

LATE REVISIONS – 1 February 2013

- Item 22** **Horizon Nut LLC, and Global Ag Properties USA, LLC, Lost Hills Pistachio Processing Plant, Kern County – Consideration of Waste Discharge Requirements.**

Finding 9

Page 2. Edit Finding 9 of the Waste Discharge Requirements as follows.

9. Solid waste generated at the Plant consists of twigs, leaves, and other debris removed from the waste stream during the pre-cleaning process, and pistachio hulls that settle-out in the wastewater ponds. Solids removed during the pre-cleaning process are moved with the rest of the debris from the pistachio orchards and composted or shipped off-site as a commodity. The pistachio hulls are removed from the wastewater ponds annually or once every two years and ~~evenly~~ **thinly** applied and incorporated into up to 400 acres of open land.

Finding 38

Page 9. Edit Finding 38 of the Waste Discharge Requirements as follows.

38. Wastewater loading calculations **data** included in the RWD indicate the BOD, ~~and~~ nitrogen, **and potassium** loading of the pistachio orchard from wastewater is up to 103 lbs/acre/day, ~~and~~ 97 lbs/acre/yr, **and 432 lbs/acre/yr**, respectively. The BOD loading was calculated using the maximum daily discharge of 4.6 mgd; however, this flow rate is not anticipated to occur for an extended period of time. US EPA guidance, publication No. 625/3-77-007, *Pollution Abatement in the Fruit and Vegetable Industry*, indicates loading rates in excess of 100 lbs/acre/day is possible if the site is irrigated for only a few weeks each year and is well maintained. According to A & P, pistachio trees use 200 to 250 lbs/acre/year of nitrogen. In addition, the *Western Fertilizer Handbook*, produced by the California Plant Health Association, indicates almonds trees (similar to pistachio trees) will take up 200 lbs/acre/yr of nitrogen. ***The University of California, Davis (Zeng et al, 2001) recommends 100 to 200 lbs/acre/year of potassium for pistachios. Pistachios will take up potassium in excess of their needs.***

Finding 41.d

Page 10. Edit Finding 41.d of the Waste Discharge Requirements as follows.

- 41.d. Due to the short processing and discharge season, best practicable treatment or control measures; ~~such as no addition of salt to the waste stream, application at agronomic rates for irrigation on crops that require high levels of potassium,~~ and blending wastewater with surface water that is much better quality than groundwater, should be protective of groundwater and prevent exceedance of groundwater limits.

Finding 42

Page 10. Edit Finding 42 of the Waste Discharge Requirements as follows.

42. The Discharger provides treatment and control of the discharge that incorporates:
- a. Pre-cleaning to remove leaves, twigs, and other debris,
 - b. Annual removal of solids from the wastewater ponds,
 - ~~c. Screening to remove excess solids from the waste stream,~~
 - d.c. Organic loading rates consistent with EPA recommendations and unlikely to cause unacceptable groundwater degradation,
 - ~~e.d.~~ Application of nitrogen at agronomic rates, and
 - f.e. Hydraulic loading at rates to preclude standing water around the pistachio trees

Information Sheet

Page 3. Edit the Solids Disposal Methods section of the Information Sheet as follows.

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Solids removed from the wastewater ponds are ~~evenly~~ **thinly** applied and incorporated into up to 400 acres of the solids application area.

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