EQIP 590 PRACTICE GUIDELINES: Precision Agriculture Incentive—Nutrient Management Track

EQIP FY 2008 Cost list item: 590—Nutrient Management—Precision Ag Nutrient Management Track, annual for 3 years ($16 per acre per year for 3 years—capped at $15,000 alone or combined with Precision Ag Pest Management Track per operation)

Name/EQIP Contract Number:_____

Purposes of Incentive Practice:

- To improve water quality by targeting nutrient applications to meet field-specific cropland yield capabilities
- To improve water quality by reducing nutrient inputs through avoidance of overlapping nutrient applications
- To reduce surface runoff and subsurface loss of nutrients through decreased nutrient inputs
- To enhance soil quality through repeatable field travel pathways, thus reducing soil compaction and erosion
- Energy conservation through precisely controlled cropping equipment, resulting in less fuel being used

Conditions for practice eligibility:

- To be eligible for this practice, a producer must not currently be practicing nutrient management on cropland through use of precision agriculture equipment such as GPS plus “light bars”.

Practice Requirements (the $16 per acre per year incentive rate includes all practice requirements):

- Development and implementation of a nutrient management plan that meets NRCS standards

- ‘Grid’ or ‘zone’ soil sampling for all enrolled fields incorporating a soil sampling strategy, including fields and sub-fields, numbers of samples to be collected by field/sub-field for both surface (agronomic) and any necessary deep sampling (28-32”).

- Field specific yield recordkeeping

- Implementation of GPS-guided navigation with *producer-owned* precision ag equipment to prevent nutrient application overlap and unneeded applications

- Field specific nutrient application records that do not exceed rates set forth in nutrient management plan.

Considerations for implementation of simple precision agriculture

- Consider pairing nutrient management track with pest management track for controlling and reducing pesticide cropland inputs resulting in additional water quality benefits

- Consider implementation of a conservation cropping system of no-till with cover crop mixes or sod-based rotations with perennials to reduce field erosion, surface runoff and enhance soil quality.

- Precision agriculture could also yield long-term economic benefits through potential fuel savings as well as reductions in fertilizer costs

- Producers are encouraged to consider a long-term goal of a comprehensive precision agriculture system that includes variable rate applications of nutrients and pesticides

Certification checklist of practice outcomes

- ❑ Nutrient Management plan developed by NRCS or TSP that includes appropriate NRCS job nutrient management job sheet (kept in case file)

- ❑ Precision soil sampling maps and records provided to Designated Conservationist annually (kept in case file)

- ❑ Field specific (to the extent possible) yield records provided to Designated Conservationist annually (kept in case file)

- ❑ Proof of purchase and installation of Precision Agriculture equipment for GPS-guided navigation provided to Designated Conservationist (kept in case file)

- ❑ Precision ag equipment for GPS-guided navigation must be installed on predominant nutrient application equipment for enrolled fields

Producer certification (initial/date)

- ❑ Nutrient application rates that do not exceed those set forth in nutrient management plan—certified through field specific records of application rates

(Year 1) I certify that precision agriculture incentive—nutrient management tract has been completed per practice guidelines and NRCS 590 nutrient management standard.

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Designated conservationist Date

Year 2 Certification/Comments

Year 3 Certification/Comments