NOTICE 1054 OF *2005*

THE DEPATMENT OF WATER AFFAIRS AND FORESTRY

THE NATIONAL FIRE DANGER RATING SYSTEM IN TERMS Of THE NATIONAL VELD AND FOREST FIRE ACT, 1998(ACT NO 101 OF 1998)

I, Tshepo Malatji, in my capacity as Director: Forestry Regulation and acting in terms of section 9(1) of the National Veld and Forest Fire Act, read with the delegations of powers and duties made in terms of the National Veld and Forest Fire Act, hereby make and publish for general information the National Veld and Forest Fire Act, as set out in the Schedule hereto.

Tshepo Malatji
DIRECTOR : FORESTRY REGULATION

DATE: 17/06/05

Schedule

The National Fire Danger Rating System applies to the entire country and consists of the following components

1. The structure and formula

The structure and formula as contained in Appendix 1, is used to calculate the indicator values required to rate the fire danger rating in each region for an appropriate period or periods.

2. The fire danger rating

Appendix 2 shows the fire danger rating, which indicates, in a clear format, the fire prevention and preparedness measure to be taken for each rating.

3. The tire danger regions and threshold values

The entire country has been divided into separate regions, each region being one in which the fire danger is sufficiently uniform to allow for a single rating, which is meaningful for the entire region. Appendix 3 shows the **41** fire danger regions of the entire country.

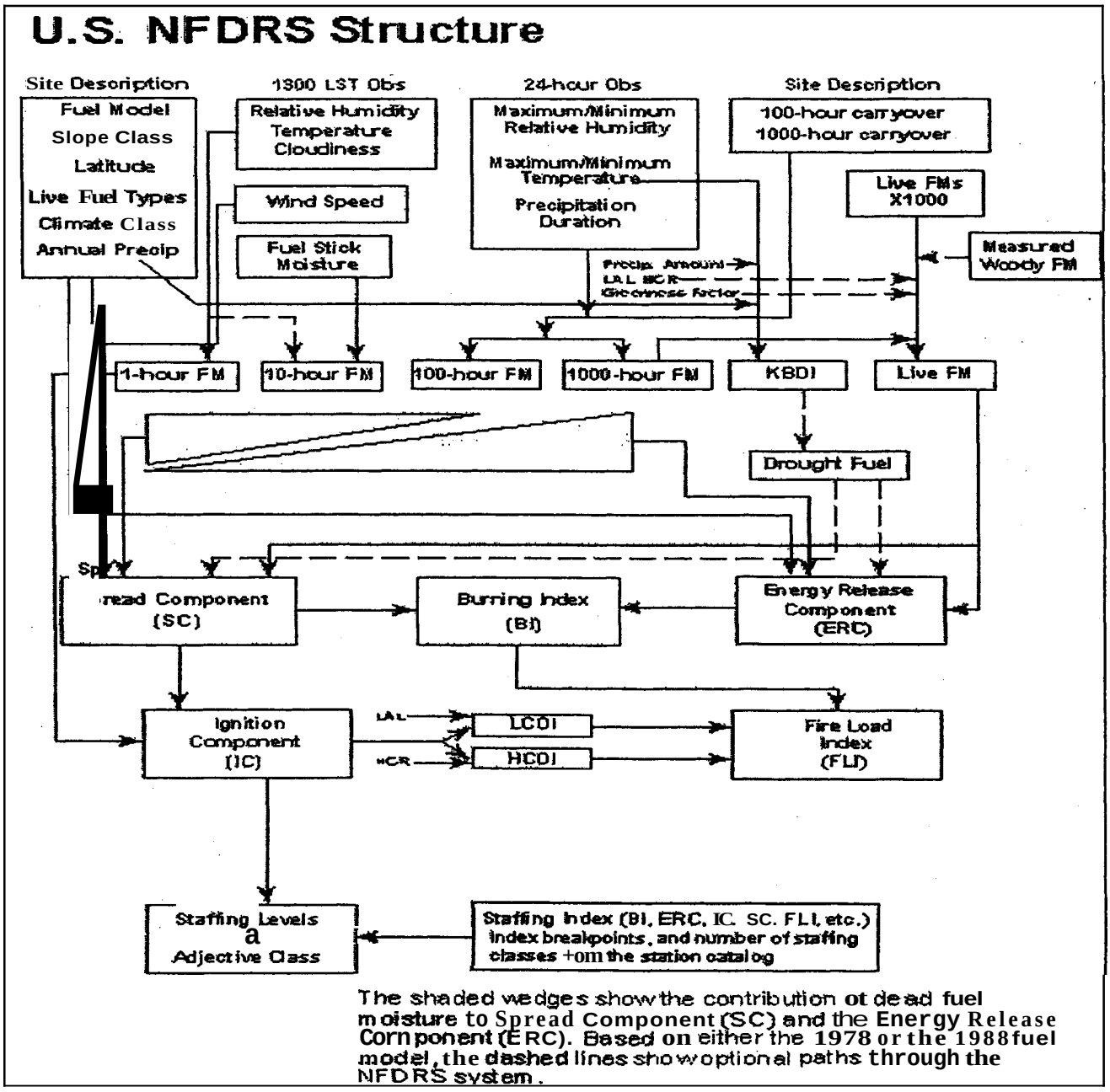
The threshold *value* for each fire danger region is as set out in Appendix **4.**

Appendix 5 is a list of municipalities for each fire danger region.

4. Communication

The Minister of Water Affairs and Forestry has delegated his duty to communicate the fire danger rating for each region to the South African Weather Services in terms of section **11** of the National Veld and Forest Fire Act, 1998 (Act No 101 of 1998).

APPENDIX I



The shaded wedges show the contribution of dead fuel moisture to Spread Component (SC) and the Energy Release Component (ERC). Based on either the 1978 or the 1988 fuel model, the dashed lines show optional paths through the NFDRS system.

APPENDIX 2

FIRE DANGER RATING

INDICATIVE COLOUR	BLUE	GREEN	YELLOW	ORANGE	RED
DANGER RATING	Insignificant	Low	Moderate	High	High - Extreme
FIRE PREVENTION AND PREPAREDNESS MEASURES	No precaution is needed	Fires including prescribed burns may be lit, used or maintained in the open air on the condition that persons making fires take reasonable precautions against the fires' spreading.	No fires may be allowed in the open air except those that are authorised by the Fire Protection Officer where a Fire Protection Association exists, or elsewhere, the Chief Fire Officer of the local fire service, or fires in designated fireplaces.	No fires may be allowed under any circumstances in the open air.	No fires may be allowed under any circumstances in the open air and Fire Protection Associations and municipal Disaster Management Centres must invoke contingency fire emergency and disaster management plans including extraordinary readiness and response plans. All operations likely to ignite fires halted. Householders placed on alert.
APPLICATION OF THE ACT			Above precautionary measure to be prescribed and made applicable nationally on days rated moderate.	Section 10(1)(b) applies: no person may light, use or maintain a fire in the open air.	Section 10(1)(b) applies: no person may light, use or maintain a fire in the open air.
RELATIONSHIP WITH DISASTER MANAGEMENT				The threat of disastrous wildfires exists at municipal level under these conditions. Municipal Disaster Management Centres must invoke contingency plans and inform National and Provincial Disaster Management Centres. (Section 49 of the Disaster Management Bill)	The threat of disastrous wildfires at provincial level exists under these conditions. Municipal Disaster Management Centres must invoke contingency plans and inform National and Provincial Disaster Management Centres. (Section 49 of the Disaster Management Bill).

INDICATIVE COLOUR	BLUE	GREEN	YELLOW	ORANGE	RED
FIRE BEHAVIOUR	Fires are not likely to ignite. If they do, they are likely to go out without suppression action. There is little flaming combustion. Flame lengths in grassland and plantation forest litter lower than 0.5 m and rates of forward spread less than 0.15 kilometres per hour.	Fires likely to ignite readily but spread slowly. Flame lengths in grassland and plantation forest litter lower than 1.0 m and rates of forward spread less than 0.3 kilometres per hour.	Fires ignite readily and spread rapidly, burning in the surface layers below trees. Flame lengths in grasslands and plantation forests between 1 and 2m, and rates of forward spread between 0.3 and 1.5 kilometres per hour.	Fires ignited readily and spread very rapidly, with local crowning and short-range spotting. Flame lengths between 2 and 5 m, and rates of forward spread between 1.5 and 2.0 kilometres per hour.	Conflagrations are likely in plantation forests, stands of alien invasive trees and shrubs, sugar cane plantations, and fynbos. Long range fire spotting is likely in these fuel types. Rates of forward spread of head fires can exceed 4.0 kilometres per hour and flame lengths will be in the order of 5 – 15 m or more.
FIRE SUPPRESSION DIFFICULTY	Direct attack feasible: one or a few field crew with basic fire fighting tools easily suppresses any fire that may occur.	Direct attack feasible: fires safely approached on foot. Suppression is readily achieved by direct manual attack methods.	Direct attack constrained: fires not safe to approach on foot for more than very short periods. Best forms of control should combine water tankers and back burning from fire control lines.	Direct attack not feasible: fires cannot be approached at all and back burning, combined with aerial support are the only effective means to combat fires. Equipment such as water tankers should concentrate efforts on the protection of houses.	Any form of fire control is likely to be precluded until the weather changes. Back burning dangerous and best avoided.