

Quality Management Plan
for the
City of Laredo, Texas
Killam Lake Brownfields Cleanup Grant Program

Submitted to
U.S. Environmental Protection Agency
Region 6 QTRAK # _____

August 14, 2006

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Quality Management Plan Identification Form

Document Title: Quality Management Plan for the City of Laredo, Texas
Killam Lake Brownfields Cleanup Grant

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Plan Coverage and Purpose:

This Quality Management Plan (QMP) covers all of the environmental monitoring and related measurements performed by or for the City of Laredo Killam Lake Brownfields Cleanup Program, during the cleanup of the Killam Lake property. The purpose of this document is to establish program consistency in the application of Quality Assurance (QA) practices for all data and information collection activities conducted during this Program. This QMP incorporates by reference the definitions from EPA QA/R-2, EPA Requirements for Quality Management Plans.

City of Laredo, Texas, Environmental Services Concurrence:

Name John Porter
Title (BP Manager) Environmental Manager, Environmental Services

Signature Date

Name Gerardo Cantu
Title (QA Manager) Environmental Specialist

Signature Date

ESD Approvals for Implementation:

Name Riazul Mia, P.E.
Title Director, Environmental Services

Signature _____ Date

EPA Approvals:

Name Walter R. Helmick
EPA Region 6 Superfund Division QA Officer

Signature Date

Name Don Johnson
EPA Region 6 QA Manager

Signature _____ Date _____

1. MANAGEMENT AND ORGANIZATION

1.1 Statement of City of Laredo Brownfields Program Policy on Quality Assurance

The Brownfields Program (BP) in the City of Laredo Environmental Services Services Department (ESD) ensures by means of quality assurance/quality control (QA/QC) that all environmental data generated and processed in connection with an Environmental Protection Agency (EPA) cooperative agreement are scientifically valid, of known precision and accuracy, of acceptable completeness, representative, and comparable and, where appropriate, legally defensible.

Because of the importance of QA/QC, it is the policy of the Brownfields Program to conduct quality assurance activities on all environmental site assessments, related field activities, cleanup activities and Brownfields program procurements so that data generated by these activities are in adherence with the QA/QC requirements. One important Brownfields Program QA/QC goal is to ensure that all environmental data generated is scientifically valid and is of acceptable completeness to allow the Brownfields Program to make decisions on appropriate future Brownfields property and land reuse. Another ESD QA/QC goal is to ensure that all environmental data can be utilized to make determinations on health-based or industrial or commercial-use cleanup decisions whenever needed.

1.2 Brownfields Program Manager (BPM) Responsibilities

1.2.1 The BPM is an environmental professional on the Staff of Environmental Services, and has primary responsibility for implementation of the City of Laredo Brownfields Program.

1.2.2 The BPM is responsible for providing timely input to the QAM, regarding changes and revisions required in the City of Laredo QMP, and for preparation of any Quality Assurance Project Plans (QAPPs) for activities conducted under the City of Laredo Brownfields Program.

1.2.3 The BPM is responsible for actual conduct of all environmental data collection activities, including field sampling, testing, monitoring and post-cleanup monitoring.

1.2.4 The BPM is responsible for planning environmental data collection activities, and prior to initiation of any of these data collection activities, the BPM is responsible for preparation of a QAPP.

1.2.5 The BPM reports to the Director, ESD.

1.3 QA Manager (QAM) Responsibilities and Authorities

1.3.1 The BPM is an environmental professional on the Staff of Environmental Services, and has primary responsibility for implementation of the City of Laredo Brownfields Program. QAM is the official QA contact for all intramural and extramural QA environmental data collection activities for the BP.

1.3.2 QAM reports directly to the ESD Director regarding all QA matters.

1.3.3 QAM is responsible for the preparation and submittal of the Quality Management Plan (QMP) and any changes to the EPA Region 6 Quality Assurance Manager for approval and distribution thereof. Distribution means to hand deliver or mail with confirmation to all affected Brownfields Program personnel.

- 1.3.4 QAM is responsible, with input from the BPM, for annual review and update of the QMP, and revision of the QMP if necessary. If no revisions are needed, a letter will be initiated by the QAM, with BPM concurrence, and signed by the ESD Director stating that the QMP has been reviewed, and is current, valid and accurately reflects the policies of the ESD and no changes are necessary. Accompanying this letter will be new, signed approval pages for the QMP. If there have been changes to ESD policies, or the staff or processes defined in the QMP, a revised QMP will be submitted to EPA.
- 1.3.5 QAM will review and concur on all Brownfields Quality Assurance Project Plans (QAPPs), and submit them to the EPA Brownfields Project Manager, at least 60 days prior to the planned initiation of environmental data collection activities.
- 1.3.6 QAM works with the ESD Brownfields-related personnel to take appropriate corrective action when, where, and however needed, during the planning, implementation, and assessment of environmental data collection activities
- 1.3.7 QAM is responsible for assuring that all environmental data collection activities are conducted in accordance with the QAPP.
- 1.3.8 The QAM reports to the Director, ESD.
- 1.4 QA/QC Commitment of Resources
 - 1.4.1 Because of the relative small size of the Brownfields Program QA/QC staff (two staff members) a QA/QC specific staffing budget is not required. Resources necessary to accomplish the Brownfields Implementation are provided by the EPA, and are approved by the EPA Brownfields Project Officer. The QAM will discuss any resource issues jointly to the EPA Brownfields Project Officer and the EPA Superfund Division QA Officer. Environmental data collection activities will be accomplished by contracting with professional environmental specialists via funding provided by the Brownfields Program, or by an environmental specialist to be hired by the ESD.
 - 1.4.2 A budget of approximately \$104,500 has been set aside for contracting purposes for the completion of cleanup and environmental data collection activities.
 - 1.4.3 The City of Laredo provides comprehensive computer training for all employees whose job functions include use of computers. Additional environmental training and re-certifications required of any Brownfields staff are obtainable through EPA, the Texas Commission on Environmental Quality (TCEQ), and other external vendors. QA/QC staff training requirements will be discussed in Section 3 - Personnel Qualifications and Training.
- 1.5 ESD Mission, Functions and Applicable Programs
 - 1.5.1 The ESD Mission Statement is, to provide a better quality of life by promoting a healthy, safer environment through community involvement and education as well as to protect the natural resources from environmental degradation for the citizens of Laredo by ensuring compliance with federal, state, and local environmental laws. The ESD carries out its mission efficiently, effectively, and professionally with respect and dedication to all citizens in Laredo. As a program of ESD, the mission of the Brownfields Program is, to encourage and support the assessment, cleanup-up, and appropriate redevelopment of properties for sustainable use within the City of Laredo. Through the combined resources of various local, state, and federal entities, the

Brownfields Program generates strategies, and facilitates and expedites the redevelopment of abandoned or underutilized sites.

- 1.5.2 As part of the EPA funded Brownfields Cleanup Grant application, the Brownfields Program identified properties to target for cleanup and redevelopment. Environmental site assessments (ESA) have been conducted to identify and record any existing, potential, or suspect conditions that may impose an environmental liability to, or restrict the reuse and/or redevelopment of a subject property. The ESA have established the limits of any contamination, characterized risks to the public, and provided recommendations for remedial and cleanup actions. The type and extent of remedial and cleanup actions will be based on the future use of the property and will be consistent with TCEQ Voluntary Cleanup Program requirements, TCEQ Risk Reduction Rules (Appendix A), and/or requirements set forth in Title 30 of the Texas Administrative Code, Chapter 330, Subchapter T, Use of Land over Closed Municipal Environmental Services Landfills (Appendix B).

1.6 Organization Chart

Please see attached organization chart (Figure 1).

1.7 Assurances of Quality Program Implementation

- 1.7.1 Once the City of Laredo Brownfields Program QMP has been approved by EPA, all Brownfields Program staff will receive a copy of the QMP. On an annual basis, all Brownfields Program staff will discuss the required QA processes detailed in the QMP, to verify their accuracy and adequacy. Details are in Section 10 of this QMP. If any changes are deemed to be beneficial, the QAM will initiate the proposed changes in the QMP, and initiate the approval process.
- 1.7.2 Once the activity discussed in Section 1.7.1 has occurred, the QAM will prepare and submit an annual QA report through the ESD Director, to the EPA Superfund QA Officer that assesses the effectiveness of the QMP and the QAPP(s). The QA report should address at a minimum the following areas: any changes or status quo of the QA management; status of the current QAPP(s) completion; measures of data quality from the project or program activities; significant quality problems (if any); quality accomplishments and status of corrective action(s); results of QA performance reviews; results of QA systems reviews; audits; assessments of data quality in terms of precision, accuracy, completeness, and comparability and QA-related training completed.
- 1.7.3 Prior to the performance of any environmental data collection activities, the BPM will prepare a QAPP, and it shall be approved by the QAM, and the ESD Director. The QAPP may be single document or it may be a portion of a remedial action or cleanup plan. The QAPP, or that portion of the remedial action or cleanup plan containing information on the collection of data and standards for its quality, may be identified or titled as a Quality Action Plan, sampling plan, or monitoring plan.
- 1.7.4 The QAPP, once approved will be sent to the EPA Brownfields Project Manager for review and approval.
- 1.7.5 The City of Laredo shall not initiate environmental data collection activities until the EPA has approved the QAPP. The EPA Brownfields Project Manager, after approving the QAPP, will send a letter to the ESD Director stating that the QAPP has been reviewed and approved, and that data collection activities are authorized to begin.

- 1.7.6 The QAM reviews and approves QA-related sections of procurement packages which include or require QA measures.
- 1.7.7 The QAM reviews and approves the QA documents for contractors or subcontractors who provide services or goods that directly affect the quality of results or products from any Brownfields-related environmental projects.
- 1.8 Responsibilities of ESD Managers (Since ESD oversees many non-Brownfields related programs, in this QMP, "ESD department managers," refers to those managers and their designated personnel who deal specifically with Brownfield-related activities.)
 - 1.8.1 ESD department managers are responsible for specifying the quality of data required from environmentally-related measurement and providing sufficient resources to ensure that an adequate level of QA is performed and required training is available.
 - 1.8.2 ESD department managers, through the QAM, ensure that the QA responsibilities and requirements are understood at every stage of project implementation.
 - 1.8.3 ESD department managers will ensure that QA is an identifiable activity with associated resources to accomplish program goals in the development and execution of all projects and tasks, internal and external, involving environmentally-related measurements.
 - 1.8.4 ESD department managers will ensure that the Brownfields Program QMP and QAPPs are established and implemented.
 - 1.8.5 ESD department managers will ensure that an annual review/audit is performed to determine compliance with QA requirements. ESD department managers ensure that corrective action(s), if needed, are initiated.
 - 1.8.6 ESD department managers will respond to identified program QA problems and needs and ensure their resolution.
 - 1.8.7 ESD department managers will assist in the review and approval of all Brownfields Program standard operating procedures (SOPs) developed by the Brownfields Program QAM and the respective managers.
 - 1.8.8 The Brownfields Program QAM and BPM will practice Data Quality Objectives (as referenced in section 2.5) in addition to departmental procedures.
 - 1.8.9 ESD department managers are responsible for the quality of work performed or items and services provided by contractors, subcontractors and suppliers. All contractors, subcontractors and suppliers must have a quality system consistent with EPA QA requirements.
- 1.9 Management Assurances: ESD department managers responsible for implementing the QMP, are committed to ensuring that adequate resources (monetary and staff) are provided to support the QA effort. ESD department managers realize the key to assuring compliance with this QMP is the professional approach of utilizing the quality system in all areas of Brownfields Program activity and generating a personal commitment on the part of all personnel toward providing a quality service.

2. QUALITY SYSTEM AND DESCRIPTION

- 2.1 The ESD Brownfields Program Quality System utilizes a centralized QA organization with QA oversight coming from the QAM. The only program in ESD specifically requiring QA oversight and QMP implementation is the Brownfields Program.
- 2.2 The QAM has direct access to other program managers for all QA matters as problems arise. QAM informs appropriate managers of these problems (see QMP Introduction) and is responsible for related QA problem corrections.
- 2.3 All Brownfields Program staff will comply with, and consider mandatory, the requirements set forth in this QMP, the requirements stipulated in any individual QAPP, and all administrative and technical procedures that are developed in response to such requirements.
- 2.4 QAPPs will be developed for all environmental data collection activities. The QAPPs specify detailed procedures to assure the quality of the data collected, related field work or goods or services required.
- 2.5 For environmental data collection activities that require the development of a QAPP, the Brownfields Program will adhere to the Data Quality Objective (DQO) process, as described by The EPA QA document titled Guidance for the Data Quality Objectives Process, EPA QA/G-4. For all Environmental Site Assessment projects, the appropriate internal legal council and approval will be secured. Adherence to the DQO process is accomplished by meeting the objectives of the project's work plans as specified in the narrative of the respective cooperative agreement.
- 2.6 Standard Operating Procedures (SOPs) exist in the Brownfields Program. The SOPs include QA practices specifically designed to generate and process data of known and appropriate quality in a cost-effective manner (see 2.7). These QA practices are the DQOs, SOPs, federal and state regulations, specific program work plans, etc.
- 2.7 All QA-related SOPs will be reviewed on an annual basis to ensure applicability and accurateness. SOPs will be modified and rewritten as needed. Current SOPs are listed below and are included as appendices. Since the Brownfields Program is a new "pilot" program, additional SOPs shall be implemented as they are installed into the program.
- Appendix C: Request for Statements of Qualifications (RFQ) for Providing Professional Consulting Services (cover letter template to consultants requesting RFQ package)
 - Appendix D: Professional Services Consultant Selection Evaluation Criteria (includes referenced forms A, B, C, D, E, F, G)
 - Appendix E: City of Laredo Entity's Affidavit of Non-Collusion, Non-Conflict of Interest, and Anti-Lobbying for Consulting Services
 - Appendix F: MBE/WBE Procurement Program packet
- 2.8 The Brownfields Program QAM will use the following internal City tools in assessing the quality of the Brownfields Program:
- reviews/audits;
 - performance evaluations;
 - and data quality assessments.

- 2.9 A single QA Status Report will be required at the conclusion of the remedial or cleanup activities. This report will be submitted to the Superfund Division Quality Assurance Officer. The report shall address the following:
- QA Management; completion status of the QAPP; measures of data quality from the project; significant quality problems (if any); quality accomplishments and status of corrective actions (if any); results of QA performance audits or QA systems audits; assessment of data quality in terms of precision, accuracy, completeness, representativeness and comparability; and QA-related training.

3. PERSONNEL QUALIFICATIONS AND TRAINING

- 3.1 BP staff shall fulfill the educational, work experience, and other requirements for their specific positions, as outlined by the City of Laredo Human Resources job descriptions.
- 3.2 Where effective, new employees will be trained through observation and assistance of veteran employees doing related jobs tasks, and will in turn be observed doing the same tasks. Formal instruction will also be given by veteran employees and supervisors, to support on-the-job training. When knowledge deficiencies are discovered, training will be provided to the staff member. Where internal training is not suitable, external training presented by competent professionals will be utilized.
- 3.3 On an annual basis, during the review of the Brownfields Program QMP, the QAM will contact the EPA Superfund Division QA Officer to determine the Brownfields Program staff needs for QA training. If EPA QA training is available, the training will be scheduled as appropriate. The BPM and the QAM, will complete the EPA Region 6 provided QA Training, within one year of the date of the grant award, or within 180 days of the appointment of new staff or replacement staff to fill these positions, to include:
- Orientation to Quality Assurance Management (one day);
 - Data Quality Objectives (one day); and
 - The QMP/QAPP Seminar (two days).
- This training is available from EPA Region 6, and is normally presented several times each year in Dallas, and at locations within Region 6, at no cost.
- 3.4 All Brownfields Program staff involved in Brownfields environmental field work or contracting environmental data collection activities will be required to complete an in-house training on Brownfields Program QMP and QAPPs provided by the QAM within the first year of employment, or to take the EPA QA Training.
- 3.5 All QA-related training records shall be maintained and kept current by the QAM.
- 3.6 The qualifications of the contractor's QAO are identified in the respective QAPPs. The individual who has been charged with the additional responsibilities as a contractor QAO must meet or exceed the minimum qualifications as set forth by the Brownfields Program, in the following paragraph.
- 3.7 The Brownfields Program QAM will coordinate with the City of Laredo Environmental Services Department for procuring a contractor for environmental site cleanup related work. The contractor will oversee any subcontractors involved with environmental site environmental data collection activities. The contractor will be required to have the following qualifications or certifications:
- Professional experience in Section 404 activities and Wetlands
 - 40 Hour OSHA Training and annual renewal
 - Professional Engineer if extensive engineering controls are required.

Working knowledge of:

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)
Resource Compensation and Recovery Act (RCRA)
Clean Water Act
Clean Air Act
Texas Natural Resource Conservation Commission Voluntary Cleanup Program
American Society for Testing and Materials procedures for conducting environmental

cleanups.

Quality Management Plans
Quality Assurance Project Plans
Data Quality Objectives

Desirable, but not required:

Certified Stormwater Operator Industrial and/or Construction Sites EPA Hazardous
Ranking System (HRS) Certification

4. PROCUREMENT OF ITEMS AND SERVICES

- 4.0.1 A goal of the Brownfields Program is to provide goods and services that comply with specified levels of quality and meet the expectations and needs of the customer. The QA requirements apply only to these items and services that apply directly to results or products for environmental services.
- 4.0.2 Within the legal constraints of Texas Local Government Code, Chapter 252, Purchasing and Contracting Authority of Municipalities, specifications on requests for requisitions shall be of such a nature as to preclude any bids that do not meet the minimum requirements as set forth by the EPA in its various technical assistance documents, Codes of Federal Regulations and the Federal Register.
- 4.1 All procurements of environmental cleanup related services shall be accomplished using a Scope of Services.
- 4.1.1 All Scopes of Service will be provided to EPA Brownfields Project Manager for review and comment prior to being finalized and put out for solicitation.
- 4.1.2 If a contract is awarded under the cooperative assistance agreement, the six affirmative steps stated in 40 CFR 30.44(b) or 40 CFR 31.36(e) as appropriate must be used.
- 4.1.3 When Scopes of Services are extended for bid consideration, all included vendors shall receive an exact hardcopy of the specific Scope required. Vendors will have a limited time for response, with no extensions allowable, on an individual basis. The BPM may extend the time for response to all vendors when circumstances so warrant.
- 4.1.4 The Environmental Services Department as well as the City Attorney, oversees contract procurement and management for environmental site assessment services, as well as review by an Engineering Review Committee (Appendix H). Procurement of services related to environmental site assessments will include completion of the required City of Laredo Request for Statement of Qualifications (RFQ) for Providing Professional Consulting Services package as distributed by the City's Environmental Services Department. This package describes the proposed project and the scope of services required of the contractor. The primary elements of this package are included in Appendices C, D, E, and F. When service bids are received, they will

be handled via regular ESD SOPs. SOPs for the evaluation of contractors responding to RFQs include the City of Laredo Professional Services Consultant Selection Evaluation Criteria (see Appendix D).

- 4.1.5 Selection determinations will be made by comparing each response, item by item, to the Scope of Services and to the evaluation criteria.
- 4.1.6 Any deliverable that does not meet the specification outlined in the Scope of Services shall be deemed unacceptable, rejected immediately, and returned with the appropriate documentation for corrective action and re-submittal of product that meets the requirements as outlined in the Scope of Services.
- 4.1.7 If the final deliverable does not meet the required specifications as outlined in the respective Scope of Services, documentation detailing why the vendor utilized should not be considered in the future for same-type services, will be forwarded to the Department of Environmental Services and Transportation which maintains the mailing list for environmental contractors. The vendor shall receive notification from ESD personnel as to why they failed to deliver agreed upon goods and services. If fraud or other non-lawful concerns are involved, the EPA Superfund and Grants Administration Project Officers shall also receive information on the unlawful nature of the occurrence.
- 4.1.8 Technical reviews of the quality of services will be conducted on a continuous basis. The City will draw upon its internal technical expertise to review the quality of services being performed by the contractor. The review will be conducted by independent qualified City staff having the expertise to examine the work that is being performed. The assigned project manager from the Environmental Services Department and Brownfields Program staff will be responsible for obtaining the technical review. Data evaluated includes documents, activities, laboratory data, etc. The review shall verify or validate the data for correctness, adequacy, completeness, and assurance that all DQOs have been met.
- 4.1.9 A comprehensive procurement record/file will be maintained by the Brownfields Program on each Brownfields-related procurement action. All Scope of Services responses and selected vendors are maintained in the records file.
- 4.2 Any changes to procurement documents shall undergo review by the QAM to ensure adherence to the DQOs and Brownfields SOPs.
 - 4.2.1 Decisions for modifications to the procurement SOPs shall be made by the QAM in consultation with the ESD Director and forwarded on for approval to the Environmental Services Department and the Purchasing Department.
 - 4.2.2 If modifications are not required, then the original process for bidding shall be repeated for items and services.
- 4.3 Because all contracts for services are to be Brownfields-related, the QA/QC requirements are mandated by the respective EPA cooperative agreement and all federal requirements therein. The Brownfields Scope of Services requires that the contractor conducting environmental data collection activities have a QA/QC plan in place and such plan shall be included in the Work Plan. If such a requirement is not addressed by the bidding contractors, the contractor will not be selected. Specific data quality validations shall be included in the contractors QAPP and shall adhere to appropriate guidelines and methodologies (e.g., EPA Guidelines Functional Guidelines of Data Validation.)

- 4.4 All considered vendors shall be selected from the approved City's environmental vendors list that is secured from the Environmental Services Department. If a vendor is not listed on this list, they cannot be considered as a possible provider of goods or services. Vendors not on the current City list can contact the City and be placed on the list. As previously mentioned in Section 4.1, all bids for environmental cleanup services shall be based on the Scope of Services.
- 4.5 Examination of deliverables for acceptability are the respective responsibility of the ESD Director, Environmental Services assigned project manager, the Brownfields Program Manager, and the QAM. Deliverables are examined when received on a continuous basis by appropriate staff members.

5. DOCUMENTS AND RECORDS

This QMP exists to ensure that environmental measurements are of known and acceptable quality. QAPPs identify the goals, objectives and general responsibilities of each Brownfields project and specify the detailed site specific procedures required to assure quality data collection. The data quality is known when all parts associated with its derivation are thoroughly documented, with the documentation being verifiable and defensible. A QAPP shall be required from the consultant for all sites that will have environmental data collection activities. The QAPP shall be submitted to the EPA Brownfields Program Manager or Project Officer for approval prior to initiating any project. A copy of the signed approved QAPP will be kept on file by the Brownfields Program QAM. The data quality is known when all parts associated with its derivation are thoroughly documented, with the documentation being verifiable and defensible. All files and records will be maintained according to City of Laredo records retention policies.

- 5.1 All data generated by the ESD Brownfields Program is reported to the EPA Brownfields Project Manager on a quarterly basis. After completion of actions, the various daily, monthly, quarterly and annual reports generated from the data shall be archived in the ESD offices for five (5) years. After five (5) years, it shall be transferred to off-site storage facilities. The Brownfields Program Manager shall be responsible for the integrity of these records.
- 5.1.1 The Brownfields Program QMP shall be reviewed on an annual basis and if any changes in the QA process have been made, a revised QMP shall pass through internal review and then be forwarded to the EPA QA Office for EPA's review and approval. The revised QMP shall adhere to the EPA Requirements for Quality Management Plans, EPA QA/R-2. If there are no changes required, at a minimum, the Brownfields Program shall submit a certification letter to the Region 6 QA Manager stating that the QMP has been reviewed, was current and accurately reflects the policies and processes of the Brownfields Program. Attached to the certification letter shall be new approval pages signed by the BPM, the QAM and the Environmental Services Division Managers.
- 5.1.2 Any documents related to environmental site assessments and environmental data collection activities are determined as having QA components and all records shall be retained as listed above in this Section.
- 5.2 All open and current data and information records shall be maintained at the desks of the specific staff members responsible for the particular action or site. All staff will be sensitive to security concerns and will take such measures needed to ensure files availability and safety considerations adhere to any confidential business concerns. Questions as to the confidentiality of records shall be clarified by the City's legal staff as needed.

- 5.2.1 After each action or site is completed or closed, all files shall be filed in the central ESD Brownfields files. Filing and retrieval access into the central files shall be restricted to the Brownfields Program staff for security and access control purposes.
- 5.2.2 All records generated under the Brownfields Program, with exceptions of information that may be considered "confidential business information," are subject to the Texas Public Information Act (also known as the Open Records Act), Texas Government Code, Chapter 552, and are available for review to the public upon request.
- 5.3 All technical records shall be prepared according to the Scope of Services.
- 5.4 Review of all Brownfields records are the responsibility of the QAM. All Brownfields environmental data collection shall be in adherence with the EPA's Guidance for Data Usability in Site Assessment document.
- 5.5 Documentation generated as a result of an EPA cooperative agreement whereby EPA may issue an enforcement action shall be under the jurisdiction of EPA and shall not be subject to the Texas Public Information Act, Texas Government Code, Chapter 552. Computer disks are records as defined by EPA.
- 5.6 All Brownfields Program related records shall be recorded and maintained as stated in Section 5.1, 5.2, and 5.3. SOPs for filing documents are Brownfields Program specific and are filed in alphabetic order by name. Special care shall be taken that all local and central files are secure when not in use.

6. COMPUTER HARDWARE AND SOFTWARE

ESD department managers are committed to ensuring that the quality of the data required from environmentally related measures is supported by sufficient computer hardware and software resources to ensure that an adequate level of QA is performed.

- 6.1 The Brownfields Program QA management policy objective is that data collected, analyzed, processed, and maintained on all automated data processing (ADP) systems, in support of environmental activities, be accurate and of sufficient integrity to support effective environmental management. ESD supports this objective and adheres to the specific data processing procedures, as specified in the respective QAPP, which ensures the effective and efficient use of hardware and software.
- 6.2 ESD purchases and uses software that is in accordance with the EPA's Information Resources Management Standard and the City of Laredo ADP Procurement Requirements (Appendix I). Newly acquired software will have a translation capability to access archived documents. Software will be compatible to hardware purchased by EPA and other City departments.
- 6.3 It is not anticipated that the Brownfields Program will develop any independent software. The City of Laredo procurement process requires that computer hardware meet certain specifications for its intended use. All future hardware and software shall be capable of being networked with other ADP computer systems in ESD.
- 6.4 Any security needed for ADP environmental records shall incorporate a code-encrypted system and only authorized staff shall have access. ESD Brownfields related activities that use computer

generated environmental information will follow the EPA "Good Automated Laboratory Practices" (GALP).

- 6.5 After the EPA QA Manager has approved and assigned the Brownfields Program QMP a QTRAK (an EPA computer program that contains database information on QMPs and QAPPs for the EPA QA Office for planning and assessment of the status of the Region 6 QMPs) number, all QMP and QAPP related records shall have the QTRAK number annotated on them.
- 6.6 The Brownfields Program QAM shall keep track of the QMP and any QAPPs by reviewing these documents on the computer and making updates accordingly using Microsoft Office word-processing software. This type of accessibility and quarterly tracking by the QAM will allow for efficient updates and tracking of staff members having QMP documentation and records.
- 6.7 Because of the relative small size of the Brownfields Program, all ADP use shall be generated from off-the-shelf purchased software. No original generation of software systems shall occur. If, in the future, there is need to create an ADP data system the QMP shall be revised to reflect such change.
- 6.8 All future purchased software shall be evaluated according to the EPA's Information Resources Management Standard and the City of Laredo ADP Procurement Requirements. If software or hardware needed is different than the standardized ADP procurements, working with knowledgeable ADP staff, specific identified needs shall be defined prior to writing a Scope of Services for required ADP needs.

7. PLANNING

- 7.1 ESD managers are responsible for ensuring that QAPPs are adequate and specific data quality goals acceptable to the data user and assigning responsibility for achieving these goals. Brownfields Program customers are the citizens of Laredo, the City Manager, the Assistant City Managers, the Mayor, the City Council, commercial/industrial business owners, the State of Texas, and EPA Region 6.
 - 7.1.1 Performance objectives will be developed based on the current EPA cooperative agreement guidance document, using identifiable cost and schedule constraints as guidelines. Performance results shall be measured according to program requirements as outlined in the respective QAPP.
 - 7.1.2 The Brownfields Program must ensure that unique planning requirements for all environmental site work are addressed and documented according to the specific work to be performed (see 1.4.2). This will be accomplished through the development of a workplan for remedial and cleanup activities for each site.
 - 7.1.3 In addition to requested revisions on the QMP and the QAPP documents, these documents are reviewed and revised when changes in sampling sites, sampling and/or analytical methodology, or QA procedures necessitate revisions.
- 7.2 The Brownfields Program DQO planning process is driven by the *Guidance for the Data Quality Objectives Process, EPA QA/G-4*, for environmental data collection activities where a QAPP is required.

- 7.2.1 The EPA cooperative agreement guidance defines the intended use of the environmental data collected. Therefore, appropriate QA measurements are defined considering the specific QA activities, the assigned level of data, and the acceptable data criteria.
- 7.2.2 An initial review of proposed work activities, as outlined in each workplan, will be conducted to ensure that the quality of science is adequate to meet the desired DQOs. EPA Brownfields Project Managers use the following means to measure the performance of the Brownfields Program against their cooperative agreement workplan and the QMP: quarterly reports written and submitted by the BP; mid-year and end-of-year assignments; interim reports and letters and through continuous communications.
- 7.2.3 If a customer makes the Brownfields Program staff aware of critical QA needs that have not been planned for, the QAM will ensure that the identified need is addressed. The QAM will revise the QMP and the respective QAPP to ensure the data needs are recorded as required.
- 7.3 Each QAPP is specifically designed to meet the environmental data required for each project. The QAPPs are developed in accordance with the Brownfields Program QMP data collection requirements.
- 7.4 All project environmental data collection activities are to be specifically detailed in the relative Scope of Services to ensure that cost and schedule constraints are considered prior to when bids are sent out, then received, approved and accepted. Working with projected estimates of planned activities, close attention will be given to the contract budget funds to ensure costs do not exceed funds available.

8. IMPLEMENTATION OF WORK PROCESSES

- 8.1 The Brownfields Program QAM, in cooperation with ESD managers, and in conjunction with the BPM, is ultimately responsible for ensuring that all projects and tasks involving environmentally related measurements are covered by an acceptable QAPP and ensuring that the plan is implemented. The work process and performance measurements are identified in the respective QAPP and are developed in accordance with the EPA cooperative assistance agreement. Because environmental measurements must be of a known and acceptable quality, environmental data operations must be implemented in accordance with procedures outlined in QAPPs, approved by the EPA Brownfields Project Manager prior to implementation. Any and all deviations must be documented in writing.
- 8.2 The EPA project officer evaluates the Brownfields Program's effectiveness by means of the quarterly reports, on-site visits and continuous communications. The quarterly progress reports will include brief statements covering work status, work progress, preliminary data results, and evaluations made during the reporting period. In each quarterly report, any significant slippage of the workplan must be documented by the QAM and reported to the EPA Brownfields Project Manager, along with a proposed plan of slippage correction. The quarterly reports will be submitted to the EPA Brownfields Project Manager for the following periods:
- 1st federal fiscal quarter - December 31
 - 2nd federal fiscal quarter - March 31
 - 3rd federal fiscal quarter - June 30
 - 4th federal fiscal quarter - September 30

- 8.3 The QAM, in conjunction with the BPM, will confirm with the ESD Director any planning deviations, either positive or negative, in order to ensure the customer satisfaction is assured and goals and objectives of the program are met.
- 8.4 As an additional oversight measure, before implementation, the EPA Brownfields Project Manager will receive copies of proposed Scopes of Work for review and comment. If the Brownfields Project Manager has concerns or requests changes, said changes will be addressed before finalization of any procurement activities.
- 8.5 Although workplans are prepared according to national and regional guidelines, workplans are living documents that are often subject to change. The implementation of activities described in these documents is minimal in scope. Thus, annual management systems reviews will not be needed. However, technical systems audit and the quarterly report shall serve as the vehicles by which the QAM keeps the ESD managers and the EPA Brownfields Project Manager apprised of activities to ensure that work is being performed according to the workplan.
- 8.6 All Brownfields-related procedures that directly impact the City's procedures shall be subject to an internal review process that crosses all impacted and involved departments. Managers of the departments involved shall review any developed SOPs that impact their department.

9. ASSESSMENT AND RESPONSE

- 9.1 In order to ensure that the Brownfields Program QA system is being implemented and is adequate, a series of technical and managerial reviews/audits are needed. The adequacy of the Brownfields QA program and to what degree it is being implemented shall be assessed by the following tools.
- Internal QAM reviews and audits;
 - Performance evaluations;
 - Technical reviews;
 - Data quality assessments;
 - Corrective Actions Response.
- 9.2 These reviews/audits verify that the QMP and the QAPPs are being implemented, detect and define problems so that immediate corrective action can be initiated, and assure that performance meets the City's and EPA's needs and objectives.
- 9.3 Peer review of activities associated with the QAPP(s) and project completion reports will be undertaken by Brownfields Program staff, EPA Brownfields Coordinator (or designated staff), and other City department staff involved with Brownfields Program project work. This process consists of reviewing the decisions and/or practices made by a single individual by others involved with the project to ensure QA objectives are being met. Continuous communications with the EPA Brownfields Coordinator shall also determine if the Laredo Brownfields QA Processes are supporting the national Program objectives.
- 9.4 If desired, the EPA may conduct reviews or audits of the Brownfields Program to ensure that program objectives are met. The reviews will ensure that acceptable QA/QC activities and requirements are included, that proper QA was considered at the project's inception and that the project will be able to produce data of required quality in a reliable and cost effective manner. The review/audit shall be scheduled and conducted with the manager whose program is to be reviewed.

- 9.5 Preliminary findings will be discussed with the manager whose program was reviewed. A written report will be prepared by the personnel that conducted the review/audit and submitted to the QAM, the Department Director and the ESD Manager within 45 days unless a different time frame is agreed upon in advance. Any corrective actions needed shall be included in the report. The manager shall respond to the report and address any corrective actions within 45 days of receiving the report.
- 9.6 Effective oversight of any environmentally related data measurements and the QA process are the responsibility of each Brownfields staff in order to ensure that quality is provided to their customers; therefore, reviews will be initiated at the most appropriate level.
- 9.7 If review/audit findings indicate corrections are needed, the QAM will revise processes and SOPs as needed after consulting with the ESD Department Director and ESD managers as to appropriate corrective actions needed.
- 9.8 Any corrective actions recommended and related follow-up shall be included in the quarterly EPA report. If the QMP needs any major revisions as a result of significant recommended corrective actions, the QMP shall be revised in a timely manner as specified by EPA QA/R-2 and submitted to the EPA QA Manager for review and approval. ESD department managers have the authority to suspend operations that are a deviation from the QMP, QAPP, and the workplan when erroneous data would be generated and/or there is risk or injury to the environment or health of the citizens of Laredo.

10. QUALITY IMPROVEMENT

- 10.1 The development of continuous quality improvement leads to the development of a better and more responsive quality system. The Brownfields Program is set up so that program personnel are encouraged to provide feedback to the manager regarding program improvement. Meetings are held with the staff and may include representatives from stakeholders and/or the contractor's representatives in the process to exchange ideas and identify new ways to accomplish tasks and produce better products. The QAM is responsible for ensuring that accepted ideas and recommendations for improvement in the QA process are captured and documented. The Brownfields QAM is responsible for ensuring that recommended program changes are investigated and if acceptable, approved and implemented.
- 10.1.1 The QAM is responsible for reviewing on an on-going basis all recommended changes that are integrated into the QA process. The program staff is responsible for reviewing and evaluating all new changes into the program. The EPA Brownfields Project Manager can also recommend program and QA changes that will improve the effectiveness of the program.
- 10.1.2 Any significant new additions or changes in the QA process must be recorded, as appropriate, and incorporated into the QMP and forwarded to the EPA QA Manager for approval.
- 10.2 Adverse conditions or concerns in the Program are identified through semi-annual reviews by the ESD Department Director, annual or semi-annual reviews by the EPA Brownfields Project Manager, and on an on-going basis by the Program's staff. After considerations and discussions, corrective actions will be implemented immediately.
- 10.2.1 Corrective actions will identify the causes of the problem(s), determine if the problem(s) is (are) unique or have more generic implications and recommend procedures to prevent reoccurrence of said problem(s). The QAM is responsible for ensuring that corrective action(s) have been implemented and are effective in preventing reoccurrence of any problem(s).

10.2.2 If SOPs need revision, the appropriate SOP will be rewritten and shared with the impacted staff members. If necessary, additional QA training will be scheduled.