Annual Performance Report - Salton Sea Toxic Air Pollutant Monitoring

November 2017

1. Summary of Project

Imperial Irrigation District currently has 6 air quality monitoring stations around the exposed playa of the Salton Sea. Through a grant agreement with Air Resources Board, IID purchased air quality monitoring equipment and supplies, monitor calibration equipment, solar panel power equipment, and filter storage equipment to upgrade 2 of their air monitoring stations to include monitoring of toxicity of airborne PM_{10} particles. The equipment collects ambient PM_{10} samples necessary for the analysis of elemental constituents in windblown playa dust by ARB's Monitoring and Laboratory Division on the Salton Sea exposed playa at the Sonny Bono and Bombay Beach monitoring stations. Video cameras were also purchased and installed at the Sonny Bono and Bombay Beach monitoring stations to visually record origin areas and plume densities of windblown playa dust. The real time video monitoring provides aid in identifying and prioritizing playa areas for early dust control deployment. The overall goal of the project is to quantify the baseline concentrations of toxic elements in windblown dust sampled at Salton Sea shoreline monitoring stations and capture images of upwind emissive areas by video camera. The results of elemental analyses will be used to support health risk assessments of the adverse public health risks resulting from exposure to potential emissions of windblown playa dust, to inform stakeholders involved in Salton Sea dust control efficiency determinations, and to provide information to the general public, local and state decision-makers, air quality regulatory agencies, and environmental and public health advocacy organizations on the relative toxicity of windblown playa dust.

2. Grant Agreement Milestones

Grant Milestone	Milestone Start Date	Milestone Achievement Date	Business Days Elapsed	Notes
2.4.1 Issue purchase orders for all equipment and supplies within 30 business days of Grant Agreement execution date	Grant *Agreement Execution*- May 3, 2017	*Issue Purchase Orders* BGI- August 3, 2017 Partisols- August 3, 2017 Cameras- August 4, 2017 Freezer- August 7, 2017	BGI- 93 Partisols- 93 Cameras- 94 Freezer- 97	The grant agreement milestones were written without the timeline of the procurement process to issue a purchase order within IID. (Note, this was anticipated and discussed prior to grant execution).
2.4.2 Complete acceptance testing of all equipment within 30 business days of equipment receipt	*Equipment Receipt* BGI- August 18, 2017 Partisols- October 4, 2017 Cameras- August 11, 2017	*Acceptance Testing* BGI- November 10, 2017 Partisols- November 2, 2017 Cameras- October 10, 2017	BGI- 58 Partisol- 21 Cameras- 41	There were delays in acceptance testing due to scheduling of installation and deployment.
2.4.3 Complete installation of Partisol samplers within 15 business days of acceptance testing completion	*Acceptance Testing Completion* November 2, 2017	*Install Partisols* October 10, 2017	0	Partisols were installed prior to acceptance testing.
2.4.4 Ship an initial inventory of filters, cassettes, and cartridges to MLD within 30 business days of receipt of these supplies	*Receipt of Supplies* August 18, 2017	*Shipment of Filters* September 20, 2017	23	

2.4.5 Commence PM_{10} monitoring with Partisol samplers within 15 business days of receiving the first set of pre-weighted filters from MLD	*Receipt of Pre-weighed Filters* October 30, 2017	*Commence PM10 Monitoring with Partisols* November 9, 2017	11	Partisol experienced an audit error on 11/3/2017. Partisol is scheduled to sample on 11/7/2017 and will also sample on 11/10/2017 (as a makeup day per EPA guidance).
2.4.6 Commence submittal of Partisol PM_{10} data to AQS on a quarterly basis by the 30th day following the end of the first quarter of Partisol operation	*First quarter of Partisol operation* 01/30/2018 (30 days after end of first quarter of Partisol operation)	*Submit Partisol PM10 Data to AQS* TBD	N/A	
2.4.6 Achieve deployment-readiness of portable PM_{10} monitors within 15 business days of acceptance testing completion	*Acceptance testing completion* By 11/10/2017	*Achieve deployment-readiness* TBD	N/A	
2.4.7 Achieve public internet access to video camera images within 30 business days of completion of each camera installation	*Camera installation* 10/31/2017	*Public internet access* TBD	N/A	
2.4.8 Issue press release identifying the website address of video camera images within 15 business days of internet access rollout for each camera installation	*Internet access rollout* TBD	*Press release* TBD	N/A	