# Overview of the Nutrient Recommendation Process

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# **Overview of the Nutrient Recommendation Process**

Nutrient recommendations, sometimes called field prescriptions, are calculated in the Agvance Planning module and saved in the field file on the *Nutrient Recs* tab. They are available for viewing, printing reports, or using in plans or blends.

The recommendations are based on soil test results stored in the field file as well as crop maintenance and buildup tables editable in Agvance Planning. Nutrient recommendations may be generated for the entire field, sample by sample, or by management zone. Management zones are areas defined by grouping sample areas with similar characteristics (i.e. soil type, yield, terraced areas, etc.).

# Setup of Nutrient Tables

Agvance Planning comes loaded with crop maintenance and nutrient buildup tables that emulate data used by the University of Illinois. These may be edited to reflect local area fertility programs or add new ones to better fit the area. Both the Crop Maintenance and Nutrient Buildup tables directly affect the nutrient recommendations that are generated.

#### **Crop Maintenance**

Accessed through the *Setup / Crop Maintenance* menu selection, the Crop Maintenance area defines the various crops serviced by the company and the nutrient specifications necessary to raise one unit (bushel or ton) of that crop. Several crops are loaded with the program. Additional crops may be added to the list at either the *Planning / Setup* or *Hub / Setup* windows. The same file is accessed and affected from either module.

If the test result for a nutrient exceeds the buildup goal, the maintenance level can be cut back.

#### Nutrient Buildup Goals

The buildup goals are viewed and edited at the *Setup / Nutrient Buildup Goals* menu selection. Multiple nutrient recommendation styles may be tailored specifically for the company's customers. Each style can be customized for the desired maintenance and buildup goals.

Nutrient by nutrient, define how test results are range checked, what the critical ranges are, and the goal for each range. Also determine the percent that maintenance should be cut back if a result exceeds a particular goal. Cutback is user defined and flexible enough for levels to be varied for each range checked and each goal. Some of the maintenance cutbacks are pre-loaded with the program.

### Nutrient Recommendation Preferences

At Setup / Nutrient Rec Preferences, in the Enter tests in what units area, select the units the test results are in either Parts

per Million (PPM) or Pounds per Acre (Lbs). Regardless of this setting, the goals and cutbacks must be entered in pounds per acre.

Also at this window, select from the options to indicate the test result values to be used to calculate P buildup and to calculate Lime buildup.

# Making a Nutrient Recommendation

A nutrient recommendation is created at the *File / Open / Nutrient Recs* menu selection. A field is selected and information from the field file displays on the *Nutrient Recommendation* window.

A nutrient recommendation may be generated based on field average, sample-by-sample, or by management zone. A management zone is an area of the field that is farmed differently or an area that is unique because of soil type or terrain.

**Tip**: Nutrient recommendations are always calculated in pounds of plant food (except lime which is in pounds or tons, depending on the user's setup).

Before a recommendation is created, last year's actual crop and yield must be entered, along with this year's crop and projected yield. The field's soil test results must reside in the Field file. The nutrient build up and crop maintenance tables are also required.

Nutrient recommendations for up to three yield scenarios may be created and viewed. Nutrient recommendation scenarios may be printed for customers to review when planning field inputs. The specific nutrient recommendation yield scenario may be saved back to the Field file by selecting **Save This Scenario**.

# Using the Nutrient Recommendations

Nutrient recommendations become part of the Field file and are available for printing nutrient reports, VRT Data/Maps, formulating Field Plans, and setting up blends.

### **Printing Nutrient Reports**

Under the *Reports* menu selection, the Nutrient Rec Summary report shows the recommendation for each sample along with the desired map.

### VRT Data/Maps

Although the nutrient recommendations are created in Agvance Planning, VRT maps are created in the Mapping module. The maps utilize the nutrient recommendations generated and saved in the Field file. The specific VRT file format exported depends on the controller software used.

#### Formulate Plans to Product Sold

Nutrient recommendations may be used to formulate the actual product to be applied when creating preseason Field Plans. The plans may be specific to products, rates and prices. Plans can include fertilizer rates based on the nutrient recommendations, chemicals at specific rates per acre, product pricing, and application costs.

### Setting Up Blends

Nutrient recommendations saved in a field file may be used to easily set up and formulate a blend. Saved nutrient recommendations are available to view and/or use when creating a Blend Ticket.

Nutrient recommendations enter the Blending program in one of two ways: Importing Field Plans into the Blend Ticket or by adding a blend and selecting **Load Nut Recs**.