Extreme Regional Fire Conditions – Red Flag Restrictions at LANL

The fire weather forecast is predicting extreme fire behavior conditions over the region for the next several days. This in combination with the extreme high temperatures and low fuel moistures, which are all aligning simultaneously and will produce critical fire weather conditions in the area. In an attempt to mitigate this hazard, Los Alamos National Laboratory (LANL) is imposing "Red Flag" restrictions effective immediately today (June 21, 2017) until June 26, 2017 at 8:00 am, unless fire conditions change significantly. The fire conditions are being monitored very closely.

Detailed information on restrictions are available on the LANL Home Page under **Alerts** or at the following link: http://int.lanl.gov/fire_matrix.html

The southwest region will be under "Super Haines" conditions, which will make fire spread extreme if a wildland fire was to ignite. Currently, Super Haines are very infrequent and are not formally part of any restriction at LANL. The major difference between Super Haines and Red Flag is wind speed.

Due to the amount of fire activity in the region the entire Southwest Area is currently postured at Preparedness Level 5, the highest rating. The United States Forest Service Jemez Ranger District has already imposed Level 1 restrictions (i.e. no campfires) with the remaining supervisory districts and agencies considering implementing the same restrictions.

All employees are asked to be extremely careful while performing outdoor activities and consider site conditions when performing outdoor operations. LANL Wildland Fire Program Office staff is available to assist you with fire risk mitigation recommendations, as requested.

Based on the extreme fire conditions, LANL Senior Management Team has implemented Red Flag restrictions as a precautionary measure. If there are any critical mission activities that are planned, the appropriate Hazard Control Plan must be approved and address mitigation of any fire risks. It is highly recommended that any Hazard Control Plan be reviewed by the LANL Wildland Fire Program Office staff before activities begin.

Additional Background: The Haines Index is derived by calculating dryness at 10,000 feet Mean Sea Level (MSL) and stability between 10,000 to 18,000 feet MSL. An unstable and dry atmosphere will be represented by Haines 6 values. The Southwest area observes Haines 6 values routinely during the main portion of the fire season (May

through early July). The National Weather Service in Albuquerque has established another Haines threshold called "Super Haines". Other names include "Super 6" and "Enhanced high haines". Think of it as a 90th to 99th percentile Haines 6 value. The mid-levels of the atmosphere during **Super Haines situations will be super unstable and very dry.**

Basically, the Super Haines will drive extreme fire spread potential if an ignition occurs. The fire behavior in the Los Conches fire was driven by a Super Haines.

Red Flag: Sustained 20-foot wind >= 20 mph and Relative Humidity <= 15%.

Dry Lightning: When 25 out of 28 weather-fuel dryness thresholds are met. Of the 25 thresholds being met, SWCC fuel dryness needs to be "very dry" and Lightning Activity Level (LAL) needs to be 3 or 6 (scattered thunderstorm coverage).

Super Haines: Mid-levels of the atmosphere are very unstable and dry coupled with above normal temperature anomalies (departures from normal both day and nighttime), low humidity (day and nighttime) and very dry fuel conditions

Please share within your organizations. If you have any questions or concerns, please contact your responsible manager.

If you need further consultation on restrictions or fire risk mitigation, please contact the Emergency Operations Support Center at 505-667-6211 and ask to be connected to the LANL Wildland Fire Management Program Office.