STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES **Policy and Procedure**		POLICY AND PROCEDURE NUMBER **11.04.023**	PAGE 1 of 6
		EFFECTIVE DATE January 23, 2006	
SUBJECT **Tires, Wheels, and Chains**		SUPERSEDES 11.04.023	DATED June 16, 2000
CHAPTER **State Equipment Fleet**	SECTION **Equipment Use, Care, and Maintenance**	APPROVED BY Mike Barton	

PURPOSE

This formalizes the policy and procedure of the department regarding tires, wheels, and chains for State Equipment Fleet (SEF) vehicles and equipment.

POLICY

Tires, wheels, and chains for SEF vehicles and equipment will be replaced, installed, maintained, used, stored, procured, and disposed of in accordance with the procedure below.

PROCEDURE

A. **Tire Replacement**

Users are responsible for checking the condition of tires and for reporting unsafe, defective, or overly worn tires to the nearest SEF shop. SEF maintenance staff will coordinate the repair and replacement of tires, including winter tires.

NOTE: In keeping with nationwide standards and manufacturers' recommendations, tire wear is measured in 32nds of an inch. A special tire depth gauge is used to determine the amount of wear left in a tire tread. If a user is concerned about the tread remaining on a tire, the vehicle should be brought to the nearest SEF shop where remaining tread depth can be quickly and easily checked for conformance to the minimum standards set out in this procedure.

SEF is responsible for replacing tires on wet rental equipment when the tread wear has reached the safety warning replacement strip manufactured in new tires or as follows:

1. Standard Highway Tires

   a. Light duty tires through 3/4 ton are to be replaced when 2/32 inch tread depth remains.

   b. Heavy duty tires are to be replaced when 4/32 inch tread depth remains.

   c. Tires of any type may be replaced before reaching the tread depth levels noted above when traction and safety are a concern. Early tire replacement will be at the discretion of SEF maintenance personnel.

2. Winter Tires and Wheels

   SEF coordinates the purchase and installation of all winter tires and wheels for state vehicles and equipment. Winter tires are studded tires and studless ice and snow tires. The user agency is responsible for determining its needs for winter tires and wheels prior to the winter season to allow for timely ordering by SEF parts personnel. Billing for winter tires and wheels will be determined by the billing status of the asset. If all other maintenance for a vehicle is billable, then winter tires will be billable. If the vehicle is a wet rental that pays operating rates, the cost of winter tires will be put into the operating rate calculation and will not generate a billable work order.

   NOTE: SEF will purchase only lightweight studs (using the weight criterion in AS 43.98.025(b)) for tires to be installed on state vehicles..

3. Dry Rental and Nonrental Vehicles

   SEF does not provide unbilled tire services to dry and nonrental vehicles. SEF provides tire replacement services to users of dry and nonrental vehicles on a billable work order.

B. **Tire and Wheel Safety**

All SEF personnel and vehicle and equipment users are to be aware of the potential safety hazard if original tires or wheels are improperly mounted or replaced with tires or wheels of a load range capacity less than that required for safe operation. The following considerations apply:

1. Tire Mounting

   a. Care must be taken when mounting tires to ensure they match with the other tires already on the vehicle in designated size, ply, diameter, circumference, width, and type (i.e., radial vs. bias and P-Metric vs. LT). All new and previously installed tires must meet the vehicle manufacturer's recommendations.

   b. Mismatching of dual or tandem tires should not exceed 1/2 inch in circumference in tire sizes smaller than 10:00-20, and 3/4 inch in circumference in tire sizes larger than 10:00-20. Mismatching of dual or tandem tires beyond these standards may cause excessive stress and premature failure of tires and other vehicle components such as differentials.

   c. Do not mix bias ply with radial tires.

   d. Maintain equal air pressure in all tires on the same axle.

   e. The load capability of tires differs with size and construction. Equipment and vehicle operators and service personnel must refer to the tire load specifications stamped on the sides of tires or to the manufacturer's tire handbook and ensure that they meet or exceed the vehicle manufacturer's recommendations.

2. Tire Specifications

   a. SEF Headquarters personnel shall include in all bid specifications the appropriate wheel and tire sizes and load ranges to carry the intended gross vehicle weight.

   b. SEF personnel will replace worn or damaged tires and wheels only with components of the proper load range and quality and that comply with the vehicle manufacturer's recommendation.

3. Tire Abuse

   a. Any accidents or damage resulting from the misapplication or misuse of tires or wheels, or from using tires that do not meet the minimum load ratings or size requirements, will be the responsibility

of the agency that installed the undersized or incorrect tire or wheel.

b. SEF maintenance personnel will report all infractions of the above to the appropriate SEF district manager, who will notify the user agency in writing, with a copy to the statewide equipment manager. Vehicles found with unsafe tire conditions will be removed from service until corrections are made.

C. **Tire Quality**

1. The quality of replacement tires will be the same as originally issued on Class 115 and 116 police interceptors or as directed in writing by the Department of Public Safety.

2. The quality of replacement tires on all other vehicles and equipment will meet or exceed original equipment specifications.

D. **Tire Storage**

The user agency is responsible for the storage of all seasonal tires. Individual SEF shops may provide tire storage if there is sufficient space. Space availability is at the discretion of the appropriate SEF district manager.

E. **Tire Procurement**

1. SEF parts personnel will establish purchase agreements for procuring tires and wheels for state vehicles and equipment. All purchases of tires and wheels will be done by or coordinated with SEF parts personnel.

2. SEF parts personnel should have knowledge of vendor stock levels and delivery schedules to ensure that an adequate inventory of tires will be available when needed.

F. **Tire Chains**

Due to the different needs of users, no equitable rental rate can include the cost of tire chains. Accordingly, all costs of tire chains (including original purchase) will be borne by the user. Tire chains for heavy equipment are supplied by DOT&PF supply services. At the user's request, SEF parts personnel will assist users of light duty vehicles in purchasing tire chains. All costs for tire chains will

be charged directly to the user as a billable work order, regardless of the vehicle's billing status.

G. **Recapped Tires**

Recapped tires are to be used to the maximum extent practicable on trailers, heavy equipment, and nonsteering axles of heavy trucks. They should be used when it is cost effective and does not interfere with original equipment manufacturer recommendations or warranty provisions, and when doing so will not have a negative impact on vital field operations.

H. **Tire Siping**

Siped tires are to be used to the maximum extent practicable on all heavyduty trucks. SEF also encourages the use of siped tires on all units in place of studded tires.

I. **Tire Disposal**

1. All tires with tread wear below the minimum standards and considered not economical to recap and tires that have been damaged are to be returned to SEF shops for final disposal. All tires damaged beyond repair will be destroyed or recycled. Disposition of used tires can be done by one of the following:

    a. The SEF regional offices will take tires damaged beyond repair to a refuse center or recycler for disposal.

    b. Tires that are safe for reuse can be sold at an outcry auction.

    c. Tires can be used as a core exchange with a tire vendor.

    d. Tires can be donated to another public agency for nonautomotive use.

2. All tire disposals must be done in accordance with federal, state, and local laws and regulations.

AUTHORITY

DPDR 11.04.022

IMPLEMENTATION RESPONSIBILITY

SEF managers and SEF headquarters personnel

DISTRIBUTION

All state employees via the DOT&PF website