## Rapeseed Pricing Methodology

Actuarial and Product Design Division
Risk Management Agency
United States Department of Agriculture

Rapeseed is not traded on any commodity futures exchange. With the design of the 2011 Common Crop Insurance Policy Basic Provisions (Basic Provisions) it is necessary to calculate a price in real time based on a commodity futures exchange. Risk Management Agency's (RMA) authority to derive this factor is found in the Commodity Exchange Price Provisions (CEPP) which utilizes an exchange price multiplied by a factor "as determined by RMA" to establish the rapeseed prices. This paper is to inform stakeholders regarding the methodology used to derive this factor.

The methodology is determined by RMA with guidance from industry sources, and statistical analysis. Data used to derive the rapeseed factor is gathered from the National Agricultural Statistics Service (NASS) and Barchart.com. The three plans of insurance (Yield Protection, Revenue Protection and Revenue Protection with HPE) associated with the Basic Provisions use the same factor and it is applied to both the projected price and harvest price as applicable. The IntercontinentalExchange (ICE) canola futures prices are traded in Canadian dollars per metric ton and must be converted to U.S. dollars per pound. This conversion is described in the CEPP.

NASS publishes U.S. rapeseed prices and production by crop year. U.S. rapeseed prices and the ICE canola futures prices are highly correlated; thus, each year's U.S. rapeseed price is compared with the ICE canola futures prices to compute an annual ratio. The annual ratios are averaged for a 10-year period (or maximum available years) to arrive at an overall rapeseed factor, rounded to nearest one-tenth cent.

Three distinct factors are computed for rapeseed; the ICE canola contract month and period used in the calculation differs depending on region and planting period. Fall planted rapeseed (except Oklahoma), uses the harvest year's November futures contract during the prior year's July 15 to August 14 period, whereas Oklahoma uses the harvest year's July futures contract during the prior year's July 15 to August 14 period. Spring rapeseed uses the harvest year's November futures contract during February.

The rapeseed factor is applied to the discovered ICE canola futures prices as described in the CEPP.