

US EPA ARCHIVE DOCUMENT

# 2020 RCRA GPRA Corrective Action Work Plan for EPA Region 6

## Regional Strategy to Complete Corrective Action by 2020

**January 30, 2009**

Updated: September 9, 2009; April 6, 2010; November 11, 2010; June 29, 2011; August 24, 2011;  
November 16, 2011 for FY11 End of Year; December 19, 2011; February 1, 2012; March 21, 2012



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**Executive Summary of Regional Strategy to Complete Corrective Action by 2020 from the  
Updated 2020 RCRA GPRA Corrective Action Work Plan - EPA Region 6**

**Goal:** Achieve 2020 GPRA Corrective Action goals by September 30, 2020. It is projected that 95% of sites will attain the Remedy Construction Complete (CA550) milestone.

**Baseline/Background:** 412 total facilities: Goal is 391 facilities with site-wide CA550-Construction Complete documented starting with 127 facilities with construction complete at the beginning of 2009 leaving 264 sites to complete in 12 years or 22 sites per year.

**Strategy:** Region 6 employs a multifaceted approach to address the major challenges of attaining the 2020 goals. The major elements of the strategy have been used successfully since 1999 allowing the Region to always meet or exceed the GPRA yearly Annual Commitment System (ACS) targets and achieve the final 2005 and 2008 national OSW goals. Additions and modifications are made to the strategy as is found convenient or necessary.

**Grant Negotiations for 2020:** First, Region 6 states were asked to provide 2020 corrective action planning information and projections and secondly, they were asked to make key commitments for FY09 that if sustained, would result in achieving the corrective action goals. States responded positively and the initial results indicate that the goals are achievable as long as conditions remain the same. This approach of has been continued in FY10, FY11 and FY12 showing good progress toward the goals.

**Review, Analyze, and Categorize Sites:** All planning information provided by the state and Region was reviewed to determine an individual site's present status and then the 412 total facilities categorized into A, B, and C categories based on technical and resource requirements. 27 A sites and 45 B sites will require the most EPA and state resources to address corrective action. 274 C sites are state lead sites that require mainly EPA oversight. A sub-category of state sites, 35 C-D sites were identified as state lead sites that are having some type of difficulties in the clean-up process. Also, 31 C-E/C-D-E sites were identified as sites that Region 6 has previously spent time, money, or other resources in the corrective action process.

For further planning purposes, 13 sites are identified in orange in the work plan as problematic and not likely to achieve construction complete unless EPA and the states partner to find innovative solutions. These sites are underfunded, bankrupt, or abandoned, as well as large, complex sites that may not achieve the goal. Another 19 facilities are identified in yellow in the work plan as requiring extra attention in that they are presently under an EPA order or EPA is partnering

with the state by providing resources to the state. Many times resources are leveraged and innovative approaches to corrective action are successfully used. Some examples of these case studies are summarized in the work plan.

**Provide Resources to Assist or Partner with States:** In addition to grant funding, the Region assists in numerous ways to move sites toward the construction complete goal.

**EPA Contract Assistance or EPA Technical Assistance:** Help to assess sites with sampling and analysis, perform ground water surveys, review documents, select remedies, perform modeling, *etc.*

**EPA Training:** Numerous trainings have been provided and more are planned to be presented.

**Development and Updating of Corrective Action Strategy (CAS):** Accelerate cleanups and encourage the use of risk-based approaches, flexibility, and performance based remedies.

**Enforcement Resources:** Enforcement staff to perform inspections at some baseline sites and issue new orders as necessary to expedite site assessment and remediation.

**Superfund Resources:** Occasionally used for site assessments and removal actions to assist with underfunded and bankrupt sites.

**Increased Communication:** A team approach is used in order to solve corrective action issues. State managers, coordinators, and site project managers are met with in order to obtain more details regarding the individual facilities in order to develop individual plans for sites where the Region's technical, contractor, or other resources are needed. Adjustments to the information in this 2020 work plan will be made as new information is obtained.

## Updated 2020 RCRA GPRA Work Plan - EPA Region 6 Regional Strategy to Complete Corrective Action by 2020

**Goal:** Achieve 2020 GPRA goals by September 30, 2020. By the end of FY2020, the cleanup of existing contamination at RCRA regulated GPRA facilities will be completed, though some long-term remediation work may be ongoing (e.g. groundwater pump and treat, etc.) The stated goal is that 95% of GPRA baseline sites will attain the Remedy Construction Completed (CA550) milestone for site-wide RCRA corrective action.

**Baseline/Background:** The Region 6 2020 Baseline consists of 412 facilities (258 TX, 64 LA, 36 OK, 31 AR and 23 NM). Of those 412 facilities, Region 6 has direct corrective action lead at 62 sites that are either EPA enforcement lead sites or those facilities where States have requested EPA to take the lead because of staffing or other issues. EPA is or has provided technical assistance to States on approximately 41 additional facilities that are BRAC or where they have been determined to be bankrupt, underfunded or have new ownership with undetermined resources or expertise to complete corrective action obligations or are large mega-sites.

State	Facilities
AR	31
LA	64
NM	23
OK	36
TX	258
<b>Total</b>	<b>412</b>

**Strategy:** Region 6 has developed a multifaceted approach to address major challenges to achieving corrective action goals for the GPRA 2020 baseline facilities. The elements of the strategy have been used successfully since 1999 allowing the Region to always meet or exceed the GPRA yearly and final 2005 and 2008 goals. Additions and modifications are made to the strategy as is found convenient or necessary.

To better track and manage progress at its 2020 baseline facilities the Region has sorted all 412 facilities into three manageable categories (and two subcategories) based on the expected workload requirement for an EPA project manager. The classification of each site and can be changed as conditions change. For example as the work is completed or the milestone is completed by EPA, the category is changed.

- 1) **Category A Sites:** 24 facilities that are: i) 6PD lead sites that were transferred from the Enforcement Division for case closure; ii) bankrupt or underfunded facilities; iii) facilities with questionable technical or financial resources; or iv) EPA lead federal facilities.
- 2) **Category B Sites:** 39 facilities that are: i) State lead sites where the Region is providing the State significant technical assistance and expects to provide future assistance; ii) sites that Texas identified where they had no project manager assigned and were given to EPA as project lead; iii) BRAC sites, iv) some large complex sites.
- 3) **Category C Sites:** 276 facilities that are State lead sites where EPA assistance is expected to be minimal. EPA involvement is expected to be limited to oversight and tracking progress.
- 4) **Category C-D Sites:** 31 facilities that are State lead sites where EPA assistance is expected to be minimal. EPA involvement is expected to be limited to oversight and tracking progress. However, these are sites that are slow moving in the corrective action process or present other difficulties to the state. These are sites identified by states in their individual plans as requiring extra work. These are problematic 'C' Sites that especially need to be monitored for progress.
- 5) **Category C-E Sites (or C-D-E):** 42 facilities that EPA has either: 1) completed the work, *i.e.* achieved the "construction complete" determination or closed the enforcement case, and/or 2) EPA previously contributed significant technical and/or contractor assistance and/or 3) returned the site to State lead sites. In other words, the facilities are no longer requiring EPA significant resources but have in the past.

Of the 412 facilities in Region 6, 127 of these sites have construction complete determinations documented at beginning of FY09. At the end of FY11, 199 had achieved this milestone indicating excellent progress toward the 2020 goal of 95%. This is 72 sites completed in 3 fiscal years or an average of 24 per year which is slightly ahead of the 22 per year projected.

Of the sites listed in Table 3., 13 sites are identified as problematic (in orange) as not likely to achieve construction complete unless EPA and the states partner to find innovative solutions. These sites are underfunded, bankrupt or abandoned as well as large complex sites that may not achieve the goal. Another 19 facilities are identified in yellow in Table 3. of the work plan as requiring extra attention in that they are presently under an EPA order or EPA is partnering with the state by providing resources to the state. Many times resources are leveraged and innovative approaches to

corrective action are successfully used. Some examples of these case studies are summarized in this work plan in Appendixes 1, 2, and 3.

EPA project managers are assigned, as appropriate, to a subset of the 412 facilities for either direct implementation of project management, technical assistance to the state as needed, or state oversight responsibilities depending upon the workload as described in project categories. Project managers will also be responsible for providing and inputting EPA data into the RCRAInfo national database. Table 4. categorizes the more time consuming or difficult sites in a couple of ways to depict future challenges which require resources in another way.

#### **Additional Significant Efforts to Achieve 2020 GPRA Goals Including Providing Resources to Assist or Partner with States:**

All Region 6 States are authorized for RCRA corrective actions and are recognized as critical partners in meeting GPRA goals. The Region is collaborating with States and assisting them in managing many projects. The following is a summary of other additional resources that have been dedicated to achieving the goals as well as specific activities that the Region is undertaking to ensure we meet the 2020 goals.

- Understanding The Universe - Where are the facilities in the corrective action process, and what do they have left to complete? This is very important to further this process. We have done the following in conjunction with our states:
  - All Region 6 States sent letters to each of their facilities requesting information and have received good responses;
  - This information was used to help plan site-specific activities to meet 2020 goals; and
  - EPA staff and contractors have also conducted extensive file reviews at Texas and Louisiana State offices to obtain information to complete CA725/750 forms and CA400/CA550 memorandums where interim remedies could be considered as final actions.
  - As explained below, all five in Region 6 states have submitted plans and projections regarding the 2020 facilities corrective action status.

- Improving Data Quality - to help plan and track 2020 milestones:
  - EPA Region 6 has been working closely with each of its States on RCRAInfo data cleanups over the past several years; and
  - EPA staff and contractor support has been used to conduct file reviews to assist in data cleanup activities on hundreds of facilities to date.
- GPRAs Team Approach To Meeting Corrective Action Goals - EPA staff and government contractors work closely with State project managers to provide technical assistance on difficult sites (i.e., large and complex, underfunded, etc). Assistance is in the form of developing conceptual site models, data gap identification, conducting sampling and analysis, laboratory support, detailed file reviews, Environmental Indicators form completion, and other relevant tasks.
- Grant Restructuring - Region 6 began restructuring performance based grants with each state in 1997 to focus on corrective action final results over the process and in 1999 focused on achieving GPRAs commitments (CA725 and CA750). Beginning with the RCRA grants in 2006, specific language was added to require state commitments to obtain the site-wide remedy selection (CA400) and construction complete (CA550) determinations.
- Grant Requirements for 2020 Projections and Plans - Grants also require the states to develop specific 2020 plans for meeting the 2020 corrective action goals. All five states have provided projections and information regarding specific sites. Region 6 states indicate that they plan to achieve the targets. The ability to successfully meet the plan cannot be as certain if resources available to EPA and the states are significantly less than when the initiative was started. This appears to be the trend in these difficult financial times.
- Grant Negotiations for 2020 - New grant commitment numbers were negotiated for FY09 for each of the corrective action measurements (CA400, CA550, CA725, and CA750). If the states are able to sustain the number of sites committed to in FY09 for future years, then the 2020 goal will be met. The projections and plans submitted for all of the states support this approach. See Chart 1 and Table 1 below. Grant progress is tracked through RCRA info reports as well as monthly calls, mid and end of the year grant reviews.



- Risk-Based Approach - We are promoting streamlined risk-based performance based corrective action approaches (Texas Risk Reduction Program (TRRP), Louisiana Risk Evaluation Corrective Action Program (RECAP), Region 6 Corrective Action Strategy (CAS) and use of innovative investigations and cleanup technologies.
- Performance-Based Remedies - The new edition of Corrective Action Strategy (CAS) emphasizes performance-based remedies using media-specific corrective action objectives to support the performance standards of source removal, treatment or containment, achievement of regulatory cleanup values or risk-based values. The emphasis is on attaining the Corrective Action Objectives (CAOs) – not on choosing a technology. This approach can assist in negotiating remedies at some sites. An example is Altus Air Force Base.
- Flexibility - We are promoting programmatic flexibility through the use of alternative authorities and facility lead agreements to speed up site investigation and cleanups.
- Training - Region 6 conducts training for States and industry on: RCRA fundamentals, completion of Environmental Indicator evaluations, development of conceptual site models, vapor intrusion evaluations, use of innovative technologies for investigation and cleanup, permitting modifications, and moving from interim measures to final corrective actions. The ORCR training “RCRA Corrective Action Training: Getting to YES! Strategies for Meeting the 2020 Vision” was presented in Austin, Texas, in April 2009, and was presented by EPA Region 6 staff in Baton Rouge, Louisiana, in April 2010.
- Superfund - Superfund staff/resources are utilized where focused site assessments and/or removals are needed (bankrupt facilities, under-funded sites, or where our recommendations can help prioritize site clean-ups).
- Enforcement and Permitting Coordination including the National Enforcement Strategy for Corrective Action (NESCA)– In preparation for the 2020 initiative, a 2006 Memorandum of Understanding (MoU) was negotiated between 6PD (permitting) and 6EN (enforcement). It was agreed that permitting project managers would take over the corrective action reviews of baseline sites undergoing the corrective action process due to EPA orders previously issued. This action would in turn free up enforcement staff to perform inspections at baseline sites and

issue new orders as necessary to expedite site assessment and remediation. In 2010, the National Enforcement Strategy for Corrective Action (NESCA) was finalized which encourages similar initiatives as the 2006 Region 6 MoU, such as the need for robust communication with our state counterparts. Some examples of NESCA ideas used by Region 6 include: 1) issuance of RCRA 3007 letters to near bankrupt sites to attain financial status of the corporations (i.e., Benton Creosote) , 2) issuance of 3013 Orders to gather information on closure/NFA status (International Shoe, Motiva), 3) incorporation of "hard schedules" for corrective action milestones ( Formosa Plastics 2011 site-wide 3008(h) AOC), 4) inclusion of a financial assurance review as part of our annual Region 6 oversight review of the corrective action and permitting programs, and 5) prioritizing our oversight reviews of state corrective action and permitting program based on environmental justice ratings used in Region 6.

- Environmental Justice (EJ) - The Region 6 RCRA Program Environmental Justice (EJ) strategy describes the goals and methods for incorporating EJ into the day to day operations of our program. The strategy is found in Appendix 4. This will incorporate EJ into the setting of priorities for oversight reviews of EPA and state lead corrective action activities at facilities. Coordination with each of our states will occur to ensure that appropriate actions are taken for all sites and that disproportionately burdened populations are included to the extent practicable in the decision making process. Staff will be assigned to sites given priority because they are located in areas of concern. Referrals to enforcement or requests for additional support will be prioritized based impact to the areas of concern.
- Increase Communication - In addition to above listed calls and meetings, the Region has increased communication with states and facilities (conference calls, meetings, site visits) to closely track progress, identify potential impediments (technical, financial, regulatory, etc), and identify need for support.
- Continue Planning – As mentioned, close communication with state counterparts is a key factor. A team approach is used in order to solve corrective action issues. State managers, coordinators, and state site project managers are met with or conference calls are held to obtain more details regarding the individual facilities in order to develop individual plans for sites where the Region's technical, contractor, or other resources are needed. Communication, tracking, and oversight are continuing processes. Adjustments to the information in the 2020 work plan are made as new information is obtained.

### **Achievement of the 2020 GPRA Corrective Action Goals**

The Achievement of the 2020 GPRA goals for corrective action is dependent on the availability of sufficient resources to undertake the required tasks. This is true for both the state and EPA regional organizations. At present, state and Federal budgets are being cut meaning that the number of staff working on the investigation and cleanup of RCRA facilities on the GPRA baseline are significantly reduced. State and EPA staff have other tasks and non-GPRA sites that are part of their workload that they must address as well which stretches resources even further. The two largest Region 6 states, Texas and Louisiana, have both seen drastic reductions in corrective action and other staff in the recent past. Any reductions in grant money to the states will also hamper the progress of investigations and cleanup of sites as well as any reduction in EPA staff and/or corrective action contract monies. It is essential that sufficient funding be available at all levels in order to meet the 2020 GPRA corrective action goals to progress 95% of the baseline sites to the site-wide construction complete stage.



Chart 1: Region 6 Projected Progress for 2020 RCRA Corrective Action  
GPRA Construction Complete (CA550) Goal

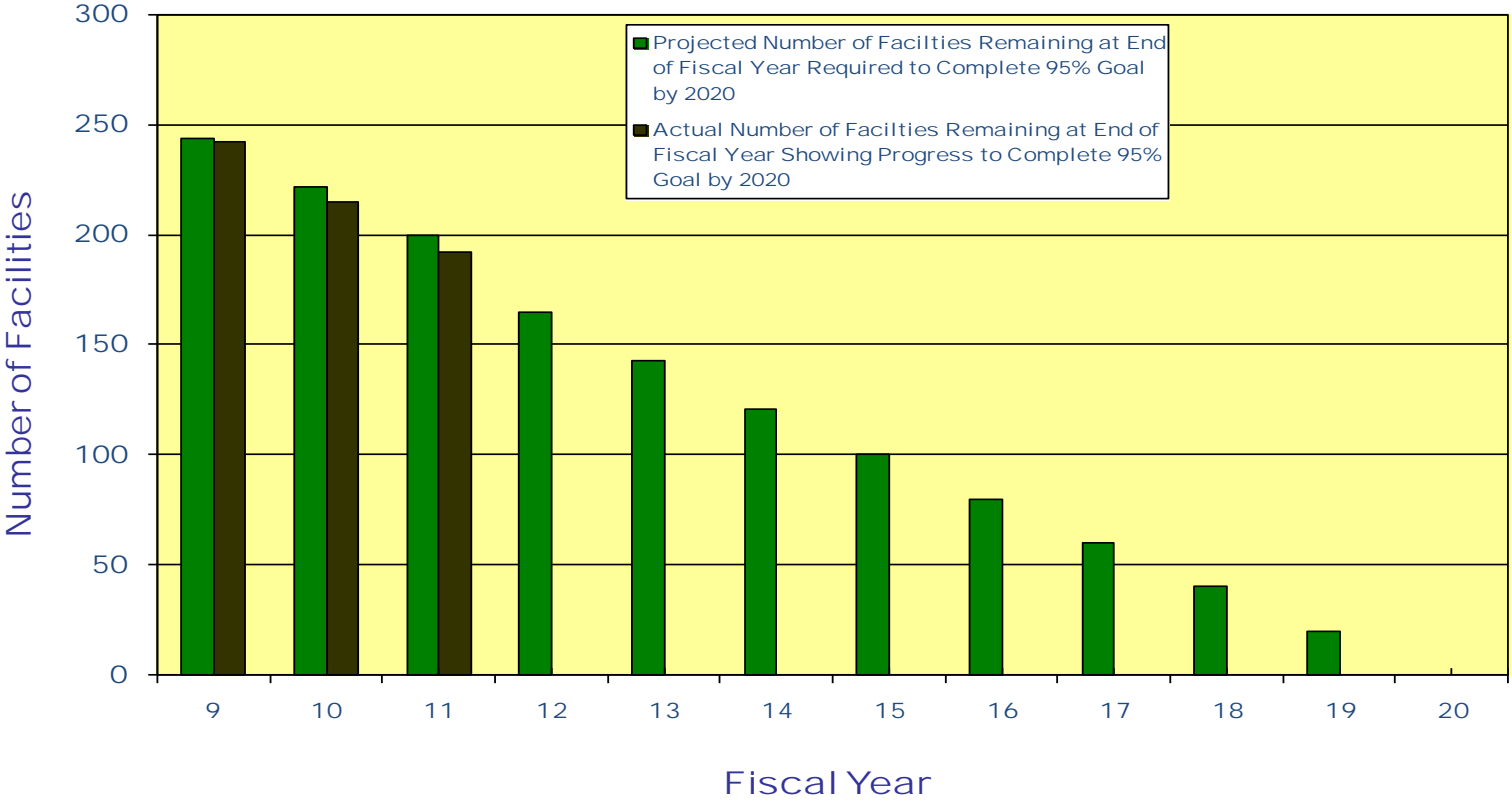


TABLE1A: NUMBER OF FACILITIES PROJECTED TO ACHIEVE RCRA GPRA MEASUREMENTS AND PERCENT OF 95% (391 FACILITIES) GOAL COMPLETED LISTED BY FISCAL YEAR :  
(ORIGINAL TABLE)

MEASUREMENT	START	FY09	FY10	FY11	FY12	FY13	FY14	
<i>CA725: HUMAN EXPOSURES</i>		246	261	276	291	306	321	336
		(63%)	(66%)	(70%)	(74%)	(78%)	(82%)	(86%)
<i>CA750: GROUND WATER</i>		216	231	246	261	276	291	306
		(55%)	(59%)	(63%)	(66%)	(70%)	(74%)	(78%)
<i>CA400: REMEDY</i>		145	165	185	205	225	245	265
		(37%)	(42%)	(47%)	(52%)	(57%)	(62%)	(67%)
<i>CA550: CONSTRUCTION</i>		127	149	171	19	215	237	259
		(32%)	(38%)	(44%)	(49%)	(55%)	(60%)	(66%)

TABLE 1B: NUMBER OF FACILITIES PROJECTED TO ACHIEVE RCRA GPRA MEASUREMENTS AND PERCENT OF 95% (391 FACILITIES) GOAL COMPLETED LISTED BY FISCAL YEAR - UPDATED 09/30/11

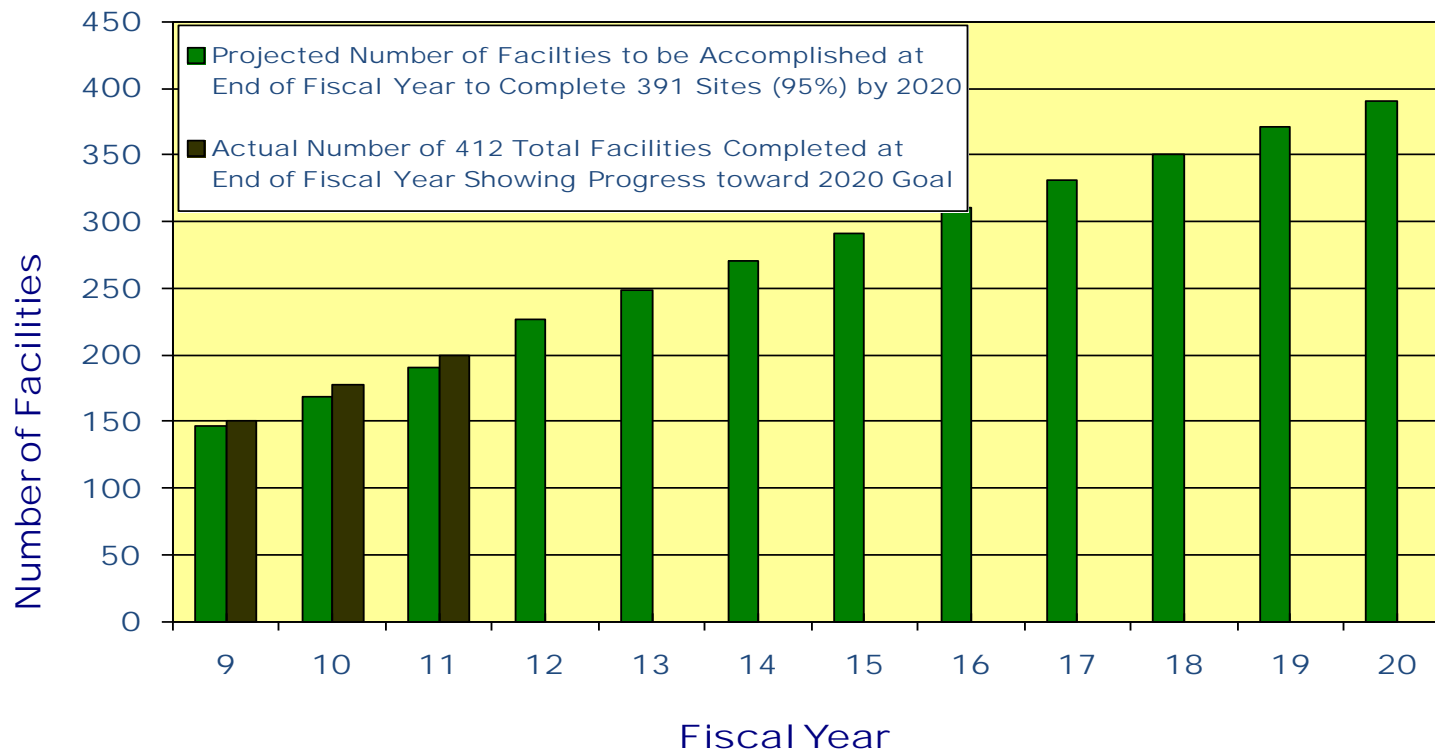
MEASUREMENT	START FY09	FY09	FY10	FY11	FY12	FY13	FY14
<i>CA725: HUMAN EXPOSURES</i>		261 (66%)	276 (70%)	291 (74%)			
	246 (63%)	<i>ACTUAL</i> 262 (67%)	<i>ACTUAL</i> 313 (80%)	<i>ACTUAL</i> 328 (84%)	309 (79%)	324 (83%)	339 (87%)
<i>CA750: GROUND WATER</i>		231 (59%)	246 (63%)	261 (66%)			
	216 (55%)	<i>ACTUAL</i> 233 (60%)	<i>ACTUAL</i> 251 (64%)	<i>ACTUAL</i> 266 (68%)	294 (75%)	309 (79%)	324 (83%)
<i>CA400: REMEDY</i>		165 (42%)	185 (47%)	205 (52%)			
	145 (37%)	<i>ACTUAL</i> 173 (44%)	<i>ACTUAL</i> 199 (51%)	<i>ACTUAL</i> 228 (58%)	248 (63%)	267(68%)	289 (74%)
<i>CA550: CONSTRUCTION</i>		149 (38%)	171 (44%)	193 (49%)			
	127 (32%)	<i>ACTUAL</i> 151 (39%)	<i>ACTUAL</i> 177 (45%)	<i>ACTUAL</i> 199 (51%)	226 (58%)	248 (63%)	270 (69%)

TABLE 2: PROJECTED NUMBER OF FACILITIES ACHIEVING RCRA GPRA MEASUREMENTS AND PERCENT OF UNIVERSE OF 412 FACILITIES COMPLETED BY FISCAL YEAR 2020 VERSUS ACTUAL  
 Updated 09/30/2011

MEASUREMENT	START FY09	FY09	FY10	FY11	FY12	FY13	FY14
CA725: HUMAN EXPOSURE	246 (60%)	261 (63%)	276 (67%)	291 (71%)	309 (75%)	324 (79%)	339 (82%)
		<i>ACTUAL</i> 262 (64%)	<i>ACTUAL</i> 313 (76%)	<i>ACTUAL</i> 328 (80%)			
CA750: GROUND WATER	216 (52%)	231 (56%)	246 (60%)	261 (63%)	294 (71%)	309 (75%)	324 (79%)
		<i>ACTUAL</i> 233 (57%)	<i>ACTUAL</i> 251 (61%)	<i>ACTUAL</i> 266 (65%)			
CA400: REMEDY	145 (35%)	165 (40%)	185 (45%)	205 (50%)	248 (60%)	267(65%)	289 (70%)
		<i>ACTUAL</i> 173 (42%)	<i>ACTUAL</i> 199 (48%)	<i>ACTUAL</i> 228 (55%)			
CA550: CONSTRUCTION	127 (31%)	149 (36%)	171 (42%)	193 (47%)	226 (55%)	248 (60%)	270 (66%)
		<i>ACTUAL</i> 151 (37%)	<i>ACTUAL</i> 177 (43%)	<i>ACTUAL</i> 199 (48%)			



Chart 2: Region 6 Projected versus Actual Progress to Complete RCRA 2020 Corrective Action Construction Complete (CA550) Goal - Updated 9/30/2011



**EXPLANATION OF TABLE 3 BELOW:**

1. **Category A Sites:** 24 facilities that are: i) 6PD lead sites that were transferred from the Enforcement Division for case closure; ii) bankrupt or underfunded facilities; iii) facilities with questionable technical or financial resources; or iv) EPA lead federal facilities. These are the most resource intensive for both technical expertise and EPA contractor work.
2. **Category B Sites:** 39 facilities that are: i) State lead sites where the Region is providing the State significant technical assistance and expects to provide future assistance; ii) sites that Texas identified where they had no project manager assigned and were given to EPA as project lead; iii) BRAC sites, iv) some large complex sites. These sites also require significant EPA resources.
3. **Category C Sites:** 276 facilities that are State lead sites where EPA assistance is expected to be minimal. EPA involvement is expected to be limited to oversight and tracking progress.
4. **Category C-D Sites:** 31 facilities that are State lead sites where EPA assistance is expected to be minimal. EPA involvement is expected to be limited to oversight and tracking progress. However, these are sites that are slow moving in the corrective action process or present other difficulties to the state. These are sites identified by states in their individual plans as requiring extra work. These are problematic 'C' Sites that especially need to be monitored for progress.
5. **Category C-E Sites (or C-D-E):** 42 facilities that EPA has either: 1) completed the work, *i.e.* achieved the "construction complete" determination or closed the enforcement case, and/or 2) EPA previously contributed significant technical and/or contractor assistance and/or 3) returned the site to State lead sites. In other words, the facilities are no longer requiring EPA
6. **Orange is most difficult sites and less likely to achieve the goals.**
7. **Yellow is for sites that require extra attention from the Region in that they are being cleaned up under an order or EPA is assisting the state .**

TABLE 3: FACILITIES OF CONCERN TO BE ADDRESSED FOR COMPLETION OF THE REMEDY CONSTRUCTION (CA550): THE A, B, C-D, C-D-E AND C-E SITES

CATEGORY	BASELINE FACILITIES	EPA ID	COMMENTS
A	Elementis Chromium LTP (American Chrome & Chemicals)	TXD098818339	Corrective action conducted via EPA CONSENT DECREE and state orders. The CA725 checklist was completed by TCEQ; EPA order covers eastern portion. A barrier wall was installed in December 2009 to prevent releases to the ship channel. Statement of Basis for remedy selection projected for 4th quarter 2010.
A	Benton Creosoting Works	LAD008056632	Small site but underfunded. EPA assistance with waste disposal using USACE contractors.
A	Chalmette Refining, LLC	LAD008179707	EPA LEAD AGENCY; being cleaned up under an EPA order
A	Encycle Texas (Corpus Christi)	TXD008117186	EPA ORDER-CA400 AND CA550 codes have not been achieved. Some hurricane preparedness work being completed with financial assurance money. Long term cleanup to be completed with bankrupt court funding.
A	Ethyl Corp (Baton Rouge)	LAD079460895	Contaminated deep aquifer with DNAPL; slow to progress. EPA is providing assistance with ground water modeling.
A	Exxon Chemical (Houston)	TXD082684002	EPA LEAD. EPA order - CA400 and CA550 should already been achieved for big muddy area (area in IHWCA)
A	Formosa Plastics (Point Comfort)	TXT490011293	EPA LEAD under EPA order. Remedy decision effective March 11, 2010. State is working on newer part of site. All corrective action in now under an EPA order filed January 18, 2012.
A	Greenway Environmental, Inc.	OKD089761290	Site is abandoned and being cleaned up with limited financial assurance money. EPA is assisting with contract funds, grant funds, and technical assistance using EPA staff.
A	Hale Dusting Service, Inc.	TXD057573438	Entity has no funds to support cleanup. EPA staff is using EPA contractor to delineate the extent of arsenic and pesticide contamination in soil and ground water.
A	Heat Treatment Services	TXD980624035	EPA providing state with Vapor Intrusion Assistance.
A	Huffman Wood Preserving	OKD053128492	Site is abandoned and being cleaned up with limited financial assurance money and innovative approaches. EPA assistance provided by staff, contractor, and EPA laboratories. Construction complete projected for 2011.
A	International Shoe Co. (Bryan)/Furniture Brands	TXD008071227	EPA LEAD 04/06/10 update from Tara Hubner with R6 indicated that a 3013 EPA order was issued in November 2009 to address confirmation ground water sampling at site to re-verify suspected data results from an earlier investigation. Permanent type wells will be installed and sampled (to replace temporary wells providing suspect data results due to turbidity issues). COCs to be sampled will involve arsenic, lead, and bis(2-ethylhexyl) phthalate.

CATEGORY	BASELINE FACILITIES	EPA ID	COMMENTS
A	Longview Refining (Longview)	TXD045586187	EPA LEAD; Underfunded site; previously abandoned site purchased for speculation; a well survey has been completed.
A	MCKINNEY SMELTING INC	TXR000025387	EPA 6PD CASE -EPA LEAD SITE. STATE PM INDICATES THAT ALL CODES HAVE NOT BEEN ACHIEVED AT THIS TIME AS ASSESSMENT IS NOT COMPLETE. PREVIOUS OWNERS WENT BANKRUPT AND THE PROPERTY OWNER HAS NOT COMPLETED THE TASK. CITY OF MCKINNEY WANTS TO BUY THE PROPERTY BUT NO PURCHASE AGREEMENT WITH THE OWNER HAS BEEN EXECUTED. ADDITIONAL ENFORCEMENT ACTION IS POSSIBLE.
A	MicroChemical Company	LAD008181927	EPA IS CURRENTLY LEAD AGENCY; Being cleaned up under an EPA order. Remedy selection/ Construction complete scheduled for February 2012..
A	Motiva Enterprises (Port Neches)	TXD980626022	EPA LEAD; being cleaned up under enforcement order. In investigation stage.
A	NIBCO, Inc.	TXD008092306	The facility completed the requirements for a facility assessment and response action plan conducted under a RCRA 3013 Order. They now plan to conduct remediation through the TCEQ voluntary cleanup program. EPA will continue to monitor progress to ensure GPRA goals are met at the site.
A	Oklahoma Pole & Lumber	OKD007335524	Under funded site with EPA assistance. Moving toward remedy selection.
A	Rogers Delinted (Robstown)	TXD980873160	EPA LEAD. Inactive IHWCA case referred to state superfund in 1991; not currently listed on any state or federal superfund registry; abandoned. No cleanup funds. EPA undertook a preliminary assessment and stabilization of the site and is presently using the EPA contractor to further investigate the extent of the investigation.
A	The Dow Chemical Company	LAD008187080	EPA providing assistance; large complex site with complex issues.
A	U.S. Dept. Of Army-Camp Stanley	TX2210020739	CONTINUING SITE WIDE REMEDIATION, SOURCE REMOVAL OF CONTAMINATED SOIL, BIOREACTOR AND INVOLVES OFF-SITE GW CLEANUP.
A	Walker Wood Preserving Co.	TXD026042168	Entity has cleanup funding problems. Currently back in state enforcement. Site has been abandoned by owner and sold for taxes. EPA is beginning to evaluate if progress can be made by leveraging resources.
A	Westlake Vinyls (Borden)	LAD003913449	EPA LEAD: Being cleaned up under an EPA order
A	WJ SMITH WOOD PRESERVING COMPANY	TXD066368879	EPA 6PD CASE- EPA is using contractor to do additional evaluation. City is interested in purchasing at least part of the property for a sports complex.
B	AK Steel Corporation	TXD000802959	EPA LEAD - On track to achieve goal.
B	Albemarle Catalysts Company, LP	TXD073920399	EPA LEAD - On track to achieve goal.
B	Alpha Omega Recycling, Inc.	TXD981514383	EPA LEAD - On track to achieve goal.
B	Baylor College Of Medicine	TXD988070082	EPA LEAD - On track to achieve goal.
B	BOC Group, Inc.	TXR000052175	EPA LEAD - On track to achieve goal.
B	Chaparral Steel Midlothian, LP	TXD066362559	EPA LEAD - On track to achieve goal.

CATEGORY	BASELINE FACILITIES	EPA ID	COMMENTS
B	Clean Harbors Laporte, Lp	TXD982290140	EPA LEAD - On track to achieve goal.
B	Dal-Tile Corporation	TXD988032751	EPA LEAD - On track to achieve goal.
B	Disposal Properties, LLC	TXD052649027	EPA LEAD - On track to achieve goal.
B	Duratherm, Inc.	TXD981053770	EPA LEAD - On track to achieve goal.
B	Eurecat U.S. Incorporated	TXD106829963	EPA LEAD - On track to achieve goal.
B	FMC Corporation	TXD083570051	EPA LEAD - On track to achieve goal.
B	Fort Wingate Depot	NM6213820974	BRAC - Large site; transfer to tribes in future. RFI work ongoing under NMED closure-post-closure.
B	Gulf Coast Waste Disposal Authority	TXD000835249	EPA LEAD - On track to achieve goal.
B	Heritage Environmental Services	TXD987995941	EPA LEAD - On track to achieve goal.
B	INEOS was Total Petrochemicals USA	TXD086981172	EPA LEAD - On track to achieve goal.
B	Neches River Treatment Corp.	TXD074204991	EPA LEAD - On track to achieve goal.
B	P Chem, Inc.	TXD098874308	EPA LEAD - On track to achieve goal.
B	Parkans International, LLC	TXD008105959	EPA LEAD - On track to achieve goal.
B	PPG Industries, Inc.	TXD078552932	EPA LEAD - On track to achieve goal.
B	Rhodia, Inc.	TXD008099079	EPA LEAD - On track to achieve goal.
B	Rogers Delinted Cottonseed Co.	TXD981055486	EPA LEAD - On track to achieve goal.
B	Safety-Kleen Systems, Inc.	TXD000747402	EPA LEAD - On track to achieve goal.
B	Safety-Kleen Systems, Inc.	TXD000747428	EPA LEAD - On track to achieve goal.
B	Safety-Kleen Systems, Inc.	TXD980876015	EPA LEAD - On track to achieve goal.
B	Safety-Kleen Systems, Inc.	TXD981053416	EPA LEAD - On track to achieve goal.
B	Safety-Kleen Systems, Inc.	TXD981056690	EPA LEAD - On track to achieve goal.
B	Sandia National Lab	NM5890110518	Large complex site; mixed waste; public interest
B	Schenectady International, Inc.	TXD010797389	EPA LEAD - On track to achieve goal.
B	Schlumberger Technology Corp.	TXD987988318	EPA LEAD - On track to achieve goal.
B	Set Environmental, Inc.	TXD055135388	EPA LEAD - On track to achieve goal.
B	South Texas Redi-Strip	TXD980879076	EPA LEAD - On track to achieve goal.
B	Southwestern Refining Co. AKA Kerr Mcgee	TXD000807859	EPA LEAD - On track to achieve goal.
B	Tm Deer Park Services, LLP	TXD000719518	EPA LEAD - On track to achieve goal.
B	TXI Operations LP	TXD007349327	EPA LEAD - On track to achieve goal.

CATEGORY	BASELINE FACILITIES	EPA ID	COMMENTS
B	U.S. Dept Of Army- Lone Star Army Ammunition Depot	TX7213821831	BRAC; CA400 and CA550 pending due to LSAAP preparing for early transfer in late 2009. This site is still in the RFA stage and still requires the investigation of about 300 solid waste management units. 12/31/2011 projected date of achievement for CA400 and CA550 may be very optimistic according to PM .
B	U.S. Naval Weapons Ind. Reserve (Dallas)	TX6170022770	CA 400 and CA550 codes have not been achieved due to ecological issues involving NRDA trustee reviews for Cottonwood Bay. Facility also working on purchasing all of Cottonwood Bay; involving complex real estate issues. 2 PMZS at the facility; likely to be proposing PRBS for both. Post closure order application and issuance is needed in order to achieve CA400 and CA550 for final facility wide remedy implementation.
B	U.S. NNSA DOE Los Alamos National Lab	NM0890010515	Mega site; mixed waste; public interest
B	UT Southwestern Medical	TXD071378822	EPA LEAD - On track to achieve goal.
C-D	Age Refining	TXD049754047	Site has resumed assessment activities (only) after apparently reaching resolution on a division of liability dispute. Lawyers for both sides are currently cooperating, but no sure what future will hold.
C-D	Amarillo Copper Refinery (Amarillo)	TXD087491973	Updated projected dates as ASARCO is conducting additional delineation and they also received some cleanup funds from bankruptcy proceedings..
C-D	Arkema, Inc. (Total)	TXD008085185	Arkema is still in the assessment phase for facility wide contamination issues expect APAR by end of 08.
C-D	Baker Petrolite incl. Cook	TXD000807875	Active Baker Petrolite facility; RFI assessment current phase; need release determination information.
C-D	Bell Helicopter (Hurst)	TXD980626006	CA400 and CA550 not achieved yet due to Bell trying to resolve eco assessment issues before finalizing RAP submittal via permit CP mod application.
C-D	BNSF or Burlington Northern (Sommerville)	TXD000778621	Facility is still conducting assessment activities and working on baseline risk assessment. Public interest.
C-D	Chevron Oronite Co.	LAD034199802	Still under investigation
C-D	ConocoPhillips Refinery (Alliance)	LAD056024391	Multiple issues
C-D	Delek Refining was LaGloria Oil	TXD007333800	CP Mod in house for PMZ they are currently in technical nod stage; CA550 achieved date estimated on CP issuance date.
C-D	Detrex Corporation	TXD980626154	Entity experiencing cleanup funding problems. Potential vapor intrusion issues.
C-D	Dow Chemical (Texas City) was Union Carbide	TXD000461533	Offsite plume still needs to be stabilized for documentation of CA750 and CA550. Still on track for achievement.
C-D	EI DuPont de Nemours	TXD063101794	CA400 and CA550 codes have not been achieved at this facility as the site is still in the process of assessing discovered releases.



CATEGORY	BASELINE FACILITIES	EPA ID	COMMENTS
C-D	El DuPont de Nemours	TXD008079212	The CA400 and CA550 still have not been achieved due to the continued evaluation of an interim remedy (MNA evaluation ongoing) for and additional assessment issues associated with TCEQ review and NOD comments to an APAR submitted by the facility. CP modification process will also be required to establish final corrective measures for CA400 & CA550.
C-D	Equistar Chemicals, LP	TXD058275769	Equistar still has several releases that required additional groundwater assessment to complete delineation but they are very close to completion. The CA400 and CA550 achieved dates are pending submittal of a CP permit mod application to address RAP implementation.
C-D	Ethyl Corp (Pasadena)	TXD008096158	Ethyl still assessing new releases at the facility.
C-D	Exxon Company (Baytown)	TXD000782698	Facility unable to achieve CA400/550 codes at this time as they are still in the facility wide FOA assessment stage (step 2) of FOA pre-approval process.
C-D	Flint Hills was Huntsman Petrochemical Corp (Port Arthur)	TXD000820928	Facility unable to achieve CA400/550 codes at this time as they still have 3 out of 4 response action plan submittals completed (still working on the last RAP). The last RAP will likely propose a PMZ. Progress further complicated by pending sale to Flint Hills.
C-D	Force	TXD000633453	State Superfund project, currently an inactive IHWCA project. Human exposures and contamination are under control. Currently completing assessment.
C-D	Fort Bliss	TX4213720101	Project includes the Castner Range Area (munitions cleanup) currently in initial assessment phase and expected to take several years to complete. Achievement of CA400/550 will be achieved when final response action plan is submitted/approved for this area.
C-D	HW Burbank LLC was Evans Harvey Corp, LLC	LAD008158289	LDEQ is finalizing an order requiring investigation.
C-D	Laughlin AFB	TX2571524105	CA750, CA400 AND CA550 not yet achieved as Laughlin is still assessing (in RI phase) for some sites. Also will need to finalize remedies via submittal of an application to modify the compliance plan.
C-D	Magellan Terminal Holdings	TXD008089021	The Magellan site still has not achieved CA550 due to the construction of a number of large above ground bulk storage tanks at the site. Due to the locations of the new tanks, Magellan is revising the existing response action plan for addressing soil and groundwater contamination at the site. The projected dates are estimated when the RAP will be approved for implementation.
C-D	Motiva Enterprises (Port Arthur)	TXD008097529	CA400 and CA550 codes have not been achieved yet due to facility expansion which has also changed final remedies for the facility.
C-D	National Oilwell	TXD057425662	Difficulty assessing site due to off-site access issues and in the area of an existing superfund site
C-D	Occidental Chemical	TXD007325111	CA400 and CA550 has not been achieved yet due to off-site access issues and off-site deed recordation problems. Facility is also pursuing an MSD with the city.

CATEGORY	BASELINE FACILITIES	EPA ID	COMMENTS
C-D	Safety-Kleen Systems, Inc.	TXD077603371	Encountering offsite access problems which are hampering assessment activities.
C-D	TAFT-STAR was Union Carbide-Taft Plant	LAD041581422	Facility currently undertaking a facility-wide investigation and remediation.
C-D	The Lubrizol	TXD041067638	CA400 and CA550 achieved are pending additional assessment. Lubrizol plans to use phytoremediation, but assessment is not complete. TCEQ must ensure they have investigated all the target COC's. Lubrizol has many specialty chemicals and TCEQ is working with them to determine how to investigate and to what cleanup levels.
C-D	The Premcor Refining (Port Arthur)	TXD008090409	CA400 and CA550 have yet to achieve due to ongoing property disputes/legal issues between Premcor and Chevron.
C-D	Tronox/Kerr McGee(Texarkana)	TXD057111403	CA400 and CA550 codes have not been achieved at this facility due to ecological issues involving impacted sediments in days creek. Eco PCLs are lower than human health PCLs and are the cleanup driver for the site. APAR currently in-house for review with NRDA trustees to evaluate eco assessment. Facility has an interim remedy system in place. CA400 and CA550 achievement is also dependant on permit/CP modification application and issuance for final corrective measures.
C-D	Wood Industries, PA (San Antonio)	TXD027070655	Difficulty achieving CA400 and CA550 codes as waste is still onsite. Site is involved with state enforcement program and entity is experiencing financial difficulty paying for cleanup/possible bankruptcy issues. Some EPA assistance.
C-D	Wright Way Spraying Service	TXD981605868	County is encountering technical issues & cleanup funding problems for this abandoned crop dusting business site at the airport.
C-D-E	Cedar Chemical Company (W.Helena)	ARD990660649	Large offsite plume being addressed under a state order with new PRPs. EPA assistance via a Superfund removal , deep well installation, and technical input. Will be listed on the NPL.
C-D-E	Marshall Holdings (Monarch Tile) (Marshall)	TXD008041048	WAS EPA LEAD. Site referred to EPA informally in April 2004. Formerly Monarch Tile. Under funded. Sent back to state.
C-D-E	Parker Solvents Company (Little Rock)	ARD035565068	Large offsite plume; EPA and ADEQ investigated vapor intrusion issues and found not to exist; underfunded site.
C-D-E	Western – was Giant Refining Co-Bloomfield	NMD089416416	Presently being cleaned up under orders; slow to progress; release to river was addressed. Returned to state.
C-E	AEROJET-GENERAL CORP	ARD091688283	STATE/ EPA ASSISTANCE
C-E	Air Force Base Conv-Eaker	AR8571924473	BRAC – CA550 achieved 09/13/2002.
C-E	AMAX METALS RECOVERY, INC	LAD058472721	STATE/EPA ASSISTANCE
C-E	BARKSDALE AIR FORCE BASE, LOUISIANA	TXD000449397	STATE/EPA ASSISTANCE
C-E	Base Transition Team - Ft Chaffee	AR9210020187	BRAC - CA550 achieved 11/20/2003



CATEGORY	BASELINE FACILITIES	EPA ID	COMMENTS
C-E	Bayport Processing-was Houston Chemical Services,	TXD010791184	The RCRA permit states that EPA/TCEQ co-review of RFI related documents are required (EPA issued order) EPA transferred to State for corrective action. Still in investigation stage.
C-E	Big Lake Nash	TXD981150923	EPA evaluated, considered an order, returned to state.
C-E	BP-WAS INEOS USA LLCINNOVENE USA LLC (O & D USA)	TXD000751172	STATE/EPA TX47
C-E	Dixie Metals Corp	LAD055792097	EPA ENFORCEMENT/STATE
C-E	England Air Force Base	LA9572124452	BRAC – Has not achieved CA400/CA550.
C-E	GALVESTON ENVIRONMENTAL SERVICES INC	TXD980628028	STATE/EPA ASSISTANCE
C-E	General Electric Company Apparatus Service	NMD047140256	EPA ENFORCEMENT/STATE
C-E	GTX. Inc.	LAD981057706	Large site being cleaned up under a joint order. Should progress. EPA and DOJ were involved.
C-E	HELENA CHEMICAL COMPANY	ARD030414494	STATE/EPA ASSISTANCE
C-E	ISO-TEX INC	TXD072206311	STATE/EPA ASSISTANCE
C-E	Mixon Brothers Wood Preserving	OKD007336258	EPA assisted permit renewal drafted, awaiting issuance by State. Will include corrective action to be accomplished.
C-E	Red River Army Depot	TX3213820738	BRAC – CA550 achieved 10/11/2009
C-E	REMINGTON ARMS CO	AR0000064311	STATE/EPA ASSISTANCE
C-E	Safety-Kleen Altair, Inc.	TXD000747410	EPA LEAD - CA550 Achieved
C-E	Safety-Kleen Systems, Inc.	TXD000747394	EPA LEAD - CA550 Achieved
C-E	Safety-Kleen Systems, Inc.	TXD000729400	EPA LEAD – CA550 Achieved
C-E	Safety-Kleen Systems, Inc.	TXD000747378	EPA LEAD - CA550 Achieved.
C-E	SHEFFIELD- GERDAU AMERISTEEL SAND SPRINGS WAS SHEFFIELD STEEL CORP.	OKD007219181	STATE/EPA ASSISTANCE
C-E	Sparton Technologies	NMD083212332	EPA 6PD CASE-Issues resolved; Remediation systems upgraded and operating well. GW models show remediation to extend to 2027.
C-E	Texas Instruments Incorporated	TXD982551806	EPA Oversight of VCP Cleanup
C-E	THE COLONEL FACTORY OUTLET OF AR INC	ARD980621288	STATE/EPA ASSIST/BANKRPT
C-E	THE COLONELS FACTORY OUTLET OF ARK INC	ARD035663301	STATE/EPA ASSIST/BANKRPT

CATEGORY	BASELINE FACILITIES	EPA ID	COMMENTS
C-E	U.S. Altus Air Force Base	OK9571824045	PREVIOUS EPA LEAD; was being cleaned up under an EPA ORDER; remedy was selected and site was progressing toward construction complete under the order. HSWA-only state permit effective January 21, 2010, for remedy implementation. EPA Order terminated March 23, 2010.
C-E	U.S. Dept Navy – Carswell	TX0571924042	BRAC – CA550 Achieved 7/21/2006.
C-E	U.S. Dept Of AF-DRMO	TX6570024939	BRAC - CA550 Achieved 2/10/2006.
C-E	U.S. Dept Of AF-Reese	TX8571524091	BRAC-COMPLETED TRANSFER
C-E	U.S. DOE Pantex Plant	TX4890110527	Part federal superfund: achievement of CA400 and CA550 dependent on issuance of ROD and pending permit modification application submittal
C-E	U.S. NASA Michoud Space Systems	LAD800014587	Investigation completed, facility will do thermal desorption pilot study for the TCE plume. State requested EPA assistance with plan and report..
C-E	US AIR FORCE PLANT #3 MCDONNELL DOUGLAS	OK9570000001	STATE/EPA DELISTING OF WASTE FOR REMOVAL.
C-E	US GOVERNMENT NAVY FACILITY- McGREGOR	TX9170024708	STATE/EPA ASSISTANCE
C-E	Vopak Logistics Services USA	TXD097673149	EPA LEAD - CA550 Achieved
C-E	WHITE LION HOLDINGS LLC (VISION METALS)	TX8571524091	STATE/EPA ASSISTANCE
C-E ??	Kelly AFB (San Antonio)	TX2571724333	BRAC - CA550 has not been achieved yet as Kelly is still constructing final remedies and need compliance plan renewal issued. Involves public input/notice.

TABLE 4: Categorization of More Difficult or Time Consuming Baseline Facilities

	<b>DIFFICULT OR TIME CONSUMING BASELINE FACILITIES</b>	<b>EPA ID</b>	<b>CATEGORIES</b>	<b>NAICS_DESCRIPTION</b>
A	Elementis Chromium LTP (American Chrome & Chemicals)	TXD098818339	ENFORCEMENT CASE	ALL OTHER BASIC INORGANIC CHEMICAL MANUFACTURING
A	Benton Creosoting Works	LAD008056632	UNDERFUNDED	WOOD PRESERVATION
A	Chalmette Refining, LLC	LAD008179707	ENFORCEMENT CASE	PETROLEUM REFINERIES
A	Encycle Texas (Corpus Christi)	TXD008117186	ENFORCEMENT CASE	HAZARDOUS WASTE TREATMENT AND DISPOSAL
A	Ethyl Corp (Baton Rouge)	LAD079460895	COMINGLED DEEP AQUIFER PLUMES	ALL OTHER BASIC INORGANIC CHEMICAL MANUFACTURING
A	Exxon Chemical (Houston)	TXD082684002	ENFORCEMENT CASE	ALL OTHER MISCELLANEOUS CHEMICAL PRODUCT AND PREPARATION MANUFACTURING
A	Formosa Plastics (Point Comfort)	TXT490011293	ENFORCEMENT CASE	PLASTICS MATERIAL AND RESIN MANUFACTURING
A	Greenway Environmental	OKD089761290	UNDERFUNDED/ABANDONED	HAZARDOUS WASTE TREATMENT AND DISPOSAL
A	Hale Dusting Service, Inc.	TXD057573438	UNDERFUNDED	SOIL PREPARATION, PLANTING, AND CULTIVATING ( Crop dusting)
A	Heat Treatment Services	TXD980624035	VAPOR INTRUSION ISSUES	HAZARDOUS WASTE TREATMENT AND DISPOSAL
A	Huffman Wood Preserving	OKD053128492	UNDERFUNDED/ABANDONED	WOOD PRESERVATION
A	International Shoe Co. (Bryan)/Furniture Brands	TXD008071227	ENFORCEMENT CASE	GENERAL FREIGHT TRUCKING, LOCAL
A	Longview Refining (Longview)	TXD045586187	UNDERFUNDED/ABANDONED	PETROLEUM REFINERIES
A	McKinney Smelting	TXR000025387	ENFORCEMENT CASE	IRON FOUNDRIES
A	Motiva Enterprises (Port Neches)	TXD980626022	ENFORCEMENT CASE	PETROLEUM REFINERIES
A	NIBCO, Inc.	TXD008092306	ENFORCEMENT CASE	INDUSTRIAL VALVE MANUFACTURING
A	Oklahoma Pole & Lumber	OKD007335524	UNDERFUNDED	WOOD PRESERVATION

	<b>DIFFICULT OR TIME CONSUMING BASELINE FACILITIES</b>	<b>EPA ID</b>	<b>CATEGORIES</b>	<b>NAICS_DESCRIPTION</b>
A	<b>Rogers Delinted (Robstown)</b>	TXD980873160	UNDERFUNDED/ABANDONED	POSTHARVEST CROP ACTIVITIES (EXCEPT COTTON GINNING)
A	<b>The Dow Chemical Co.</b>	LAD008187080	COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP.	ALL OTHER BASIC ORGANIC CHEMICAL MANUFACTURING
B	<b>Walker Wood Preserving</b>	TXD026042168	UNDERFUNDED/ABANDONED	WOOD PRESERVATION
B	<b>Westlake Vinyls (Borden)</b>	LAD003913449	ENFORCEMENT CASE	PETROCHEMICAL MANUFACTURING
B	<b>Fort Wingate Depot</b>	NM6213820974	FEDERAL FACILITY - BRAC - COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP: TRANSFER TO NATIVE AMERICANS IN FUTURE.	NATIONAL SECURITY
C-D	<b>Sandia National Lab</b>	NM5890110518	FEDERAL FACILITY -COMLEX LARGE SITE WITH MIXED WASTE AND PUBLIC INTEREST.	NATIONAL SECURITY
C-D	<b>U.S. NNSA/DOE Los Alamos National Lab</b>	NM0890010515	FEDERAL FACILITY -COMLEX LARGE SITE WITH MIXED WASTE AND PUBLIC INTEREST.	NATIONAL SECURITY
C-D	<b>Age Refining</b>	TXD049754047	LIABILITY DISPUTE IN PAST.	PETROLEUM REFINERIES
C-D	<b>Amarillo Copper Refinery (Amarillo)</b>	TXD087491973	PREVIOUS BANKRUPTCY ISSUES: COMPLEX WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP:	PRIMARY SMELTING AND REFINING OF COPPER
C-D	<b>Arkema, Inc. (Total)</b>	TXD008085185	COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP: OFFSITE PLUME	ALL OTHER MISCELLANEOUS CHEMICAL PRODUCT AND PREPARATION MANUFACTURING
C-D	<b>Baker Petrolite incl. Cook</b>	TXD000807875	COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP.	ALL OTHER MISCELLANEOUS CHEMICAL PRODUCT AND PREPARATION MANUFACTURING
C-D	<b>Bell Helicopter (Hurst)</b>	TXD980626006	ECOLOGICAL ASSESSMENT ISSUES	AIRCRAFT MANUFACTURING
C-D	<b>BNSF or Burlington Northern (Sommerville)</b>	TXD000778621	COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP.	WOOD PRESERVATION
C-D	<b>Chevron Oronite Co.</b>	LAD034199802	COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP.	PETROLEUM REFINERIES
C-D	<b>ConocoPhillips Refinery (Alliance)</b>	LAD056024391	COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP.	PETROLEUM REFINERIES
C-D	<b>Delek Refining was LaGloria Oil</b>	TXD007333800	COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP	ALL OTHER BASIC ORGANIC CHEMICAL MANUFACTURING

	DIFFICULT OR TIME CONSUMING BASELINE FACILITIES	EPA ID	CATEGORIES	NAICS_DESCRIPTION
C-D	Detrex Corporation	TXD980626154	COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP.VAPOR INTRUSION ISSUES	PETROCHEMICAL MANUFACTURING
C-D	Dow Chemical (Texas City) was Union Carbide	TXD000461533	COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP: OFFSITE PLUME	INDUSTRIAL GAS MANUFACTURING
C-D	El DuPont de Nemours	TXD063101794	COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP. POTENTIAL VAPOR INTRUSION	ALL OTHER BASIC ORGANIC CHEMICAL MANUFACTURING
C-D	El DuPont de Nemours	TXD008079212	COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP	ALL OTHER BASIC ORGANIC CHEMICAL MANUFACTURING
C-D	Equistar Chemicals, LP	TXD058275769	COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP	ALL OTHER BASIC ORGANIC CHEMICAL MANUFACTURING
C-D	Ethyl Corp (Pasadena)	TXD008096158	COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP	PETROLEUM REFINERIES
C-D	Exxon Company (Baytown)	TXD000782698	COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP: FOA	ALL OTHER BASIC ORGANIC CHEMICAL MANUFACTURING
C-D	Flint Hills was Huntsman Petrochemical Corp (Port Arthur)	TXD000820928	COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP	PETROLEUM REFINERIES
C-D	Fort Bliss	TX4213720101	FEDERAL FACILITY: COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP. POTENTIAL VAPOR INTRUSION	NATIONAL SECURITY
C-D	HW Burbank LLC was Evans Harvey Corp, LLC	LAD008158289	UNDERFUNDED	PAINT AND COATING MANUFACTURING
C-D	Laughlin AFB	TX2571524105	FEDERAL FACILITY: COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP. POTENTIAL VAPOR INTRUSION	NATIONAL SECURITY
C-D	Magellan Terminal Holdings	TXD008089021	PLANT EXPANSION UNCOVERED AND SPREAD CONTAMINATION.	PETROLEUM BULK STATIONS AND TERMINALS
C-D	Motiva Enterprises (Port Arthur)	TXD008097529	COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP	CYCLIC CRUDE AND INTERMEDIATE MANUFACTURING
C-D	National Oilwell	TXD057425662	COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP: OFFSITE ACCESS ISSUES	PETROLEUM REFINERIES

	<b>DIFFICULT OR TIME CONSUMING BASELINE FACILITIES</b>	<b>EPA ID</b>	<b>CATEGORIES</b>	<b>NAICS_DESCRIPTION</b>
C-D	<b>Occidental Chemical</b>	TXD007325111	OFFSITE DEED RECORDATION PROBLEMS	ALL OTHER BASIC INORGANIC CHEMICAL MANUFACTURING
C-D	<b>Safety-Kleen Systems, Inc.</b>	TXD077603371	OFFSITE ACCESS ISSUES TO CHARACTERIZE PLUME.	HAZARDOUS WASTE TREATMENT AND DISPOSAL
C-D	<b>TAFT-STAR was Union Carbide-Taft</b>	LAD041581422	COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP	ALL OTHER BASIC ORGANIC CHEMICAL MANUFACTURING
C-D	<b>The Lubrizol</b>	TXD041067638	COMPLEX: WIDESPREAD CONTAMINATION AND/OR NUMEROUS SWMUs TO CLEAN UP	ALL OTHER BASIC ORGANIC CHEMICAL MANUFACTURING
C-D	<b>The Premcor Refining (Port Arthur)</b>	TXD008090409	ONGOING PROPERTY DISPUTES/LEGAL ISSUES BETWEEN PREMCO AND CHEVRON	PETROLEUM REFINERIES
C-D	<b>Tronox/Kerr McGee (Texarkana)</b>	TXD057111403	ECOLOGICAL ISSUES WITH CREEK SEDIMENTS	WOOD PRESERVATION
C-D-E	<b>Wood Industries, PA (San Antonio)</b>	TXD027070655	UNDERFUNDED -PREVIOUS RECYCLER	GENERAL FREIGHT TRUCKING, LOCAL
C-D-E	<b>Wright Way Spraying Service</b>	TXD981605868	UNDERFUNDED-PESTICIDES	SOIL PREPARATION, PLANTING, AND CULTIVATING ( Crop dusting)
C-D-E	<b>Cedar Chemical Company (W.Helena)</b>	ARD990660649	COMPLEX SITE: IN PROCESS OF BEING LISTED ON NPL	OTHER BASIC ORGANIC CHEMICAL MANUFACTURING
C-D-E	<b>Marshall Holdings (Monarch Tile) (Marshall)</b>	TXD008041048	UNDERFUNDED	CERAMIC WALL AND FLOOR TILE MANUFACTURING
C-D-E	<b>Parker Solvents Company (Little Rock)</b>	ARD035565068	RECALCITRANT	OTHER CHEMICAL AND ALLIED PRODUCTS MERCHANT WHOLESALERS
C-D-E	<b>Western – was Giant Refining Co-Bloomfield</b>	NMD089416416	COMPLEX SITE	PETROLEUM REFINERIES



## ADDENDUM 1

### *Huffman Wood Preserving and Oklahoma Pole and Lumber Facilities, Broken Bow, Oklahoma*

EPA Region 6 RCRA project team took two corrective action sites that were stalled in being cleaned up and used innovation in finding funds, technology and resources to get the sites cleaned up and back in productive use in the community. Both facilities had lingered in the corrective action pipeline for over ten years with little or no activity. EPA, ODEQ and the other stakeholders are working together to creatively leverage resources to complete site investigation and cleanup activities at these facilities and put them back into productive use.

Huffman Wood Preserving, Inc. (HWP) and Oklahoma Pole and Lumber Company (OPLC) are two wood treating facilities located in Broken Bow, Oklahoma, and approximately half a mile apart. Both facilities are on the GPRC RCRA 2020 baseline and bankrupt/underfunded. HWP is a 25-acre facility that treated fence posts and other wood products with creosote and pentachlorophenol. The facility operated from 1956 until 1984. In 1989, the now-deceased owner closed 5 unlined surface impoundments under state authority, and set aside approximately \$120,000 in financial assurance for future site work. The owner passed away in 1991 and the facility was purchased by an adjacent property owner to house his small welding shop. Several acres of the site were used by Oklahoma Pole and Lumber as a laydown yard for untreated poles but this practice will be discontinued. The facility sits atop a recharge zone for the Antlers Aquifer.

OPLC is a 26-acre site that was initially owned by Thomason Lumber and Timber Company, Inc. The facility operated from the late-60's to late-90's. Thomason abandoned the site in 1999, leaving behind two closed surface impoundments, 15 wells, and possible soil contamination. The site was purchased by OPLC, who took over the deed and liability for the property in June of 2000. In June 2002, OPLC abandoned the facility. The facility remained abandoned through 2004. OPLC resumed treatment operations at the facility in early 2005. Currently, OPLC is operating the facility, but has limited cash flow/resources to conduct site investigation and any cleanup.

Region 6 project team members were innovative in collaborating with numerous stakeholders to achieve investigation and cleanup at these financially troubled sites. The culmination of the corrective action process has been the result of partnerships between EPA Region 6 (Dallas), EPA ORD's lab in Ada, Oklahoma, EPA OSWER's Technology Innovation Office, Region 6's Houston Lab,

Oklahoma DEQ, the Army Corps of Engineers, the City of Broken Bow, and the facility owners. All investigation and cleanup activities are expected to be completed within the next year.

The specific external resources leveraged over the course of the project included the following:

- Technology Innovation Office provided funding and TRIAD technical assistance to Region 6 and ADA Lab to develop a site assessment plan.
- City of Broken Bow provided resources to clear brush in order for sampling to take place. In addition, the City provided heavy equipment/operators for trenching as part of sampling activities and disposed of purge water via the City's POTW. The City also provided a water truck for decontamination and other sampling work, and a vacuum tanker truck for purge and decon water.
- Region 6 staff and its contractors conducted soil and groundwater sampling at OPLC and HWP.
- The Houston Lab provided analysis for the soil and groundwater samples collected at HWP.
- USACE (via an IAG with Region 6) installed groundwater monitoring wells at HWP to characterize the deeper regional groundwater aquifer.
- OPLC's contractors conducted groundwater sampling and analysis of HWP's monitoring wells.
- OPLC provided equipment and manpower to conduct soil removal at both OPLC and HWP. HWP's financial assurance funds will be used to pay for soil disposal for that site; OPLC will fund disposal of its contaminated soils.
- The balance of the HWP's financial assurance will be used for long-term monitoring and maintenance at that site
- Ada Lab personnel provided training to Region 6 and ODEQ Project Managers, and took a lead role in gathering samples to conduct calibration testing for immunoassay field test kits that will be used during the cleanups at OPLC and HWP. The Houston Lab provided final calibration standards. Ada Lab also assisted Region 6 in developing a gridded sampling plan following the TRIAD approach for soil and groundwater sampling. This approach will reduce project costs due to real time field sampling and use of EPA staff/labs, while increasing technical competency and expediting corrective action.
- Region 6 and Ada Lab characterized and performed confirmatory sampling of soils using immunoassay field test methods, along with laboratory confirmation sampling.
- Region 6 installed four additional groundwater monitoring wells at OPLC.
- Region 6 and ODEQ will jointly issue Ready for Reuse Determinations to the facilities at the completion of their respective cleanups in order to promote productive, protective and sustainable reuse of the properties.
- It should be noted that the revitalization tool was really effective in initiating correction actions at these sites as City of Broken Bow was interested in using one of these properties for parking city equipment.



## ADDENDUM 2

### *Micro Chemical Company, Winnsboro, Louisiana*

This GPRA facility has been at a stalemate regarding site investigation and remediation efforts for approximately 10 years due to limited funding for site work and the inflexibility of the regulatory project manager on how to appropriately deal with this under-funded facility. Regulatory inflexibility, lead to limited cooperation between the parties and little progress was made after the initial Interim Measures were completed. During the past year, the regulatory project manager changed and the facility is now participating in the Region 6 Corrective Action Strategy (CAS) process which focuses on risk-based / performance-based corrective action objectives for the site. The facility ceased operations in 2008 due to a downturn in the economy and loss of contracts. Investigation and cleanup activities at the facility were completed in 2009. In September 2010, LDEQ and EPA issued a Ready for Reuse determination for a portion of the site, which will likely be sold to the adjacent grain elevator operations in 2011. EPA is currently working with the property owner and consultant on completing the documentation of CA550 construction complete with the expectation of completing this work by Sept. 2011. At that time, EPA will close out its Order and post closure care will be conducted under a new LDEQ post closure order.

The Micro Chemical Facility is located in Winnsboro, Louisiana 45 minutes south of Monroe on Hwy 15. It is located on 4.75 acres and has been formulating, blending and packaging agri-chemicals (pesticides and herbicides) for local use since 1954. The facility closed in 2008 due to a shrinking competitive market. The owner of the facility has since retired (approximately 80 years of age) but is willing to use remaining limited resources to complete site investigation and cleanup activities. After the cleanup of the property is complete, EPA and the State will provide a Region 6 Ready for Reuse comfort letter to aid in the sale of the property to the adjacent feed mill operation. The proceeds from the sale will be used as financial assurance for long term monitoring and post closure case.

In 1994 Micro Chemical Company entered into an Administrative Order on Consent with EPA to identify, investigate and prevent the further release and/or migration of hazardous constituents to the environment and to perform corrective actions necessary to protect human health and the environment.

In 1996 interim measures were performed which consisted of:

- 14,000 cu/yards of contaminated soils being consolidated, stabilized and capped onsite
- 13 nested pairs of groundwater wells were installed and semi-annual groundwater monitoring was initiated

- Sediments in a near-by abandoned oxbow were sampled and tested

In 1997 a draft RFI work plan was submitted but the final was never approved

In 1999 a draft RFI report was submitted but was never approved

No additional site investigation or cleanup activities took place until 2008

In 2008 the Facility, under new regulatory project management initiated corrective action streamlining activities using the Region 6 Corrective Action Strategy

Since that time the following has been accomplished:

- conducted 4 separate rounds of groundwater delineation step-out sampling to define the extent of the plume
- conducted soil sampling in the MSMA process and tank storage area
- conducted soil sampling along the abandoned Toxaphene delivery line and tank storage area
- conducted additional sediment sampling in the Turkey Creek oxbow
- Excavated, stabilized and consolidated an additional 1,500 cu/yards of contaminated soils (all surface soils were excavated to a minimum of 2 feet and replaced with clean top soil)
- Installed 4 new wells to groundwater monitoring well network
- Financial assurance will be provided by the facility via the sale of the property for long term monitoring and maintenance.
- Currently working on CA550 documentation, where Interim Measures will serve as the final remedy at the facility.

## ADDENDUM 3

### *Rogers Delinted Cottonseed Co. Site, Robstown, TX*

This former cottonseed delinting facility in South Texas was recently purchased by the Robstown Industrial Development Corporation (RIDC) from Nueces County. The County had originally obtained the property on back taxes from the deceased property owner, Koshiro Yazaki (Yazaki USA Corporation). The RIDC would like to complete whatever cleanup is required at the facility and promote the property for use that would complement the new Nueces County Fairground and Convention Center that is located across the highway from the RDCC facility. A new retail outlet mall is also proposed for development this year next to the fairgrounds. During the summer of 2011, EPA Region 6 Superfund performed some removal actions at the facility which included cleaning out a collapsed aboveground storage tank, cleaning up/removing the pesticide application room, removing containers of pesticides left at the facility, sweeping and pressure washing the facility buildings to remove pesticide residues, and performing lead-based paint and asbestos inspections in the facility buildings. EPA Region 6 RCRA has used REPA contract funds to install groundwater monitoring wells at the facility, perform groundwater monitoring, and perform soil sampling. EPA Region 6 RCRA will work with the TCEQ to determine what further corrective actions are required at the facility based on its potential future reuse. The facility has achieved the CA725 human exposure under control goal. The EPA will determine the status of meeting CA750, CA400, and CA550 milestones after discussions and resolutions with the TCEQ.

The former Rogers Delinted Cottonseed Co. facility is located just northeast of Robstown, TX, in Nueces County, on the east side of U.S. Hwy 77 (Business). It produced cottonseed for sale by using a wet acid cottonseed delinting process, in which highly concentrated sulfuric acid was used on cottonseeds to remove cotton fibers from the seed. The spent sulfuric acid and rinsewaters were discharged from a sump into a series of evaporation ponds. The seed was then dried and treated with fungicides and insecticides. The plant operated from about 1962 to 1983 and has been abandoned since 1984.

The facility is on EPA's GPRA baseline list for corrective action, and as such must meet EI determinations and corrective action completion.

August 2003 groundwater sampling by TCEQ found arsenic, benzene and organochlorine pesticides above MCLs. EPA conducted a site reconnaissance trip on August 4, 2004, and found that part of the site was actively being used for playing paintball games, as noted by paintball equipment left on site, paintball debris, and paintball splatters on wooden pallets in the warehouse building.

In March 2005, EPA returned to the site to conduct sampling and to post signs to warn trespassers that the site was under investigation. Sampling results indicated that the fungicide and pesticides wastes left on site in the process building had elevated

levels of lead, chromium and thiram. This waste was bagged. Floor sweep samples from the warehouse building indicated elevated levels of arsenic, lead and chromium. Surface soil samples indicated elevated levels of lead.

EPA returned to the site in July 2005 and conducted the following measures:

- the bagged waste in the process building was drummed and removed from the site,
- the warehouse building was swept and wastes were drummed and removed,
- surface soils outside the warehouse that had elevated levels of lead were covered with a clay-gravel mixture to prevent exposure to surface soils,
- All openings to the process building were fenced off and marked with KEEP OUT signs.

The property owner passed away in 1997 with a significant accumulated property tax levy. The City of Robstown has an interest in securing the property through tax resale. Therefore, the EPA has been collaborating with the City of Robstown to move the site forward. The fencing and most of the warning signs that EPA installed in 2005 have been removed by trespassers. The City of Robstown initiated a trash cleanup day at the site to remove the tires and wood pallets that trespassers had been using to build paintball courses. The City of Robstown also cleared brush so that EPA could access the site for an investigation. In June 2010, EPA contractors installed groundwater monitoring wells at the site and groundwater was sampled. Soil borings were installed within the unclosed ponds and subsurface soil samples were collected. Surface soil samples were also collected throughout the site.

EPA Region 6 RCRA Multimedia Planning and Permitting Division (PD) requested assistance from Region 6 Superfund Division to perform some waste removal work at the site. During 2011, EPA Superfund is planning to remove a 13,000 gallon collapsed sulfuric acid tank and surrounding acidic soils and a 55 gallon drum of unknown liquid at the site. Superfund is also planning to sample and potentially cleanup the pesticide application room. Through a REPA IV contract, PD is planning to perform another round of groundwater monitoring, a water well survey, and an aquifer test at the site during 2011.

EPA intends to work with the local government and City officials to achieve CA750, CA400 and CA550; and encourage the beneficial reuse of the property by recycling onsite materials including metal equipment and building components.

## ADDENDUM 4

### *The Region 6 RCRA Hazardous Waste Program Environmental Justice Strategy*

#### **Introduction**

The Agency has made “*Expanding the Conversation on Environmentalism and Working for Environmental Justice*” a priority. To implement this priority, EPA launched Plan EJ 2014 as the Agency’s strategy for integrating environmental justice (EJ) in its programs, policies and activities. This four-year plan will help EPA move forward to develop a stronger relationship with communities and increase the Agency’s effort to improve the environmental conditions and public health in overburdened communities. The plan seeks to protect the environment and health in overburdened communities; empower communities to take action to improve their health and environment and establish partnerships with local, state, tribal and federal governments and organizations to achieve healthy and sustainable communities.

The Region 6 EJ office has identified five areas of concern for EJ consideration. A map showing the locations is shown in Appendix A. These areas will be used as initial assessment areas by the RCRA program to focus our efforts.

The Region 6 RCRA Hazardous Waste Program evaluated three EJ assessment tools. These were available for use to prioritize sensitive areas for consideration. See Appendix B for a comparison table of the three tools. EPA Region 6 uses the Potential EJ Index (PEJI) ranking tool which has high resolution because it is based on the Census block level, but there are a low number of social demographic indicators used in the ranking. (Social demographic indicators include: percent minority, per capita income, population density and others.) The Social Vulnerability Index (SVI) ranking tool utilized by Region 9 makes assessments at the Census block group level, which is a lower resolution than the PEJI, but considers a higher number of social demographic indicators, including: percent minority, per capita income, percent population over 18, percent population over 64, percent population without high school diploma, and percent households with limited English proficiency. OECA’s Environmental Justice Strategic Enforcement Assessment Tool (EJSEAT) assesses at a Census tract level, the highest resolution of the three indices. EJSEAT evaluates the same social demographic indicators as the SVI, but also includes various environmental, human health, and compliance indicators. In order to eliminate the diverse assessment of tools, the EPA Headquarters is working to create a national EJ ranking tool, anticipated to be released in 2014. For the purposes of this strategy, the RCRA Hazardous Waste oversight program will evaluate factors from the various rankings until the national tool is available, and will designate identified areas as areas of concern.

The Region 6 RCRA Hazardous Waste Program strategy describes the goals and methods for incorporating EJ into the day to day operations of our program. This strategy defines three focus areas for the RCRA Hazardous Waste State Program oversight process:

1. Program oversight review of state-issued permits and GPRA corrective action reviews

2. Program oversight review of state public participation activities associated with permit renewals and RCRA corrective action, and
3. In other program areas, we will consider areas of concern in our decision-making process for EPA assistance to the states. This would involve RCRA underfunded/near bankrupt sites and the various state voluntary cleanup programs.

### ***Focus Area 1: Oversight Review of Permits and GPRA Corrective Action***

There are several areas in our oversight of state- implemented RCRA hazardous waste programs where we can more effectively protect human health and the environment for disproportionately burdened populations by incorporating EJ considerations into our reviews.

- Complete an initial review of the five areas of concern identified by the Region 6 EJ office. Using GIS layer treatment storage and disposal (TSD) and permit data along with GPRA 2020 data for corrective action sites within a 5 mile radius of the areas of concern.
- Expand the list of facilities by incorporating information on voluntary cleanup program (VCP) sites. For Texas this will include facilities located in municipal settings designated (MSD) areas.
- Prioritize the facilities within an area of concern by narrowing the focus to facilities with an identified off-site release. In addition to the above we will prioritize our reviews and oversight based upon the ORCR Corrective Action EJ Analysis. This analysis places GPRA 2020 corrective action sites into one of three categories.
- Expand the number of areas of concern by using other screening tools to look at areas that may be disproportionately burdened by RCRA facilities. There are numerous pockets of that have large numbers of 2020 Corrective Action sites. See Appendix C.
- To further prioritize the identified areas of concern, the concentration of RCRA facilities within an area will be used for screening.
- Prioritize our annual permit and corrective action reviews for each state by ensuring that facilities located in the areas of concern are given priority.
- Prioritize GPRA corrective action status updates (via monthly conference calls) based on areas of concern or sensitive areas.
- Based on facility-specific information on corrective action progress and agreement with state partners, referrals to the Hazardous Waste Enforcement Branch of the Region 6 Compliance Assurance and Enforcement Division may be appropriate.

## ***Focus Area 2: Oversight Review of State Public Participation***

In February 1996, EPA finalized the RCRA Expanded Public Participation Rule (EPA530-F-95-030) to empower communities to become involved earlier and more often in the process of permitting hazardous waste management facilities. The Rule supports 1) involving the public earlier in the permitting process, 2) providing more opportunities for public involvement, 3) expands access to public information, and 4) provides guidance on how facilities can improve public participation.

- During our RCRA Permit Program and Corrective Action Program reviews for a state, EJ considerations will be incorporated into the review. This includes documenting how each state supports the RCRA Expanded Public Participation Rule into their permitting and corrective action processes. For example see Appendix D, *Summary of Region 6 States RCRA Public Participation*.

## ***Focus Area 3: EPA Assistance to the States***

Facilities that are identified within areas of concern through the use of the various EJ prioritization tools will be prioritized for EPA assistance which may include:

- Use of contract dollars for additional sampling at facilities located in areas of concern.
- Coordination with each of our states to ensure that appropriate actions are taken for all sites and that disproportionately burdened populations are included to the extent practicable in the decision making process.
- Referrals to enforcement or requests for additional support will be prioritized based impact to the areas of concern.
- Special consideration for sites in the VCP with potential Indoor Air Exposures.

## **Path Forward**

The RCRA Hazardous Waste Program will concentrate on the five areas of concern to perform an initial screen of RCRA sites and 2020 GPRA corrective action sites. The Grants Mining District in New Mexico does not have any RCRA sites or 2020 GPRA corrective action sites within the 5 mile radius we are using for the screen. The initial mapping effort for Manchester and Port Arthur, Texas along with Mossville, Louisiana will be completed by the end of September 2011. The Corpus Christi, Texas area is dependent upon receiving parcel boundary data, but should be completed by December 2011.

In addition to mapping the 2020 GPRA corrective action sites located within the areas of concern, we will prioritize them to prepare for discussions with the states. This should be completed by December 2011. See Appendix E for a list.



We will use the screening information to prioritize our permit and corrective action reviews for FY 2012. We currently host monthly calls with Louisiana to discuss issues with corrective action sites. If the need arises we will implement a similar strategy in other states.

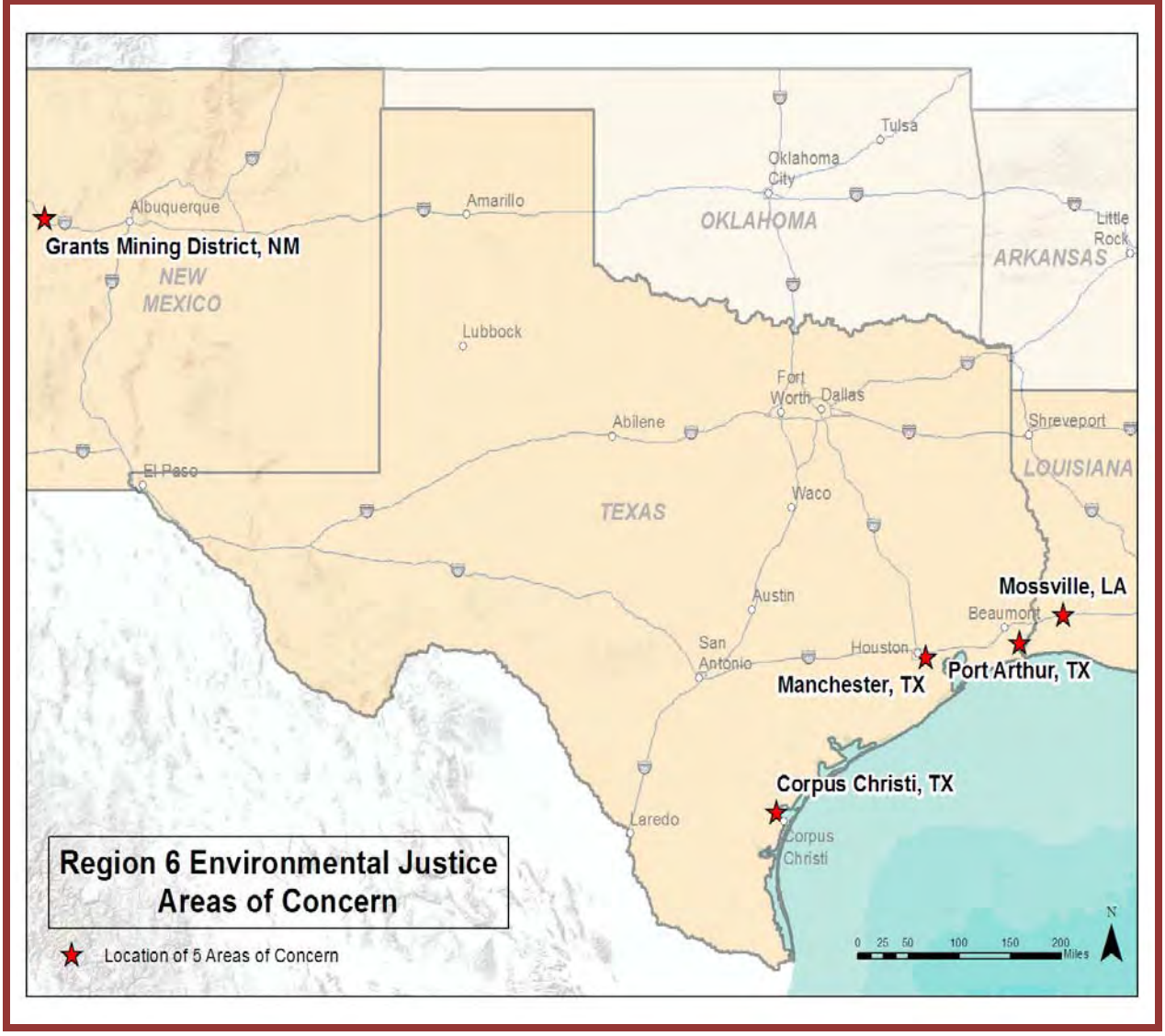
The Region 6 RCRA program will incorporate an Environmental Justice element into the RCRA state grant program for each of the five states. This would occur during the negotiations for the 2013 fiscal grant year for each state and would require the consideration of EJ facility rankings as a factor in the setting of priorities for review of state lead corrective action activities.

Once the initial review of potential oversight areas is complete we will continue to screen additional facilities in these areas of concern, such as voluntary cleanups to ensure that our oversight program is adequate. This task would start in FY 2013. Additional areas of concern could be identified based upon screening criteria the Region decides to implement in the interim until an Agency wide screening tool is developed hopefully in FY 2014.



APPENDIX A

APPENDIX B

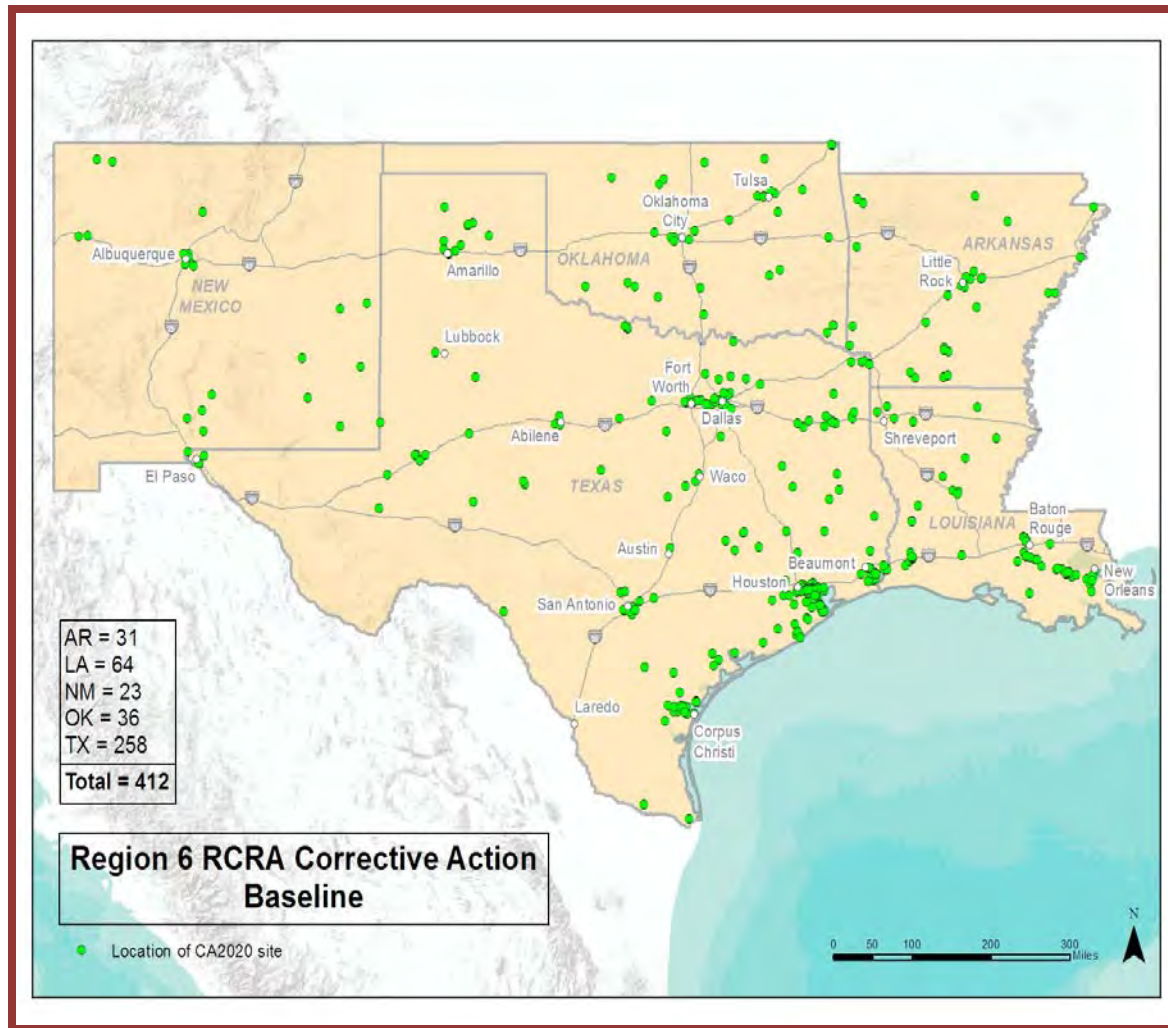


OECA – Environmental Justice Strategic Enforcement Assessment Tool (EJSEAT)	Region 9 – Social Vulnerability Index (SVI)	Region 6 – Potential Environmental Justice Index (PEJI)
<ul style="list-style-type: none"> <li>❖ Assessed at <u>Census Tract Level</u> (multiple tracts make up a county)</li> <li>❖ Designed for enforcement/compliance programs to rank census tracts and regulated facilities</li> <li>❖ Project started in 2005 – draft tool still in development</li> <li>❖ Score: 1 (Highest Potential EJ Concern) – 10 (Lowest Potential EJ Concern)</li> </ul> <p>Tool pulls data for <b>4 indicator categories</b> from <b>18 select</b> federally-recognized or managed databases:</p>	<ul style="list-style-type: none"> <li>❖ Assessed at <u>Census Block Group Level</u> (multiple block groups make up a tract)</li> <li>❖ Designed for ranking both census block groups and Corrective Action sites</li> <li>❖ Developed by Region 9’s Environmental Justice Program</li> <li>❖ Score: 0 (Least Socially Vulnerable) – 18 (Most Socially Vulnerable)</li> </ul> <p>Tool pulls data for <b>1 indicator category</b> from <b>6 select</b> federally-recognized or managed databases:</p>	<ul style="list-style-type: none"> <li>❖ Assessed at <u>Census Block Level</u> (multiple blocks make up a block group)</li> <li>❖ Designed for all Region 6 programs to identify potential EJ areas of concern</li> <li>❖ Methodology derived in the mid-1990s (from Human Health Risk Index)</li> <li>❖ Score: 0 (Low EJ Sensitivity) – 100 (High EJ Sensitivity)</li> </ul> <p>Tool pulls data for <b>1 indicator category</b> from <b>3 select</b> federally-recognized or managed databases:</p>
<p>➤ <b><u>Social Demographic Indicators</u></b> (2000 Census Data)</p> <ul style="list-style-type: none"> <li>○ Percent minority</li> <li>○ Percent in poverty</li> <li>○ Percent population under 5</li> <li>○ Percent population over 64</li> <li>○ Percent population without high school diploma</li> <li>○ Percent households with limited English proficiency</li> </ul>	<p>➤ <b><u>Social Demographic Indicators</u></b> (2000 Census Data)</p> <ul style="list-style-type: none"> <li>○ Percent minority</li> <li>○ Per capita income</li> <li>○ Percent population under 18</li> <li>○ Percent population over 64</li> <li>○ Percent population without high school diploma</li> <li>○ Percent households with limited English proficiency</li> </ul>	<p>➤ <b><u>Social Demographic Indicators</u></b> (2000 Census Data)</p> <ul style="list-style-type: none"> <li>○ Percent minority</li> <li>○ Percent in poverty/economically stressed (percent of households with income under \$20,000 – adjusted to present day)</li> <li>○ Population density (pop. per sq mi)</li> </ul>
<p>➤ <b><u>Environmental Indicators</u></b></p> <ul style="list-style-type: none"> <li>○ NATA cancer and non-cancer risk from air emissions</li> <li>○ Toxic chemical emissions and transfers from industrial facilities-TRI</li> <li>○ Population weighted ozone and PM 2.5 monitoring data</li> </ul>		
<p>➤ <b><u>Human Health Indicators</u></b></p> <ul style="list-style-type: none"> <li>○ Percent infant mortality</li> <li>○ Percent low birth weight</li> </ul>		
<p>➤ <b><u>Compliance Indicators</u></b></p> <ul style="list-style-type: none"> <li>○ Inspections, violations, and formal actions at major facilities</li> <li>○ Facility density (no. of permitted facilities per q mi)</li> </ul>		

OECA – Environmental Justice Strategic Enforcement Assessment Tool (EJSEAT)	Region 9 – Social Vulnerability Index (SVI)	Region 6 – Potential Environmental Justice Index (PEJI)
<p><b>How community vulnerability is scored:</b></p> <ul style="list-style-type: none"> <li>Each indicator is scaled from 0-100 within each state by Census tract</li> <li>The scaled indicator values are averaged within each category (e.g., demographic, health)</li> <li>The four category values are averaged into an overall value</li> <li>This value is again rescaled from 0-100 within each state, and the final summary value is represented as a decile (1-10) for the Census tract</li> </ul>	<p><b>How community vulnerability is scored:</b></p> <p>Each dataset for each block group is assigned an index score of 0-3, based on whether the value in that dataset falls in the top quartile (score=3), second quartile (score=2), third quartile (score=1), or bottom quartile (score=0)</p> <ul style="list-style-type: none"> <li>Top quartile represents most vulnerable (i.e., block group with the highest percent minority)</li> <li>The datasets are then all added together to assign a comprehensive score to each block group (0-18)</li> </ul>	<p><b>How community vulnerability is scored:</b></p> <ul style="list-style-type: none"> <li>Population density (population per 1 square mile) is scaled 0-4 (0 = 0, 4 = &gt;5,000)</li> <li>Economically stressed and percent minority are scaled 1-5 (based on comparison to State Avg.)</li> <li>Population density and percent minority are calculated at the block level; economically stressed calculated at the block group level, and then applied to the block level</li> <li>The 3 factors are multiplied together to assign a comprehensive EJ score to each block (0-100)</li> </ul>
<p><b>How facility ranking is scored:</b></p> <ul style="list-style-type: none"> <li>Facilities are ranked based on their proximity (currently, considered within 2/3 mile) to Census tracts with high EJSEAT scores</li> </ul>	<p><b>How site ranking is scored:</b></p> <ul style="list-style-type: none"> <li>A one-mile radius is drawn around each site</li> <li>If a site's radius falls within one block group, then the SVI score for that block group is assigned</li> <li>If a site's radius covers multiple block groups, then the percentage of each block group that falls within the radius is calculated, and then multiplied by the total population within each block group</li> <li>Each value is then multiplied by that block group's SVI score, and then summed</li> <li>This value is then divided by the total population that falls within the one-mile radius to come up with a weighted SVI score for the site</li> </ul>	<p><b>How site ranking is scored:</b></p> <ul style="list-style-type: none"> <li>N/A – there is no site ranking component to this methodology</li> </ul>
<p><b>Advantages:</b></p> <ul style="list-style-type: none"> <li>Considers multiple indicators and datasets</li> <li>Calculates a score not just for a demographic area, but also for a regulated facility</li> </ul>	<p><b>Advantages:</b></p> <ul style="list-style-type: none"> <li>Flexible: easy to customize output</li> <li>Block group scale can pick up more EJ communities than Census tract</li> <li>Calculates a score not just for a demographic area (i.e., block group), but also for a site location</li> </ul>	<p><b>Advantages:</b></p> <ul style="list-style-type: none"> <li>Flexible: easy to customize output</li> <li>Block scale can pick up more EJ communities than Census tract or block group</li> </ul>
<p><b>Disadvantages:</b></p> <ul style="list-style-type: none"> <li>Static: limited ability to customize output</li> <li>Census tract scale is not detailed enough to pick up all EJ communities</li> <li>Environmental indicators are focused on outdoor air risk and toxics; do not take into account indoor air quality, drinking water, groundwater, pesticide, and other concerns</li> </ul> <p>Not all indicators have data available at the Census tract level (e.g., health indicators are at the County level)</p>	<p><b>Disadvantages:</b></p> <p>Doesn't consider multiple indicators (e.g., environmental, human health)</p>	<p><b>Disadvantages:</b></p> <ul style="list-style-type: none"> <li>Doesn't consider multiple indicators (e.g., environmental, human health)</li> </ul> <p>Current methodology doesn't take into account calculating a score for a regulated facility or Corrective Action site</p>



APPENDIX C









## APPENDIX D

### *Summary of Region 6 States RCRA Public Participation*

All of the states in Region 6 are authorized to implement the RCRA permitting corrective action programs. As such EPA does not issue RCRA permits in Region 6. We rely on the state programs to follow at minimum EPA guidelines for public participation. As our role of oversight has expanded we continue to look all parts of the RCRA permitting and corrective action programs, including public participation.

In general the states follow the RCRA public participation requirements with some enhancements that are unique for each state. Several of the states provide the public access to draft permits on-line. States also have documents related to corrective action activities on-line. This allows the public easy access to documents for review and in some cases to leave comments. Included is a brief description of each states program and how environmental justice factors into decisions.

#### Arkansas

The Arkansas Department of Environmental Quality (ADEQ) follows the basic required steps for public notices/participation during the permitting process for all Class 1/2/3 Permit Modifications as well as Permits (both initial and renewals). This involves both administrative completeness as well as technical completeness. For Commercial facilities, they always hold a public meeting/hearing for all Class 3 modifications/renewals. For Non-Commercial facilities a public notice of the decisions is made and they await final decisions after the close of the public comment period, etc. Public meetings/hearings are not required to be held for Non-Commercial facilities, but there have been an occasion in which ADEQ has felt it was prudent based upon public concerns, etc. In all public notices, ADEQ offers the public the opportunity to request a public hearing (if not originally required or scheduled).

All comments (both verbal and written) are addressed in a Responsiveness Summary and are sent to all parties that are on the mailing list for the respective facility or to those that provided comments. This Responsiveness Summary becomes part of the final approval/notice of issuance. All final decisions are discussed in Responsiveness Summary and Fact Sheet on each respective decision.

The current State Administrative Regulation (APC&EC Reg. No. 8) allows for any party to request a hearing/meeting if one is not initially offered. Based upon discussions with program managers they could not recall a time in which someone requested a meeting/hearing that the Director did not grant such request.

The point where the local community has input into the process is from the point the facility submits a request to ADEQ for a Permit Modification or a Renewal (or initial issuance) since (1) the facilities are required regulatory to do a public notice when applications are submitted to ADEQ for consideration and (2) ADEQ issues notices of intent to either deny or grant. This later notice has a 30 to 45 day public comment period built into the process. Administrative Repositories are established for all Permitting decisions and the locations of these are placed in the initial public notice Fact Sheets.

There is also a public participation process in RCRA corrective action. A RCRA final remedy for a site is described in a Remedial Action Decision document (RADD), which has a 45-day (or 30-day) public comment period. Once public comments are collected, the authorized agency writes a Response to Comments/Final Decision document.

### *Louisiana*

The Louisiana Department of Environmental Quality (LDEQ) follows the required steps for public notices/participation during the permitting process. LDEQ also has a Public Participation Group that is part of the Permit Support Services Division. They are responsible for issuing public notices and conducting public hearing and meetings associated with permitting activities. One additional enhancement is noted in the requirements to hold an evidentiary hearing in LAC 33:V.709, Evidentiary Hearings on Operating Permit Applications for Commercial Hazardous Waste Treatment, Storage, Disposal, or Recycling Facilities. This applies to a company applying for a RCRA permit as a commercial TSD. The department must hold an evidentiary hearing after the technical review of the permit. There is a public notice and hearing at which extra information regarding the application can be submitted by the public to the LDEQ. LDEQ can't issue the draft permit until it has received and reviewed the record of the evidentiary hearing.

The state maintains an on-line method for the public to access permits (both draft and final), correspondence, public notices and applications.

There is also a public participation process in RCRA corrective action. A RCRA final remedy for a site is described in a Basis of Decision document which has a 45-day (or 30-day) public comment period. Once public comments are collected, the authorized agency writes a Response to Comments/Final Decision document.

### *Oklahoma*

The Oklahoma Department of Environmental Quality (ODEQ) follows the required steps for public notices/participation during the permitting process. ODEQ has a Customer Assistance Program which provides a point of access for agency information. Among other things they provide risk communication and citizen assistance. This allows citizens and public interest groups to obtain copies of permits and other documents.

Another enhancement over and above the basic public participation requirement is how they post all draft permits on the ODEQ web site. The permits can be viewed and comments can be provided on-line by interested parties. ODEQ plans to have all active permits available on line for viewing.

There is also a public participation process in RCRA corrective action. A RCRA final remedy for a site is described in a Statement of Basis which has a 45-day (or 30-day) public comment period. Once public comments are collected, the authorized agency writes a Response to Comments/Final Decision document.

### *New Mexico*

The New Mexico Environment Department (NMED) follows the required steps for public notices/public participation during the permitting process. The New Mexico Hazardous Waste Management Regulations, 20.4.1 NMAC provides for a robust public participation process. Through involvement of the public in the permitting process the hazardous waste permits in New Mexico are improved.

Through negotiations with the applicants and the public, comments received during the comment period the final permits are greatly enhanced to provide the public with more awareness, such as e-mail notifications of various activities that occur at the facility through the term of the permit. NMED will also extend the public comment period on some of the more complex permits.

The New Mexico Hazardous Waste Management Regulations, at 20.4.1.901.A(4) NMAC, states: "If the Secretary issues a Draft Permit, and a timely written notice of opposition to the Draft Permit and a request for a public hearing is received, the Department, acting in conjunction with the applicant, will respond to the request in an attempt to resolve the issues giving rise to the opposition. If such issues are resolved to the satisfaction of the opponent, the opponent may withdraw the request for a public hearing." NMED has interpreted this rule to allow face-to-face discussions with commenter's and the applicant. NMED has successfully conducted such meetings, which have led to withdrawal of hearing requests. While avoiding a hearing can save months of time and considerable resources preparing for an administrative hearing, conducting multiple meetings can also add to the delay in issuing permits.

Commenter's that did not request a hearing are not invited to the meetings with NMED and the applicant. The intent is to resolve as many issues as possible during these meetings. The meetings provide a beneficial interaction and understanding of each party position and in many instances, through detailed discussion of the specific issue, ends in a mutual resolution or compromise. Concerns being discussed may include environmental justice issues. The resolution or compromise must be consistent with and not conflict with the regulations and statute.

At the end of these meetings there are several procedures that may occur. If the withdrawal of hearing requests is made then NMED could issue a final permit. If hearing requests are not withdrawn NMED could then reissue the draft permit for public comment if

significant changes have been made. NMED could schedule a public hearing which would be limited to those issues that were not resolved during the meetings. Other iterations could be considered in the process.

NMED has employed all of these strategies at various times, depending on the circumstances peculiar to each permitting action.

In addition LANL and WIPP have e-mail notification when certain actions occur. These are required in their respective hazardous waste permits. Also, WIPP held pre-submittal meetings when they applied for their permit renewal and they also hold them for Class 2 and Class 3 permit modification proposals. LANL has held pre-submittal meetings on permit modifications, and recently, a new unit they are proposing to add to the current permit. NMED has and continues to encourage the facilities to hold pre-submittal meetings on major modifications and renewal applications. New Mexico public notices permit applications as required by 40 CFR 124.32.

Many of our federal facilities also have established physical information repositories. LANL has recently employed an electronic repository in addition to a physical repository as was negotiated during the permit process and required under the current permit. WIPP also has an electronic repository and a physical repository. In addition, many of our facilities are required to put in place a community relations plan (CRP) that engages the public, and in some instance tribes, on how to inform the communities and interested public of permit and corrective action related activities. The CRPs are required to be updated annually with input from communities, tribes and interested persons.

NMED has established a Border Liaison and a Tribal Liaison to work on EJ concerns and issues. The liaisons were established in response to a public participation process to ascertain the extent and nature of unique and differing EJ issues and concerns in NMED's five state-wide districts. The goal of the liaisons is to be the main point of contact for border or tribal EJ issues focusing on reducing air pollution, providing safe drinking water, reducing the risk of exposure to hazardous waste, training and outreach.

Other enhancements that allow easy access to documents include the NMED website which has all of the current RCRA permits online for viewing or download. The site also includes public notices.

There is also a public participation process in RCRA corrective action. A RCRA final remedy for a site is described in a Statement of Basis which has a 45-day (or 30-day) public comment period. Once public comments are collected, the authorized agency writes a Response to Comments/Final Decision document

### *Texas*

The Texas Commission on Environmental Quality (TCEQ) follows the required steps for public notices/public participation during the permitting process. Enhancements include publishing notices in an alternate language. After a preliminary decision is reached (Final Draft Permit is sent the Office of Chief Clerk (OCC)): a) OCC sends notice of preliminary decision to all persons listed in 30 TAC

39.413; b) Applicant publishes notice in English in local newspaper (in some areas also in an alternate language...i.e. Spanish); c) for new, renewal, and major amendments (not Class 3 modifications) the company will also do a radio broadcast.

Comments and hearing requests will be accepted and considered from the first notice through the final comment period. Also, for major permitting actions and new facilities, the Commission may hold a public meeting as per 30 TAC 39 if public interest is shown.

TCEQ provides easy to find public participation information on-line. In addition the state maintains an Environmental Equity office to address EJ issues. Some of the goals of the program are to help citizens and neighborhood groups participate in regulatory processes; serve as the agency contact to address allegations of environmental injustice; serve as a link for communications between the community, industries, and the government; and to thoroughly consider all citizens' concerns and handle them fairly.

There is also a public participation process in RCRA corrective action. A RCRA final remedy for a site is described in a Statement of Basis which has a 45-day (or 30-day) public comment period. Once public comments are collected, the authorized agency writes a Response to Comments/Final Decision document.





## APPENDIX E

### *2020 GPRA Corrective Action Sites within 5 Miles of Communities of Concern*

EPA ID NO.	FACILITY	PARCEL OWNER	LEAD AGENCY	RANK CA075	HUMAN HEALTH CA725	GROUNDWATER CONTROLLED CA750	REMEDY SELECTED CA400	REMEDY CONSTRUCTED CA550	PROJECTED REMEDY CONSTRUCTED CA 550	EJ SEAT RANKING
<b>Manchester, Texas</b>										
TXD000802959	Ak Steel Corporation	Armco Inc	EPA TX47	ME	YE 10/09	OK	OK	OK	2017	1
TXD008089021	Koppers Company Inc	Magellan Terminal Holdings	STATE	HI	YE 07/04	YE 07/04	08/06		2011	1
TXD008098725	Chevron Phillips Chemical Company Lp	Chevron Phillips Chemical	STATE	HI	YE 02/09	YE 02/09	02/09	NR 02/09		1
TXD008099079	Rhodia Inc	Rhodia / Texas Ultra Pure (joint parcel ownership)	EPA TX47	ME	YE 03/07	OK	OK	OK	2018	1
TXD008105959	Parkans International Llc	Seafood Internationale LLC	EPA TX47	LO	YE 10/09	OK	OK	OK	2018	2
TXD026481523	Kinder Morgan Liquids Terminals Lp	GATX Terminals Corp	STATE	HI	YE 12/04	YE 12/04	08/08	RC 08/08		
TXD053624193	Valero	Valero Refining Co Texas	STATE	LO	YE 11/10	YE 11/10	10/10	10/10		1
TXD055135388	Set Environmental Inc	Set Environmental Inc	EPA TX47	LO	YE 9/10	OK	OK	OK		1

EPA ID NO.	FACILITY	PARCEL OWNER	LEAD AGENCY	RANK CA075	HUMAN HEALTH CA725	GROUNDWATER CONTROLLED CA750	REMEDY SELECTED CA400	REMEDY CONSTRUCTED CA550	PROJECTED REMEDY CONSTRUCTED CA 550	EJ SEAT RANKING
TXD082684002	Exxon Chemical Americas Baytown Chemical	Exxon Corp	EPA 6PD CASE	HI	YE 8/07	IN 8/07			2016	
TXD082688979	Lyondell Citgo Refining Lp	Houston Refining	STATE	HI	YE 08/02	YE 08/02	07/06	RC 08/07		5
TXD084972777	Bayer Corp	John E Frantz	STATE	HI	YE 10/01	YE 08/02	02/08	NR 02/08		1
TXD982560294	Nuclear Sources And Services Inc	Robert D Gallagher	STATE	HI	YE 10/00	YE 10/00	02/06	NR 02/06		1
TXD990757486	Air Products Lp	Air Products Incorporated	STATE	ME	IN 07/97	IN 07/97	01/09	RC 01/09		1
<b>Corpus Christi, Texas</b>										
TXD008117186	Encycle Texas Inc	Still waiting on data	EPA 6PD CASE	HI	YE 12/04	YE 04/04	11/10		2013	3
TXD008132268	Valero Energy Corp	Still waiting on data	STATE	ME	YE 01/09	YE 01/09			2012	1
TXD051161990	Citgo Petroleum Corporation	Still waiting on data	STATE	LO	YE 01/09	YE 01/09			2012	1
TXD066447376	Flint Hills Resources Lp	Still waiting on data	STATE	HI	YE 02/00	YE 12/03	08/07	RC 08/07		1
TXD981153711	Citgo Refining And Chemicals Company Lp	Still waiting on data	STATE	ME	YE 09/09	YE 06/09	02/09	NR 02/09		3
TXD981157530	Citgo Refining And Chemicals Inc	Still waiting on data	STATE	LO	IN 03/07	IN 03/07	3/11	3/11		
<b>Port Arthur, Texas</b>										
TXD000820928	Huntsman Petrochemical Corporation	Huntsman Petrochemical Corp	STATE	LO	YE 03/05	YE 03/05	02/06	RC 02/06		3
TXD008076846	Huntsman Petrochemical Corporation	Huntsman Petrochemical Corp	STATE	ME	YE 09/09	YE 09/09	09/09	NR 09/09		2
TXD008090409	The Premcor	Golden	STATE	HI	YE 02/03	YE 02/03			2012	4

EPA ID NO.	FACILITY	PARCEL OWNER	LEAD AGENCY	RANK CA075	HUMAN HEALTH CA725	GROUNDWATER CONTROLLED CA750	REMEDY SELECTED CA400	REMEDY CONSTRUCTED CA550	PROJECTED REMEDY CONSTRUCTED CA 550	EJ SEAT RANKING
	Refining Group Inc	Triangle Properties LLC								
TXD008097529	Motiva Enterprises Llc	Motiva Refinery	STATE	HI	YE 04/04	YE 04/04	02/09		2015	3
TXD980626022	Motiva Enterprises Llc	Motiva Refinery	EPA 6PD CASE	HI	YE 12/04	YE 12/04			2015	2

**Mossville, Louisiana**

LAD000618256	Cecos Intl, Inc. Calcasieu Facility	Cecos International Inc	STATE	HI	YE 05/03	YE 05/03	06/08	2/11		9
LAD008080350	Citgo Petroleum Corporation	Citgo Petroleum Corporation	STATE	HI	YE 04/05	IN 08/99			2018	3
LAD008080681	Olin Corporation, Lake Charles	Olin Corporation	STATE	HI	YE 06/03	YE 06/03			2014	3
LAD008086506	PPG Industries Inc	PPG Industries Inc	STATE	HI	YE 06/04	YE 06/04	6/10		2012	3
LAD086478047	Georgia Gulf Lake Charles, Llc	Georgia Gulf Lake Charles LLC	STATE	HI	YE 03/03	YE 03/03	02/10	NR 02/10		3
LAD981514441	Ppg Industries No 5 Incinerator	PPG Industries Inc	STATE	HI	YE 06/00	YE 06/00	12/05	12/05		
LAD990683716	ConocoPhillips Company	Conoco Inc	STATE	HI	YE 10/05	YE 10/05			2020	3
LAR000018333	Lyondell Chemical Company	Lyondell Chemical Company	STATE	LO			6/10		2014	3
LAR000041087	Sasol North America Inc.	Sasol North America Inc	STATE	LO					2014	3

**Grants, New Mexico - no RCRA 2020 sites within 40 miles**



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