# Agricultural Best Management Practices and Dust Complaint Response

Madeline Greenbaum

Air Compliance Officer

**Luke Messer**Air Compliance Officer



ARS 49-504. Limitations: Nothing in this article shall be construed so as to:

4. Prevent the normal farm cultural practices which cause dust



## Categories for AgBMPs



Category I: Tillage, Harvest or Ground Operation

 Category II: Non-cropland and Commercial Farm Roads

Category III: Cropland

 Category IV: Signification Agricultural Earth Moving Activities

# Ag BMP General Permit for Maricopa Cropland



## 20\_\_ Agricultural Best Management Practices General Permit Record Crop Operations - Serious PM10 Non-attainment Area

Name of Commercial Farm:		
Name of Commercial Farmer:	Email:	
Address of Commercial Farm:		
Environmental Quality only when requested		ss days of notice to the Arizona Department of  gricultural PM10 Best Management Practices for BMF
CATEGORY I: Tillage, Harvest or	CATEGORY II: Non-cropland and	CATEGORY IV: Significant Agricultural Earth
Ground Operation	Commercial Farm Roads	Moving Activities
Select at least two of the following:	Select at least two of the following:	(Required only when moving a significant amount of ground.
☐ Chemical Irrigation	☐ Access Restriction	See Guide to Agricultural PM10 Best Management Practices
☐ Combining Tractor Operations	☐Aggregate Cover	for more information.)
☐ Equipment Modification	□Wind Barrier	Select at least two of the following:  ☐ Apply Water Prior to Significant Agricultural Earth  Moving Activities and/or Time to Coincide with  Precipitation
☐ Green Chop	☐Critical Area Planting	
☐ Integrated Pest Management	☐Organic Material Cover	
☐ Limited Harvest Activity	☐Reduce Vehicle Speed	
☐ Limited Tillage Activity	☐ Synthetic Particulate Suppressant	☐ Apply Water during Significant Agricultural Earth
☐ Multi-year Crop	☐ Track-out Control System	Moving Activities
☐ Cessation of Night Tillage	□Watering	☐ Limit Significant Agricultural Earth Moving
☐ Planting Based on Soil Moisture	CATEGORY III: Cropland	Activities on a Day Identified by the County Dust Control Forecast to be high risk for dust generation  Conduct Significant Earth Moving Activities in a Manner to Reduce a Minimum of One Ground Operation by Using Equipment that is the Most Efficient Means of Moving the Soil
☐ Precision Farming	Select at least two of the following:	
☐ Reduced Harvest Activity	☐ Wind Barrier	
☐ Reduced Tillage Activity	☐ Cover Crop	
☐ Tillage Based on Soil Moisture	☐ Cross-wind Ridges	
☐ Timing of Tillage Operation	☐ Chips/mulches	
☐ Transgenic Crops	☐ Multi-year Crop	
☐ Transplanting	☐ Permanent Cover	
☐ Shuttle System/Larger Carrier	☐ Stabilization of Soil Prior to Plant Emergence	
☐ Conservation Tillage	☐ Residue Management	
	☐ Sequential Cropping	
	☐ Surface Roughening	
Signature:		Date:

## **Observed Dust**



Acceptable dust conditions. The PM is visible but not obstructing roads or crossing neighboring properties.



#### **Observed Dust**



Acceptable dust conditions. Modified equipment generates dust but allows for less passes. This allows for a shorter period of time that dust is generated.





## **Dust Conditions**





## **Dust Conditions**





## Fallow Fields



"Fallow Field" means an area of land that is routinely cultivated, planted and harvested and is unplanted for one or more growing seasons or planting cycles, but is intended to be placed back in agricultural production.

- R18-2-610.01



# Fallow Field Complaint Case Study





# Fallow Field Complaint Case Study





# Fallow Field Complaint Case Study











## San Simon Case Study



San Simon project. About 1300 acres of converted desert tilled to a depth of four feet. This caused wind-blown dust to obstruct vision on the I-10 forcing ADOT to reroute traffic. ADEQ undertook a project to stabilize the soil.





# San Simon Case Study



Please contact us if you observe dust to prevent a potentially dangerous situation.





#### Conclusion



- Be mindful that farming practices are dusty but can be managed.
- In conclusion, if you are unsure about an agricultural activity, contact us and we will check it out.

#### **Contact:**

#### **Madeline Greenbaum**

Air Compliance Officer

Ph: 602-771-2370

M: 602-568-1678

#### Luke Messer

Air Compliance Officer

Ph: 602-771-4695

M: 602-399-1982