# 10 Dust Group Update

## What I Will Cover



- Brief History Summary
- 2017 Accomplishments
- I-10 Dust Group Process Moving Forward
- MM 214 Project Completed
- MM 214 Project Monitoring (Scott Dibiase, Pinal Co.)



#### Participating Partners - I-10 Dust Group



#### **Group Member Agencies**

Arizona Department of Environmental Quality (ADEQ) – current lead

Arizona Department of Transportation (ADOT)

AZ Department of Public Safety (DPS)

National Weather Service (NWS) Phoenix & Tucson

Arizona Department of Agriculture (ADA)

Pinal County Sherriff's Office

**USDA Natural Resource Conservation Service (USDA NRCS)** 

**Pinal County Air Quality** 

University of Arizona

National Oceanic and Atmospheric Administration (NOAA)

Gila River Indian Community (GRIC)

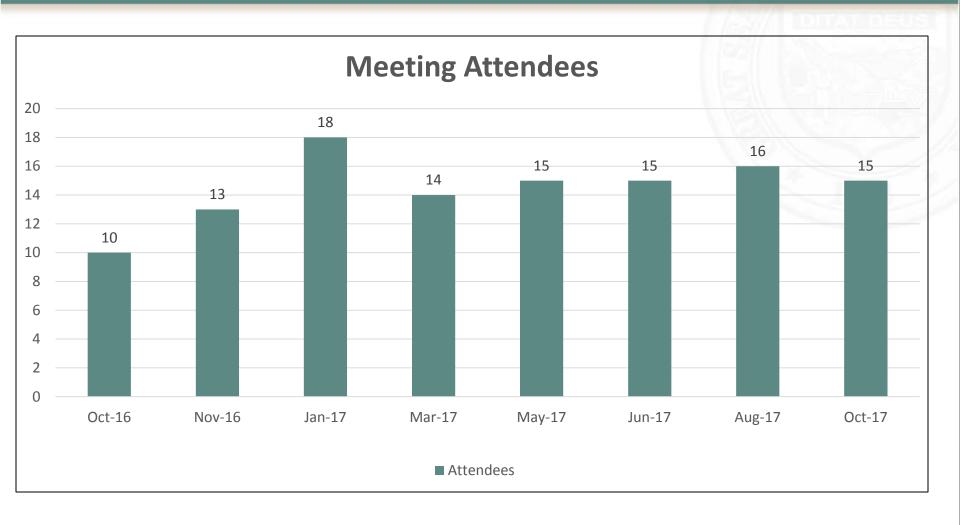
Tohono O'Odham Nation

AZ State Lands Department

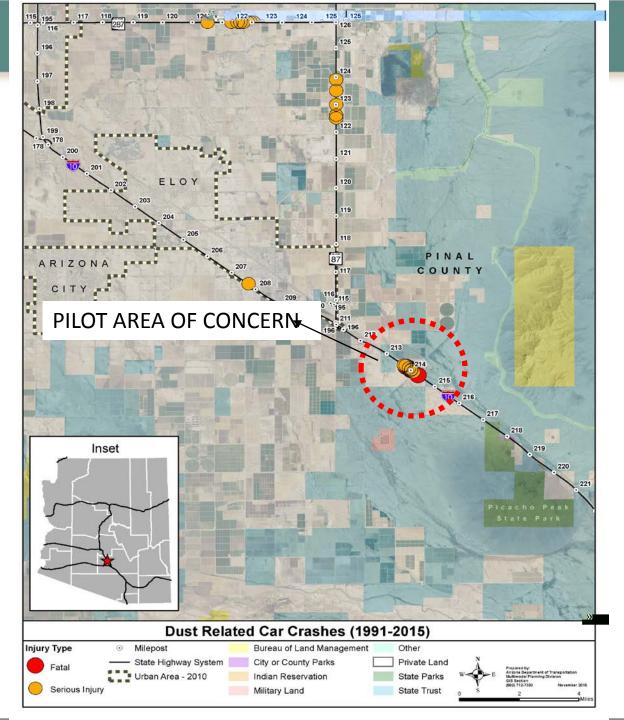
New Mexico DOT (added to email list Fall 2017)

#### I-10 Dust Group Participation



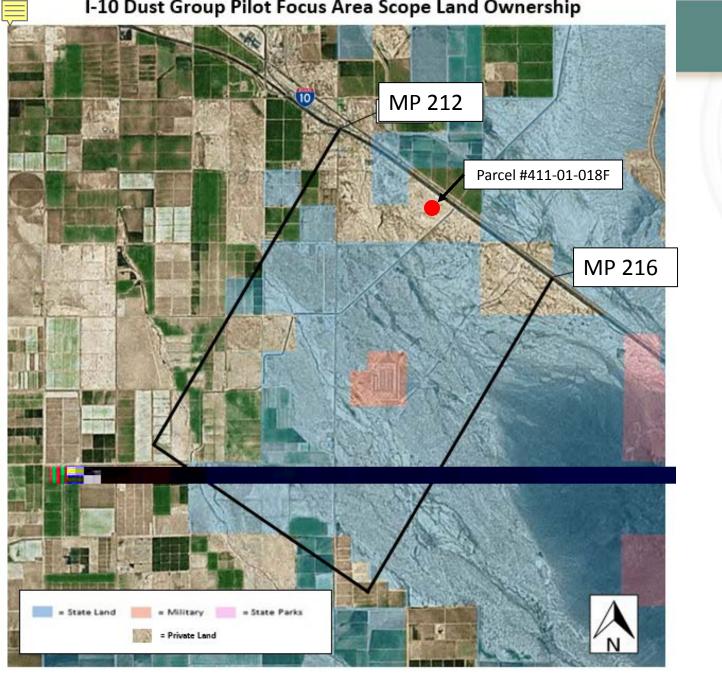








**Problem Being Solved:** Wind blown dust creates hazardous driving and health conditions along the I-10 corridor





#### I-10 Dust Group Future Direction

SLIDE FROM 2017 Dust Workshop I-10 Dust Group, ADEQ presentation

- Partners currently collecting data to confirm land activities and soil type in focus area.
- Identify root cause(s) of dust impacting I-10 in scope area. (January meeting)
- Identify solution projects to mitigate dust root cause(s) to be implemented. (February/March meeting)
  - Identify resource/funding needs and sources
  - Establish or determine existing private
     landowner/agency partnerships to assist in project
     implementation

#### ADDITIONAL 2017 GROUP ACCOMPLISHMENTS

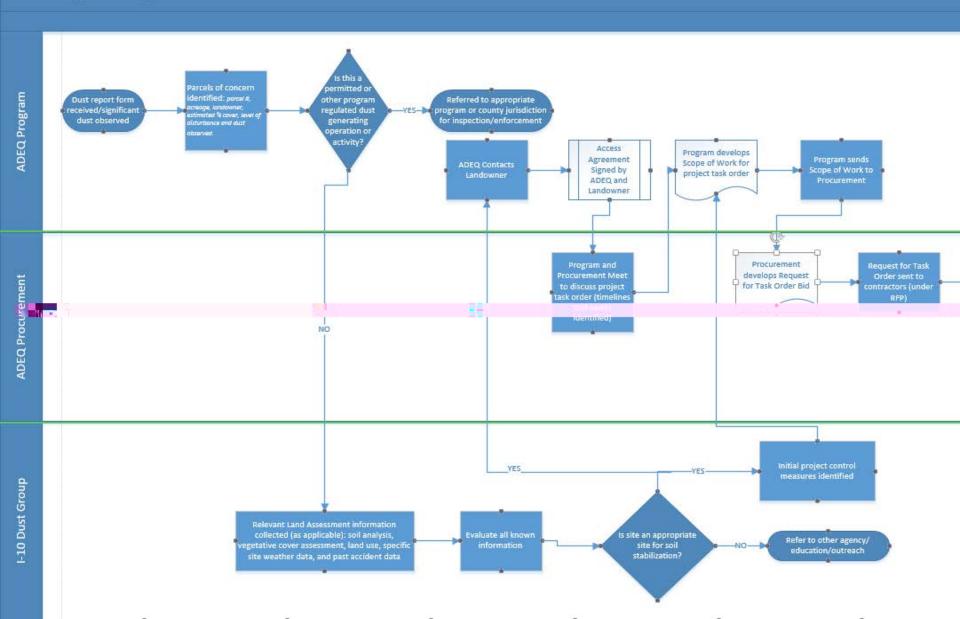


- ADEQ established a funding resource for mitigation projects
- Developed and began using the Dust Report Form
- Established I-10 Dust Group Process for Response and on the ground implementation of mitigation measures as appropriate
- Completed chemical dust stabilization pilot project at MM214
- Established monitoring pilot protocol for mitigation projects with chemical dust stabilization method used

#### Project Development Process

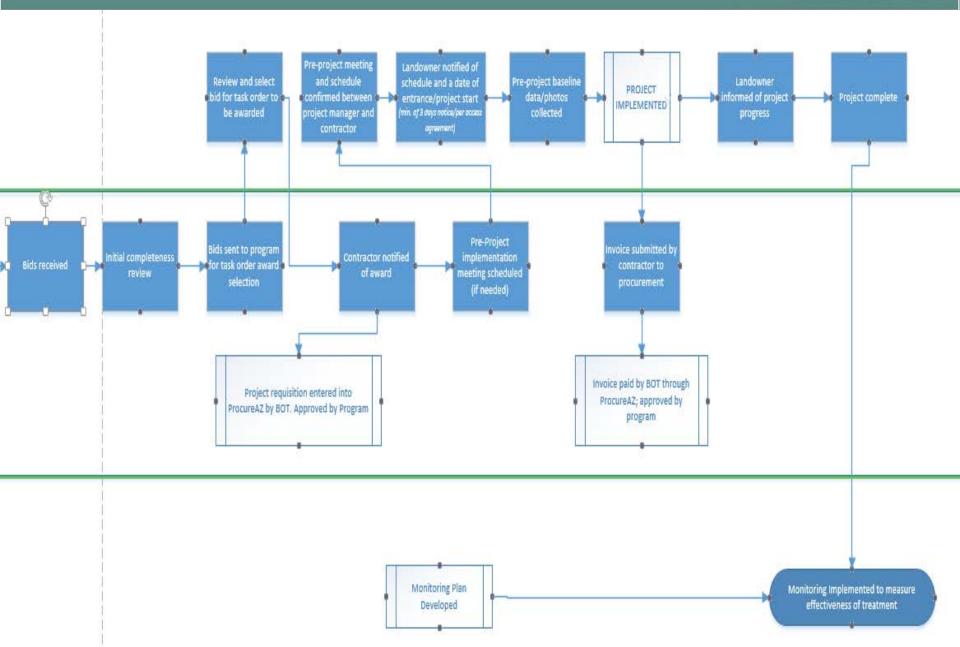


**Dust Mitigation Project Process Flow** 



#### **Project Development Process**



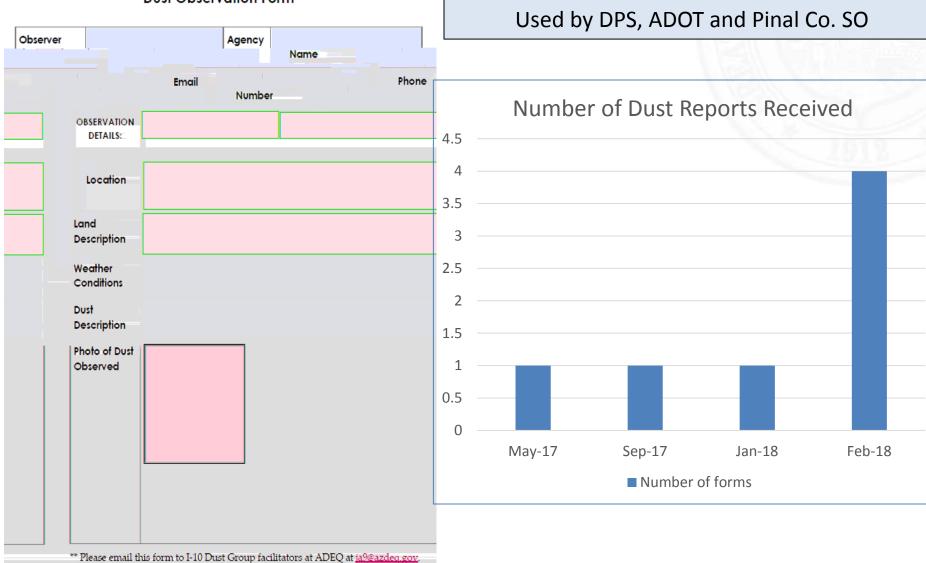


#### I-10 Dust Report Form





Distributed in May 2017.



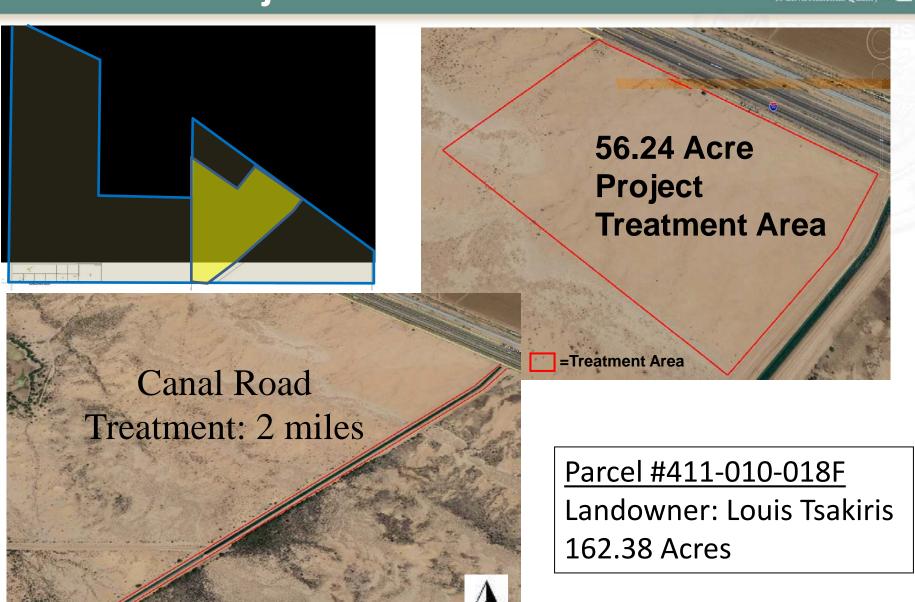
#### **I-10 Dust Group Next Steps**



- Identify new project areas USE DUST REPORT FORM
- 2. Implement process and collect more data on sources for localized dust events impacting I-10
- 3. Continue monitoring success of MM214 Project

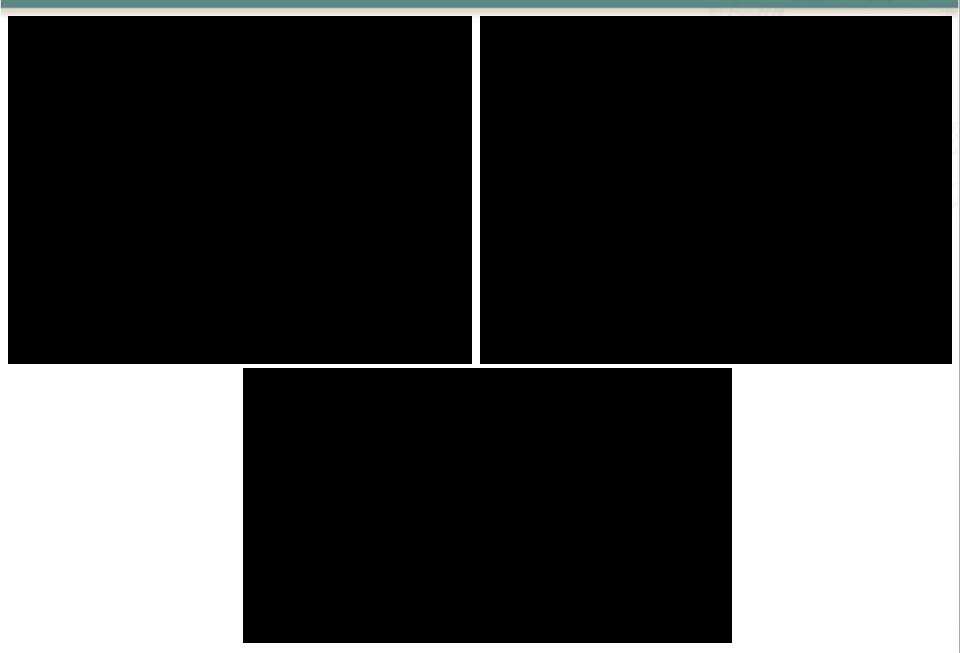
#### MM 214 Project





### MM 214 Pre-treatment





#### MM 214 Project



WHO: ADEQ Contract with Pinal County Dust Permit Contractor: EarthCare Consultants

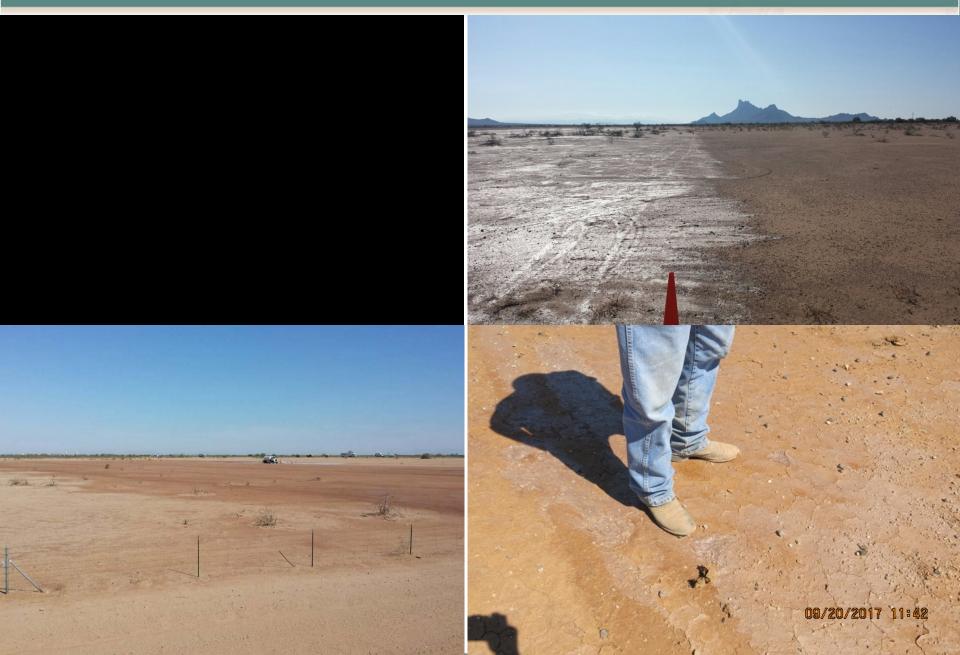
WHAT: Application of chemical dust stabilizer: Soil~Sement©

WHEN: September 15 – September 26, 2017

FUNDING: \$108,138.96

## **MM 214 During Treatment**





#### **MM 214 Post Treatment**



November 30, 2017



# MILE POST 214

TOPATHOLIT MACHITADINIC

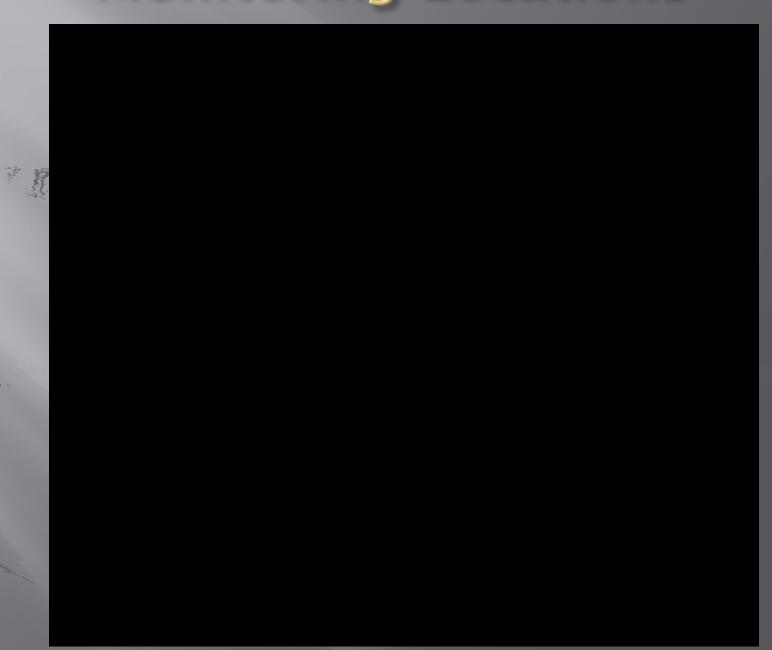
Scott DiBiase
Pinal County Air Quality Control
February 27, 2018

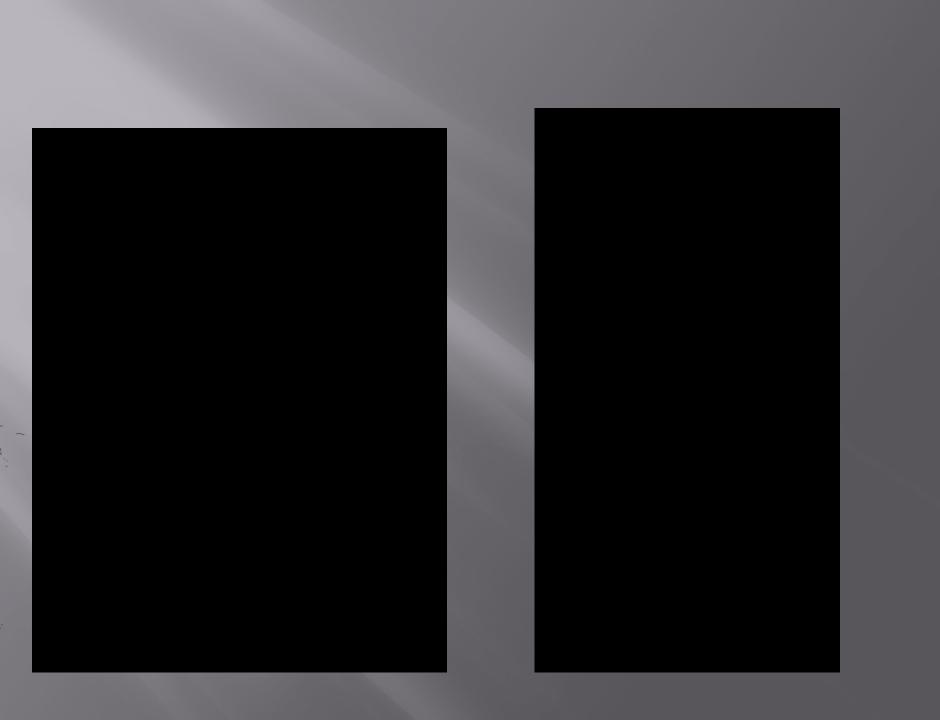
## MP214 Pretreatment

# MP 215 Monitoring

- Post application monitoring in coordination with U of A – Joey Blankenship & Jayson Fields
- Goals:
  - determine treatment longevity
  - soil influx
- BSNE (Big Spring Number Eight) passive saltation maritan saltation monitors
  - Gravimetric analysis after collection
  - 6 Monitors deployed Fall 2017 (3 on treatment, 3 off treatment)

# Monitoring Locations





## Results to Date

- Monthly sample collection
- □ 10/18/17 Installed
- 11/20/17 No accumulation
- 12/18/17 No accumulation (water in samplers due to rain)
- 1/30/18 No accumulation

# QUESTIONS?



