

# Air Quality

## Ambient Monitoring

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Ambient Monitoring</b>					
<b>Continuous Monitoring Systems</b>	23	23	23	23	92
<b>Non-continuous Stations</b>	6	6	7	6	25
<b>Toxics Stations</b>	6	6	6	7	25

### Number of Air Samples Collected (continuously/hourly)

Ozone (in thousands)	32.8	32.7	31.5	32.3	129.3
Sulfur Oxides (in thousands)	14.8	15.2	15.0	14.9	59.9
Total Oxides of Nitrogen	6.5	6.6	6.4	6.2	25.6
Nitrogen Dioxide-NO <sub>2</sub> (in thousands)	6.5	6.6	6.4	6.2	25.6
Nitrogen Oxides-NO (in thousands)	6.5	6.6	6.4	6.2	25.6
Carbon Monoxide (in thousands)	6.5	6.5	6.4	5.5	24.9
Special Purpose (in thousands)	10.5	9.4	8.8	12.9	41.5
PM-10 (in thousands)	2.2	2.1	2.1	2.2	8.6
PM-2.5 (in thousands)	18.9	18.6	18.4	18.7	74.6

### Number of Air Samples Collected (non-continuous/daily)

PM-10	148	88	90	181	507
PM-2.5	347	310	353	363	1,373
Toxics	148	262	253	289	952
Lead	0	0	12	17	29

## Excess Emissions Monitoring

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Excess Emissions Report</b>	726	480	360	315	1,881

## Emissions Inventory

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
--	-------	-------	-------	-------	-------

### Emissions Inventory

<b>Billings</b>					
Major Facilities	327	4	0	0	331
Minor Facilities	1,614	1	0	0	1,615

### Inventories Received

Companies	6	2	79	549	636
Facilities	9	2	97	2,056	2,164

## Enforcement Administration

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
--	-------	-------	-------	-------	-------

### Air Enforcement

Notices of Violation	15	5	10	15	45
Formal Actions	11	5	10	3	29
Level III Violation Letters	7	6	2	3	18
Alternate Enforcement Letters	38	35	25	36	134
Asbestos Actions	1	1	2	2	6
Fines Paid (in thousands of dollars)	134.312	36.0	40.834	120.671	331.781
SEP Dollars (in thousands)	138.141	0	0	0	138.141
Total Number of SEPs	3	0	0	0	3

## Environmental Impact Assessments

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Environmental Impact Assessments</b>	36	36	166	36	274

## Inspection

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
Air Inspections					
Monitoring Inspections (from ECLS)	21	14	17	52	104
On-Site Compliance Evaluations	93	121	141	168	523
Off-Site Compliance Evaluations	412	311	384	280	1,387
Follow-up Enforcement Inspections	2	1	0	9	12
Asbestos Inspections	62	72	79	82	295
Complaint Inspection	8	9	5	10	32
Stack Tests Observed	7	5	7	16	35
Stack Tests Reviewed	100	80	91	39	310

## Lead-Based Paint

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Lead-Based Paint Certification</b>					
Inspector	0	0	0	5	5
Risk Assessor	6	2	0	80	88
Abatement Worker	31	9	0	42	82
Supervisor	2	4	0	62	68
Project Designer	0	0	0	4	4
Firm	4	3	0	73	80
<b>Lead-Based Paint Compliance Inspections</b>	8	7	6	5	26
<b>Lead-Based Paint Enforcement Actions</b>	0	0	0	0	0

## Permit Administration

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Air Quality Permitting</b>					
<b>Construction Applications/Permits Issued</b>					
Minor Received	77	87	55	66	285
Minor Issued	82	90	48	64	284
Major Received	5	6	4	10	25
Major Issued	5	5	5	6	21
PSD Received	2	0	0	1	3
PSD Issued	1	1	1	0	3
<b>Operating Applications/Permits Issued</b>					
Minor Received	133	112	106	80	431
Minor Issued	147	114	154	116	531
Major Received	26	39	38	40	143
Major Issued	34	27	31	39	131
PSD Received	0	0	0	0	0
PSD Issued	0	0	0	0	0
Title V Initials and Modifications Received	11	11	7	11	40
Title V Initials and Modifications Issued	10	10	10	11	41
Title V Renewals and Modifications Received plus TVR2	15	28	31	29	103
Title V Renewals and Modifications Issued plus TVR2	24	17	21	28	90
Acid Rain Received	0	3	1	0	4
Acid Rain Issued	0	2	9	4	15
Relocation Received	10	4	9	15	38
Relocation Issued	9	4	8	15	36
Applications Withdrawn	8	9	16	9	42

## Permit Administration - continued ...

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Title V Initial and Renewal Modifications Issued - Total</b>	34	27	31	39	131
<b>Title V Initial and Renewal Modifications Issued - Significant</b>	15	11	14	21	61
<b>Applicability Determination Received</b>	29	24	17	19	89
<b>Applicability Determination Issued</b>	24	28	15	27	94
<b>Permits Denied</b>	0	0	0	0	0
<b>Total Applications Received</b>	282	275	230	231	1,018
<b>Total Permits Issued</b>	302	271	271	270	1,114
<b>Minor Permit Status &gt; 90 Day Timeline</b>	28	31	27	11	97
<b>Tests Observed</b>	9	3	6	6	24
<b>Performance Inspections</b>	27	21	37	35	120
<b>Permit Protest Hearings</b>	0	0	0	0	0
<b>Number of PSD Modeling Analysis Conducted</b>	5	4	4	3	16

## Quality Assurance

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Quality Assurance</b>					
<b>Audits</b>					
Continuous	33	37	35	35	140
Non-Continuous	20	14	13	22	69
Interlab	3	0	4	0	7
<b>Data Validation</b>	566	550	547	543	2,206
<b>Standards Certified</b>	70	64	69	82	285
<b>Filter Checks</b>	229	272	256	280	1,037
<b>Precision Tests</b>	366	361	377	368	1,472

## Public Information and Education

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Clean Air Alerts</b>					
Oklahoma City	4	0	0	1	5
Tulsa	6	0	0	1	7
Lawton	0	0	0	0	0
Rural Oklahoma	1	0	0	0	1
<b>AQ Health Advisories</b>	24	0	0	9	33
<b>Environmental Education</b>					
<b>Events</b>					
Conference Presentations	0	0	1	1	2
Conference Displays	0	2	1	0	3
<b>Community Wide Events</b>	0	0	1	1	2
<b>Education Presentations</b>					
K-12	2	2	2	3	9
University	0	0	1	0	1
Community/Adult	2	3	10	4	19
<b>Teacher Packets Distributed</b>	18	20	67	68	173
<b>Contacts</b>	22	4,905	1,168	6,180	12,275

# Customer Services

## Laboratory Operations

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Laboratory Services</b>					
<b>Local DEQ</b>	104	106	28	108	346
<b>Private Citizens</b>	155	92	120	125	492
<b>Contractual</b>	203	140	32	72	447
<b>QA Check Samples</b>	61	79	63	46	249
<b>Public Water Supplies</b>	4,485	2,991	3,128	5,395	15,999
Bacteriological	5,548	4,580	3,850	4,660	18,638
<b>Superfund</b>	127	78	162	293	660
<b>Hazardous Waste</b>	38	45	13	0	96
<b>Water Quality</b>	74	48	78	133	333
<b>Oklahoma Water Resources Board</b>	703	434	365	640	2,142
<b>% of Samples Analyzed Within Turnaround Goals</b>	99%	99%	98%	0%	296%

## Laboratory Methodology/Instrumentation

# New Instruments to Support New Methods	0	0	0	0	0
# Replacement Instruments	0	0	0	0	0
# New Methods Implemented	2	0	0	1	3

## Laboratory Certification

Applications Received	4	2	1	0	7
Certificates Issued	0	4	2	1	7
Certificates Renewals	146	0	0	0	146
Performance Evaluations	0	20	18	4	42
Issuance > Timelines	29	25	16	0	70

## Customer Assistance General Outreach

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Customer Assistance</b>					
Services Provided to:	671	651	630	626	2,578
<b>Permit Assistance to New Business &amp; Industry</b>	4	6	6	17	33
<b>Targeted Outreach</b>	0	0	0	1	1

## Special Events

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Special Complaint Samples</b>	104	106	28	0	238

## Permit Administration

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
Public Meetings for Permitting	2	0	0	3	5

## Media Handling

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Media Relations</b>					
Press Releases	11	12	4	28	55
Responses to Media Inquiries	144	64	63	70	341
Interviews	102	51	29	51	233
Number of Presentations	39	10	5	25	79
Number of Citizens at Presentations	1,305	5,245	218	2,337	9,105

## Ambient Monitoring

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
Biotrend Monitoring (from CSD)	36	17	0	0	53

## Public Information

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Public Information &amp; Publications</b>					
Designs/Illustrations/Graphics Produced	612	567	712	412	2,303
Brochures/Flyers Produced	63	32	46	34	175
Fact Sheets Produced	26	23	14	18	81
Publications/Reports Produced	19	14	8	14	55
Newsletters Produced	5	2	1	2	10
Web Applications/Pages Developed	75	45	55	68	243
<b>Information Dissemination and Environmental Education</b>					
Conferences/Displays	2	1	1	1	5
Environmental Education packets/information distributed	48	52	72	28	200
Personal/Web /Phone Contacts	101	87	82	145	415

## Sara Title III

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Community Right to Know (EPCRA)</b>					
Tier 2 Reports Filed	827	26	41,293	3,768	45,914
Tier 2 Forms Filed Electronically	486	26	41,293	1,939	43,744
Toxic Release Reports Filed	1,226	0	0	0	1,226
Industry Request for Guidance	172	76	1,982	706	2,936
CAMEO/Submit Instruction/Presentations	10	6	12	9	37
LEPC Meetings Attended	13	11	14	3	41
TRI Inspections Attended	0	3	0	0	3

# Environmental Complaints and Local Services

## Complaint Statistics

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Total Spills/Complaints Received</b>	974	840	1,093	1,176	4,083
<b>Spills/Complaints Referred to Other Agencies</b>	55	53	55	75	238
EPA	4	2	3	6	15
Corp of Engineers	0	0	2	1	3
Used Motor Vehicle Commission	0	0	0	0	0
Dept. of Agriculture, Food, & Forestry	11	8	9	12	40
County Sheriff's Office	2	1	0	0	3
City/Town	3	7	11	12	33
Dept. of Mines	0	0	0	0	0
Corporation Commission	34	28	28	37	127
Native American	1	4	2	4	11
Dept. of Wildlife Conservation	0	0	0	0	0
Dept. of Health	0	1	0	2	3
Dept. of Transportation	0	0	0	0	0
Dept. of Labor	0	2	0	0	2
Liquefied Petroleum & Gas Board	0	0	0	1	1
Dept. of Public Safety	0	0	0	0	0
Conservation Commission	0	0	0	0	0
Oklahoma Water Resources Board	0	0	0	0	0
<b>Total DEQ Spills/Complaints Received</b>	919	787	1,038	1,101	3,845
<b>Spills Received</b>	70	70	73	88	301
Water Quality Division	2	0	1	4	7
Air Quality Division	17	14	17	20	68
Land Protection Division - Solid Waste	49	55	54	61	219
Land Protection Division - Hazardous Waste	2	1	1	3	7

## Complaint Statistics - continued...

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Complaints Received</b>	849	717	965	1,013	3,544
Publicly-Owned Wastewater Facility & Lines	38	52	71	77	238
Private Wastewater Service Lines	90	65	99	106	360
Public Water Supply	87	63	80	73	303
Fish Kills	27	4	4	6	41
Unpermitted Discharge - Unknown Source	5	4	5	6	20
Industrial Stormwater	6	5	6	6	23
Industrial Wastewater Treatment	10	8	5	8	31
Fugitive Dust	34	24	26	40	124
Air Facilities Emissions	9	6	13	11	39
Odors	20	11	7	9	47
NESHAP Violations	3	2	10	3	18
Lead-Based Paint	1	0	0	0	1
Solid Waste Landfill Operation	9	6	7	8	30
Solid Waste Unpermitted Discharges	3	3	1	1	8
Tires	3	4	5	8	20
Hazardous Waste Facility Operation	0	2	0	0	2
Hazardous Waste Improper Disposal	5	2	1	3	11
Radiation	0	1	0	2	3
Underground Injection Control	0	0	0	0	0
On-site Sewage	217	237	366	357	1,177
Private Water Supply	0	4	0	1	5
Open Burning	70	52	56	68	246
Unpermitted Disposal of Solid Waste	97	74	111	107	389
Unpermitted Disposal of Liquid Waste	62	54	50	70	236

continued on next page...

## Complaint Statistics - continued...

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
Septage Pumpers & Haulers	11	5	9	5	30
Construction Stormwater	40	24	31	34	129
Open Burning Copper Wire	2	5	2	4	13
<b>Emergency Response</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### Complaint Responsiveness

Complaints Requiring Response	596	413	547	574	2,130
Met 2 Working Day Response	70%	79%	86%	84%	80%

## Customer Assistance Private Water Supply

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Requested Services</b>					
<b>Private Water</b>					
Water Well Inspections	5	5	13	6	29

## Enforcement Administration

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Enforcement Actions - Unpermitted Activities</b>					
<b>Notices of Violation</b>					
Open Burning	0	1	1	0	2
Open Dumping	0	5	13	0	18
Fugitive Dust	0	0	0	0	0
Surfacing Sewage	1	20	50	1	72
Minor Water System	0	0	0	0	0
Certified Installers	2	0	5	2	9

## Enforcement Administration - continued...

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
Non-Certified Installers	0	2	6	2	10
Septage Pumpers/Haulers	0	0	1	0	1
Total Retention Lagoons	0	3	4	0	7
Certified Soil Profilers	0	2	0	0	2
<b>Formal Actions</b>					
Open Burning	0	0	1	1	2
Open Dumping	8	0	12	12	32
Fugitive Dust	0	0	0	0	0
Surfacing Sewage	28	1	38	29	96
Certified Installers	3	0	1	2	6
Non-Certified Installers	4	0	4	1	9
Septage Pumpers/Haulers	0	0	1	1	2
Total Retention Lagoons	1	0	2	6	9
Certified Soil Profilers	0	0	0	0	0
<b>Fines Paid</b>					
Open Burning	\$0.00	\$0.00	\$1,000	\$0.00	\$1,000
Open Dumping	\$0	\$8,775	\$0	\$0	\$8,775
Fugitive Dust	\$0	\$0	\$0	\$0	\$0
Surfacing Sewage	\$3,040	\$0.00	\$200	\$10,000	\$13,240
Certified Installers	\$0	\$100	\$150	\$250	\$500
Non-Certified Installers	\$300	\$0	\$0	\$0.00	\$300
Septage Pumpers/Haulers	\$0	\$0	\$0	\$0	\$0
Total Retention Lagoons	\$3,000	\$1,000	\$26,667	\$7,000	\$37,667
Certified Soil Profilers	\$0	\$1,000	\$500	\$0	\$1,500
Highway Spill Remediation	\$0	\$0	\$0.00	\$0	\$0
Total					\$62,982

## Technical Assistance

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
Air Quality	4	2	4	2	12
DWSRF	6	6	11	17	40
Fish Kill	3	0	0	0	3
Haz Waste	1	1	7	9	18
Industrial WW	4	4	0	4	12
LPD Solid Waste	8	2	13	4	27
Onsite Sewage	109	50	74	88	321
Other	8	6	23	13	50
Private Water	25	15	5	13	58
Promote Soil Profile	24	18	15	15	72
PWS	37	19	43	33	132
Spill	1	0	1	1	3
Stormwater	12	0	10	4	26
Tires	0	1	0	0	1
Total Retention Lagoon	17	23	27	25	92
WPC	21	24	25	20	90
TOTAL	268	165	234	152	819

## Wellhead Protection Program

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Contingency Plan Developed</b>	1	1	1	4	7
<b>Well Integrity Established</b>	1	1	3	4	9
<b>Public Awareness Program Implemented</b>	1	2	2	5	10
<b>Implementation Complete</b>	1	3	3	4	11

## Inspection

<b>Air Quality</b>	<b>QTR 1</b>	<b>QTR 2</b>	<b>QTR 3</b>	<b>QTR 4</b>	<b>TOTAL</b>
<b>Air Inspections</b>					
Monitoring Inspections	0	0	0	0	0
<b>Waste Management</b>					
	<b>QTR 1</b>	<b>QTR 2</b>	<b>QTR 3</b>	<b>QTR 4</b>	<b>TOTAL</b>
<b>Solid Waste Inspections</b>					
Monitoring Inspections	47	44	46	51	188
<b>Water Quality</b>					
	<b>QTR 1</b>	<b>QTR 2</b>	<b>QTR 3</b>	<b>QTR 4</b>	<b>TOTAL</b>
<b>Public Water Supply</b>					
Monitoring Inspections	737	673	509	781	2,700
Minor Water Systems	92	48	31	165	336
<b>Municipal Wastewater</b>					
Monitoring Inspections	240	228	221	247	936
<b>Total Retention Lagoons</b>					
Monitoring Inspections	186	167	132	184	669
<b>Industrial Wastewater</b>					
Monitoring Inspections	64	92	91	141	388
<b>Stormwater</b>					
NOT Inspections	178	293	201	178	850
Active Permit Inspections	22	63	37	49	171
No Exposure Inspections	10	4	12	5	31
<b>Septage Pumpers</b>					
Inspections	21	47	168	21	257
<b>Total</b>	0	0	0	0	6,338

## Permit Administration

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>ECLS Requested Services</b>					
<b>Private Sewage</b>					
Soil Tests	386	301	303	451	1,441
Existing System Inspections	82	68	72	82	304
Authorizations Issued	1,774	2,197	1,294	1,945	7,210
Alternative System Permits Issued	30	5	26	31	92
Septage Pumpers and Haulers	20	22	162	24	228
Septage Pumper Licenses Issued					
<b>Water Quality</b>					
<b>Storm Water-Construction</b>					
Authorizations Issued	214	205	189	210	818
Authorizations Terminated	113	264	137	186	700
<b>Storm Water-Industrial</b>					
Authorizations Issued	17	28	13	33	91
Authorizations Terminated	4	11	25	4	44

## Operator Certification

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
--	-------	-------	-------	-------	-------

### On-site System Installer Certification

<b>Renewal Training Attendees</b>	31	125	62	8	226
-----------------------------------	----	-----	----	---	-----

### New Certification Examinations

Sub-surface Examinations	2	21	0	6	29
Lagoon Examinations	1	1	2	0	4
Aerobic Spray Examinations	14	0	10	0	24
Aerobic Drip Examinations	0	0	0	1	1
Low Pressure Dosing Examinations	0	0	0	0	0

### Soil Profiler Certification

Renewal Training Attendees	0	23	0	0	23
New Certifications	3	0	1	0	4

# Land Protection

## Council/Rulemaking Meetings

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Rulemaking Meetings</b>					
HWMAC meetings/rulemaking hearings held	0	0	0	1	1
RMAC meetings/rulemaking hearings held	0	0	0	1	1
SWMAC meetings/rulemaking hearings held	2	0	0	0	2
Total	0	0	0	0	4

## LPD Complaints

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Complaints</b>					
Complaints referred to LPD	9	12	8	7	36
Referred complaints resolved < 90 days or approved extension	9	12	8	7	36

## Historic Site Cleanup

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Voluntary Cleanup Program</b>					
Ongoing	115	114	110	106	560
Completed	3	5	1	7	16

## Radiographer Certification

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Radiography Certification</b>					
Number of exam dates	2	2	2	2	8
Number of individuals taking exams	81	63	57	64	265

## Inspection

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Solid Waste Inspections</b>					
Compliance Evaluation Inspections	96	84	85	81	355
<b>Hazardous Waste Inspections</b>					
Compliance Evaluation Inspections (generator, transporter, non-commercial TSD)	89	49	18	42	198
Compliance Evaluation Inspections (military installations)	0	1	0	3	4
Compliance Evaluation Inspections (commercial TSD)	0	0	2	2	4
CME and O&M Inspections at RCRA TSDs	1	0	0	3	4
<b>Radiation Inspections</b>					
Compliance Evaluation Inspections	31	37	30	26	124
<b>Waste Tire Inspections</b>					
Compliance Evaluation Inspections	18	18	18	15	69
Tire Dealer Inspections	37	29	15	49	130
Tire Dump Surveys	5	5	4	7	21
<b>UIC Inspections</b>					
UIC Compliance Inspections	0	6	0	7	13

## Enforcement Administration

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Solid Waste</b>					
Notice of Violation	6	2	1	3	12
Formal Actions	2	1	0	1	4
Fines Paid	\$0	\$0	\$0	\$0	\$0

continued on next page...

## Enforcement Administration - continued...

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
Supplemental Environmental Projects	\$0	\$0	\$0	\$0	\$0
Total Number of Supplemental Env. Projects	0	0	0	0	0

### Hazardous Waste

Notice to Comply	21	9	11	2	43
Notice of Violation	2	0	19	0	21
Formal Actions	4	0	0	0	4
Facilities in significant noncompliance	1	0	0	0	1
Fines Paid	\$102,817.16	\$97,750.00	\$0	\$40,381.99	\$240,949.15
Supplemental Environmental Projects	\$75,846.58	\$7,600.78	\$0	\$0	\$83,447.36
Total Number of Supplemental Env. Projects	2	0	0	0	2

### Radiation

Notice of Violation	6	6	4	9	25
Formal Actions	1	1	2	0	4
Fines Paid	\$3,425.00	\$0	\$9,500.00	\$17,000.00	\$29,925.00
Supplemental Environmental Projects	\$0	\$0	\$0	\$0	\$0
Total Number of Supplemental Env. Projects	0	0	0	0	0

### UIC

Notice of Violation	0	0	1	1	2
Formal Actions	0	0	0	0	0
Fines Paid	\$0	\$0	\$0	\$0	\$0
Supplemental Environmental Projects	\$0	\$0	\$0	\$0	\$0
Total Number of Supplemental Env. Projects	0	0	0	0	0

## Enforcement Administration - continued...

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Waste Tires</b>					
Notice of Violation	4	4	2	4	14
Formal Actions	2	2	1	0	5
Fines Paid	\$0	\$0	\$0	\$0	\$0
Supplemental Environmental Projects	\$0	\$0	\$0	\$0	\$0
Total Number of Supplemental Env. Projects	0	0	0	0	0
Total Enforcement Actions	0	0	0	0	134
Total Fines					\$270,874.15
Total SEPs					2
Total SEP \$					\$83,447.36

## Customer Assistance Outreach

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Targeted Outreach - Radiation</b>					
Radiation Surveys	9	11	6	9	35
Number of radon test kits provide to homes	16	5	7	1	29
<b>Targeted Outreach - Land Restoration</b>					
Number of acres of land where remediation was completed at contaminated sites in the state.					0
Number of acres of land where remediation was completed at orphan sites in the state.					0
<b>Targeted Outreach - Waste Tires</b>					
Number of abandoned tires remediated from illegal dumps across the state.	4,940	5,178	5,821	4,121	20,060

continued on next page...

## Customer Assistance Outreach - continued...

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
Number of community-wide waste tire collection events.	9	10	18	17	12,578
Number of tires collected from community-wide collection events	21,177	12,534	12,670	29,284	63,133
Number tire dumps remediated	4	2	3	5	14
Dollar amount of waste tire fees used to remediate illegal tire dumps, remove tires collected during community-wide events and reimburse qualified applicants that recycle or utilize waste tires	\$1,361,481.85	\$1,171,048.78	\$1,233,597,.92	\$1,366,045.07	\$5,132,173.62

### Targeted Outreach - Local Government Assistance

Number of local governments assisted with funds to clean up trash dumps, restore damaged lands, and improve recycling programs.	1	0	0	0	1
Dollar amount of solid waste fees reinvested in local projects, including land reclamation and Supplemental Environmental Projects	\$ 162,141	\$0	\$0	\$0	\$16,2141

### Targeted Outreach - Compliance Assistance

Number of compliance assistance visits at SQGs/ CESQGs to enhance the DEQ's Oklahoma Star Incentive Program.	0	0	0	0	0
--	---	---	---	---	---

## Permit Administration

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Land Protection Permitting</b>					
<b>Solid Waste</b>					
Applications Received	80	84	117	92	373
Permits Issued/Plans Approved	84	79	120	86	369
Permit Protest Hearing	0	0	1	0	1
Permits Issued < Timelines	84	79	120	86	369
<b>Hazardous Waste</b>					
Applications Received	61	47	71	44	223
Permits Issued/Plans Approved	59	52	61	42	214
Permit Protest Hearing	0	0	0	0	0
Permits Issued < Timelines	59	52	61	42	214
<b>Underground Injection Control</b>					
Applications Received	8	7	9	11	35
Permits Issued/Plans Approved	12	7	9	9	37
Permit Protest Hearing	0	0	0	0	0
Permits Issued < Timelines	12	7	9	9	37
<b>Radiation</b>					
License Applications Received	94	81	82	95	352
License Applications Completed	107	104	72	90	373
Licenses Issued < Timelines	107	104	72	90	373
<b>Total Permits Issued &lt; Timelines</b>	262	242	262	227	993

## Waste Reduction & Environmental Education

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Environmental Education Planning/Promotion</b>					
Recycling/Sustainability Projects (includes meetings)	16	35	20	25	96
Recycling/Sustainability Public Presentations/Exhibits	8	7	5	5	25
Recycling/Sustainability Publications/Articles (new, updated, edited)	5	10	3	3	21
Recycling/Sustainability/EE Customer Assistance Provided	135	180	150	140	605
<b>Recycling Information</b>					
Recycling Exhibits Prepared	2	0	1	0	3
Total Recycling Public Presentations (e.g. schools, festivals, etc.)	14	0	17	14	45
Recycling Public Presentations (Adult)	2	0	6	6	14
Recycling Public Presentations (K-12)	12	0	11	9	32
DEQ Recycling Publications (Total)	0	0	3	1	4
New DEQ Recycling Publications Developed	0	0	0	0	0
DEQ Publications Distributed	297	0	354	274	925
Recycling Training Given (Agencies, Organizations, etc.)	17	0	17	12	46
Recycling Markets Identified in Oklahoma (Total)	19	0	16	17	not a cumulative total
Recycling Markets Identified in Oklahoma (New)	3	0	2	2	7
Waste Audits Performed	0	0	2	1	3
<b>Pollution Prevention</b>					
Assistance tools developed and disseminated for P2	50	100	100	150	400
Individuals/organizations receiving waste reduction/P2 training	175	80	150	150	555
Technical Assistance					

## Waste Reduction & Environmental Education - continued...

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
Telephone & E-mail contacts	75	80	90	75	320
Site Assistance Visits	0	1	3	3	7
Number of business sectors targeted for pollution prevention outreach	2	3	3	3	11

## Waste to Resources Programs

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Superfund</b>					
Preliminary Assessments	0	0	0	1	1
Site Inspections	0	0	1	0	1
Management Assistance*	8	8	8	8	not a cumulative total
Remedial Design*#	5	5	5	0	not a cumulative total
Federal Facilities*	20	23	23	23	not a cumulative total
Remedial Action*	5	5	5	5	not a cumulative total
Removal Actions**	2	0	1	2	not a cumulative total
New Listing on NPL	0	0	0	0	0
Sites Deleted	0	0	0	0	0
Remedial Investigation/Feasibility Study**	1	1	1	1	not a cumulative total
Brownfield Targeted Site Assessments Completed	3	0	3	0	6
Brownfield Targeted Site Assessments**	5	6	7	4	not a cumulative total

continued on next page...

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
Brownfield Cleanups Completed (Cert. Issued)	1	0	0	0	1
DEQ-Lead Brownfield Cleanups Completed	0	0	0	0	0

### Waste to Resources Programs - continued...

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
--	-------	-------	-------	-------	-------

#### SCAP - Armories & Orphans

Investigation	2	2	2	2	8
Procurement (DCS process)	2	0	0	2	4
Remediation	3	1	1	2	7
Transfer to local communities/ deed notice	2	1	1	2	6

\*Ongoing

\*\*new or in-progress and ongoing

# EPA lead RD

### Non-Hazardous Waste Management

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Solid Waste</b>					
NHIW Certifications Received	158	178	103	146	585

# Water Quality

## Permit Administration

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Water Quality Permitting</b>					
<b>Construction Applications/Permits Issued</b>					
Public Water Supply Received	169	111	117	133	530
Public Water Supply Issued	116	99	89	124	428
Water Well Received	4	2	13	11	30
Water Well Issued	4	2	5	6	17
Municipal Wastewater Received	126	75	66	98	365
Municipal Wastewater Issued	76	50	53	90	269
<b>Municipal Wastewater Applications/Permits Issued</b>					
Discharge Applications Received	14	17	16	11	58
Discharge Permits Issued	17	21	19	14	71
<b>Industrial Wastewater Applications/ Individual Permits Issued</b>					
Applications Received	14	21	8	11	54
Permits Issued	18	23	12	16	69
<b>Stormwater</b>					
Construction Authorization Processed (from ECLS)	214	205	189	210	818
Multi-Sector Industrial Authorization Processed (from ECLS)	17	28	13	33	91
<b>Other Industrial General Permits</b>					
Applications Received	12	10	7	6	35
Authorization Issued	7	9	11	14	41
<b>Other Municipal General Permits</b>					
Applications Received	1	0	1	1	3
Authorization Issued	1	2	0	1	4

continued on next page...

## Permit Administration - continued...

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Sludge Management Applications/Plans Approved</b>					
Applications Received	1	3	2	2	8
Plans Approved	1	1	3	0	5
Total Permits Issuance > Timelines	17	19	9	0	45
Total Permit Protest Hearings	0	0	0	0	0

## Operator Certification

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Operator Training and Certification</b>					
Approved Training Hours Provided	384	376	656	2,444	3,860

## New Certified Examinations

Water Operator	213	258	246	192	909
Wastewater Operator	112	239	189	159	699
Water Laboratory Operator	47	48	44	9	148
Wastewater Laboratory Operator	35	13	24	14	86

## Data Management

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Groundwater</b>					
Sites With GPS Correction	48	37	69	142	296

## TMDL DEVELOPMENT

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>TADS</b>					
TMDLs Started	1	5	1	1	8
TMDLs Completed	32	0	1	12	45

## Enforcement Administration

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Public Water Supply</b>					
Boil Advisories	4	3	1	0	8
Notices of Violation	103	62	94	78	337
Consent / Final Orders	6	2	5	10	23
Fines Paid	0	0	0	1,000	1,000
Supplemental Environmental Projects	0	0	0	0	0
TOTAL number of SEPs	0	0	0	0	0
<b>Municipal Wastewater</b>					
Notices of Violation	30	33	23	22	108
Consent / Final Orders	9	17	19	15	60
Fines Paid	23,000	0	12,500	5,000	40,500
Supplemental Environmental Projects	519,653	1,999	2,000	1,382	52,5032.85
TOTAL number of SEPs	1	1	1	1	4
<b>Industrial Wastewater</b>					
Notices of Violation	7	5	11	3	26
Consent / Final Orders	5	7	4	2	18
Fines Paid	32,800	17,633	65,800	2,450	11,8682.98
Supplemental Environmental Projects	0	0	0	0	0
TOTAL number of SEPs	0	0	0	0	0
<b>Storm Water</b>					
Notices of Violation	9	18	6	7	40
Consent / Final Orders	1	5	3	6	15
Fines Paid	100	12,650	10,050	12,350	35,150
Supplemental Environmental Projects	50,000	0	0	0	50,000
TOTAL number of SEPs	1	0	0	0	1

## Inspection

	QTR 1	QTR 2	QTR 3	QTR 4	TOTAL
<b>Public Water Supply</b>					
Monitoring Inspections (from ECLS)	737	673	509	781	2,700
<b>Municipal Wastewater</b>					
Monitoring Inspections (from ECLS)	240	228	221	247	936
Pretreatment Compliance	0	4	2	16	22
Pretreatment Audits	0	1	3	1	5
Compliance Evaluation Inspections	14	24	19	12	69
Compliance Sampling Inspections	0	0	0	1	1
<b>Industrial Wastewater</b>					
Monitoring Inspections (from ECLS)	64	92	91	141	388
Compliance Evaluation Inspections	12	11	6	2	31
Compliance Sampling Inspections	0	0	0	0	0
<b>Storm Water</b>					
Compliance/TA Inspections	56	53	50	52	211
NOT Inspections (from ECLS)	178	293	201	178	850
Active Permit Inspections (from ECLS)	22	63	37	49	171
No Exposure Inspections (from ECLS)	10	4	10	5	29

# Annual Environmental Quality Report

## DEPARTMENT OF ENVIRONMENTAL QUALITY

*For consideration by the Environmental Quality Board on November 19, 2009*

*For submittal to the Governor and Legislature on or before January 1, 2010*

**T**he Department of Environmental Quality (DEQ) is required by statute annually to submit an “Environmental Quality Report” to the Governor, the President Pro Tempore of the Senate and the Speaker of the House of Representatives. It is to outline the DEQ’s annual needs for providing the environmental services within its jurisdictional areas, any new federal mandates, and state statutory or constitutional changes recommended by the DEQ. The Report must be reviewed and approved by the Environmental Quality Board prior to its submittal to the Governor and Legislature.

## I. ANNUAL NEEDS

### GENERAL (BASELINE) APPROPRIATION REQUEST

For State Fiscal Year (FY) 2011, the DEQ is requesting a baseline state legislative appropriation of \$10,597,129 to address ongoing costs. Taking the estimated legally mandated cost increases (for insurance and retirement contributions) to the agency into account, this is equivalent to what the DEQ was slated by 2009 appropriation bills to receive for current FY 2010 (although monthly across-the-board cuts have reduced and will continue to reduce the actual allocations in FY 2010).

### ADDITIONAL SPECIFIC APPROPRIATION REQUEST

In addition to its baseline request, the DEQ is requesting appropriated funds to support a government modernization initiative in the form of web-based systems for electronic permitting and electronic complaints management.

The DEQ’s core functions are environmental permitting, complaint response, inspection/monitoring and compliance. As the agency regulatory programs have advanced, the software, data bases, and electronic systems (e-systems) that support these core functions have evolved, but in many instances as separate systems. In the last few years, the agency has made great strides in standardizing and integrating tracking and reporting systems, but permitting and complaints systems have lagged. The DEQ is proposing electronic permitting and complaints management systems designed to meet the future needs of our customers, improve efficiencies and meet requirements for state government modernization.

The issuance of an environmental permit is a complex process requiring a multitude of steps and extensive supporting documentation to meet both state and federal environmental regulations. The system being proposed is a one-stop shop for individuals or businesses seeking environmental permits and licenses. It is designed to utilize one common software system with individual modules for each permit application. For example, there are 14 different types of air quality permits, each containing unique requirements. By using a common software and modular approach, we can support the spectrum of environmental permits issued by the agency. The e-permitting system is an internet-based system that is easily integrated with and completely compatible with our core reporting and tracking systems. The proposed software and permitting modules are designed to meet federal EPA guidelines and are being used by many state environmental agencies and the U.S. Environmental Protection Agency.

*continued on next page...*

The proposed e-permitting system allows customers to easily and quickly determine permit and license requirements and acquire on-line permit assistance, and it enables on-line monitoring of permit status by applicants from the beginning to the end of the process. It will provide a simplified application process that is faster and easier to use and should substantially streamline the process for both the agency and regulated public. We believe this system not only meets our needs and those of our customers, but will satisfy the state's directive for a statewide permitting system, and complement future statewide licensing software.

The proposed Complaints Management System replaces an antiquated data base with a complete management system that will provide a high level of interoperability and integration with existing systems. The system will provide us with a comprehensive statewide environmental complaint, inquiry and emergency response tracking system with GIS mapping and data capabilities. As a web-based application, it will allow remote access for field staff to obtain necessary information from other agency data bases to aid in the investigation of potential pollution sources and deal with affected entities.

The DEQ is asking for \$230,000 for the initial e-permitting license and software, \$707,000 for the entire collection of permit modules, and \$150,000 for the complaints management system, for a total request of \$1,087,000. We do not anticipate the need for any additional staff (FTE), salary or other expenditures associated with operations.

### **E-PERMITTING SYSTEM**

License	\$ 80,000
Initial Software	\$ 150,000
Air Quality	\$ 167,000
Water Quality	\$ 181,000
Land Protection	\$ 160,000
Environmental Complaints Local Services	\$ 199,000
<b>COMPLAINTS MANAGEMENT SYSTEM</b>	\$ 150,000
TOTAL	\$1,087,000

## **II. FEDERAL MANDATES**

### **AIR QUALITY DIVISION**

Several developments at the federal level will directly impact the Air Quality Division and the sources it regulates. Principal among these are the revisions to the National Ambient Air Quality Standards (NAAQS) for ozone, nitrogen dioxide and sulfur dioxide. There are two proposed rules regarding climate change that may have an impact as well.

#### **Ozone NAAQS**

Oklahoma will be in compliance with the current ozone standard of 0.075 ppm at the end of 2009. However, EPA has given notice that it plans to reconsider the current standard. That may result in a standard somewhere in 0.060-0.070 ppm range, as originally recommended by EPA's science advisory panel. If the standard is lowered, the Oklahoma City and Tulsa metropolitan areas and most of the rest of the state will be at risk of violating the standard. Actual implementation of any change will not take place in the coming year, but DEQ will be working with EPA, potentially impacted areas of the state and the regulated community to evaluate recommendations to minimize adverse impacts on Oklahoma citizens.

## **Nitrogen Dioxide NAAQS**

As a result of court orders, EPA has proposed changes to the nitrogen dioxide standard that may involve adding a 1-hour standard reflecting near-roadway exposure, or in the alternative a community-wide standard. If EPA were to select a near-roadway exposure standard, this would require monitoring along a major roadway in both Tulsa and Oklahoma City. Because mobile sources are a large part of the nitrogen dioxide inventory and because the monitors would be in close proximity to the sources, monitoring results are likely to indicate NO<sub>2</sub> at levels of concern.

## **Sulfur Dioxide NAAQS**

As a result of litigation, EPA has proposed revisions to the sulfur dioxide standard which may include the establishment of a 1-hour daily maximum value in the 50-75 ppb range. DEQ has monitored values in the Tulsa and Muskogee area that would be problematic if a 1-hour standard were established anywhere in that range. The proposed rule is scheduled to be issued in November of 2009 with the final rule in 2010.

## **Climate Change**

As was the case last year, Congress is considering legislation that would regulate greenhouse gas (GHG) emissions. EPA has two pending rules that also relate to regulation of greenhouse gases. The first is a mandatory reporting rule which becomes effective in January of 2010. While this program is not delegable to the states, we anticipate that EPA will ask the states to have some involvement in the verification of the reported GHG emissions. The second rule is the proposed Prevention of Significant Deterioration/Title V Greenhouse Gas Tailoring Rule. This rule would move forward in the event Congress fails to enact climate change legislation. The rule would generally require the permitting of sources emitting 25,000 tons/year or more of GHG. It could also trigger the collection of Title V emissions fees associated with these emissions.

## **Other**

EPA is actively engaged in responding to numerous court-ordered requirements. The above summaries reflect some but not all of the major air-related changes anticipated in the coming year. Other possibilities include the Clean Air Interstate Rule, a Utility Maximum Achievable Control Technology (MACT) requirement, revisions to the Lead and Particulate Matter NAAQS, and additional area source MACT requirements.

## **CUSTOMER SERVICES DIVISION**

### **Analysis of Drinking Water Samples**

On August 3, 2009, the EPA published a Federal Register Notice approving Method 524.3 for use in the analysis of drinking water samples for volatile organic compounds. This updated method adds two emerging contaminants of interest (1,3-butadiene and chlorodifluoromethane) and four oxygenates that are reformulated gasoline additives (DIPE, TAEE, TAME, and TBA) to the list of analytes. In addition to expanding the analyte list, this method offers much more flexibility in setting analytical parameters and changes the chemical used for sample acidification so the potential hazards involved in shipping hydrochloric acid to the field are avoided.

EPA's Office of Ground Water and Drinking Water technical support group has formally disallowed industry-recommended performance-enhancing method modifications to the current method, 524.2, stating instead that laboratories wishing to modify certain specific method parameters must adopt Method 524.3 in its entirety. DEQ's State Environmental Laboratory processes approximately 3,500 to 4,000 samples a year for public water supply systems in Oklahoma. Implementation of Method 524.3 will require modifications to four DEQ autosamplers at a total cost of approximately \$25,000.

## **LAND PROTECTION DIVISION**

### **Coal Combustion Waste**

EPA is considering classifying Coal Combustion Waste (CCW), such as fly ash and bottom ash, as a hazardous waste; more stringently regulating it as a solid waste; or adopting some hybrid approach between solid waste and hazardous waste regulation. This heightened focus by EPA appears to have been triggered by the failure of a CCW slurry impoundment in Tennessee.

*continued on next page...*

States are almost unanimously opposed to regulating CCW as hazardous waste, as that may impede beneficial uses for the material in construction and because most States have CCW controls already in place under solid waste rules or other state rules. EPA has not explained how a transition to regulation of CCW as a hazardous waste would be handled if EPA does choose to move forward with that approach.

## **WATER QUALITY DIVISION**

### **Stormwater Discharges**

Unless a pending extension request is granted, in December of 2009 EPA is scheduled to issue a new rule denominated the Effluent Limitations Guidelines and Standards for the Construction and Development Point Source Category Rule. The rule establishes new Effluent Limit Guidelines for stormwater discharges from construction sites. The intent of the rule is to significantly reduce the amount of sediment and other pollutants discharged from construction sites by establishing technology-based effluent limits and new source performance standards for construction and development point sources.

Under the new rule DEQ will be required to modify our general construction stormwater permits to include monitoring, treatment, and reporting requirements for construction sites of 10 acres or more. This new requirement will increase the DEQ workload for providing technical assistance, inspections, monitoring, compliance tracking and enforcement. While there is no way to accurately predict resource requirements until the final rule is published, currently we estimate that an additional one to three FTEs may be required to fully implement the program.

## **III. LEGISLATIVE RECOMMENDATIONS**

The following are the DEQ's proposals, subject to concurrence by the Environmental Quality Board, for "request" bills for the 2010 Oklahoma regular legislative session.

### **ON-SITE WASTEWATER SYSTEM INFORMATION**

Current law does not require certification of vital information concerning new construction necessary for on-site wastewater system installers to adequately size a system. In some cases systems are undersized and in others the lot size is inadequate to accommodate an on-site system. As a result, new home buyers and owners of newly constructed commercial properties receive inadequate systems. The information needed for residential construction is the number of bedrooms and for commercial construction it is the intended use of the building.

The DEQ is proposing legislation that would require those contracting with the installer to certify in writing the information necessary to adequately size the system. This legislative change would allow the agency to determine responsibility for an undersized or inadequate system.

### **MAINTENANCE OF SHARED WASTEWATER TREATMENT SYSTEMS**

Often, shared wastewater systems constructed as a part of new housing developments are left with no viable entity responsible for necessary ongoing operation or maintenance of the system. The most common scenario is when a developer conveys the system to a homeowners association, which is unable or unwilling to take responsibility for the system. As a result, these systems are prone to fall into disrepair, causing raw sewage either to surface from a subsurface system, or discharge from a lagoon and/or collection system.

DEQ is proposing legislation that would require a shared wastewater system, prior to construction, either to become part of an existing rural water/sewer district or to become a rural sewer district. Existing districts would be given the right of first refusal for the system.

The system would then be operated by a public entity, eligible for public low-interest funding and for assistance from the Oklahoma Rural Water Association, which offers technical assistance to rural water and sewer systems.

### STATE ENVIRONMENTAL LABORATORY AS ACCREDITING BODY

DEQ's Customer Services Division, which includes the State Environmental Laboratory, is in the process of preparing an application for Accrediting Body recognition by The NELAC Institute (TNI). TNI is a national non-profit organization whose mission is to foster the generation of environmental data of known and documented quality. Achieving Accrediting Body recognition will place DEQ among the states qualified for implementation of consensus standards for environmental laboratory accreditation. The Environmental Quality Code may require minor modification to clarify that DEQ has statutory authority to incorporate all of the TNI standards into DEQ's rules.

## Criminal Enforcement Statistics

### CRIMINAL ENFORCEMENT STATISTICS\*

Preliminary investigations conducted	15
New cases opened	6
Continuing cases from previous years	6
Felony charges filed	1
Misdemeanor charges filed	1
Persons convicted of misdemeanors	2
Persons convicted of felonies	3
Months of jail time imposed	12
Months of probation imposed	120
Criminal fines imposed	\$5,100.00
Restitution imposed	\$578.21

• July 1, 2009 to June 30, 2010

## Administrative Hearings FY 2010

Facility or Individual	Nature of Hearing	Outcome
Henderson Plating 08-288	Hazardous Waste	Final order, Fine and clean -up
Midwest C&D landfill 07-384	Solid Waste permit violations	ACO
Windmill Run Marina 08-216	Discharge w/o permit, construction violations, operational and/or maintenance violations	Final Order supporting CO and Emergency Order.
Non-Destructive and Visual Inspection, LLC (NVI) 08-352	Radiation Exposure	District Court

# Solid Waste Fees Budgeted & Expended - FY 2010

FISCAL YEAR 2010				\$5,089,671
FY2010 Income (through 6/30/2010)				
	Budgeted Solid Waste Program	Budgeted OCCHD/ TCCHD	Total FY 2010 Budget	FY 2010 Expenditures/ Encumbrances 07/06/10
<b>Personnel</b>	2,934,308	935,525	3,869,833	3,828,224
(Salaries, Insurance, FICA, Retirement, Workers Compensation)				
<b>Equipment</b>	5,400	0	5,400	27,787
(Data Processing Equipment & Software, Property, and Furniture)				
<b>Travel</b>	131,492	49,126	180,618	145,360
(In-state and out-of-state Mileage, Meals, & Incidentals, Lodging)				
<b>Miscellaneous Administrative Expenses</b>	32,761	13,150	45,911	63,235
(Freight, Telecommunications, Informational, Exhibitions, Licenses, Membership, Utility, Copy Charges, Copier Lease, Printing)				
<b>Rent Expense</b>	7,018	1,280	8,298	23,477
(Building Space, Telecommunication Equipment)				
<b>Maintenance and Repair</b>	68,925	919	69,844	20,046
(Equipment)				
<b>Specialized Supplies &amp; Materials Expense</b>	0	0	0	0
(Medical, Architectural, and Printing Supplies, Fuels)				
<b>Production &amp; Safety</b>	1,000	0	1,000	551
(Uniforms & Wearing Apparel, Safety Supplies)				
<b>Office and Shop</b>	55,883	0	55,883	74,811
(Office Supplies, Data Processing Supplies, Lab Supplies and Services)				
<b>Resource Materials</b>	300	0	300	171
(Library Resources)				
<b>Lease Purchases</b>	0	0	0	0
(Lease Purchases of Furniture, Equipment, Software, Buildings, and Land)				
<b>Contracts</b>				
SWRINO/Solid Waste Research Institute	110,000	0	110,000	110,000
Association of County Commissioners	45,000	0	45,000	35,000
Keep Oklahoma Beautiful	65,000	0	65,000	0
Wheel Wash	300,000	0	300,000	300,000
Medical Monitoring	4,580	0	4,580	2,205
OSU Cooperative Extension Service	68,000	0	68,000	0
Legal/Court Reporting Services	8,750	0	8,750	6,854
Community Based Environmental Protection	200,000	0	200,000	0
Recycling Equipment - Local Governments	144,609	0	144,609	1,139
Land Reclamation	39,839	0	39,839	162,141
Projects to Implement County Plans	400,000	0	400,000	397,379
Total Budget for Contracts	1,385,778	0	1,385,778	1,014,718
<b>TOTALS</b>	<b>4,622,865</b>	<b>1,000,000</b>	<b>5,622,865</b>	<b>5,198,378</b>

# Solid Waste Fees Budgeted - FY 2011

FISCAL YEAR 2010			5,328,000
FY2010 Income (through 6/30/2011)			
	Budgeted Solid Waste Program	Budgeted OCCHD/TCCHD	Total FY 2011 Budget
<b>Personnel</b>	2,982,378	890,254	3,872,632
(Salaries, Insurance, FICA, Retirement, Workers Compensation)			
<b>Equipment</b>	13,673		13,673
(Data Processing Equipment & Software, Property, and Furniture)			
<b>Travel</b>	72,369	79,495	175,864
(In-state and out-of-state Mileage, Meals, & Incidentals, Lodging)			
<b>Miscellaneous Administrative Expenses</b>	44,450	8,109	52,559
(Freight, Telecommunications, Informational, Exhibitions, Licenses, Membership, Utility, Copy Charges, Copier Lease)			
<b>Rent Expense</b>	29,806	11,149	16,955
(Building Space, Telecommunication Equipment)			
<b>Maintenance and Repair</b>	34,129	992	35,121
(Equipment)			
<b>Production &amp; Safety</b>	0	0	0
(Uniforms & Wearing Apparel, Safety Supplies)			
<b>Office and Shop</b>	36,974	10,001	46,975
(Office Supplies, Data Processing Supplies, Lab Supplies and Services)			
<b>Resource Materials</b>	0	0	0
(Library Resources)			
<b>Lease Purchases</b>	0	0	0
(Lease Purchases of Furniture, Equipment, Software, Buildings, and Land)			
<b>Contracts</b>			
SWRINO/Solid Waste Research Institute	90,000	0	90,000
Association of County Commissioners	40,000	0	40,000
Keep Oklahoma Beautiful	45,000	0	45,000
Wheel Wash	50,162	0	50,162
Medical Monitoring	2,205	0	2,205
Trash Poster Contest	12,000	0	12,000
Legal/Court Reporting Services	6,854	0	6,854
Community Based Environmental Protection	255,000	0	255,000
Recycling Equipment - Local Governments	2,000	0	2,000
Land Reclamation	200,000	0	200,000
Projects to Implement County Plans	400,000	0	400,000
Lab Hazardous Waste Disposal	11,000	0	11,000
Total Budget for Contracts	1,114,221	0	1,114,221
<b>TOTALS</b>	<b>4,328,000</b>	<b>1,000,000</b>	<b>5,328,000</b>

# Administration and Effectiveness of the Oklahoma Waste Tire Recycling Program for FY 2008, 2009 and 2010 - Executive Summary



**T**his report fulfills 27A O.S. §2-11-401.6(B)(5) which requires the Oklahoma Department of Environmental Quality (DEQ), Waste Tire Recycling Program (Program) to file a report every three years with the Governor and Legislature. This report examines tire recycling fee income, tire collection and processing activities, cleanup of illegal tire dumps, collection activities at community-wide cleanup events, market data for beneficial use of waste tires, and tire dealer inspections. Activities for Fiscal Year (FY) 08 (July 1, 2007 – June 30, 2008), FY 09 (July 1, 2008 – June 30, 2009), and FY 10 (July 1, 2009 – June 30, 2010) demonstrate DEQ continues to benefit Oklahoma by facilitating proper recycling of tires.

Oklahoma's Program is successful in beneficially reusing tires. Waste tire processors were able to process an estimated 9.4 million waste tires over the three-year period covered by this report. The number of tires remediated this three-year period is up from previous years by approximately 1 million tires. Together, Qualified Applicants for Collection and Transportation (QACTs) cleaned up approximately 296,000 waste tires from illegal tire dumps and community-wide collection events. The state continues to make significant progress toward cleaning up tire dumps and deterring illegal dumping by encouraging participation in community wide events. If this trend continues as expected, proper disposal of Oklahoma's tires in the future is assured.

This period, the Program has had successful outcomes as a result of tire dealer inspections. Effective July 1, 2007, DEQ is authorized to conduct tire dealer inspections. The intent of this law is to

provide a mechanism by which Program staff can identify tire dealers and other businesses that sell tires and who are not in compliance with the Act. Since April 2008, staff has conducted 277 inspections with at least one in each county of the state. These inspections have allowed for the recovery of an estimated \$63,000. Program staff provided outreach to many tire dealers who are now in compliance as a result of the inspections.

The Program continues to undergo statutory changes. The newest change allows some agricultural tires in the Program. Effective July 1, 2010, a waste tire fee of \$0.05 per pound of weight with a minimum fee of \$2.50 should be collected for tires used on implements of husbandry and agricultural equipment that are not more than 14 inches wide and 44 inches in diameter.

During this three-year period, DEQ has also provided national leadership on federal issues. On June 4, 2010 the U.S. Environmental Protection Agency (EPA) proposed a new rule in 40 CFR that attempts to clarify whether whole tires are solid waste when used for fuel in cement kilns. The proposed rule will likely affect the ability of Oklahoma cement kilns to economically burn whole tires. The DEQ has made several attempts to express concern on behalf of the State of Oklahoma including submission of comments, conference calls, and meetings with industry. The DEQ has also been instrumental in influencing the Environmental Council of States (ECOS) to pass a resolution that recommends whole tires be excluded from the definition of solid waste at the point of combustion.

# Administration and Effectiveness of the Oklahoma Waste Tire Recycling Program for FY 2008, 2009 and 2010

## Background

The Oklahoma Waste Tire Recycling Act (Act) requires the Department of Environmental Quality (DEQ) to file a report with the Legislature and the Governor detailing the administration of the Act and its effectiveness in implementing the cleanup of existing waste tire dumps and in preventing the development of new dumps. The report is to be filed every three years [27A O.S. §2-11-401.6(B)(5)]. This report fulfills the requirement through examination of tire recycling fee income, waste tire collection and processing activities, cleanup of illegal tire dumps, collection activities at community-wide cleanup events, market data for beneficial reuse of waste tires, and tire dealer inspections. Activities for Fiscal Year (FY) 08 (July 1, 2007 – June 30, 2008), FY 09 (July 1, 2008 – June 30, 2009), and FY 10 (July 1, 2009 – June 30, 2010) demonstrate the Waste Tire Recycling Program (Program) continues to benefit Oklahoma by facilitating proper recycling of tires.

## Waste Tire Fund Revenue

Tire dealers and tag agencies are required to collect waste tire recycling fees on tires sold and for tires associated with newly registered vehicles in the state. Recycling fees are deposited into the Oklahoma Tax Commission (OTC)-administered Waste Tire Recycling Indemnity Fund (Fund) and subsequently used to reimburse permitted facilities

that beneficially reuse waste tires. Currently, the Fund is used to reimburse cement kilns, crumb rubber facilities, facilities that shred tires, and river erosion control contractors. These entities are called Qualified Applicants for Collection and Transportation (QACTs).

In accordance with 27A O.S. §2-11-401.2(A)(1) (a), fees are assessed on any tire sold. Effective July 1, 2007 a new category was added to include a fee of \$2.50 for tires with rim sizes greater than 17 ½ inches and less than 19 ½ inches a rim diameter. A fee of \$1.00 remained in effect for tires sold with a rim diameter of 17 ½ inches or less and tires sold for use on a motorcycle, motor-driven cycle or motorized bicycle. Tires with a rim diameter of greater than 19 ½ inches remained at \$3.50.

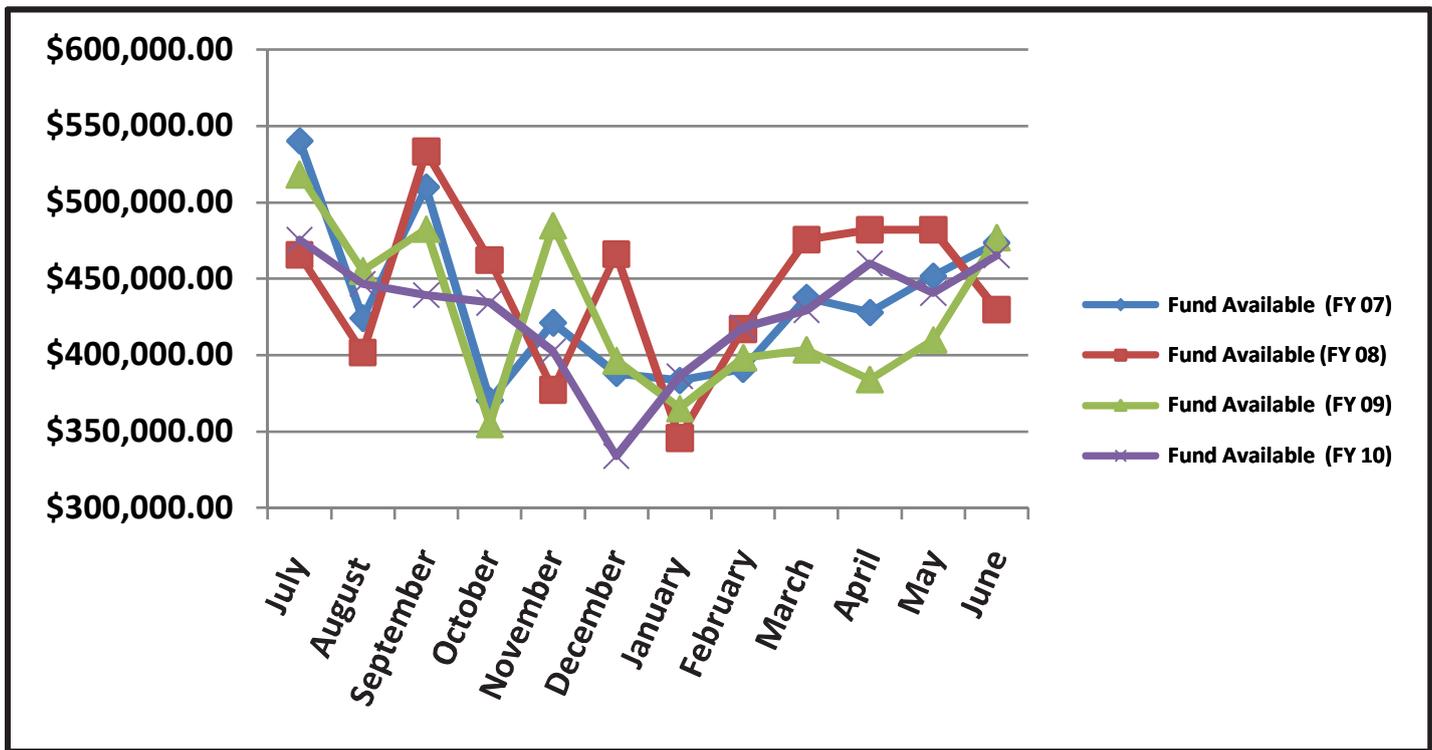
Table 1 shows the fees collected during FY08, FY09 and FY10. There has been a downward trend over the past three years for both Fund revenues and funds available for reimbursement. The intent of the new fee of \$2.50 effective July 1, 2007 was to increase Fund revenues. However, Fund revenues decreased over this period. This could be related to a compromised economy rather than appropriate fees not being collected at the time of sale or registration. While money received into the Fund seems to be greater some months than others, available funding for reimbursement during FY 08 is higher than subsequent years (Figure 1).

**Table 1. Recycling Fee Income for FY 2008, 2009, and 2010.**

	FY 2008	FY 2009	FY 2010
Fund Revenue Source: OTC	\$5,810,343.92	\$5,301,447.60	\$5,582,958.48
Fund Available for Reimbursement Source: DEQ	\$5,338,990.29	\$5,130,542.90	\$5,132,173.62

*continued on next page...*

**Figure 1. Monthly Fund Available for Reimbursement (FY08, FY09, and FY10)**



**Sources of Oklahoma Waste Tires**

There are three primary sources of waste tires in Oklahoma. These sources include: 1) tire dealers and licensed automotive dismantlers and parts recyclers; 2) illegal tire dumps; and 3) community wide collection events and landfills. These sources generated an estimated 9.4 million tires over the three year period. Tire dealers and licensed automotive dismantlers and parts recyclers generated an estimated 9.1 million waste tires while illegal dumps, community wide events and landfills generated an estimated 296,000 waste tires. This means that 9.4 million tires have been removed from the waste stream.

**Illegal Tire Dumps**

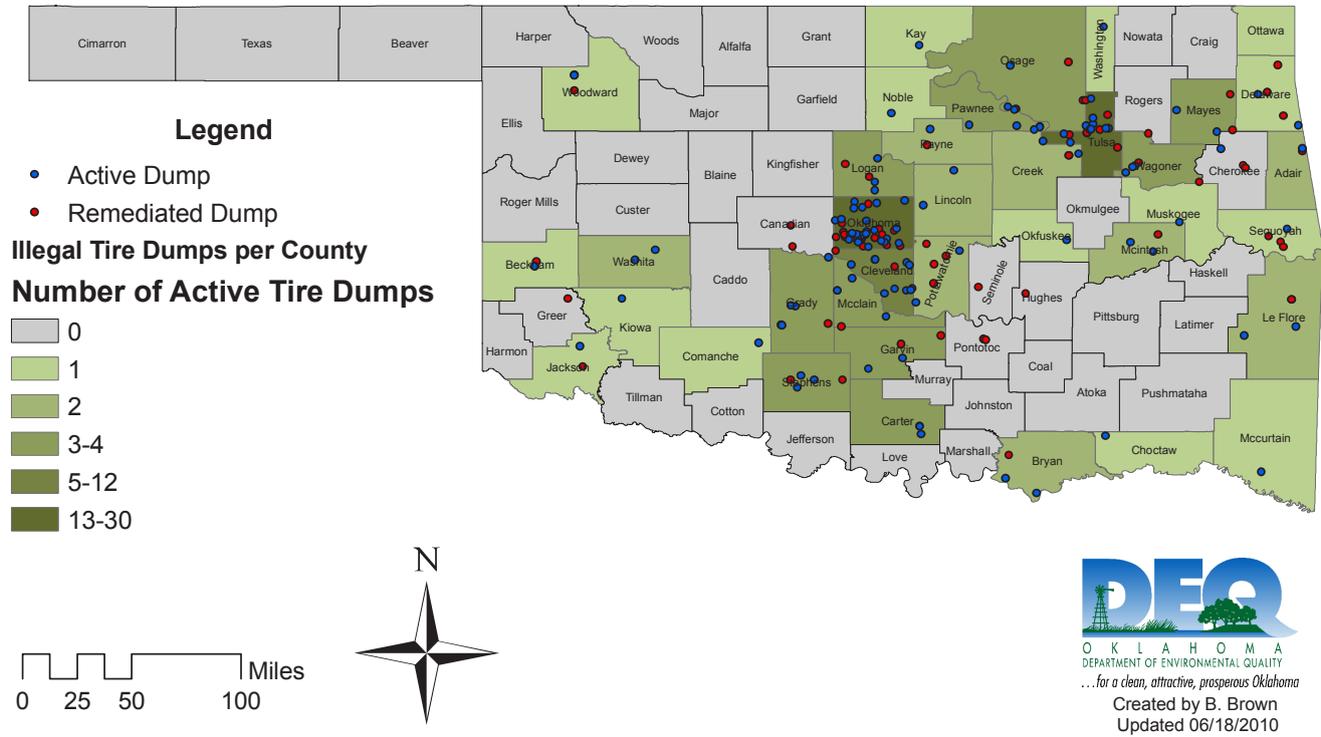
In accordance with the Act, the Department is authorized to develop a Priority Cleanup List (PCL) and prioritize those dumps where the landowner was a victim of illegal dumping. Any other tire dump may be placed on the PCL when the administrative enforcement process has been exhausted. In such cases, DEQ may provide for the cleanup of the dump pursuant to 27A O.S. § 2-11-401.7. Figure 2 shows the number per county of tire dumps that are active and have been remediated during FY08, FY09, and FY10.

The bulk of the tire dumps are located in the central portion of the state and in areas that are more heavily populated.

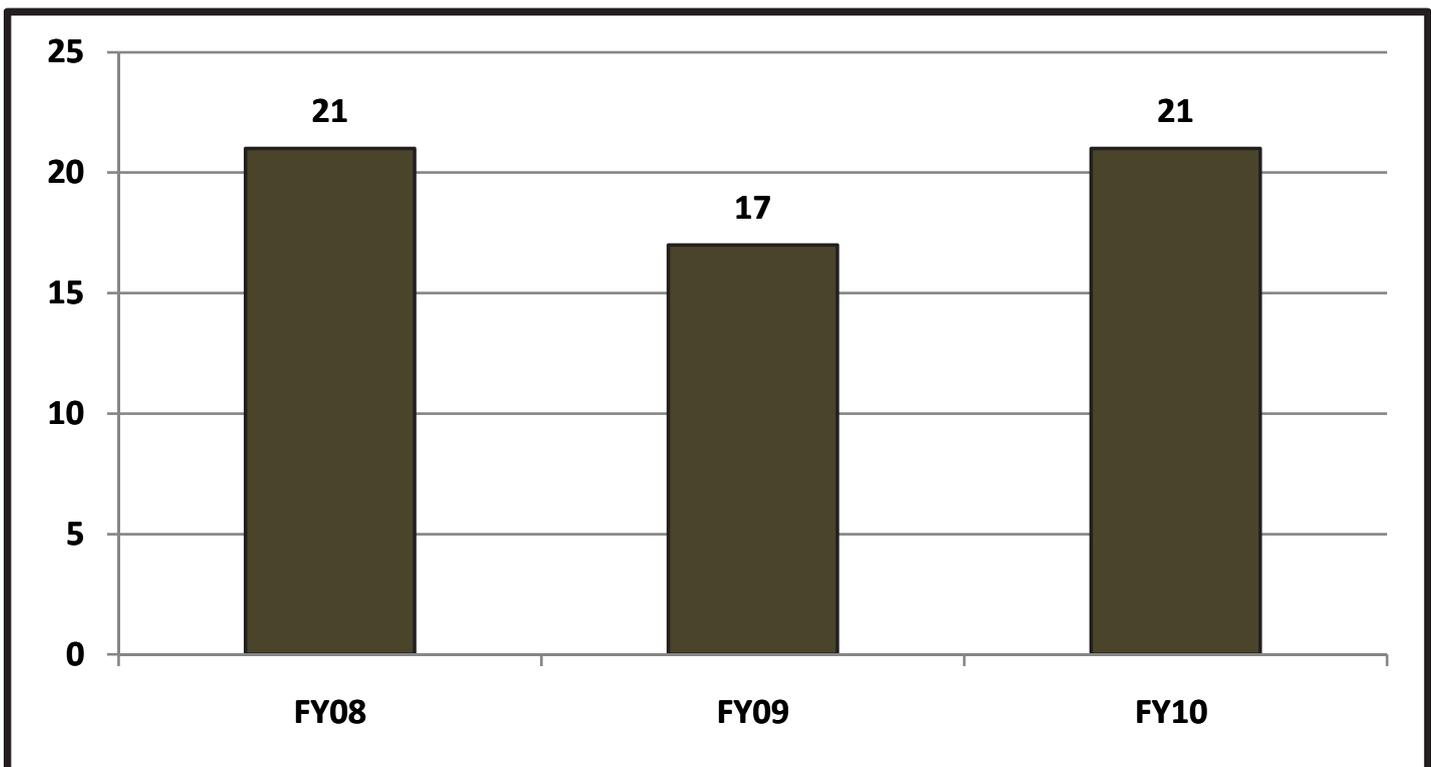
An estimated 111,793 waste tires were collected from illegal tire dumps during FY08-FY10. During this period, 59 tire dumps were authorized and placed on the PCL. Forty-nine tire dumps were successfully cleaned up. Over the three year period, tire dump authorizations remained about the same (Figure 3). New tire dumps were slightly lower in FY09 than in FY08 or FY10. However, number of tire dumps cleaned-up was higher in FY09. While the number of tire dumps cleaned-up was lowest in FY08, number of tires remediated from such dumps was highest in FY08 (Figure 4). In general, number of tires remediated from dumps in FY10 was down. This may be due to a statutory change effective July 1, 2007 which decreased the number of tires required to be picked up from dumps by QACTs. Other possible reasons for a decrease in the number of tires collected during FY10 include a global economic downturn which may have hindered QACT efforts and fewer tires in dumps. Another viable explanation is that the magnitude of tire dumps has decreased since the inception of the program.

**Figure 2. Map of active and remediated tire dumps for FY08, FY09, and FY10**

## Active and Remediated Tire Dumps FY2008- FY2010

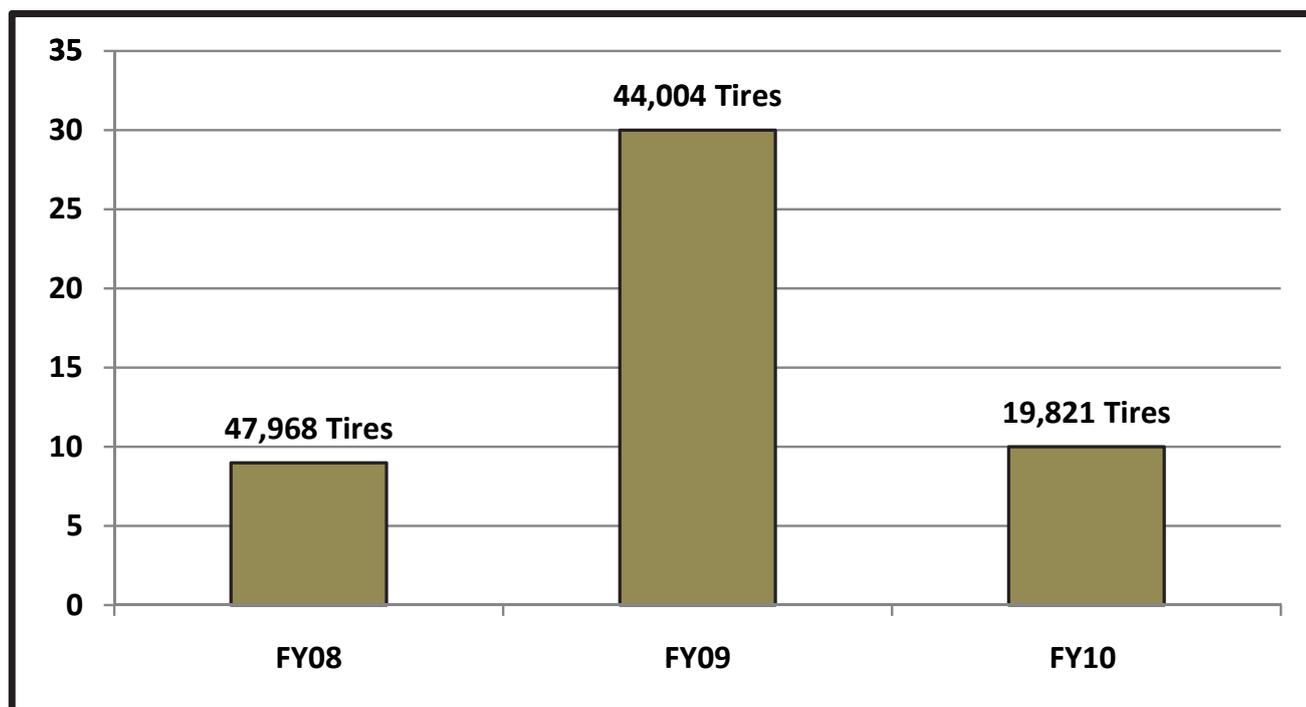


**Figure 3. Illegal tire dumps authorized and placed on the PCL during FY08-FY10**



*continued on next page...*

**Figure 4. Illegal tire dumps cleaned up during FY08, FY09, and FY10**



### Community Wide Events

In addition to illegal tire dumps, the Act provides for the collection of tires from community-wide collection events approved by DEQ and landfills. Figure 5 shows community wide events held across the state during FY08, FY09 and FY10. An estimated 193,447 waste tires were collected from community wide events and landfills. The number of tires remediated from these events and number of events was highest in FY09 and FY10 reflecting an upward trend over a three-year period (Figure 6). This trend indicates more communities are taking advantage of community wide events and fewer tires are being illegally dumped as reflected in the number of new dumps reported in FY10. These results are consistent with the goals of the Act and more specifically with DEQ objectives for this period. These objectives were to increase the number of community wide events and decrease the number and/or magnitude of illegal dumps.

### Tire Dealers and Automotive Dismantlers and Parts Recyclers

Facilities that accept waste tires are required to collect or attempt collection of tires from dealers and other businesses that sell tires in all 77 counties. These businesses may include tire dealerships, auto dealers, and automotive dismantlers and parts

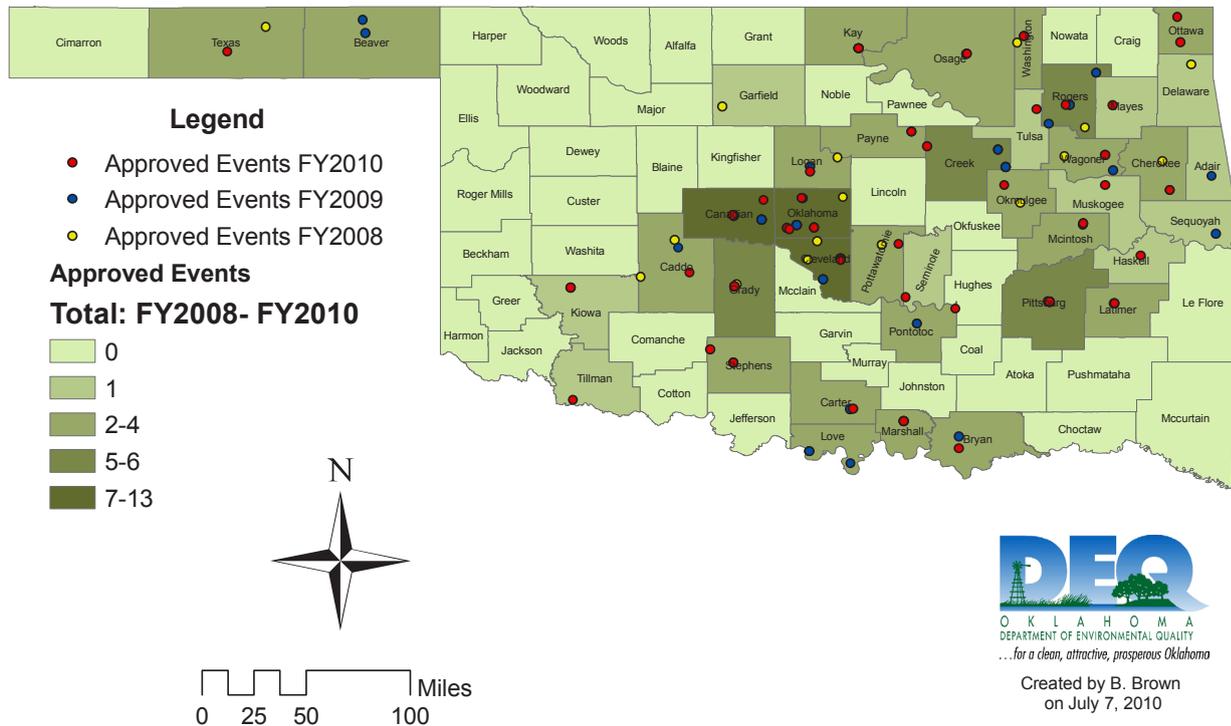
recyclers. Most of the waste tires in Oklahoma are generated by tire dealers. Tire dealers are required to submit fees to OTC for tires sold. The dealer keeps the waste tires which are picked up by QACTs. The program has been successful in minimizing the opportunity for illegal disposal and reducing the number of tire dumps across the state. In lieu of remitting tire recycling fees, proof of purchase of a salvage vehicle registered in Oklahoma by an automotive dismantler and parts recycler, licensed pursuant to the Automotive Dismantlers and Parts Recycler Act, may be presented for the collection and transportation of up to five waste tires per salvage vehicle purchased on or after January 1, 1996.

### Tire Dealer Inspections

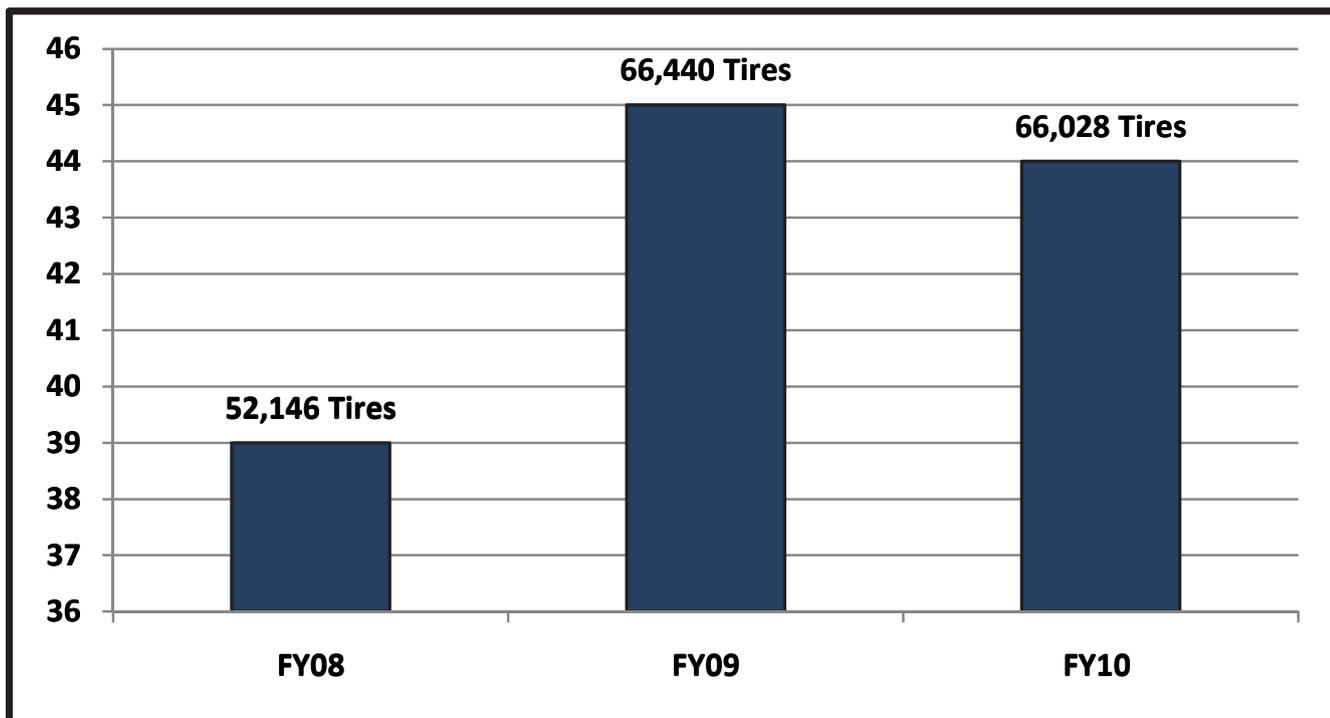
Effective July 1, 2007, DEQ was authorized to conduct tire dealer inspections. The intent of this law is to provide a mechanism by which Program staff can identify tire dealers and other businesses that sell tires and who are not in compliance with the Act. Since April 2008, staff has conducted 277 inspections with at least one in each county of the state (Figure 7). These inspections have facilitated the recovery of an estimated \$63,000.

**Figure 5. Community wide events held in FY08, FY09, and FY10**

## Community Wide Events FY 2008- FY 2010



**Figure 6. Number of community wide events authorized in FY08-FY10 and corresponding number of tires picked up from these events**



*continued on next page...*

**Figure 7. Map showing tire dealer inspections during FY08, FY09, and FY10**

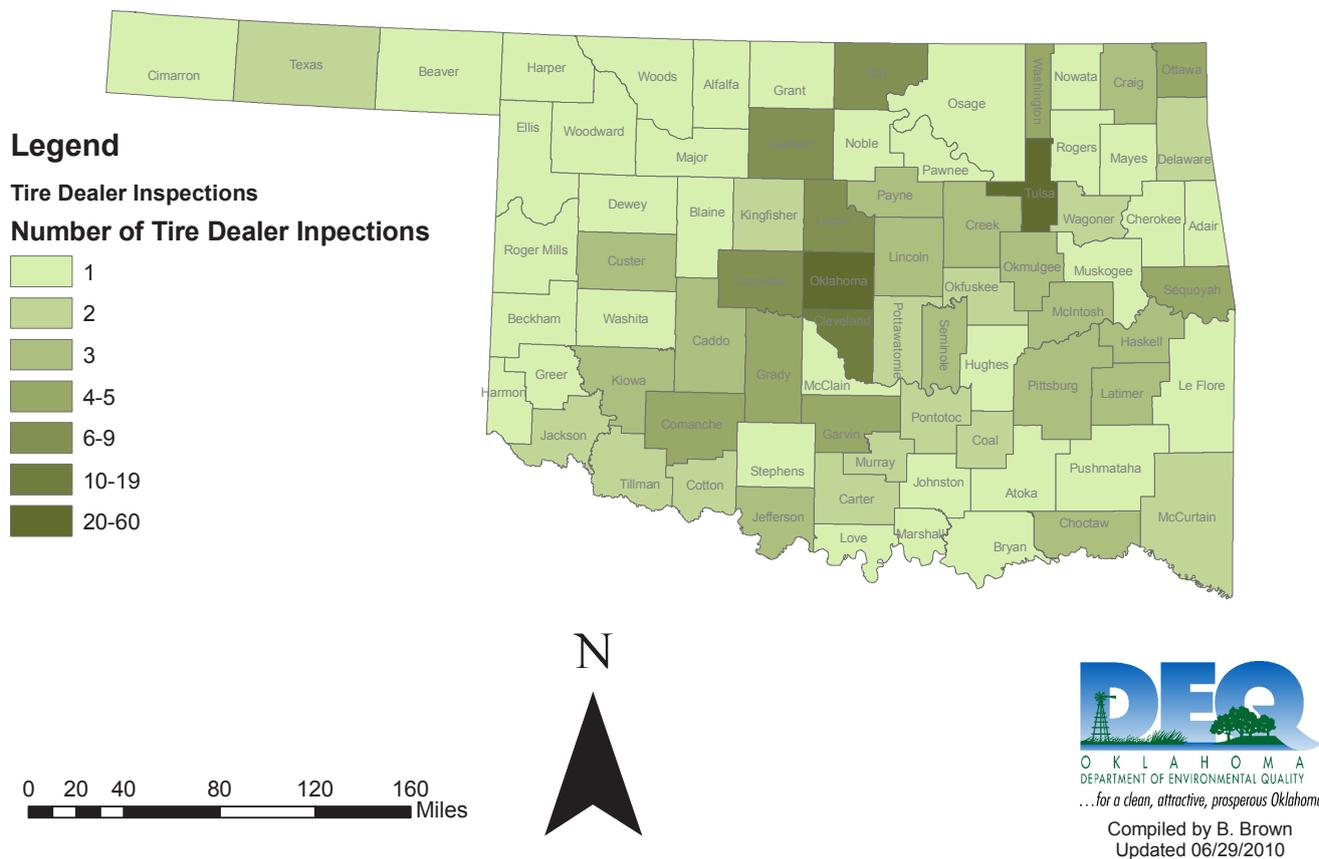


Figure 8 reflects the level of compliance resulting from inspections of tire dealers and other establishments that sell tires. Of these businesses, 58% were in compliance and 42% were out of compliance. Of the 42% that were out of compliance, 17% obtained compliance as a result of the inspection, 22% are under enforcement action or waiting for re-inspection. Another 3% stopped selling tires or are no longer in business.

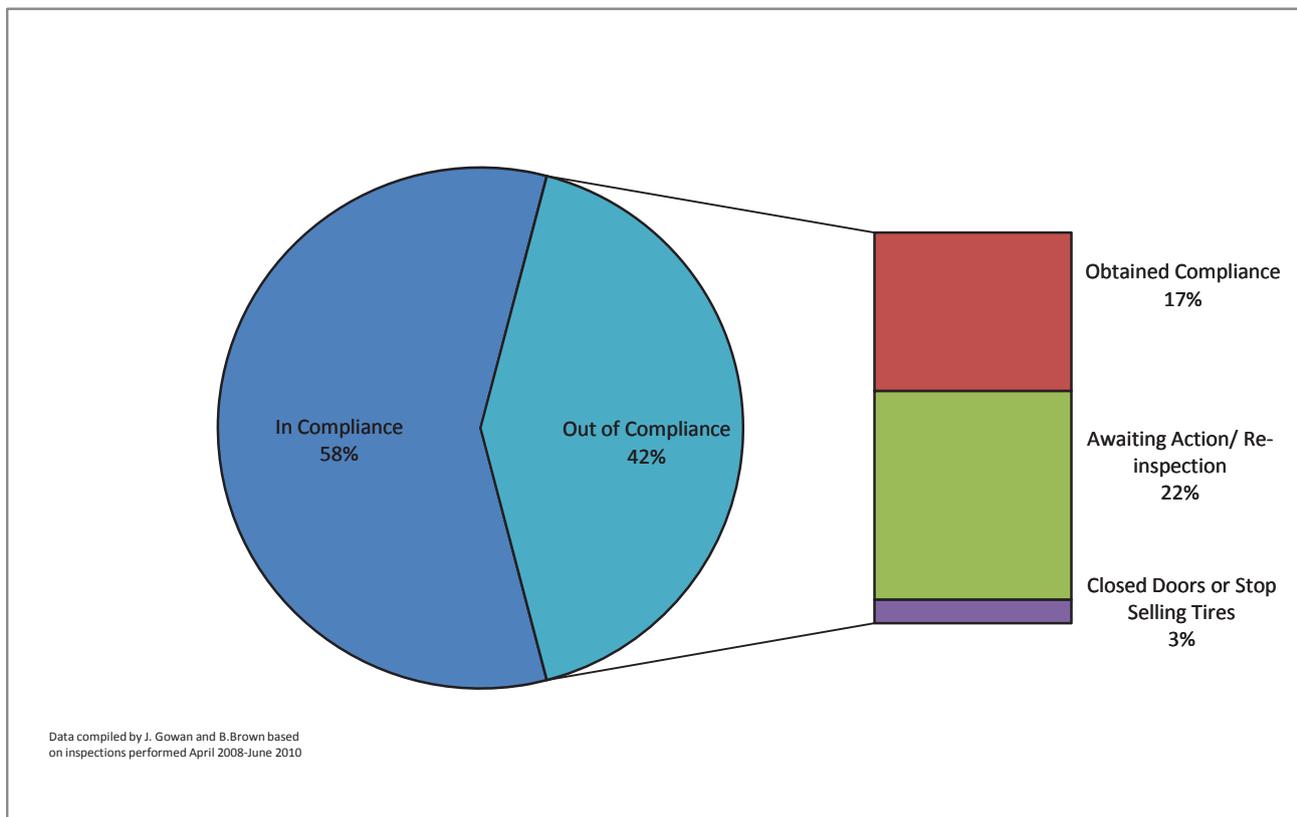
The Motor Vehicle Division of OTC conducts basic and/or complete audits on all motor license Agents (MLAs) in the State. In basic and complete audits, OTC checks to ensure that the MLAs are collecting and generating the proper waste tire fee receipt. If collected improperly, a ledger adjustment is processed and fees are transferred to the appropriate account. In October of 2009, MLAs were advised that the Application for Oklahoma Title has a space to record tire rim size information. Based on the annual audit report from OTC Motor Vehicle Division to DEQ for FY09, all 309 MLAs collected waste tire fees of

which only 15 collected fees improperly. In FY10, all 304 MLAs collected waste tire fees of which 25 collected fees improperly. For both years, improper collection of fees was not a consistent pattern and all funds were transferred appropriately.

**Recycling of Oklahoma’s Waste Tires**

An estimated 3.1 million waste tires are collected by QACTs on an annual basis. During FY08, FY09, and FY10, QACTs were reimbursed over 5 million dollars annually from the Fund for managing Oklahoma’s waste tire stream. The program allows for beneficial reuse of tires so that illegal dumps and stockpiles do not create human health hazards and harm to the environment. Oklahoma supports four (4) management strategies to control the waste tire stream including: 1) burning whole tires for fuel in cement kilns; 2) shredding waste tires for use in cement kilns and civil engineering projects, 3) processing waste tires into crumb rubber; and 4) stream bank erosion control projects.

**Figure 8. Compliance distribution for tire dealers inspected since April 2008**



**Qualified Applicants for Collections and Transportation**

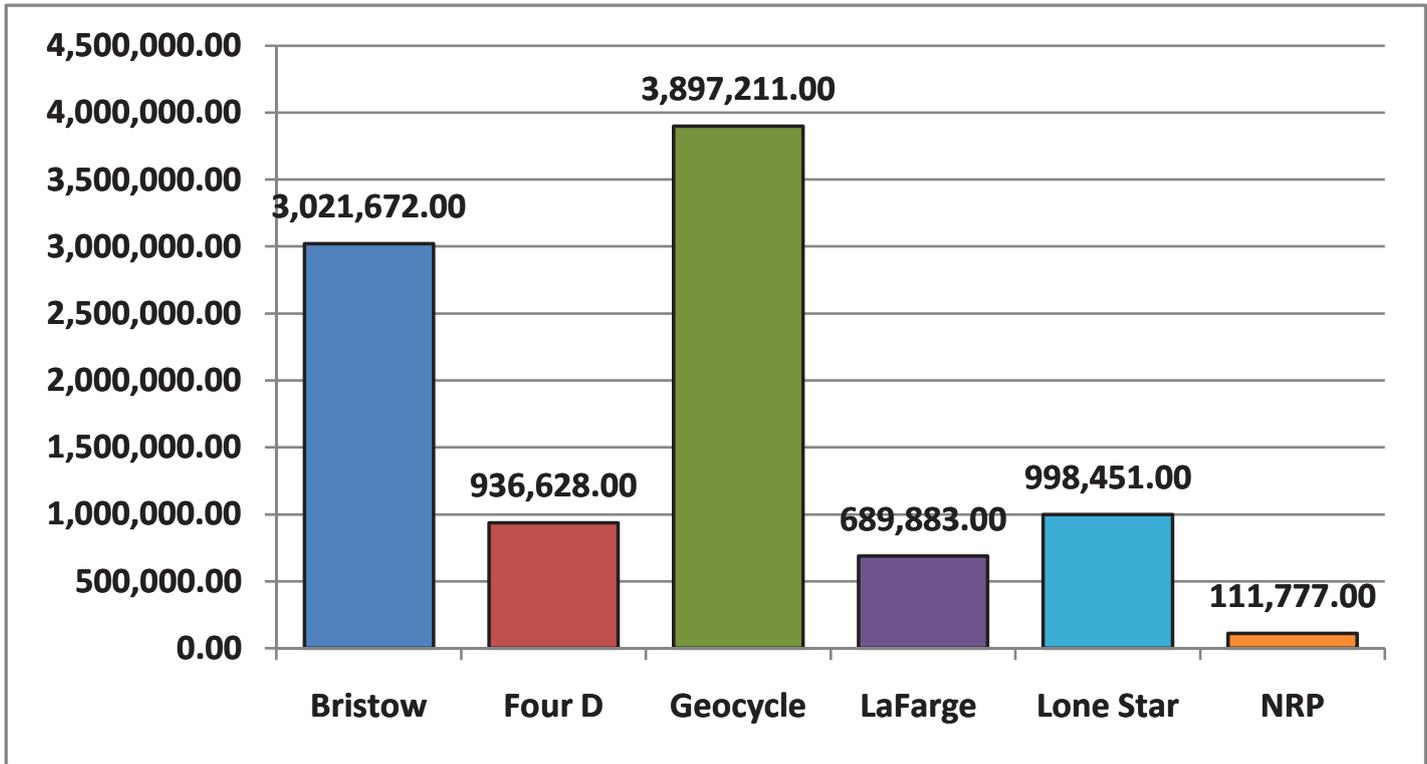
During FY08, FY09, and FY10, the state reimbursed six (6) permitted QACTs for collecting, transporting, and processing tires from dealers, salvage yards, illegal tire dumps, and community-wide collection events and landfills across Oklahoma. Waste tire processing activities include burning whole tires in cement kilns for fuel, shredding whole tires, and the production of crumb rubber. One QACT uses tires for stream bank erosion projects. Crumb rubber facilities include Bristow Rubber Recycling (Bristow) and Four-D Corporation (Four-D). Cement kilns that use whole tires for fuel include LaFarge Building Materials (LaFarge), Holcim US, Inc. (Holcim) and Lone Star Industries, Inc. dba Buzzi Unicem USA (Lone Star). Geocycle LLC (Energis) transports whole tires. Some of these tires are used as fuel at Holcim and some are shredded for use in landfills and other cement kilns out of state. Noble Rubber Products (NRP) uses

whole tires for the installation of tire mattresses. Tire mattresses consist of rows of whole tires secured with cable and anchored into the ground to prevent erosion along degrading stream banks.

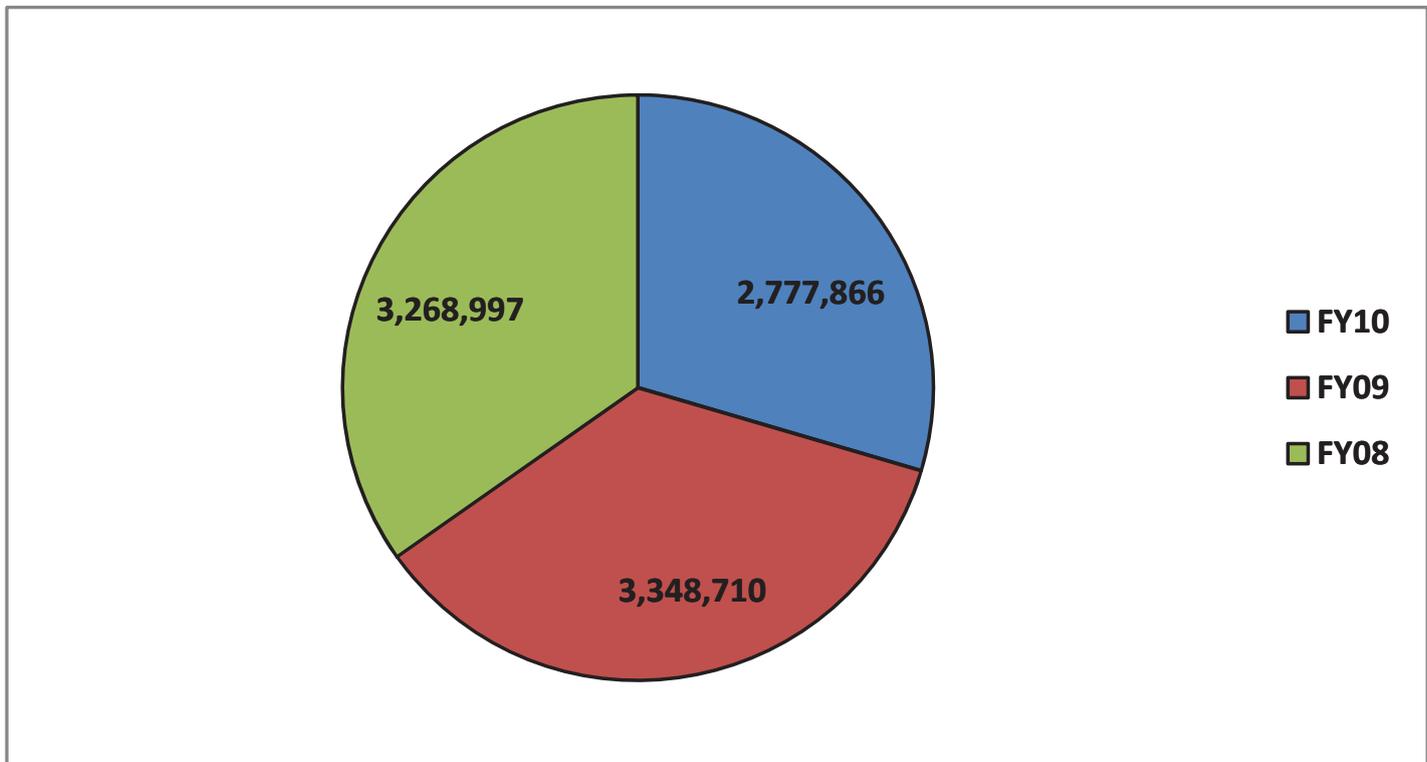
During this reporting period (FY 08-FY 10), an estimated 9.4 million waste tires were collected for processing by the state’s six (6) QACTs (Figure 9). The total includes tires collected from tire dealers, salvage yards, illegal tire dumps, and community-wide collection events. These totals reflect numbers of tires collected, transported and processed through June 2010. In general, the number of waste tires collected, transported and processed by QACTs increased in FY 09 and was lowest in FY10 (Figure 10). The decrease in collections during FY10 was due to reduced productivity for many of the QACTs possibly because the cement kilns were idled by the economic lull.

*continued on next page...*

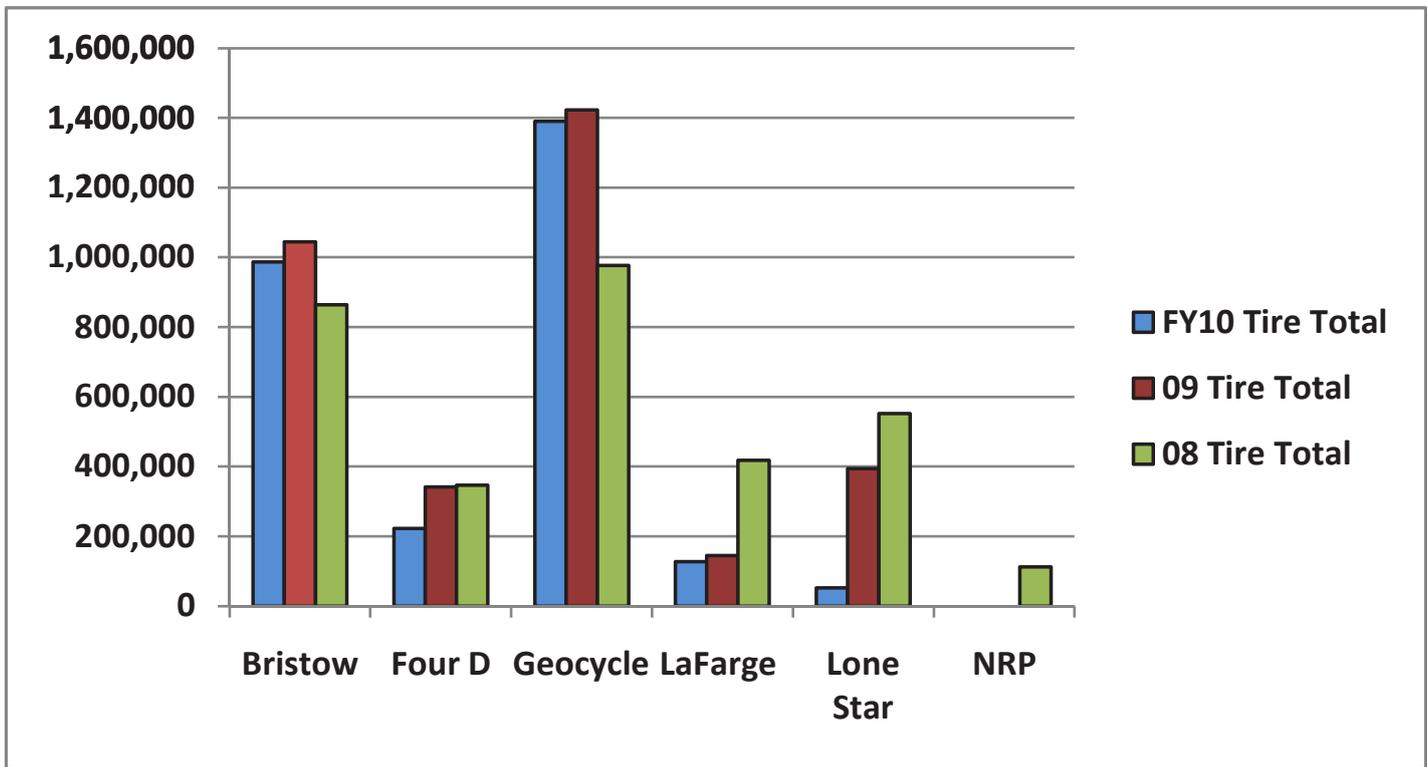
**Figure 9. Total number of tires collected by QACTs from all sources during FY08-FY10**



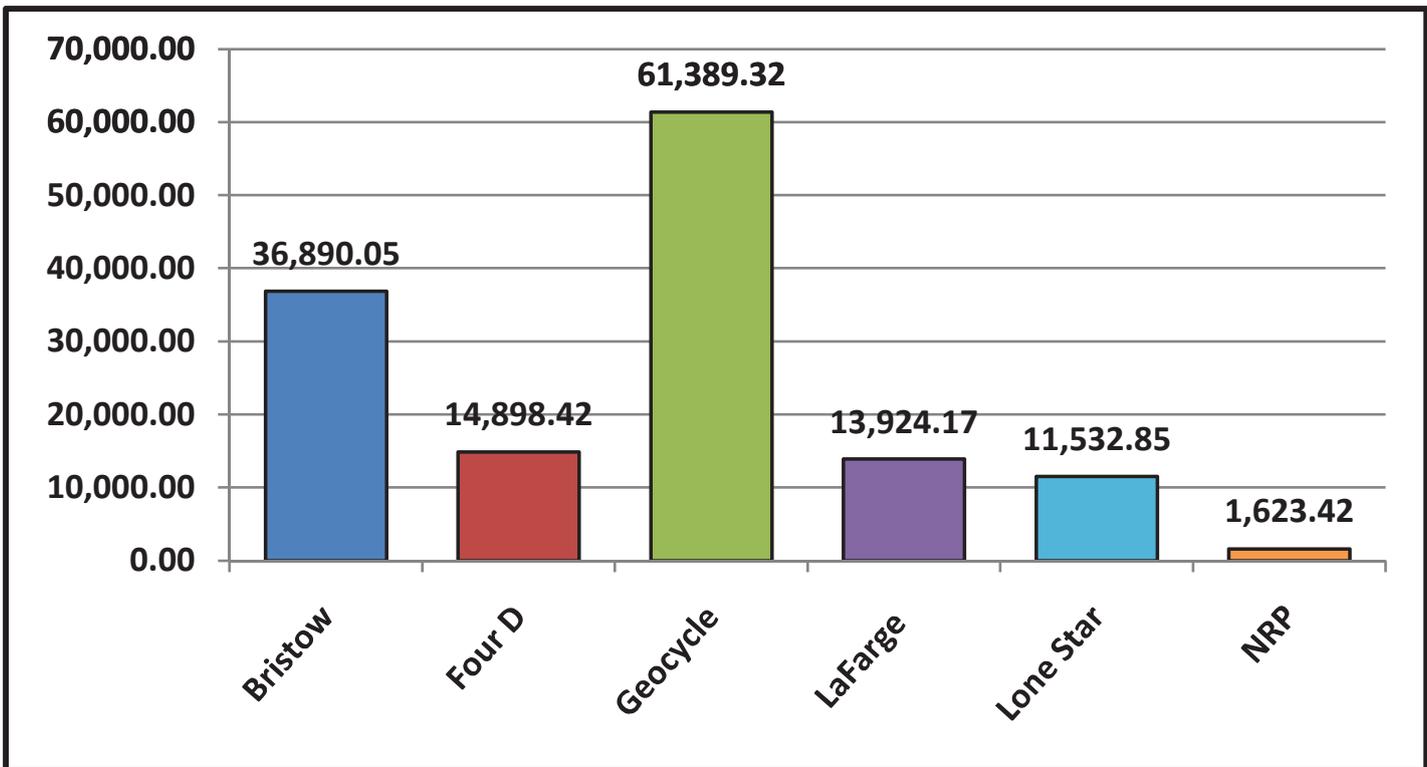
**Figure 10. Pie chart showing annual distribution of tires collected and processed by QACTs for FY08, FY09, and FY10**



**Figure 11. Comparison of total number tires collected by QACTs for FY08-FY10**

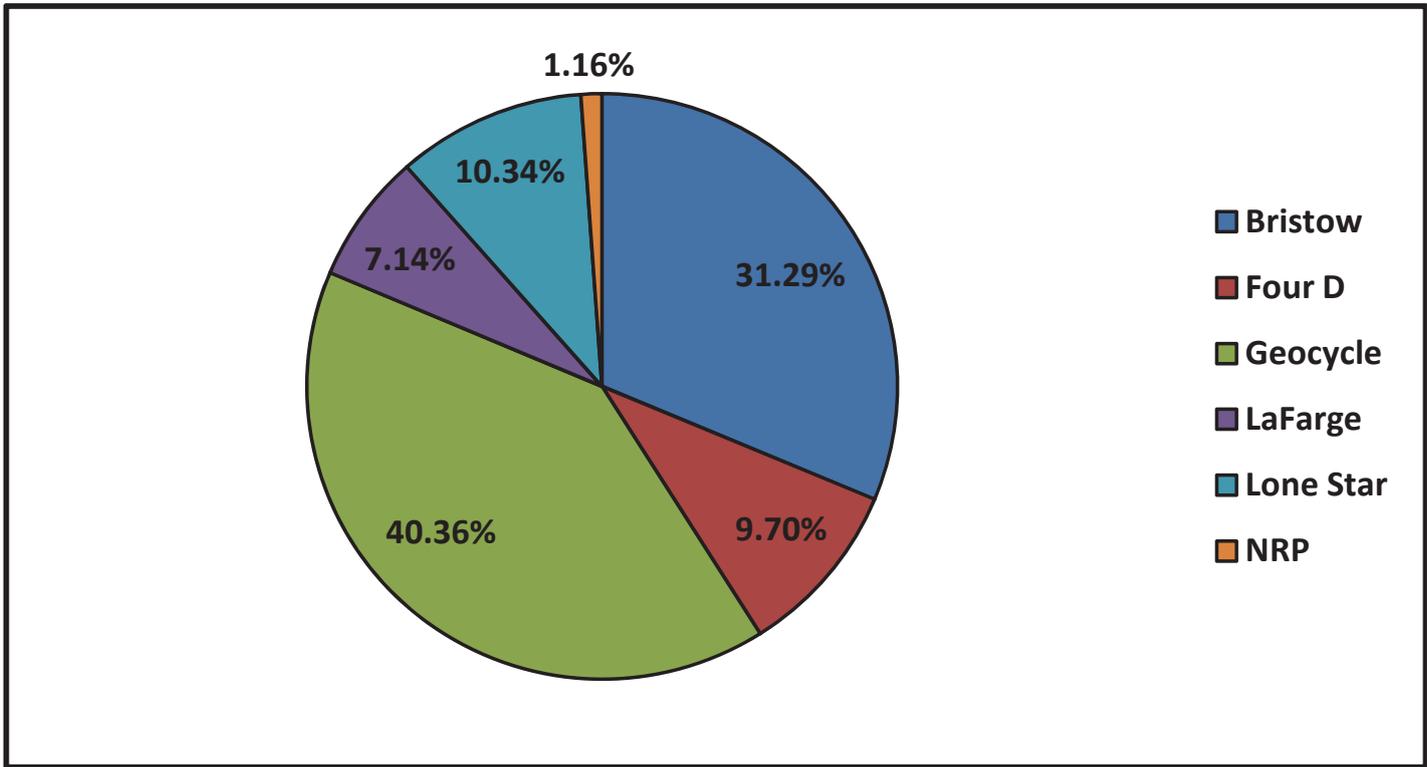


**Figure 12. Total tons of waste tires collected and processed by QACTs during FY08-FY10**



*continued on next page...*

**Figure 13. Percentage of waste tires beneficially reused by QACTs for FY08-FY10**



### Products

The bulk of waste tires in Oklahoma are used for two primary purposes which include burning whole tires for fuel at cement kilns and in the production of crumb rubber. A third use of waste tires involves placing the tires on a stream bank for erosion control. In FY10, DEQ approved the use of tire shreds in landfills as protective covering and in leachate collection systems. Tire shreds continue to be used in civil engineering projects and transported out of state to other cement kilns. During FY08, FY09, and FY10, Bristow used 30.82% of the tires in the crumb rubber process. Four D used 9.70% of the tires in the crumb rubber process. Geocycle collected and transported 40.32% of the tires to Holcim Cement Kiln and either burned the tires as fuel or processed the tires into shreds and used in other markets. LaFarge and Lone Star used 7.34% and 10.63%, respectively, as fuel in cement kilns.

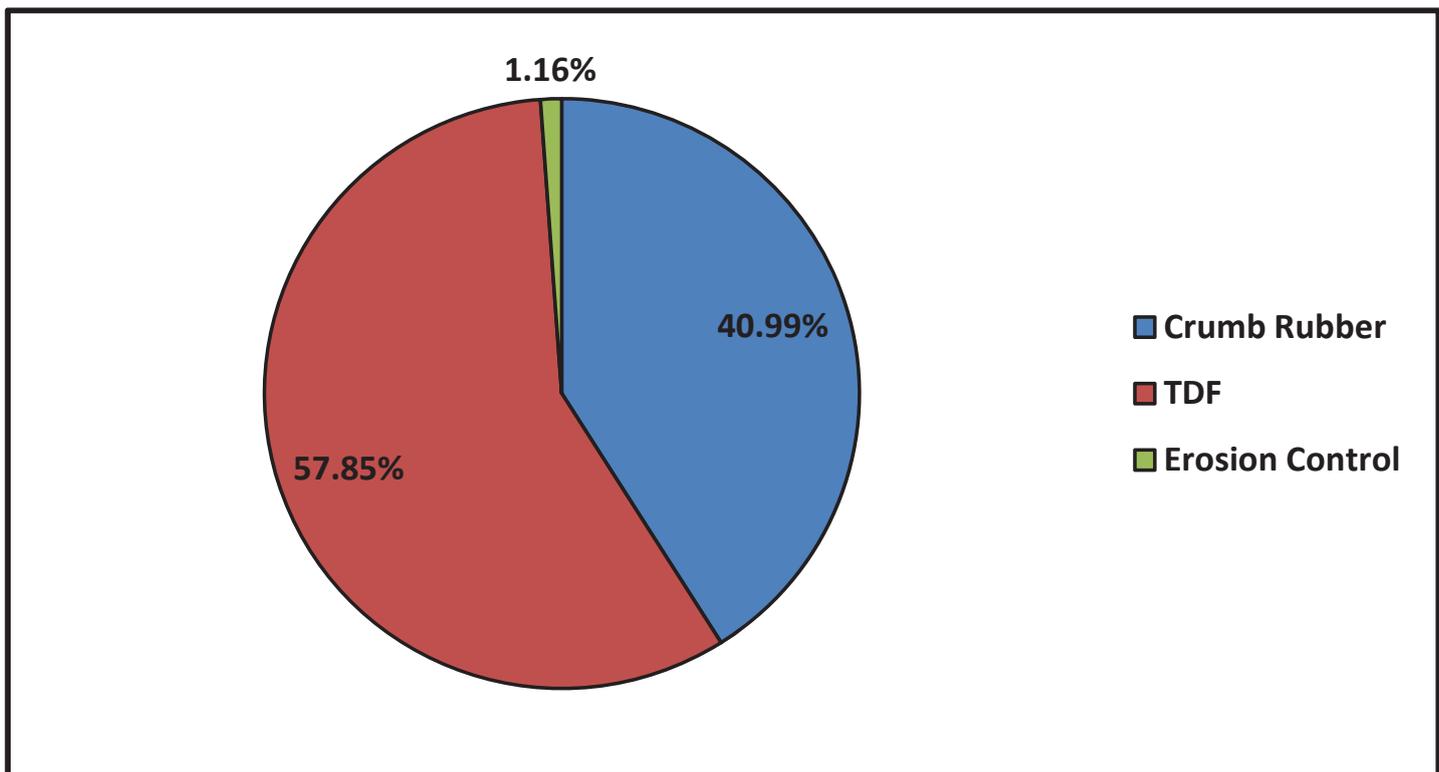
Crumb rubber and tire derived fuel constitute the largest percent of product use (Figure 14). Although erosion control projects and civil engineering projects constitute a much smaller portion of the overall use of waste tires in Oklahoma, these uses are viable options

for recycling of waste tires. Currently, only Geocycle and Bristow are transporting tire shreds for use at landfills.

### Conclusion

Oklahoma's Program is successful in beneficially reusing tires. Waste tire processors were able to process an estimated 9.4 million waste tires. The number of tires remediated this period is up from FY05-FY07 by approximately 1 million tires. Together, QACTs cleaned up approximately 296,000 waste tires from illegal tire dumps and community-wide collection events. The state continues to make significant progress toward cleaning up tire dumps and deterring illegal dumping by encouraging participation in community wide events. If this trend continues as expected, proper disposal of Oklahoma's waste tires in the future is assured. Finally, the Department will continue inspecting tire dealers and informing them of their responsibilities with respect to the Act. The inspection program has been successful this period recovering close to \$63,000.

**Figure 14. Percentage of tires used for end markets during FY08, FY09, and FY10**



### Emerging Issues

#### Agricultural Tires

During the 2010 legislative session, Senate Bill 441 amended 27A O.S. § 2-11-401 et seq allowing certain agricultural tires in the program. Effective July 1, 2010, a waste tire fee of \$0.05 per pound of weight with a minimum fee of \$2.50 should be collected for tires used on implements of husbandry and agricultural equipment that are not more than 14 inches wide and 44 inches in diameter. Pursuant to these statutory changes, a list of agricultural tire weights for tires that meet the size requirements will be made available to tire dealers. This list is currently posted on the Waste Tire Recycling Program website. In addition, no fees shall be assessed by a tire dealer if the customer retains the used agricultural tire for use on a farm or ranch. A tire dealer may pay the assessed fee for any waste agricultural tire in current inventory and include that tire in the waste tire recycling program. Finally, beginning July 2013, agricultural tires of any size will be included in the program.

#### Fee Increase?

In this three-year period, Fund revenues were not sufficient to pay QACTs every month. In FY08 and FY10 QACTs were not fully paid for collection, transportation and processing two (2) times and three (3) times in FY09. QACTs were only reimbursed a percentage of what they requested for burning tires for fuel and making crumb rubber. This pro-ration occurred seven (7) times in FY08, 12 times in FY09 and nine (9) times in FY10. Fund revenues were sufficient to reimburse QACTs the requested amounts for collection, transportation, processing, crumb rubber, TDF and additional transportation five (5) times in FY08 and one (1) time in FY10. Over this three-year period, costs have increased for QACTs, especially those costs associated with transportation. Additionally, the cost of collecting and processing agricultural tires could drive the overhead costs up even further. In order to attract new markets and to continue providing the same level of service they have in the past, QACTs assert that more money is needed in the Fund.

*continued on next page...*

## **New Markets**

New viable markets have become increasingly important as the State is limited to either burning tires in cement kilns, shredding, or crumb rubber production. Cement kilns burn over 50% of the waste tires in Oklahoma and most of the balance is processed into crumb rubber or shreds used at landfills. In 2010, DEQ approved the use of tire shreds in landfills as daily protective cover and in leachate collection systems. While this is a viable use, it represents a very small percentage of the waste tire market in Oklahoma. More markets are needed in Oklahoma that can effectively remove tires from the waste stream. One such market which has been successful in many states is blending ground rubber to favorably modify the properties of asphalt used in the construction of roads and highways.

## **Proposed Federal Rules**

On June 4, 2010 the U.S. Environmental Protection Agency (EPA) proposed a new rule in 40 CFR that attempts to clarify whether whole tires are solid waste when used for fuel in cement kilns. This rule proposes that whole tires are considered discarded and therefore a solid waste even if the tire is managed under a state beneficial use program

unless the tire has been sufficiently processed by removing the metal from the tire. The forced processing of whole tires only increases energy use and will likely cause cement kilns and other facilities to burn coal instead of tires. There is no benefit to the environment if less efficient fuels are used by facilities. Further, there is no benefit to the environment when additional energy is used in the processing of used tires and the removal of steel belting which is an ingredient in the cement manufacturing process.

The proposed rule will likely affect the ability of Oklahoma cement kilns to economically burn whole tires. Reduction in usage of whole tires by cement kilns in Oklahoma would inevitably result in an increase in stockpiles statewide. It could potentially reverse the progress we have made in cleaning up tire dumps and could encourage illegal dumping. Currently, cement kilns and other processors who use tires are required to clean up the tire dumps specified by the State. It would be extremely detrimental to the Oklahoma Waste Tire Program and to the state of Oklahoma if the cement kilns stopped using tires. The proposed rule would force cement kilns to use coal instead of tires which would be environmentally costly as coal is less efficient to burn than tires.

## **A NEW Decade: A NEW Environment**

*This publication is issued by the Oklahoma Department of Environmental Quality, as authorized by Steven A. Thompson, Executive Director. Eight-hundred copies have been produced at a cost of \$11,490.00. Copies have been deposited with the Publications Clearinghouse of the Oklahoma Department of Libraries. Printed on recycled content paper. September 2010.*

**A NEW Decade:  
A *NEW Environment***

