

FOREWORD

This Guide contains standards and practices which have been found effective in preventing forest fires caused by various types of industrial operations when conducted on forest, grass or watershed lands. These standards and practices are based upon studies and the experience of fire agency and operating company personnel. The standards are to be considered as minimums and the various practices are offered as suggestions and examples of what has been tried and found successful in various situations. As industrial equipment and techniques change, the standards may need to change too. On-the-ground conditions may indicate the need for practices beyond the minimum legal requirements and will indicate which practices are most applicable in a given situation.

It is expected that all personnel, who supervise or inspect industrial operations in forest, grass and watershed areas, or who prescribe hazard reduction work or other fire prevention measures, will be thoroughly familiar with the contents of this Guide. It is intended that it be given wide distribution at the field level in both the fire agencies and the operating companies. Their personnel should use it, refer to it regularly and observe the principles and practices included herein.

This Guide was developed as a cooperative undertaking by the United States Forest Service, United States Bureau of Land Management, California Department of Forestry and Fire Protection, and many operating and equipment supply companies in California.

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INTRODUCTION

Industrial operations on the wildlands have been an integral part of the economic growth of this country since its inception. Over the years, many new methods of mechanical operations have evolved that require technology to devise more modern equipment. Timber harvesting, dam and highway construction, housing development, and agricultural land development have benefited from these advances with sometimes larger and more efficient systems.

Historically, these activities have not resulted in an unusual number of wildfires compared to other causes. However, several large fires were caused by sparks from grader blades, tractor grozers on rocks, and faulty exhaust systems on internal combustion engines. This has led to aggressive fire prevention programs by fire protection agencies and industry in order to reduce fire losses and save money. The beneficial results from this effort can be easily and quickly negated by a careless act of negligence. Knowledge and conscience practice of fire safe activities are necessary to avoid future disasters.

Many aspects of machine use may start vegetation fires which include: exhaust sparks, hot exhaust manifolds and pipes, fuel leaks, overheating, track and blade sparks, short circuits, brakes, belts and pulleys, accumulated debris, and broken hydraulic lines spilling on hot engine parts.

Burning of vegetation for land management practices is commonly used for fire hazard reduction, planting site preparation, and land clearing in regards to construction. Unless conducted under properly prescribed and controlled conditions, such burning can escape and become a wildfire. An escape is more likely to occur in the spring when windy weather quickly dries wildland fuels and causes fire escapes on unattended projects. If well done, prescribed fire can produce the desired land management purpose and greatly reduce the likelihood of severe wildfires.

Controlled fire and the use of internal combustion engines are two of our most useful tools. However, uncontrolled fires are always dangerous. This guide is an attempt to make the available tools as safe as possible while guarding against wildfire.