

# Developing Management Alternatives to the Current Harvest Procedures in Response to Air Quality Mandates

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## Update

We are identifying the range of soils where almond orchards are planted in the SJV and developing a "dustiness" index for those soils in the laboratory using our lab dust generator. We expect that soil texture, water content, and organic matter content will affect dustiness. We will also use the dust generator to determine the effects of polyacrylamide (PAM) and similar soil amendments on dust production. Field experiments will measure air borne dust emission, particle size of the dust as a function of distance from harvesters, effects of harvest equipment modification, contrasting soil textures, and various treatments of PAM. The field dust measurements will be done in collaboration with UC Davis engineers who are developing an on-machine dust monitor.