pass is closed. Less than one quarter of a percent of total trucks would be prohibited from using EJMT. Division 1.5 Current classification Class name prior to Jan. 1, 1991 Division 1.1 Class A explosives. Division 1.2 Class A or Class B explosives. Division 1.3 Class B explosive. Division 1.4 Class C explosives. Division 1.5 Blasting agents. Division 1.6 No applicable hazard class.
Table 2: Nonflammable Gas (chlorine). Permitted when LP closed.	Permitted when LP closed.	Prohibited Poison by inhalation Division 2.3	Minimal impact. On average, less than 150 placarded vehicles per year will be prohibited from using EJMT when Loveland Pass is closed. Less than one quarter of a percent of total trucks would be prohibited from using EJMT. Alternative Route: Using Mapquest, when LP is closed using Berthoud Pass on to Kremmling and HWY 9 back to I-70 adds 82.7 (165.4 round trip mi. from Denver) and approximately 1 hr 54 min. (app. 4 hrs round trip).
Table 2: Permitted when LP closed. <ul style="list-style-type: none"> Nonflammable Gas Division 2.2 Nonflammable Gas (oxygen, cryogenic liquid) Division 2.2 Flammable solids Division 4.1, 4.2 Nonflammable Gas (fluorine) Division 2.2 Combustible Liquid Division 3 Poison B Division 6.1 (other than material poisonous by inhalation) Corrosive Material Division 8 Irritating Material Division 6.1 Flammable Gas (Note: compressed gas/propane) Division 2.1 	Permitted when LP closed.	Permitted when LP is closed.	No impact.

Current Rule	Current Practice	Proposed Rule	Impact
<ul style="list-style-type: none"> Flammable Liquid (Note: gasoline, jet fuels, diesel) Division 3 Oxidizers Division 5.1 			
Table 2: Organic Peroxide. Permitted when LP closed.	Permitted when LP closed.	Prohibited Division 5.2 Type B liquid or solid, Temperature controlled.	Minimal impact. On average, less than 150 placarded vehicles per year will be prohibited from using EJMT when Loveland Pass is closed. Less than one quarter of a percent of total trucks would be prohibited from using EJMT. Note: This commodity may explode from heat, contamination or loss of temperature control.
Table 2: Organic Peroxide. Permitted when LP is closed	Permitted when LP closed.	Permitted when LP closed. Hazard Class 5.2 <u>other than</u> Type B liquid or solid, Temperature controlled	No impact.
<p>Rule 5.3.1 When LP closed, hazmat identified in current Rule 10.00 may use EJMT, but is subject to staging and specific hours.</p> <p>Specific hours for use of EJMT in current rules:</p> <ul style="list-style-type: none"> 5.3.1.1. Hazmat required to wait in truck-parking area until permitted to enter EJMT. 5.3.1.2 Hazmat shall transit EJMT 7 days a week on the hour except: <ul style="list-style-type: none"> Westbound Saturday and Sunday mornings, 8-9 a.m. Eastbound Sunday afternoons, 3, 4, 5, and 6 p.m. National Holidays when falling on Friday, 8-9 a.m. National Holidays when falling on Monday, 3, 4, 5, and 6 p.m. 	Follows current restrictions, during restricted hours hazmat loads are staged at Officer's Gulch, Vail Pass Rest Area (eastbound); Herman's Gulch (westbound).	<p>When LP is closed, staging required using Officer's Gulch, Vail Pass rest area and Herman's gulch. Further investigating any potential changes to peak hours of travel based upon current traffic counts.</p> <ul style="list-style-type: none"> Clarified: <i>Westbound</i> on national holidays when they fall on a Friday, and Clarified <i>Eastbound</i> on national holidays when they fall on a Monday. 	No change to current practice. Impact could be relevant to driver hours of service restrictions.
<p>Rule 5.5 Tunnel personnel at EJMT authorized to stop vehicle upon reasonable cause that vehicle is in violation of Rules and are authorized to review shipping papers.</p>	Current practice is consistent with rules.	Proposed rules state that CDOT can stop a vehicle and contact CSP.	No change. Beneficial only; no delay in CDOT and driver reviewing and discussing shipping papers.
<p>Rule 5.6 Tunnel personnel authorized to regulate manner (speed, convoy) in which access is granted or to prohibit access to EJMT if access would present hazard to tunnels or other persons using tunnels.</p>	Current practice is consistent with rules.	Clarify current rule by requiring that all hazmat commercial vehicles using EJMT: (1) Travel at speeds no greater than 30 miles per hour through the tunnel; (2) Not pass while in a Tunnel; (3) Spacing between Motor Vehicle or Commercial Carriers and all other vehicles must be a minimum of 800 feet while in Tunnel.	No impact.
<p>Rule 5.7 Vehicles operating with over-width permits must stop in truck-parking areas at tunnel portals.</p>	Current practice is consistent with rules.	Rules won't reference to over-size/over-weight loads because covered in separate set of CDOT rules.	No impact.
<p>If an empty cargo unit is purged under 49 CFR 172.328, not restricted under current rules.</p>	Permitted when LP is closed.	Empty cargo units will be treated the same as any other hazardous material transport, based upon placarding requirements.	No impact.

Footnote 1: 1.4 Explosive. 1.4 Explosive class depends on the compatibility group. 1.4B is a detonator which is the most sensitive explosive that is used commercially. It is used to initiate a larger quantity of explosive material. “1.4” means that it is packaged in a manner so that if one detonator were to detonate it would not propagate to the other detonators in the container causing them to detonate. Most detonators contain such a small amount of explosives would not be a hazard unless someone was actually holding one in their hand. But if there were a fire in the vehicle then the shipment could mass detonate and depending on the quantity it could cause some serious damage to fire personnel or motorists close by. The current regulations say that any 1.4 material weighing less than 1000 pounds is not required to be placarded and could be transported through the tunnel. 1.4S is usually a material that is used to initiate the detonator and burns rather than detonates like safety fuse of a fuse lighter. There are some 1.4S materials that could contain a detonator but are sealed so it would not detonate and propagate to other 1.4S materials

Footnote 2: 1.5 Explosive. 1.5 Explosive class is a blasting Agent. The most common is Ammonium Nitrate-Fuel Oil Mixture (ANFO). Ammonium nitrate is an oxidizer which in simple terms, creates its own oxygen when burned.. The fuel oil mixed with it will aid in detonating the material using a detonator. For example, when ammonium nitrate is confined in a semi-trailer and a fire occurs on the truck it would cause a massive explosion if it were a large load. The hazard of the 1.5 explosive material during a fire would not be that much more than if a truck carrying a class 5 hazardous material (oxidizer) like ammonium nitrate fertilizer except it would detonate quicker with the fuel oil mixed with it. This is what happened at the West Texas fertilizer plant explosion in March.

Footnote 3: 1.6 explosive. CDOT does not use any 1.6 explosive, so it has no firsthand knowledge of this material except for what is written in the 49 CFR regulations on handling hazardous materials: “a material which after undergoing certain prescribed tests, is found to be an extremely insensitive detonating substance.” Based on this information and discussions with CSP, CDOT believes this material should not be included in the “prohibited at all times” group in the rules.

Resolution # TC -

Open Rule-Making Regarding Revisions to the Rules Governing the Use of Tunnels on Colorado State Highways, 2 CCR 601-8 and Delegate Authority to an Administrative Hearing Officer to Hold a Public Rule-Making Hearing.

WHEREAS, § 43-1-106(8)(k), C.R.S., § 42-4-106 (7)(a) and (b), C.R.S., § 42-20-301(3), authorize the Transportation Commission of Colorado (the “Commission”) to promulgate rules governing the use of tunnels on Colorado state highways (“Tunnel Rules”); and

WHEREAS, the Commission adopted the Tunnel Rules in 1986, with a subsequent adoption making minor corrections in 2008; and

WHEREAS, the current rules require updating in order to conform to current federal regulations and provide clearer guidance to the travelling public; and

WHEREAS, pursuant to Governor Hickenlooper’s Executive Order D 2012-002, the proposed rules are drafted in clear language to make them accessible to CDOT personnel, Colorado State Patrol, motor carriers and the travelling public; and

WHEREAS, following the measures taken by the Department to comply with the Administrative Procedure Act, the proposed Rules will be submitted to the Commission for approval and adoption.

NOW THEREFORE BE IT RESOLVED, the Transportation Commission herein opens the rule-making process and delegates authority to an administrative hearing officer to preside over a public rule-making hearing on the modifications to the Rules.

Transportation Commission Secretary

Date