

## ESP Remote Sensing Experience

Long-Term Programs				
Location	Contacts	Project Scope/Capability	Contract Duration/ Unit Sales	Approximate Raw Tests
Arizona, USA	Dan Grubbe 602-207-4017 ADEQ Phoenix, AZ	<b>Program Type:</b> Gross emitter identification; on-road HC, CO, and CO <sub>2</sub> monitoring <b>Geographic Area Served:</b> Phoenix metropolitan area <b>Inspections:</b> Approximately 500,000 valid records per month Met implementation schedule and contractual obligations.	1994 – 1998	5M/yr
California, USA	Joe Pedrosa 916-255-4248 CA BAR Sacramento, CA	<b>Program Type:</b> Program Evaluation; On-road HC, CO, CO <sub>2</sub> monitoring including low and high emitter evaluation <b>Geographic Area Served:</b> Statewide <b>Inspections:</b> Average of 800,000 validated vehicle records per month Met implementation schedule and contractual obligations.	1995 – 1997	8M/yr
California, USA	Joe Pedrosa 916-255-4248 CA BAR Sacramento, CA	<b>Program Type:</b> Identify and repair/scrap high-emitting vehicles <b>Geographic Area Served:</b> Los Angeles area <b>Inspections:</b> 600 vehicles repaired.	1996 – 1997	19M
Colorado, USA	Rick Barrett 303-692-3212 CDEHNR Denver, CO	<b>Program Type:</b> Fleet characterization; on-road HC, CO, CO <sub>2</sub> , NO <sub>x</sub> monitoring; enhanced I/M compliance <b>Geographic Area Served:</b> Greeley, Denver <b>Inspections:</b> >0.5% of I/M fleet Met implementation schedule and contractual obligations five times.	1996 – 2001	400K/yr
Colorado, USA	Rick Barrett 303-692-3212 CDEHNR Denver, CO	<b>Program Type:</b> RapidScreen, HC, CO, CO <sub>2</sub> , NO <sub>x</sub> <b>Geographic Area Served:</b> Ft. Collins, Greeley, Denver (2004) <b>Test Goal:</b> RapidScreen up to 35% of I/M annually Meeting implementation schedule. Program in process.	2001 – present	2M/yr (2004)

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Long-Term Programs

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<b>Connecticut, USA</b>	Robert Waz 203-805-6224 CT DMV Waterbury, CT	<b>Program Type:</b> Fleet characterization; on-road HC, CO, CO <sub>2</sub> , NO <sub>x</sub> monitoring; enhanced I/M compliance <b>Geographic Area Served:</b> Statewide, enhanced program area <b>Inspections:</b> >0.5% of I/M fleet annually Met implementation schedule and contractual obligations two times.	1999 – 2001	100K
<b>Illinois, USA</b>	Mike Hills 217-524-9061 IEPA Springfield, IL	<b>Program Type:</b> Fleet characterization; on-road HC, CO, CO <sub>2</sub> , NO <sub>x</sub> monitoring; enhanced I/M compliance <b>Geographic Area Served:</b> Chicago and East St. Louis, enhanced program area <b>Inspections:</b> >0.5% of eligible vehicle population annually Met implementation schedule and contractual obligations three times.	1998 – present	100K
<b>Indiana, USA</b>	Mike Worrell 317-232-8218 IDEM Indianapolis, IN	<b>Program Type:</b> Fleet characterization; on-road HC, CO, CO <sub>2</sub> , NO <sub>x</sub> monitoring; enhanced I/M compliance <b>Geographic Area Served:</b> IN enhanced program area <b>Inspections:</b> >0.5% of eligible vehicle population annually Met implementation schedule and contractual obligations two times.	1999 – present	100K
<b>Maryland, USA</b>	Dave Filbert 410-631-4131 Baltimore, MD	<b>Program Type:</b> Fleet characterization; on-road HC, CO, CO <sub>2</sub> , NO <sub>x</sub> monitoring; enhanced I/M compliance <b>Geographic Area Served:</b> 14-county enhanced program area <b>Inspections:</b> >0.5% of vehicles in each county annually.	1996 – 2009	100K
<b>Missouri, USA</b>	Haskins Hobson 573-751-4817 MDR Jefferson City, MO	<b>Program Type:</b> RapidScreen™; on-road HC, CO, CO <sub>2</sub> , NO <sub>x</sub> monitoring <b>Geographic Area Served:</b> Greater St. Louis Metropolitan Area <b>Inspections:</b> 30% of I/M fleet RapidScreened annually; 4M valid records since 4/2000; ~180K RapidScreened annually Met implementation schedule; contract in process.	1999 – 2007	5M/yr

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<b>New York, USA</b>	James Symon 518-457-8831 NYSDEC	<b>Program Type:</b> Characterization/Correlation <b>Geographic Area Served:</b> 9-county enhanced I/M area <b>Inspections:</b> >0.5% of I/M fleet; correlation with NYTEST (IG-240); gross emitter identification; ~100K valid records annually Met implementation schedule and contractual obligations three times.	1996 – 1999	180K
<b>Pennsylvania, USA</b>	Ernie Spittler 717-565-7510 Harrisburg, PA	<b>Program Type:</b> 0.5% compliance <b>Geographic Area Served:</b> Pittsburgh, Philadelphia <b>Inspections:</b> >0.5% of I/M fleet.	2001 – present	20K
<b>Taiwan</b>	Philip Lan 01188622773317 ext. 311 Taipei, Taiwan	<b>Program Type:</b> Fleet characterization; On-road HC, CO, CO <sub>2</sub> , NO <sub>x</sub> monitoring; gross emitter identification <b>Geographic Area Served:</b> Countrywide <b>Inspections:</b> Over 2 million tests through local partners Met implementation schedule and contractual obligations.	1997 – 2000	500K/yr
<b>Texas, USA</b>	Jimmy Guckian 512-424-2970 Austin, Texas	<b>Program Type:</b> On-road HC, CO, CO <sub>2</sub> , NO <sub>x</sub> monitoring; gross emitter identification <b>Geographic Area Served:</b> Dallas-Fort Worth, Houston, El Paso <b>Inspections:</b> Over 5 million raw readings; 100 notifications/month Exceeding customer expectations.	2001 – present	5M/yr
<b>Studies</b>				
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<b>Arizona, USA</b> Phoenix area	Andrew Burnett 512-407-1822 ERG Austin, TX	<b>Program Type:</b> Fleet characterization for AZACTS Study under Eastern Research Group Met implementation schedule. Data delivered 10/01.	2001	40K

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<b>California, USA</b> Sacramento area	Joe Pedrosa 916-255-4248	<b>Program Type:</b> Large-scale demonstration	1994	300K
El Segundo area	CA BAR Sacramento, CA	<b>Program Type:</b> Three-phase feasibility study	1991 – 1993	200K
Los Angeles area		<b>Program Type:</b> NO <sub>x</sub> and speed/acceleration measurement optimization and field study	1994 – 1996	100K
Sacramento area		<b>Program Type:</b> On-road HC, CO, CO <sub>2</sub> monitoring; technology demonstration Met implementation schedule and contractual obligations.	1994	200K
<b>Idaho, USA</b>		<b>Program Type:</b> Feasibility study <b>Geographic Area Served:</b> Boise area Met implementation schedule and contractual obligations.	1995	50K
<b>Missouri, USA</b>	Wendy Vit Mid-America Regional Council 816-474-4240 ESP was contracted by the prime - ERG, Austin, TX	<b>Program Type:</b> Fleet characterization for Mid-America Regional Council (MARC) <b>Geographic Area Served:</b> Kansas City, Missouri Met implementation schedule and contractual obligations.	1998	80K
<b>New Jersey, USA</b>		<b>Program Type:</b> Identification of gross emitters and correlation with fixed testing <b>Geographic Area Served:</b> Trenton area Met implementation schedule and contractual obligations.	1996	100K
<b>New York, USA</b>	P.R Shanker NYCDEP 718-595-3791	<b>Program Type:</b> Fleet characterization; on-road HC, CO, CO <sub>2</sub> monitoring; commuter polluters <b>Geographic Area Served:</b> New York City/Manhattan Met implementation schedule and contractual obligations.	1998	150K
<b>Pennsylvania, USA</b>	Paul Durkin Sunoco 215-977-3401	<b>Program Type:</b> Identify gross-polluting vehicles for retirement program <b>Geographic Area Served:</b> Philadelphia metropolitan area.	1993	200K

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<b>Texas, USA</b> El Paso		<b>Program Type:</b> Comparison of United States and Mexico vehicle fleets; On-road HC, CO, CO <sub>2</sub> monitoring	1994	70K
Dallas/Fort Worth/ El Paso		<b>Program Type:</b> Feasibility study	1996	150K
Houston		<b>Program Type:</b> On-road HC, CO, CO <sub>2</sub> monitoring Met implementation schedule and contractual obligations.	1996	
<b>Vermont, USA</b>	Tom Moye, David Love 802-241-3554 Waterbury, VT	<b>Program Type:</b> Fleet characterization, On-road monitoring of CO, CO <sub>2</sub> , hydrocarbons, and NO <sub>x</sub> <b>Geographic Area Served:</b> Statewide Met implementation schedule and contractual obligations.	1998 – 2000	100K
<b>Virginia, USA</b>	Richard Olin 804-698-4425 VDEQ Richmond, VA	<b>Program Type:</b> Fleet characterization, on-road monitoring of CO, CO <sub>2</sub> , hydrocarbons, and NO <sub>x</sub> ; identification of non-program vehicles <b>Geographic Area Served:</b> Northern Virginia Met implementation schedule and contractual obligations.	1996	270K
<b>Virginia, USA</b>	Richard Olin 804-698-4425 VDEQ Richmond, VA	<b>Program Type:</b> Fleet characterization, reference I/M program evaluation <b>Geographic Area Served:</b> Northern Virginia and Richmond Met implementation schedule and contractual obligations.	2002 – 2003	1M
<b>Washington DC, USA</b>	Charles Williams DC DOH Washington DC, USA	<b>Program Type:</b> On-road monitoring of CO, CO <sub>2</sub> , NO <sub>x</sub> and hydrocarbons <b>Geographic Area Served:</b> Metro DC	2002	30K
<b>Austria</b> St. Michael	Walter Nissler 011-43-6644-465-001 BPA, Vienna, Austria	<b>Program Type:</b> Fleet characterization, On-road monitoring of CO, CO <sub>2</sub> , hydrocarbons, and NO <sub>x</sub> from HD Euro trucks Met implementation schedule and contractual obligations.	2001	1K HDD Trucks
<b>Austria/Czech Border</b>	Walter Nissler 011-43-6644-465-001 BPA, Vienna, Austria	<b>Program Type:</b> Measurement of Czech tourist buses entering Austria	2001	20K

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<b>Japan</b>	Akihiro Misumi 011-81-43-295-2256 Petroleum Energy Center Chiba, Japan	<b>Program Type:</b> Fleet characterization, on-road monitoring of CO, CO <sub>2</sub> , hydrocarbons, and NO <sub>x</sub>	2000 – present	40K
<b>Mexico Tijuana</b>	Lenora Bohren Colorado 907-669-6192	<b>Program Type:</b> Gross emitter of Mexican vehicles into U.S. Met implementation schedule and contractual obligations.	1997	50K
<b>UK Manchester</b>	Mike Charity 01147712740392 Manchester, UK	<b>Program Type:</b> Pullover screening of gross emitters with UK Vehicle Inspectorate Met implementation schedule and contractual obligations.	2001	30K
<b>Sri Lanka, Colombo</b>	Ananda Mallawatantri amallawatantri@usaid.gov USAID-USAEP Colombo, SL	<b>Program Type:</b> Fleet characterization, pre-I/M baselining.	2003	100K
<b>Singapore</b>	Nick Tan National Environment Agency	<b>Program Type:</b> Pilot study	August 2003 – present	70K
<b>India</b>	Balraj Bhanot Automotive Research Association of India	<b>Program Type:</b> Pilot study	Present	20K