

separate from any other obligation contained in this Agreement and that no claim or action by or on behalf of the City shall be limited to insurance coverage provided..

L) Contractor and any Subcontractors are responsible for all damage to their own equipment and/or property.

INDEMNIFICATION

CONTRACTOR covenants and agrees to FULLY INDEMNIFY, DEFEND and HOLD HARMLESS, the CITY and the elected officials, employees, officers, directors, volunteers and representatives of the CITY, individually and collectively, from and against any and all costs, claims, liens, damages, losses, expenses, fees, fines, penalties, proceedings, actions, demands, causes of action, liability and suits of any kind and nature, including but not limited to, personal or bodily injury, death and property damage, made upon the CITY directly or indirectly arising out of, resulting from or related to CONTRACTOR' activities under this Agreement, including any acts or omissions of CONTRACTOR, any agent, officer, director, representative, employee, consultant or subcontractor of CONTRACTOR, and their respective officers, agents employees, directors and representatives while in the exercise of the rights or performance of the duties under this Agreement. The indemnity provided for in this paragraph shall not apply to any liability resulting from the negligence of CITY, it s officers or employees, in instances where such negligence causes personal injury, death, or property damage. IN THE EVENT CONTRACTOR AND CITY ARE FOUND JOINTLY LIABLE BY A COURT OF COMPETENT JURISDICTION, LIABILITY SHALL BE APPORTIONED COMPARATIVELY IN ACCORDANCE WITH THE LAWS FOR THE STATE OF TEXAS, WITHOUT, HOWEVER, WAIVING ANY GOVERNMENTAL IMMUNITY AVAILABLE TO THE CITY UNDER TEXAS LAW AND WITHOUT WAIVING ANY DEFENSES OF THE PARTIES UNDER TEXAS LAW.

The provisions of this INDEMNITY are solely for the benefit of the parties hereto and not intended to create or grant any rights, contractual or otherwise, to any other person or entity. CONTRACTOR shall advise the CITY in writing within 24 hours of any claim or demand against the CITY or CONTRACTOR known to CONTRACTOR related to or arising out of CONTRACTOR' activities under this AGREEMENT and shall see to the investigation and defense of such claim or demand at CONTRACTOR's cost. The CITY shall have the right, at its option and at its own expense, to participate in such defense without relieving CONTRACTOR of any of its obligations under this paragraph.

SUPPLEMENT TO STANDARD INSTRUCTIONS TO RESPONDENTS

1. Project Description:

The primary purpose of this project is to reconstruct a portion of the perimeter road north of runway 4-22. There may be work within the runway operating environment that will require the temporary closure of runway 4-22. Work will be allowed 24-hours/day, seven days/week. The Contractor will be able to access the project seven days/week and 24 hours/day. Construction of the project will be within the active Air Operations Area (AOA). All construction within the AOA will be conducted in accordance with the requirements of SAT Operations and FAA Advisory Circular 150/5370-2F latest edition, *Operational Safety on Airports During Construction*. In addition, Contractor personnel will be required to obtain security badging to work within the AOA and all construction vehicles on the AOA must be operated by personnel who have completed the AOA driver's training class conducted by SAT Operations or are accompanied by an Airport approved escort vehicle.

In general, the Project Work can be categorized as 1) Work within the runway operating environment(s) and 2) Work outside of the runway operating environment(s). Work within the runway operating environment(s) may require a temporary closure of runway 4-22. **All work within these areas shall be coordinated with SAT Operations.** Work outside of the runway operating environment will be allowed anytime during the Contract Period. Subsequent to its re-opening, runway 4-22 will be active and all requirements of SAT Operations and FAA Advisory Circular 150/5370-2F, Operational Safety on Airports During Construction will be strictly enforced.

2. A responsive bid shall consist of the following:
 - a. Compliance with items set forth in Division A, 010 Invitation for Bid.
3. In determining a low bidder, the City shall consider the total of the following:
 - a. Base Bid and all Alternative Bids (where applicable).
 - b. Contractor's qualifications.

STANDARD INSTRUCTIONS TO BIDDERS FOR FEDERALLY ASSISTED CONTRACTS (SIB-AVIATION)

1. DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

1.1 It is the policy of the City of San Antonio to involve qualified Small, Minority, African-American, Woman-owned, and local business enterprises to the greatest extent feasible in the City's construction, procurement, professional services, and leases and concessions contracting. Per Ordinance #69403, the City of San Antonio, its employees, contractors, and subcontractors shall not discriminate on the basis of race, color, religion, national origin, sex, age, or handicap in the award and performance of contracts. Violation of this ordinance is a criminal offense and subject to penalty.

1.2 Requirements for **ALL** bids:

1.2.1 It is the policy of the City of San Antonio that disadvantaged business enterprises (DBEs), as defined under 49 CFR Part 26, shall have "equality of opportunity" to participate in the awarding of federally-assisted Aviation Department contracts and related subcontracts, to include sub-tier subcontracts. This policy supports the position of the U.S. Department of Transportation (DOT) in creating a level playing field and removing barriers by ensuring nondiscrimination in the award and administration of contracts financed in whole or in part with federal funds under this contract. Therefore, on all DOT-assisted projects the DBE program requirements of 49 CFR Part 26 apply to the contract.

1.2.2. The Bidder/Contractor agrees to employ good-faith efforts (as defined in the Aviation Department's DBE Program) to carry out this policy through award of subcontracts to disadvantaged business enterprises to the fullest extent consistent with the sufficient performance of the Aviation Department Contract, and/or the utilization of DBE suppliers where feasible. Aviation Department bidders/contractors are expected to solicit bids from available DBE's on contracts which offer subcontracting opportunities.

1.2.3. Bidder/Contractor specifically agrees to comply with all applicable provisions of the Aviation Department's DBE Program. The DBE Program may be obtained through the airport's DBE Liaison Officer at (210) 207-3505 or by contacting the City's Aviation Department.

1.2.4 Notification is hereby given that a DBE contract specific goal has been established on this bid/contract. The applicable DBE goal is 10.37% of the total dollar value of this contract.

1.2.5 The Contractor shall appoint a high-level official to administer and coordinate the Contractor's efforts to carry out the DBE Policy and Program requisites. The Contractor's official should coordinate and ensure approval of the required "Good-Faith Effort Plan" (Attachment 1).

1.2.6 The Contractor shall maintain records, as specified in the audit and records section of the contract, showing: (i) all subcontract/supplier awards, specifically awards to DBE firms; (ii) specific efforts to identify and award such contracts to DBEs; and (iii) submit when requested, copies of executed contracts to establish actual DBE participation.

1.2.7 The Contractor shall agree to submit periodic reports of subcontract and/or supplier awards to DBE firms in such form and manner and at such times as the Aviation Department shall prescribe and shall provide access to books, records, and accounts to authorized officials of the City, Aviation Department, state, and/or federal agencies for the purpose of verifying DBE participation and good-faith efforts to carry out the DBE Policy and Program. All Aviation Department contractors may be subject to a post contract DBE audit. Audit determination(s) may be considered and have a bearing in the evaluation of a Contractor's good-faith efforts on future airport contracts.

1.2.8 All construction Bidders/Contractors with contracts subject to formal review and approval shall make good-faith efforts (as defined and approved by the City through the Aviation Department in

its DBE Program) to subcontract and achieve the applicable contract specific DBE goal with certified DBEs. Contractors failing to achieve the applicable contract specific DBE goal or contractors failing to maintain the specific DBE goal percentage involvement initially achieved, will be required to provide documentation demonstrating that they have made good-faith efforts in attempting to do so through the submittal of an Aviation Department approved “*DBE Good-Faith Effort Plan*”. *Bidders are required to satisfy applicable DBE program requirements prior to the award of the Aviation Department contract. Bidders must submit a DBE Good-Faith Effort Plan or will be considered non-responsive.*

- 1.2.9 A Bidder/Contractor may count towards its DBE goal sixty percent (60%) of its expenditures for materials and supplies required under a contract and obtained from a regular dealer, and one hundred percent (100%) of such expenditures to a DBE manufacturer. For purposes of this section, a manufacturer is a firm that operates or maintains a factory or establishment that produces on the premises the materials or supplies obtained by the Bidder or Contractor.
- 1.2.10 The City and Aviation Department encourages the Bidder/Contractor to utilize currently approved and certified DBE firms on the contract for DBE goal achievement and credit purposes. The Aviation Department utilizes the services of the South Central Texas Regional Certification Agency (SCTRCA) to certify DBE eligibility status. Please contact the SCTRCA at 305 E. Euclid, Suite 102, San Antonio, Texas 78212 (210/227-4722) for information regarding DBE trade areas or to apply for DBE status. The Aviation Department accepts DBE certification from any one of the five (5) certifying agencies under the Texas Unified Certification Program (TUCP) – Texas Department of Transportation (TxDOT), North Central Texas Regional Certification Agency (NCTRCA), South Central Texas Regional Certification Agency (SCTRCA), City of Houston, and the Corpus Christi Regional Transportation Authority.
- 1.2.11 Submittal of DBE status certification information for **all** DBE firms utilized or proposed to be utilized on the project as subcontractors, sub-consultants, or vendors, to include prime contractors when applicable, in the performance of work on said project. Additionally, prime contractors must submit a “Letter of Intent” form (Attachment 2) for **each** subcontractor prior to award of contract.
- 1.2.12 The following DBE-related contractual clause shall be applicable and is specifically included as part of the construction contract. Contractors shall also include this clause in each subcontract the prime contractor signs with a subcontractor.

“The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate”.

Additionally, Contractors agree to the following prompt payment and retainage payment clause:

“The Prime Contractor agrees to pay each subcontractor under this Prime Contract for satisfactory performance of its Contract no later than thirty (30) days from the receipt of each payment the Prime Contractor receives from the City of San Antonio. The Prime Contractor further agrees to return retainage payments to each subcontractor within thirty (30) days after the subcontractor’s work is satisfactorily completed. Any delay or postponement of payment from the above referenced timeframe may occur only for good cause following written approval from the City of San Antonio. This Clause applies to both DBE and non-DBE subcontractors”.

- 1.2.13 All changes to the list of subcontractors submitted with the bid and approved by the City or Aviation Department, including major vendors, shall be submitted for review and approval by the Aviation Department's DBE Liaison Office. DBE Form 3, *Change of Subcontractors/Suppliers* (Attachment 3) is to be completed and submitted to Aviation Department officials for approval when adding, changing, or deleting subcontractors on airport projects. *Contractors shall make a good-faith effort to replace DBE subcontractors unable to perform on the contract with another DBE.*
- 1.2.14 Failure or refusal by a Bidder or Contractor to comply with the DBE provisions herein or any applicable provisions of the DBE Program, either during the bid process or at any time during the term of the Contract, may constitute a material breach of Contract, whereupon the Contract, at the option of the Aviation Department, may be cancelled, terminated, or suspended in whole or in part, and the Contractor may be debarred from further contracts with the City of San Antonio.

Additional Supplemental General Conditions Required
for
Aviation Department Projects

- 1) The use of explosives is strictly prohibited on the airport properties, including airside property and landside property.
- 2) The Contractor will be responsible for construction staking except for verifying and making benchmarks for horizontal and vertical control.
- 3) Survey Layout:
The Contractor shall employ an experienced and competent surveyor, registered in the State of Texas, to lay out the detail lines and grades of the work from the horizontal and vertical control established in those contract documents. A closed traverse and level loop within a close proximity of the construction site will be provided by the contractor's surveyor. A copy of such work will be presented to the Architect/Engineer for review prior to any field layout by the Contractor.
- 4) This contract shall be a calendar day contract.
- 5) Extension of Time for Adverse Weather:
Extension of time for adverse weather conditions not reasonably anticipated as provided in Subparagraph 8.3.1 will be granted for those days where precipitation is 0.10 inch or greater and where the number of such days exceed the normal number of rain days in that particular month. This provision shall cease at the time of Substantial Completion. The determination of the normal number of rain days per month shall be according to Local Climatological Data prepared by the National Oceanic and Atmospheric Administration.

For the San Antonio area, the climatological data is recorded at the airport weather station. The Contractor may expect adverse weather for the number of calendar days in accordance with the following local climatological data prepared by NOAA.

	0.10 In. or More Precipitation at <u>San Antonio Airport</u>
January	2
February	4
March	2
April	4
May	4
June	3
July	3
August	3
September	5
October	6
November	3
December	3
 Total Days Lost	 42

The contractor agrees that the measure of adverse weather during the period covered by the Specification shall be the number of days in excess of those shown for each month.

- 6) Aviation Department may close the construction site due to security reasons. The contractor will not be compensated for any loss due to shut down for the first three closures. Each day shall be counted as one shut down regardless of the total hours involved for each day.
- 7) Contractor shall provide, prepare and distribute agendas and minutes for all construction progress meetings and/or coordination meetings.
- 8) As per FAA policy, the prime contractor must provide the Aviation Department a Buy American Preference certificate.
- 9) Staging Area and Storage Area:
 - A) The contractor needs to maintain areas in a clean condition at all times.
 - B) If the contractor and/or their subcontractors store equipment, fuel, paint, and or other hazard material at the staging areas, and/or storage areas, the contractor will perform and pay their own costs for soils and water testing before use of the site, upon exit from the site and any site remediation that may be necessary, as directed by the Owner.
 - C) Prior to occupying and upon vacating any staging area/and or storage areas, the contractor shall submit the owner a minimum of 10 photographs documenting the initial and final conditions of the staging area and/or storage area. Each photograph must have a date. During the construction, the contractor needs to provide 5 progress photographs for each area with each payment request.
 - D) The contractor shall provide a written notice to the owner two weeks in advance prior to vacating the staging areas and/or storage areas.
 - E) The policies stated here will be applied to the areas owned by the private citizens and leased by the contractor for the project involved.
 - F) All work and required pictures are part of subsidiary to Item 100.1, Mobilization/Demobilization.
- 10) Reflective Safety Vests and Hard Hats:
 - A) At a minimum, all reflective safety vests must meet ANSI Class-2, Level-2 Standards.
 - B) All construction personnel or site visitors on the project sites shall wear the hard hat and the reflective safety vest at all times.
 - C) All construction personnel or site visitors entering AOA site must wear the reflective safety vest at all times, regardless inside the project site or not.
- 11) The Aviation Department has the Soil Management Plan. The said plan can be downloaded from the <http://www.sanantonio.gov/Aviation/EnvironmentalStewardship/SoilManagemnt.aspt>. All four appendixes are attached after this section. The contractor has to follow the instructions stated in the said Soil Management Plan to handle all required tests and to submit the SMP Manager Authorization Form for all import soils and/or exported soil for approval before the contractor can import the soil to the project site or to export the soil out of the airport project site, regardless the location of the project site, inside AOA fence or outside AOA fence. All required materials, equipment, labor, tool, and incidentals necessary to complete the work to meet the requirements stated on the Aviation Department's Soil Management Plan are one part of subsidiary to Item 101, Preparing Right-of Way.

SAN ANTONIO INTERNATIONAL AIRPORT

9800 Airport Boulevard
San Antonio, Texas 78216



Soil Management Plan

*Prepared by: San Antonio International Airport
Environmental Stewardship Division*

TABLE OF CONTENTS

Section	Contents	Page Number
1.0	Introduction	1
1.1	Purpose & Scope	1
1.2	Definitions	1
1.3	Soil & Geologic Setting	3
1.4	Applicability	3
1.5	SAAS Department Responsibilities	4
2.0	Soil Stockpile Area Requirements	5
2.1	Storm Water Pollution Prevention Plan	5
2.2	Erosion Control Measures	5
2.3	Security	5
2.4	Soil Segregation	5
2.5	Environmental Contamination	5
2.6	Vehicle Maintenance/Fueling	5
3.0	Potential Contaminants	6
3.1	Jet Fuel	6
3.2	Aviation Gasoline	6
3.3	Motor Gasoline	6
3.4	Diesel	7
3.5	Solvents	7
3.6	De-icing and Anti-icing Fluids (ADAFs)	7
3.7	Metals	7
3.8	Battery Acids	8
3.9	Other Construction Components	8
4.0	Management of Soils at Project Sites	9
4.1	Soil Screening & Sampling	9
4.1.1	Screening Methods	9
4.1.2	Soil Sampling	10
4.1.3	Sampling Frequencies	11
4.1.4	Confirmation Sampling	11
4.2	Excavated Soils	12
4.3	Imported Soils	12
4.3.1	Ready-to-Plant, Mulch and Topsoil	12
4.3.2	Material Used for Concrete	12
4.4	Suspected Contaminated Material	12
4.5	Soil Disposition/Transportation	13
4.6	Soil Sampling and Classifications	14
4.6.1	Unregulated Soil	14
4.6.2	Impacted Soil	14
4.6.3	Contaminated Soil	14
4.7	Sample Documentation	14
5.0	Management of Soil Stockpile Areas	16
5.1	Soil Classification Management	16
5.1.1	Unregulated Soil	16
5.1.2	Impacted Soil	16
5.1.3	Contaminated Soil	16
5.2	Maintenance of Soil Stockpiles	16
6.0	Data Management	17
6.1	Field Documentation	17
6.2	Soil Tracking	17
6.3	Sample Documentation	17
6.4	Project Database	18
7.0	Reporting	19
6.1	Emergency Notifications	19
6.2	Reports – Project Manager	19

APPENDICES

Appendix	Contents
A	Soil & Geologic Tables
B	Chemicals of Concern (COC) Acceptable Concentration Limits
C	Soil Stockpile Plan
D	SMP Authorization Form

1.0 Introduction

The Environmental Stewardship Division (ESD) of the San Antonio Airport System (SAAS) has developed this *Soil Management Plan* (SMP) to establish practices for managing soil generated or handled by Airport projects to assure that excavated/imported soil suspected of being contaminated is separated from clean soil and managed in compliance with Federal, State and Local rules and regulations.

This *Soil Management Plan* is designed to:

- ensure that soil entering or leaving the San Antonio International Airport (SAT) or Stinson Municipal Airport (SSF) is not contaminated;
- verify that surplus soil leaving SAT or SSF is not mixed with contaminated soil at an off-Airport location;
- ensure that test procedures to identify soil contamination are scientifically appropriate;
- provide a tracking method for soil disposition.

Note: This *Soil Management Plan* is not designed nor is it intended to be a *Site Safety Plan*. Determination of compliance with Occupational Safety and Health Administration (OSHA) regulations and appropriate training for construction workers is the sole responsibility of the contractor.

1.1 Purpose and Scope

This *Soil Management Plan* is designed to assist SAAS, SAAS contractors and SAAS tenants with cradle to grave liability for contaminated media, provide guidelines to identify potential, or known, environmental conditions that may be encountered during construction projects at SAT or SSF, and assure compliance with applicable laws, regulations and/or policies. The scope of this *Soil Management Plan* is to provide guidelines and procedures to effectively address environmental issues associated with soil excavated from SAAS projects; generated on-Airport, or imported from off-Airport sources to be used by SAAS contractors.

Compliance with applicable federal, state and local health and safety regulations is the responsibility of SAAS and each contractor and/or tenant engaging in activities relevant to this *Soil Management Plan*. Construction contracts may provide more specific project related obligations.

1.2 Definitions

ESD – SAAS's Environmental Stewardship Division.

Project Manager – This is the individual in charge of any construction project that involves the moving or handling of soil. The project manager may be an employee of SAAS, a tenant, or a contractor. The Project Manager is responsible for ensuring the adherence to all requirements of this *Soil Management Plan*.

P&D – SAAS's Planning and Development Division

SAAS – San Antonio Airport System

SAT – San Antonio International Airport

SMP – Soil Management Plan

SMP Authorization – Written authorization from ESD and/or P&D to transport soils to or from SAT or SSF. The written authorization must specify the off-Airport location, expected contaminant levels, soil quantity, time period and Airport site(s) covered by the authorization. Written authorization to import or export soil must be obtained prior to acceptance of contractual obligations for soil importation or exportation.

Soil Stockpile Plan – The *Soil Stockpile Plan* must be generated and maintained by ESD and the Planning & Development Division (P&D) with support from the Wildlife Division (which monitors wildlife activities and hazardous wildlife on and near the airport). The *Soil Stockpile Plan* must distinguish between surplus soil and soil required to remain available on-Airport for use in future planned construction projects. The *Soil Stockpile Plan* must consider soil volume, structural properties, and designate stockpile locations to preserve and maintain surplus clean soils for future development projects as P&D deems appropriate.

Soil – Refers to soil, dirt, fill, gravel, sand, rock, aggregate, alluvium, crushed concrete, constructions soils/spoils, demolition material, backfill, topsoil, engineering fill or earthen material.

SSF – Stinson Municipal Airport

TCEQ - Texas Commission on Environmental Quality

Soil Screening Plan – A written plan prepared by the Project Manager whose construction project involves the moving or handling of soil. This project *Soil Screening Plan* must be submitted for ESD and/or P&D approval prior to conducting related project activities. The project *Soil Screening Plan* must consider:

- Nature of historic activity and potential existing contamination at the construction site (PM can obtain this information from ESD or from Phase I Environmental Site Assessment);
- Description of contaminants that will be screened;
- Identification and justification for contaminants that will not be actively screened;
- Proposed screening methodology;
- Identification of action thresholds for each contaminant;
- Description of handling procedures for soil containing contaminants

- exceeding pre-established screening thresholds; and
- Designated haul routes (if applicable).

Due Diligence Review – The due diligence review is an environmental evaluation conducted by ESD and P&D, applicable to any off-Airport facility to which excavated soil generated by SAAS projects is to be taken for disposal or imported for use on-Airport. The due diligence review must evaluate the proposed off-Airport soil facility for compliance with the provisions of the federal Comprehensive Environmental Response, Compensation & Liability Act (CERCLA) or Resource Conservation & Recovery Act (RCRA). ESD's due diligence review will include:

Due diligence review of proposed soil suppliers:

- Description of soil material
- Description of source of soil material
- Analytical data for soil and/or all quality control data guaranteeing the use of non-contaminated soil.

Due diligence review of proposed off-Airport Soil Disposal Sites:

- Description of soil material to be disposed
- Description of potential contamination of soil to be disposed
- Analytical analysis of soil
- Review of recent (5 to 10 years) federal and state environmental enforcement actions against soil disposal site
- Review and copies of any relevant environmental permits to ensure soil disposal facility can accept soil from Airport
- Description of any programs/protocols/assurances to prevent contamination from other sources during transportation, storage and disposal.

A due diligent review may involve the collection of samples to evaluate potential soil contamination. Sampling will be required, on a case by case bases by ESD, depending on the due diligence review.

1.3 Soils and Geologic Setting

See Appendix A regarding the soil and geology at each SAAS facility.

1.4 Applicability

This SAAS *Soil Management Plan* applies to:

- A. Surplus soil generated by on-Airport projects;
- B. Fill dirt, gravel, spoils, sand, soil, aggregate, and infrastructure supporting earthen material required by SAAS projects;
- C. Soil imported for on-Airport use;
- D. Soil disturbed due to on SAAS property projects; and

- E. Soil that is disturbed in the process of contaminant remediation.
- F. Investigation Derived Waste (IDW)

Implementation of this Soil Management Plan is effective immediately and is intended for use all on-Airport property projects.

1.5 Department Responsibilities

Aviation Environmental Stewardship Division (ESD)

ESD must implement the *Soil Stockpile Plan* with full support from P&D as requested. ESD responsibilities must include:

- Documenting the sources of stockpiled soil;
- Documenting the sources of soil used by the various SAAS projects;
- Assist in the security of any contaminated soil stockpiles;
- Provide technical and regulatory assistance to Project Managers when possible;
- Conducting/oversee due diligence reviews;
- Authorizing importation and exportation of soil as requested;
- Overseeing implementation of protocols for testing and categorizing soil;
- Evaluation and review of field and laboratory test results;
- Approval of off-Airport soil destinations; and
- Reporting to Administering Agencies, as required, on circumstances relating to contaminated soil.

Aviation Planning & Development (P & D) Division

Tasks include:

- Assist with the update of any *Soil Stockpile Plan* site maps;
- Coordinate current and future soil projects with ESD; and
- Review structural properties and quantities of soils needed for planned development projects as well as providing specifications for all soil projects.

2.0 Soil Stockpile Area Requirements

The location of clean soil stockpiles will be **DESIGNATED BY ESD AND P&D. LOCATIONS ARE REFLECTED WITHIN THE SOIL STOCKPILE PLAN (APPENDIX C)**. All soils suspected of contamination must be tested, profiled (characterized) and properly disposed.

2.1 Storm Water Pollution Prevention Plan

Each contractor and/or tenant conducting construction activities will develop, implement and maintain a Storm Water Pollution Prevention Plan (SWP3), if applicable, in accordance with Texas Pollution Discharge Elimination System (TPDES) rules and regulations.

2.2 Erosion Control Measures

Erosion controls (silt fence, rock berms, vegetation, etc...) must be installed and maintained around all stockpile areas. Controls must be inspected by contractor after each rain event. Erosion controls in need of repair/replacement must be corrected within one week. If unaddressed within the one week timeframe, SAAS retains the right to make the required corrections and back charge the contractor for time and material.

2.3 Security

During non-operational hours, or when not staffed, soil stockpile area(s) must be fenced off and entrance/exit gates locked or located within the AOA. Reflective markers must be used for night time vehicle safety.

2.4 Soil segregation

Soil that will be stockpiled on SAAS property will be segregated by project and/or contamination. Additionally, each stockpile must have signage indicating material type, generating date, originating project and contamination status.

2.5 Environmental Contamination

A Limited Phase II Environmental Site Assessment (ESA) will be completed before commissioning and decommissioning any SAAS soils. All stockpile facilities must be constructed using appropriate structural and operational methods to minimize potential environmental contamination (e.g. use of impervious barriers where suspect contaminated soil is stored prior to profiling and disposal).

2.6 Vehicle Maintenance/Fueling

Maintenance and fueling of vehicles and earth moving equipment at stockpile sites must be limited as much as practicable. Reasonable measures should be employed to prevent environmental contamination where such vehicle maintenance activities at the project site are unavoidable.

The trucks used for moving soil between the construction site and any stockpile area must meet all Texas Department of Transportation (TXDOT) rules and regulations. Trucks not meeting these regulations will not be authorized to work.

3.0 Potential Contaminants and Environmental Concerns

Contaminant spills and releases occurring during construction activities must be responded to in a timely and effective manner by the responsible party. Even relatively small hydrocarbon releases are reportable to regulatory agencies when evidenced by sheens on receiving waters of the United States/Texas. SAAS requires immediate reporting of contaminant spills and releases to Airport Communications and immediate action to contain, mitigate and clean up spills and releases to prevent migration to infrastructure discharging to receiving waters and, thereby minimize environmental impact and compounded response costs. SAAS requires preventative maintenance of equipment, at appropriate locations, in order to minimize the potential for preventable spills and releases due to equipment failure. Prevention of spills and releases of oil and oil products may also be required pursuant to Spill Prevention Control and Countermeasures (SPCC) regulations (refer to 40 CFR 112.1). *SPCC Plans* are dependent on oil product storage capacity (ESD can provide guidance upon request).

Contractors can reduce the possibility of generating contaminated materials by proper management and maintenance of their construction areas (equipment mobilization and staging areas; materials lay-down yards). SAAS requires that Contractors conducting activities at SAT and SSF to properly handle, store, and label construction materials to prevent environmental multi-media contamination (air, soil, and water) to the maximum extent practicable.

The following is intended to be a general reference list of contaminants that could be encountered during construction activities at SAT and SSF:

3.1 Jet A Fuel (Jet A)

Jet A has been used to fuel commercial, cargo and private aircraft at SAT and SSF.

Jet A has a nearly water-white appearance; is a mobile, oily liquid; and has a mild petroleum paraffinic odor typical of kerosene. Jet A has an auto-ignition temperature of 475°F (246°C), a lower boiling point of 320°F (160°C), a flash point of 100°F (38°C), and a specific gravity of 0.81. The Lower Explosive Limit (LEL) is 0.5% and the Upper Explosive Limit (UEL) is 6.0%. The vapor pressure density of Jet A fuel is 5 mm/Hg. Jet A is essentially water insoluble (floats on the surface of water).

3.2 Aviation Gasoline (AvGas)

AvGas is used to fuel piston engine aircraft at SAT and SSF.

AvGas is generally a clear blue liquid with a gasoline hydrocarbon odor. AvGas has a lower boiling point of 158°F (70°C), a flash point of -49°F (-45°C), and a specific gravity of 0.71. The vapor density of AvGas is 4 mm/Hg, the LEL is 0.6% and the UEL is 8.0%. AvGas is essentially insoluble in water.

3.3 Motor Gasoline (MoGas)

MoGas is used to fuel ground service equipment (GSE).

MoGas is a clear colored liquid (typically red-orange) with a pungent petroleum hydrocarbon odor. MoGas has a lower boiling point of 102°F (39°C), a flash point of 35°F (-37°C), and a specific gravity of 0.8. The vapor density of MoGas is 3 to 4 mm/Hg, the LEL is 1.5% and the UEL is 7.6%. MoGas is essentially insoluble in water.

3.4 Low Sulfur Diesel (LSD)

LSD is typically used to fuel construction equipment and therefore, may be encountered during construction activities.

LSD is a pale yellow liquid with a hydrocarbon odor. LSD has a lower boiling point of 349°F (176°C), a flash point of 125°F (52°C), and a specific gravity of 0.84. The vapor pressure of LSD is 0.04 PSIG, the LEL is 0.6% and the UEL is 4.7%. LSD is essentially insoluble in water.

3.5 Solvents

Solvents are primarily used to clean aircraft and vehicle parts. These activities have typically been restricted to maintenance areas in hangars and at maintenance shops

3.6 Aircraft De-icing and Anti-icing Fluid (ADAF)

Both ethylene glycol and propylene glycol are used at SAAS as ADAF. De-icing activities are performed at gates, RONs, ramps and along taxiways. ADAF residuals may be encountered when construction project excavation is conducted proximate to terminal gates due to prior gate deicing practices.

Glycol-based fluids are generally colorless, odorless, viscous, hygroscopic liquids. Aircraft deicing/anti-icing ethylene glycol has a lower boiling point of 383°F (195°C), a flash point of 232°F (111°C), and a specific gravity of 1.1. The vapor density of ethylene glycol is 2.1 mm/Hg, the LEL is 3.2% and the UEL is 15.3%. Ethylene and propylene glycol used for aircraft deicing/anti-icing may have a pungent odor and may have an orange to green appearance (depending on concentration). Both ethylene and propylene glycol are miscible in water (mix readily with water).

3.7 Metals

Some metals are evidenced at low concentrations in soils and groundwater at SAT and SSF (referred to as background since naturally occurring). Chromium associated with paint and painting operations, and lead from leaded gasoline may occur at levels above background concentrations. Significant contamination is not usually encountered; either as background or resulting from prior occupancy activities conducted at SAT and SSF. If there is a suspected cause making contamination testing prudent, the suspect media will be tested for the eight RCRA identified metals and the Texas three metals using specified U.S. Environmental Protection Agency (EPA) laboratory protocols. Metals include: antimony, arsenic, barium, beryllium, cadmium, chromium, mercury, nickel, lead, selenium, and silver.

3.8 Battery Acids

Increasing airline use of electric GSE at SAT and SSF has resulted in the establishment of a growing fleet of battery powered GSE and construction of numerous electric vehicle recharging stations. Spills of battery acid from GSE occur occasionally. Battery acid spills may occur on ramps, around charging stations and near maintenance facilities. Acidic conditions may be encountered in excavated soils from these locations.

3.9 Other Construction Components

Other contaminants may be discovered in the course of a project or generated due to methods used during construction. Project generated contaminants can result from boring operations that generate process wastewater or by petroleum contamination generated, for example, by hydraulic leaks from construction equipment. Construction related process wastewater must be properly contained, collected and disposed.

4.0 Management of Soils at Project Sites

This *Soil Management Plan* has been developed as a framework for field determination, classification, transportation, and disposition of excavated soil, free phase product, contaminated dissolved phase groundwater, and vapors that may be encountered during construction projects. This *Soil Management Plan* must be followed by SAAS and contract personnel. Each Project Manager is responsible for administering the *Soil Management Plan* during ongoing pre-construction and construction activities they oversee.

The occasional presence of contaminated media (soil, groundwater, and free phase product) may be encountered from time to time. Information collected from pre-construction investigation activities should be summarized to determine likely locations of contaminants within the construction footprint. Close attention must be paid to excavated soil for contamination. Suspect soils must be stockpiled for subsequent evaluation, treatment, reuse or disposal.

The project *Soil Screening Plan* should reflect the results of pre-construction investigations and any project due diligence review. The *Soil Screening Plan* must be submitted by the construction Project Manager to ESD and P&D for review and concurrence during the construction review process. The *Soil Screening Plan* will identify screening methods and frequencies using the environmental principles discussed in Section 4.1.

CAUTION: When environmental conditions associated with contaminated media are encountered, the contractor is required to ensure compliance with applicable federal, state, and local regulations and is responsible to protect worker health and safety.

In the event excavated or construction pre-screened soil evidences contact with potential contaminants not listed in the *Soil Screening Plan*, construction activities in the affected area must be immediately terminated pending ESD & P&D evaluation of the pending issues.

4.1 Soil Screening & Sampling

As much as possible, soil characterization must be performed prior to soil importation or excavation. The designated Project Manager must observe soil for visual evidence of contamination. Soil samples will be collected as described in the project specific *Soil Screening Plan*. Typically this may involve visual and olfactory soil observations, PID readings, headspace analysis, soil sampling and/or manufacturer documentation.

4.1.1 Screening Methods

Volatile organic compounds (and some semi-volatile organic compounds) may be screened using approved field technology photo-ionization detection (PID) or flame ionization-detection (FID) direct reading instrumentation, as appropriate, to screen for volatile organic compounds (VOCs); immuno-assay tests for semi-volatile; x-ray fluorescence (XRF) for metals (refer to table below). Field analysis alone will not authorize off-Airport disposal options or approval. Field analysis results may be used to

determine the appropriateness of returning clean soil to the excavation; to determine the appropriateness of transporting clean soil to another on-Airport clean soil stockpile; or to decide which suspect soils must be stockpiled and sampled for contamination.

Only trained personnel must conduct direct reading instrumentation excavated soil screening; calibrate direct reading instruments, deploy recommended instrument manufacturer's methods, or use analytical kits of any kind. Daily calibration, using recommended instrument manufacturer's methods or analytical kit requirements must be completed and recorded for submission to ESD prior to project close-out.

Field methods must be documented; retained in project management files and submitted to ESD. Should screening method results exceed limits outlined, work is to be stopped and ESD and/or P&D immediately contacted.

Potential Contaminant	Analytical Field Test Method
Jet A Fuel	PID, FID, Immunoassay Kit, Portable GC
Aviation Gas	PID, FID, Immunoassay Kit, Portable GC
Vehicle Gas	PID, FID, Immunoassay Kit, Portable GC
Diesel Fuel	PID, FID, Immunoassay Kit, Portable GC
Solvents	Portable GC, Immunoassay Kit, Electron Capture GC
Aircraft Deicing Fluids	Colorimetric Kit
Metals	X-Ray fluorescence
Pesticides/PCBs	Portable GC, Immunoassay Kit
Hydraulic Fluids	PID, FID, Immunoassay Kit, Portable GC

*PID - Photo Ionization Detector

*FID - Flame Ionization Detector

*GC - Gas Chromatograph

4.1.2 Soil Sampling

Soil must not be imported or exported without a completed SMP authorization (see attached form) issued/approve by ESD and/or P&D. A *Soil Screening Plan* must be prepared and followed for all projects. At a minimum, soils should be analyzed for the following:

Chemical of Concern (COC)	Test Method
Total Petroleum Hydrocarbon (TPH)	TX1005
Benzene, Toluene, Xylene and Ethylbenzene (BTEX)	8021 or 8260
Polycyclic Aromatic Hydrocarbons (PAH) ⁴	8310 or 8270
Metals (RCRA-8) plus Antimony, Beryllium and Nickel	200.7

⁴ - TPH testing will be used to screen for PAHs using method TCEQ-1005. If the laboratory reports any detection of hydrocarbons in the carbon range greater than nC12, then the sample with the highest

concentration of hydrocarbons in the > nC12 range must be analyzed for PAHs. The PAH results will be compared to the PAH results listed above.

See Appendix B for the acceptable concentrations of Chemicals of Concern (COCs).

4.1.3 Sampling Frequencies

Project Type	Frequency
Soil Importation	One (1) composite sample per 1,000 cubic yards (or less)*. Additional visual screening of imported soil is required at a minimum of one (1) per every five (5) trucks*.
Soil Exportation (initial screening)	One (1) composite sample per 1,000 cubic yards
Soil Exportation (off site disposal)	One (1) composite sample per 50 cubic yards (the requirements of the disposal facility may be substituted for the above composite sampling frequency).

* - This sampling frequency may be relaxed based upon demonstration of minimal likelihood of encountering contamination and/or documentation provided by soil supplier.

4.1.4 Confirmation Sampling

Project specific soil sampling requires the collection of soil samples from sidewalls and the finished grade bottom of excavations where contaminated media was encountered. This will allow determination of the levels of potential contaminants that may remain in the area. ESD may also require confirmation sample(s) to verify that contamination is no longer present in the construction footprint should results of field screening and laboratory results of excavated soils sampled so indicate.

Typically, excavated soil with no evidence of contamination from pre-construction investigations, no visual or olfactory evidence of contamination, and no elevated PID readings (less than 20 parts per million (ppm)) may be deemed clean soil and will not require additional analytical testing or laboratory sampling. Clean soil, upon ESD's approval, may be directly transported to the clean soil stockpile area for subsequent reuse. If a Project Manager anticipates off-Airport disposal or reuse, an SMP authorization must be obtained from ESD and/or P&D.

Excavated soil evidencing contamination from pre-construction investigations; visual or olfactory screening; direct reading instrumentation hits above 20 ppm; or other approved field screening methods must be stockpiled for further evaluation. Excavated soils suspected of contamination must be segregated at the project site from clean soil based on field screening and placed on and covered with vapor barriers (e.g. visqueen). Once segregated, the material must be sampled, profiled and disposed.

4.2 Excavated Soils

As much as possible, soil characterization must be performed prior to soil excavation. The designated Project Manager must observe unexcavated and excavated soil for visual evidence of contamination. Excavated soil samples will be collected as described in the project specific *Soil Screening Plan*. Typically this will involve visual and olfactory soil observations, PID readings, headspace analysis, and sampling.

4.3 Imported Soils

Screening of imported materials prior to entering Airport property or a project site is acceptable for material such as rocks and pea gravel. Soil screening results that exceed pre-established contamination levels **will not** be brought onto SAAS property without the expressed authorization of ESD and/or P&D. If no levels are pre-established this will be the detection limit of any contamination subject to the materials screening protocols. Field notes for the screening will be collected and submitted to ESD and/or P&D.

4.3.1 Ready-to-Plant, Mulch and Topsoil

Ready-to-Plant, Mulch and Professional Topsoil will be addressed on a case by case basis. These soils are generally contract spec soils that will be mixed per the required specifications. The P&D Division should approve the spec and source before the contractor brings the soil on to the airport.

4.3.2 Material Used for Concrete

Soil importation for production of concrete is necessitated by the scope and scale of some SAAS Airport capital development projects. It is important to conduct imported concrete production materials screening to prevent distribution of imported materials that may have been previously contaminated. Given that materials used to produce concrete are typically manufactured products, ESD anticipates that screening will be less rigorous than suspect soils. The Project Manager will be responsible to document imported soils screening consistent with ESD and/or P&D approved project specific soil screening prior to accepting imported soils used for the on-Airport production of concrete.

4.4 Suspected Contaminated Material

When field-screening results indicate levels above the action threshold (**20 ppm**), the material will be stockpiled onsite and placed on and covered with a vapor barrier. The Project Manager will contact ESD and/or P&D and notify them that soil sampling is required. While awaiting results from the laboratory, the soils will remain in this hold status until a determination is made for final disposition. If laboratory analysis results indicate that the soil is clean, the soil may be moved to a clean stockpile for reuse. If laboratory results indicate there is contamination; but contaminate concentrations are below the standards set in Appendix B, this soil may be subsequently transported for reuse at appropriate projects. When results indicate levels of contamination too high for reuse, this material will be designated for profiling and disposal.

4.5 Soil Disposition/Transportation

Project Managers are responsible for transporting soils to and from the project site. Imported materials and materials generated by on-Airport projects destined for off-airport disposition will proceed only after express authorization by ESD and/or P&D. Project Managers will assure that any soil that will be stockpiled at Airport stockpile reuse areas will be free of trash, debris, rubbish, or construction rubble. Haul trucks will be required to follow designated haul routes (specified in *Soil Screening Plan*) from the excavation area to the soil stockpile area(s).

Soil must not be exported without a completed SMP Authorization Form approved issued by ESD and/or P&D. Soil screening must be conducted on all exported materials pursuant to the approved *Soil Screening Plan* prior to leaving Airport Property. The soil screening plan must reflect the anticipated contaminants in the soil to be exported and the results of the due diligence review of the off-site facility. Detailed records must permanently be maintained documenting sample test results, soil source location, soil destination, the due diligence review, and all other relevant data.

THE PROJECT MANAGER WILL COMPLETE AND SUBMIT A SMP AUTHORIZATION FORM TO ESD AND/OR P&D FOR APPROVAL (See Appendix D). THIS SHOULD BE INCLUDED IN THE INITIAL PLAN REVIEW PROCESS.

The contractor is solely responsible for Health and Safety measures required for safe transportation of the excavated materials to the designated destination on or off-Airport.

The Project Manager will record the following information for all materials received at any SAAS stockpile area:

- Date/Time
- Project name and ESD and/or P&D authorization approval
- Truck number and size
- Truckloads of material received
- Type of material received
- Truck Tickets

The following additional information will be recorded for confirmed and suspected contaminated materials:

- Description of material
- Parameters analyzed
- Material ID Number (given by Project Manager)
- Sampling results
- Disposal location
- Date removed
- Truck Tickets

4.6 Soil Sampling and Classifications

Final characterization of excavated soils will result in one of three soil classifications. The following sections summarize the designation criteria associated with each classification. A brief discussion of each classification is presented for guidance.

4.6.1 Unregulated Soil

Unregulated soil is soil evidencing no detectable levels of potential contaminants of concern. Unregulated soil may be reused on-Airport, as the Planning and Development Division deems necessary.

4.6.2 Impacted Soil

Impacted soils exhibiting analytical results below established maximum concentration levels for each COC analyte may be reused on-Airport only. Reuse locations must meet TRRP requirements restricting reuse in projects with finished grade impervious surfaces and where no human exposure pathways will occur (e.g.: under pavement or other impervious cover as allowed by regulation). ESD and/or P&D concurrence with reuse of impacted soils for designated projects is required.

4.6.3 Contaminated Soil

Contaminated soils are soils exhibiting analytical results above established RCRA levels for any COC analyte. Contaminated soils will be profiled and properly disposed.

4.7 Sample Documentation

Samples collected from the soil stockpiles, or confirmation samples collected from excavation sidewalls and finished grade will be identified using a four-part system. The sample identification system will consist of the following:

- A location designator based on the SAAS Airport's Emergency Grid System;
- A matrix identifier;
- A sample number; and
- Depth of sample collection (where applicable).

The first portion of the sample identifier will identify the soil origination utilizing the SAAS Airport Emergency Grid System as described above. Therefore, analytical results from the soil stockpiles can be traced to locations on the airport property where the soil was excavated.

The second portion of the sample identifier will identify the sample as a soil sample (SS) collected at the source, groundwater (GW), or stockpile (SP) sample.

During excavation, soil samples will be numbered within each grid location (i.e., in subsequent grid locations, sample numbers will start over). The depth at which the sample was obtained will be noted as the final portion of the sample identifier.

For example, the tenth sample obtained in the 4GA grid square from an excavation at a depth of 2 feet would be labeled:

4GA – SS-10 (2)

Stockpile samples will be numbered according to the soil source location. For example, a sample obtained from stockpiled soil whose source is the 4GA grid square at a depth of approximately 5 feet would be labeled:

4GA – SP – 1(5)

A sample log and sampling map will be created to document all samples collected. The sample log will contain the sample identification number, sample matrix, date and time collected, location description, number of jars, analyses requested, PID readings (if any), and relevant notes. The sampling map will be a drawing that will identify the location of each sample taken, the location of the project in relation to other onsite activities, a north arrow and any other requested information.

Proper chain-of-custody documentation will be maintained for all samples sent to the laboratory using the appropriate Chain-of-Custody form.

5.0 Management of soil stockpile areas

The Project Manager must manage the *Stockpile Screening Plan* that will guide day to day operation and handling of soil and soil stockpiles.

5.1 Soil Classification Management

ESD and/or P&D will review the *Soil Screening Plan* for each project and determine if soil is eligible for direct shipment to a clean soil stockpile area. This determination will be communicated to the Project Manager. Please refer to Section 4.5 for proper soil stockpiling recordkeeping requirements.

5.1.1 Unregulated Soil

If the soil is determined to be uncontaminated and has been approved for storage at the Airport's Buckhorn site the Project Manager (or his designee) will unlock the site (Buckhorn) at the scheduled time and remain on site until delivery is complete. The area will be re-secured when not supervised. The Project Manager (or his designee) will inspect loads to verify that they are debris free and properly authorized. Trucks with construction debris will be returned to the project site for debris removal. Soils transported to a clean soil stockpile area will be segregated by project.

5.1.2 Impacted Soil

Impacted soils exhibiting analytical results below established maximum concentration levels for each COC analyte may be reused on-Airport only. Stockpile storage locations must be approved by ESD and/or P&D.

5.1.3 Contaminated Soil

Contaminated soils are soils exhibiting analytical results above established RCRA levels for any COC analyte. Contaminated soils must be properly profiled and disposed of at an approved ESD and/or P&D facility. Long term stockpiling of contaminated soil on Airport property is prohibited.

All contaminated soils stockpiled will be placed on an impervious material and covered with an impervious material.

Construction materials not for immediate use must be stockpiled in designated areas. Other materials may be stored at approved locations proximate to the work area provided however that the piles are no greater than 18" in height. Higher piles may be permitted only during working hours and in such quantity that they may be reduced in height to 18" maximum within thirty (30) minutes of notification."

Soils stationed at Buckhorn will be placed in windrows no more than six feet in height. Soils will be segregated and records maintained by the Project Manager

to identify soil sources, soil types and contamination test results.

5.2 Maintenance of Soil Stockpiles.

Stockpiles must be maintained in a manner to minimize wildlife attractants. All requirements of Section 2.0 must be met.

6.0 Data Management

6.1 Field Documentation

Quantities of excavated/imported soils, soil types, PID readings, trucking data, etc. must be documented by the Project Manager in a daily logbook, by photo-documentation and/or by use of electronic record keeping.

6.2 Soil Tracking

The sources of excavated soils must be tracked and maintained along with sampling, analytical, and disposal records. SAAS Airport's Emergency Grid System will be utilized to aid in tracking excavated soil sources. SAAS Airport's Emergency Grid System is laid out such that north-south grid lines are labeled numerically beginning with the number 1 and east-west grid lines are labeled alphabetically from A to S. Each grid square is 1,000' by 1,000'. Each grid square is further sectioned by 4 smaller squares (500' by 500') that are labeled with a letter designation (e.g.: a location can therefore be designated as 4GA, which denotes a particular area 500' by 500'). If the Emergency Grid System is not utilized for soil stockpile tracking then an alternate method must be approved by ESD and/or P&D.

As part of the *Stockpile Management Plan*, it is also necessary to track the final disposition of all soil. See the *Stockpile Management Plan* and Section 4.5 for additional tracking information.

6.3 Sample Documentation

Samples collected from the soil stockpiles, or confirmation samples collected from excavation sidewalls and finished grade will be identified using a four-part system. The sample identification system will consist of the following:

- A location designator based on the SAAS Airport's Emergency Grid System;
- A matrix identifier;
- A sample number; and
- Depth of sample collection (where applicable).

A sample log and sampling map will be created to document all samples collected. The sample log will contain the sample identification number, sample matrix, date and time collected, location description, number of jars, analysis requested, PID readings (if any), and relevant notes. The sampling map will be a drawing that will identify the location of each sample taken, the location of the project in relation to other onsite activities, a north arrow and any other requested information.

Proper chain-of-custody documentation will be maintained for all samples sent to the laboratory using the appropriate Chain-of-Custody form.

See Section 4.0 for more sampling information.

6.4 Project Database

A database will be created and maintained by ESD and/or P&D. This database will include "trip tickets", laboratory analytical results, excavation dates, stockpile numbers, and stockpile locations.

7.0 REPORTING

7.1 Emergency Notifications

In the event of an environmental emergency, the following notifications must be made immediately:

- SAT/SSF Communications Center – (210) 207-3433
- Operations 202 – (210) 413-4928
- Operations 210 – (210) 207-3590
- Operations – (210) 207-3540
- Environmental Stewardship Manager – (210) 207-3402
- SAAS Environmental Stewardship Division – (210) 207-3518
- Planning & Development – (210) 207-3519
- San Antonio Fire/Police Department – 911
- SAT Fire/Rescue – (210) 207-3473

7.2 Reports – Project Manager

Weekly Status Reports

A Weekly Status Report will be prepared during construction activities describing the field activities conducted that week and summarize the total amount of soil excavated/imported and specify quantities of soil stockpiled and suspected of contamination.

Post-Construction Report

As a pre-requisite to project closeout, the Project Manager will verify all previously submitted information/reports are correct and up to date. Any missing information such as truck tickets, soil analysis and/or disposal manifests will be submitted to ESD and/or P&D.

Appendix A

Soil & Geologic Tables

Soil Map—Bexar County, Texas
(SAT)



Map Scale: 1:28,500 if printed on A size (8.5" x 11") sheet.



MAP LEGEND

 Area of Interest (AOI)	 Very Stony Spot
 Soils	 Wet Spot
 Area of Interest (AOI)	 Other
 Soil Map Units	Special Line Features
 Special Point Features	 Gully
 Blowout	 Short Steep Slope
 Borrow Pit	 Other
 Clay Spot	Political Features
 Closed Depression	 Cities
 Gravel Pit	Water Features
 Gravelly Spot	 Oceans
 Landfill	 Streams and Canals
 Lava Flow	Transportation
 Marsh or swamp	 Rails
 Mine or Quarry	 Interstate Highways
 Miscellaneous Water	 US Routes
 Perennial Water	 Major Roads
 Rock Outcrop	
 Saline Spot	
 Sandy Spot	
 Severely Eroded Spot	
 Sinkhole	
 Slide or Slip	
 Sodic Spot	
 Spoil Area	
 Stony Spot	

MAP INFORMATION

Map Scale: 1:28,500 if printed on A size (8.5" x 11") sheet.
 The soil surveys that comprise your AOI were mapped at 1:24,000.
 Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: UTM Zone 14N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bexar County, Texas
 Survey Area Data: Version 12, Oct 26, 2009
 Date(s) aerial images were photographed: 1/7/1995; 1/6/1995

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Bexar County, Texas (TX029)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AuB	Austin silty clay, 1 to 3 percent slopes	113.9	3.2%
AuC	Austin silty clay, 3 to 5 percent slopes	233.1	6.6%
BrD	Brackett gravelly clay loam, 5 to 12 percent slopes	6.4	0.2%
BsC	Whitewright-Austin complex, 1 to 5 percent slopes	150.7	4.3%
HnC2	Heiden clay, 3 to 5 percent slopes, eroded	46.1	1.3%
HoD3	Heiden-Ferris complex, 5 to 10 percent slopes, severely eroded	78.5	2.2%
HsB	Houston Black clay, 1 to 3 percent slopes	30.1	0.9%
HsC	Houston Black clay, 3 to 5 percent slopes	10.8	0.3%
HtA	Branyon clay, 0 to 1 percent slopes	749.5	21.3%
HtB	Branyon clay, 1 to 3 percent slopes	55.2	1.6%
LvA	Lewisville silty clay, 0 to 1 percent slopes	560.3	15.9%
LvB	Lewisville silty clay, 1 to 3 percent slopes	616.1	17.5%
PaB	Patrick soils, 1 to 3 percent slopes, rarely flooded	490.9	13.9%
PaC	Patrick soils, 3 to 5 percent slopes, rarely flooded	30.0	0.9%
Pt	Pits and Quarries, 1 to 90 percent slopes	121.4	3.4%
TaB	Eckrant cobbly clay, 1 to 5 percent slopes	39.3	1.1%
Tf	Tinn and Frio soils, 0 to 1 percent slopes, frequently flooded	194.3	5.5%
Totals for Area of Interest		3,526.5	100.0%

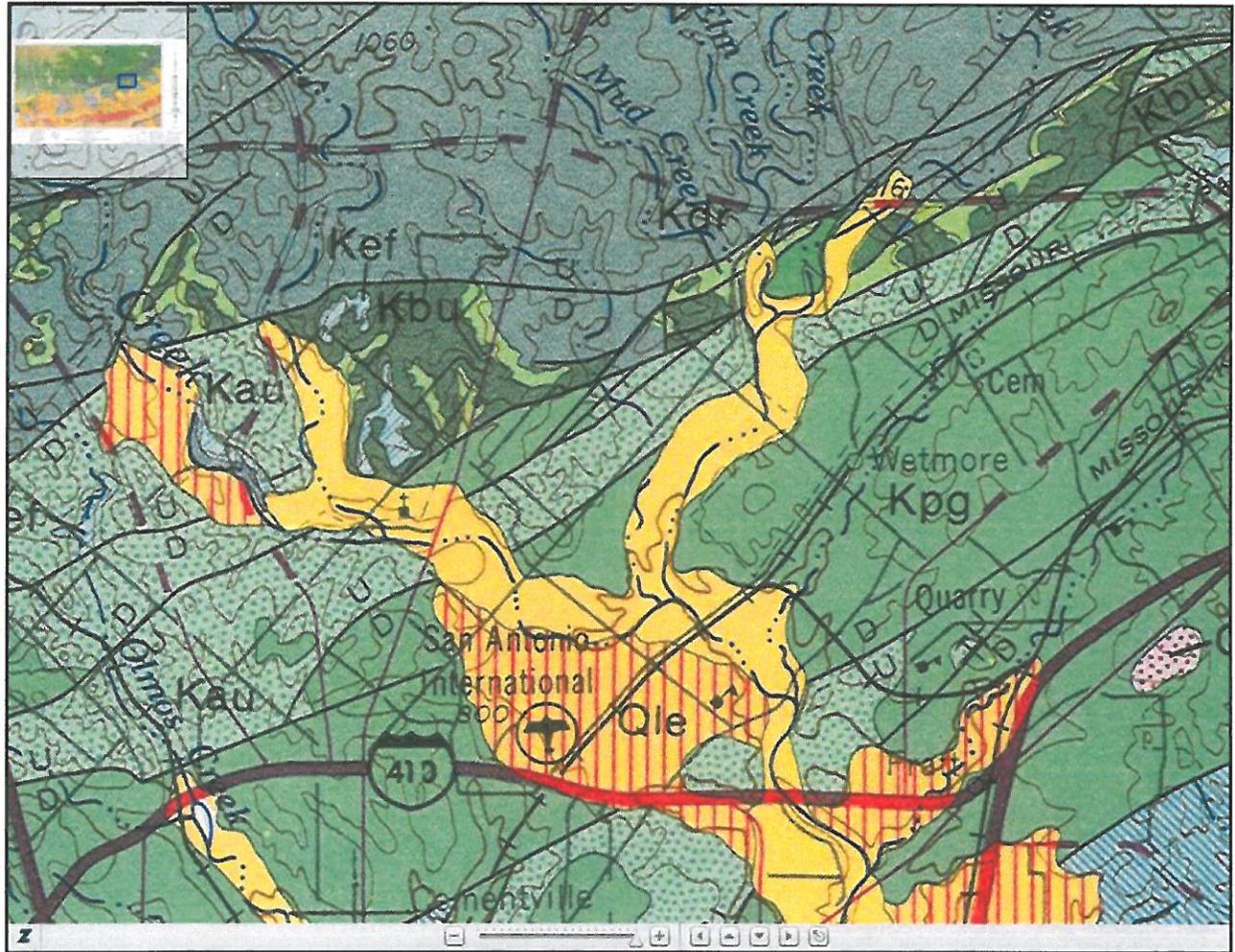
San Antonio International Airport – Soil Table

Soil	Symbol	Landform	Slope	Depth to restrictive feature	Drainage class	Depth to water table	Frequency of flooding	Frequency of ponding	Available water capacity	Typical profile
Austin Silty Clay	AuB	Ridges	1-3%	24-43" to paralithic bedrock	Well drained	> 80"	None	None	Moderate	0-28": silty clay 28-42": silty clay 42-72": Bedrock
Austin Silty Clay	AuC	Ridges	3-5%	24-40" to paralithic bedrock	Well drained	> 80"	None	None	Low	0-16": Silty clay 16-30": Silty clay 30-72": Bedrock
Whitewright-Austin complex (Whitewright)	BsC	Ridges	1-5%	10-20" to paralithic bedrock	Well drained	> 80"	None	None	Very Low	0-6": Clay loam 6-15": Silty clay 15-20": Bedrock
Whitewright-Austin complex (Austin)	BsC	Ridges	1-5%	24-43" to paralithic bedrock	Well drained	> 80"	None	None	Moderate	0-28": Silty clay 28-42": Silty clay 42-72": Bedrock
Brackett gravelly clay loam	BrD	Ridges	5-12%	6-20" to paralithic bedrock	Well drained	> 80"	None	None	Very Low	0-4": Gravelly clay loam 4-12": Gravelly clay loam 12-30": Bedrock
Heiden clay, eroded	HnC2	Ridges	3-5%	> 80"	Well drained	> 80"	None	None	Moderate	0-14": Clay 14-25": Clay 25-62": Clay
Heiden-Ferris complex, severely eroded (Heiden)	HoD3	Ridges	5-10%	> 80"	Well drained	> 80"	None	None	Moderate	0-14": Clay 14-25": Clay 25-62": Clay 62-80": Clay
Heiden-Ferris complex, severely eroded (Ferris)	HoD3	Ridges	5-10%	40-60" to densic bedrock	Well drained	> 80"	None	None	Moderate	0-8": Clay 8-40": Clay 40-84": Clay
Houston Black Clay	HsB	Ridges	1-3%	> 80"	Moderately well drained	> 80"	None	None	Moderate	0-8": Clay 8-38": Clay
Houston Black Clay	HsC	Ridges	3-5%	> 80"	Moderately well drained	> 80"	None	None	Moderate	0-8": Clay 8-38": Clay 38-62": Clay
Branyon Clay	HtA	Stream Terraces	0-1%	> 80"	Moderately well drained	> 80"	None	None	Moderate	0-8": Clay 8-40": Clay 40-62": Clay

San Antonio International Airport – Soil Table

Soil	Symbol	Landform	Slope	Depth to restrictive feature	Drainage class	Depth to water table	Frequency of flooding	Frequency of ponding	Available water capacity	Typical profile
Branyon Clay	HtB	Stream Terraces	1-3%	>80"	Moderately Well drained	> 80"	None	None	Moderate	0-8": Clay 8-34": Clay 34-60": Clay
Lewisville Silty Clay	LvA	Stream Terraces	0-1%	> 80"	Well drained	> 80"	None	None	High	0-6": Silty clay 6-44": Silty clay 44-62": Silty clay
Lewisville Silty Clay	LvB	Stream Terraces	1-3%	> 80"	Well drained	> 80"	None	None	High	0-6": Silty clay 6-44": Silty clay 44-62": Silty clay
Patrick soils, rarely flooded	PaB	Paleo-terraces	1-3%	> 80"	Well drained	> 80"	Rare	None	Low	0-17": Clay loam 17-60": Very gravelly sand
Patrick soils, rarely flooded	PaC	Paleo-terraces	3-5%	> 80"	Well drained	> 80"	Rare	None	Low	0-17": Gravelly clay loam 17-60": Very gravelly sand
Pits and Quarries	Pt	Pits	1-90%	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed	0-80": Variable
Eckrant Cobbley Clay	TaB	Ridges	1-5%	8-20" to lithic bedrock	Well drained	> 80"	None	None	Very Low	0-10": Cobbly clay 10-18": Extremely stoney clay loam 18-25": Bedrock
Tinn and Frio soils, frequently flooded (Tinn)	Tf	Flood plains	0-1%	> 80"	Moderately well drained	> 80"	Frequent	None	High	0-8": Clay 8-65": Clay 65-80": Clay
Tinn and Frio soils, frequently flooded (Frio)	Tf	Flood plains	0-1%	> 80"	Well drained	> 80"	Frequent	None	High	0-30": Silty clay loam 30-50": Silty clay loam 50-80": Clay loam

Texas Water Development Board
San Antonio Sheet

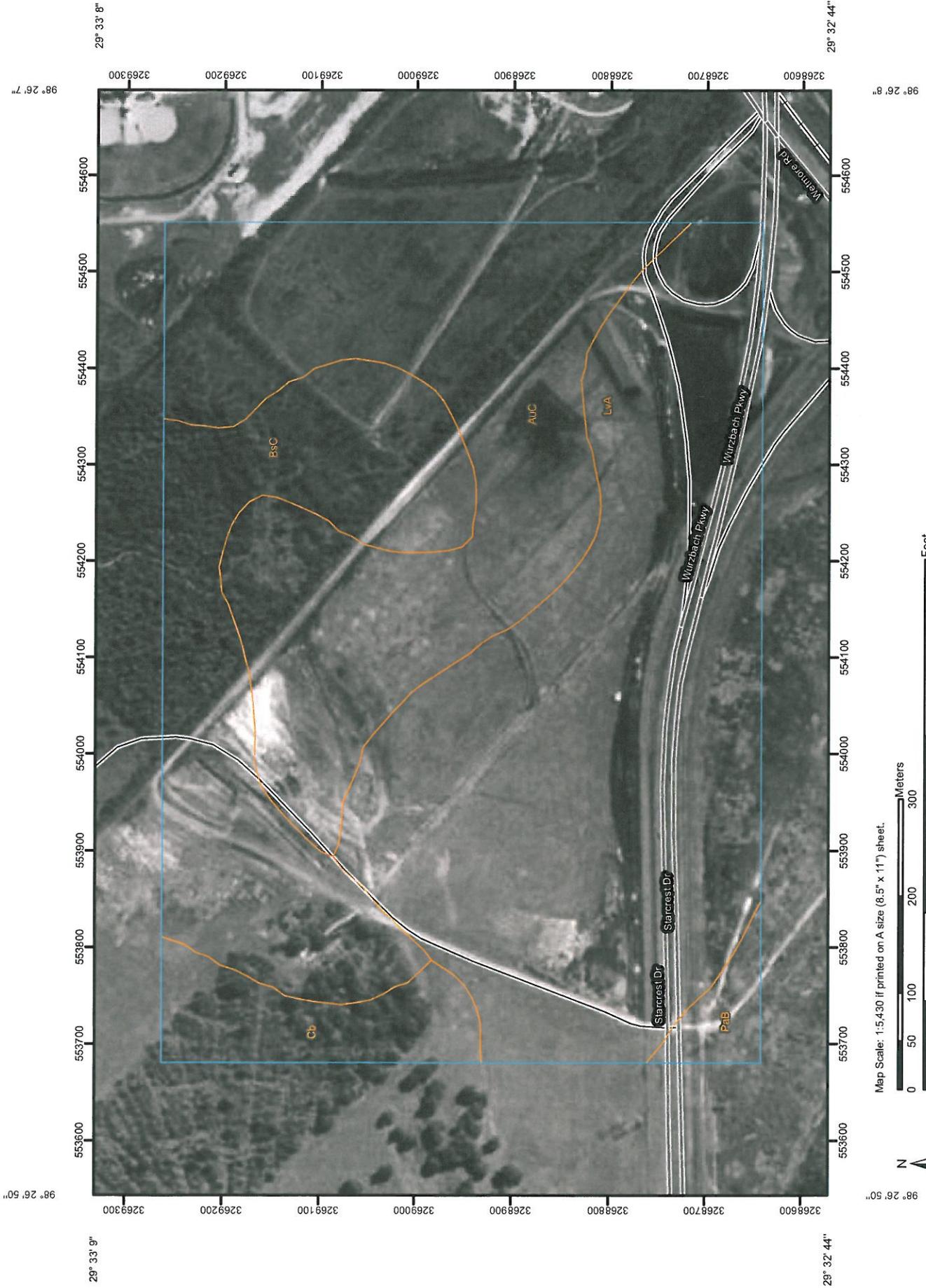


[Back to index map](#)

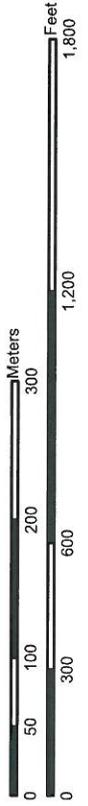
San Antonio International Airport – Geology Table

Formation Name	Symbol	Age	Description	Primary Rock Type	Secondary Rock Type	Tertiary Rock Type
Leona Formation	Qle	Phanerozoic Cenozoic Quaternary Pleistocene	Fluvatile terrace deposits of gravel, sand, silt and clay on first wide terrace of Nueces and Leona Rivers below the level of the Uvalde Formation.	Sand	Gravel	Clay or mud
Fluviatile Terrace Deposits	Qt	Phanerozoic Cenozoic Quaternary Pleistocene Holocene	Sand, silt, clay, and gravel in various proportions, with gravel more predominant in older, higher terrace deposits. Locally indurated with calcium carbonate (caliche) in terraces along streams. Along Colorado River clasts mostly limestone, chert, quartz, and various igneous and metamorphic rocks from Llano region and Edwards Plateau. Includes point bar, natural levee, stream channel deposits along valley walls; probably in large part correlatives of Deweyville, Beaumont, Lissie, and Willis deposits. In upland regions (Rolling Plains, Edwards Plateau, etc.) unit includes fluvial terrace deposits, undivided. Light-brown, reddish-brown, gray, or yellowish brown, gravelly quartz and lithic sand and silt to sandy gravel (Moore and Wermund, 1993). Deposits become increasingly fine grained on Coastal and Nueces Plains. Locally, calcium carbonate-cemented quartz sand, silt, clay, and gravel intermixed and interbedded. Low terraces of major rivers are capped by 2-4 m of clayey sand and silt. Sandy gravel on higher terraces varies somewhat in composition from river to river.	Terrace	Sand	Gravel, silt, clay or mud
Pecan Gap Chalk	Kpg	Phanerozoic Mesozoic Cretaceous-Late [Gulfian]	In East Texas and Gulf Coast to Rio Grande- Sherman Sheet (1967) in Collin County, upper 45 ft limestone in alternating intervals of soft, light to med. olive-gray lime sand and hard, granular, dark bluish-gray limestone, glauconitic with most of it in limesand, phosphate pebbles throughout, thin to very thin beds, limesand minutely cross-bedded; marine megafossils abundant; southward limesand replaced by calcar, silty clay; grades east in Hunt Co. and beyond to chalk. Thickness 50-70 ft. In north, central, and south Texas including Quaternary for all of west Texas- chalk and chalky marl, v. lt. yell to yell-brn, Exogyra ponderosa common; thickness 100-400 ft thick on San Antonio Sheet (1974).	Limestone	Sand	Clay or mud; limestone

Soil Map—Bexar County, Texas



Map Scale: 1:5,430 if printed on A size (8.5" x 11") sheet.



MAP LEGEND

-  Area of Interest (AOI)
-  Soils
-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot
-  Spoil Area
-  Stony Spot

-  Very Stony Spot
-  Wet Spot
-  Other
- Special Line Features**
-  Gully
-  Short Steep Slope
-  Other
- Political Features**
-  Cities
- Water Features**
-  Oceans
-  Streams and Canals
- Transportation**
-  Ralls
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

MAP INFORMATION

Map Scale: 1:5,430 if printed on A size (8.5" x 11") sheet.
 The soil surveys that comprise your AOI were mapped at 1:24,000.
 Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: UTM Zone 14N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bexar County, Texas
 Survey Area Data: Version 12, Oct 26, 2009
 Date(s) aerial images were photographed: 1/6/1995

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

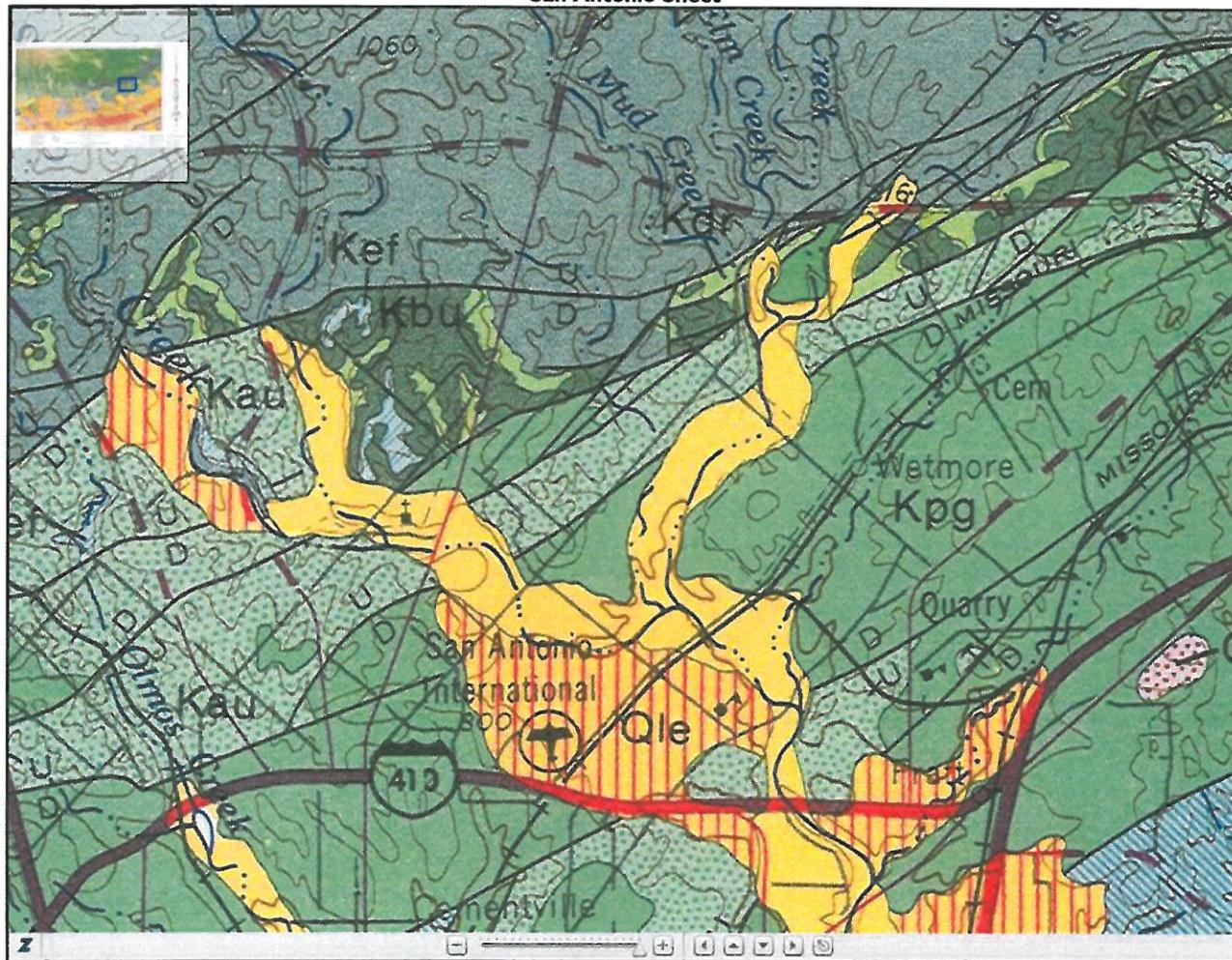
Map Unit Legend

Bexar County, Texas (TX029)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AuC	Austin silty clay, 3 to 5 percent slopes	41.5	31.0%
BsC	Whitewright-Austin complex, 1 to 5 percent slopes	26.4	19.7%
Cb	Crawford and Bexar stony soils	6.9	5.2%
LvA	Lewisville silty clay, 0 to 1 percent slopes	56.6	42.4%
PaB	Patrick soils, 1 to 3 percent slopes, rarely flooded	2.2	1.7%
Totals for Area of Interest		133.7	100.0%

Buckhorn – Soil Table

Soil	Symbol	Landform	Slope	Depth to restrictive feature	Drainage class	Depth to water table	Frequency of flooding	Frequency of ponding	Available water capacity	Typical profile
Austin Silty Clay	AuC	Ridges	3-5%	24-40" to paralithic bedrock	Well drained	> 80"	None	None	Low	0-16": Silty clay 16-30": Silty clay 30-72": Bedrock
Whitewright-Austin complex (Whitewright)	BsC	Ridges	1-5%	10-20" to paralithic bedrock	Well drained	> 80"	None	None	Very Low	0-6": Clay loam 6-15": Silty clay 15-20": Bedrock
Whitewright-Austin complex (Austin)	BsC	Ridges	1-5%	24-43" to paralithic bedrock	Well drained	> 80"	None	None	Moderate	0-28": Silty clay 28-42": Silty clay 42-72": Bedrock
Crawford and Bexar stony soils (Crawford)	Cb	Plains	0-3%	20-40" to lithic bedrock	Well drained	> 80"	None	None	Low	0-8": Stony clay 8-34": Stony clay 34-50": Bedrock
Crawford and Bexar stony soils (Bexar)	Cb	Plains	0-5%	20-40" to lithic bedrock	Well drained	> 80"	None	None	Low	0-18": Cobbly clay loam 18-27": Cobbly clay 27-32": Bedrock
Lewisville Silty Clay	LvA	Stream Terraces	0-1%	> 80"	Well drained	> 80"	None	None	High	0-6": Silty clay 6-44": Silty clay 44-62": Silty clay
Patrick soils, rarely flooded	PaB	Paleo-terraces	1-3%	> 80"	Well drained	> 80"	Rare	None	Low	0-17": Clay loam 17-60": Very gravelly sand

Texas Water Development Board
San Antonio Sheet



[Back to index map](#)

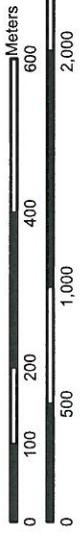
Buckhorn – Geology Table

Formation Name	Symbol	Age	Description	Primary Rock Type	Secondary Rock Type	Tertiary Rock Type
Fluviatile Terrace Deposits	Qt	Phanerozoic Cenozoic Quaternary Pleistocene Holocene	Sand, silt, clay, and gravel in various proportions, with gravel more predominant in older, higher terrace deposits. Locally indurated with calcium carbonate (caliche) in terraces along streams. Along Colorado River clasts mostly limestone, chert, quartz, and various igneous and metamorphic rocks from Llano region and Edwards Plateau. Includes point bar, natural levee, stream channel deposits along valley walls; probably in large part correlatives of Deweyville, Beaumont, Lissie, and Willis deposits. In upland regions (Rolling Plains, Edwards Plateau, etc.) unit includes fluvial terrace deposits, undivided. Light-brown, reddish-brown, gray, or yellowish brown, gravelly quartz and lithic sand and silt to sandy gravel (Moore and Wermund, 1993). Deposits become increasingly fine grained on Coastal and Nueces Plains. Locally, calcium carbonate-cemented quartz sand, silt, clay, and gravel intermixed and interbedded. Low terraces of major rivers are capped by 2-4 m of clayey sand and silt. Sandy gravel on higher terraces varies somewhat in composition from river to river.	Terrace	Sand	Gravel, silt, clay or mud
Pecan Gap Chalk	Kpg	Phanerozoic Mesozoic Cretaceous-Late [Gulfian]	In East Texas and Gulf Coast to Rio Grande- Sherman Sheet (1967) in Collin County, upper 45 ft limestone in alternating intervals of soft, light to med. olive-gray lime sand and hard, granular, dark bluish-gray limestone, glauconitic with most of it in limesand, phosphate pebbles throughout, thin to very thin beds, limesand minutely cross-bedded; marine megafossils abundant; southward limesand replaced by calcar, silty clay; grades east in Hunt Co. and beyond to chalk. Thickness 50-70 ft. In north, central, and south Texas including Quaternary for all of west Texas- chalk and chalky marl, v. lt. yell to yell-brn, Exogyra ponderosa common; thickness 100-400 ft thick on San Antonio Sheet (1974).	Limestone	Sand	Clay or mud; limestone

Soil Map—Bexar County, Texas



Map Scale: 1:9,720 If printed on A size (8.5" x 11") sheet.



MAP LEGEND

-  Area of Interest (AOI)
-  Soils
-  Area of Interest (AOI)
-  Soil Map Units
- Special Point Features**
 -  Blowout
 -  Borrow Pit
 -  Clay Spot
 -  Closed Depression
 -  Gravel Pit
 -  Gravelly Spot
 -  Landfill
 -  Lava Flow
 -  Marsh or swamp
 -  Mine or Quarry
 -  Miscellaneous Water
 -  Perennial Water
 -  Rock Outcrop
 -  Saline Spot
 -  Sandy Spot
 -  Severely Eroded Spot
 -  Sinkhole
 -  Slide or Slip
 -  Sodic Spot
 -  Spoil Area
 -  Stony Spot
- Special Line Features**
 -  Gully
 -  Short Steep Slope
 -  Other
- Political Features**
 -  Cities
- Water Features**
 -  Oceans
 -  Streams and Canals
- Transportation**
 -  Rails
 -  Interstate Highways
 -  US Routes
 -  Major Roads
 -  Local Roads

MAP INFORMATION

Map Scale: 1:9,720 if printed on A size (8.5" x 11") sheet.
 The soil surveys that comprise your AOI were mapped at 1:24,000. Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
 Coordinate System: UTM Zone 14N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bexar County, Texas
 Survey Area Data: Version 12, Oct 26, 2009
 Date(s) aerial images were photographed: 1/15/1995

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

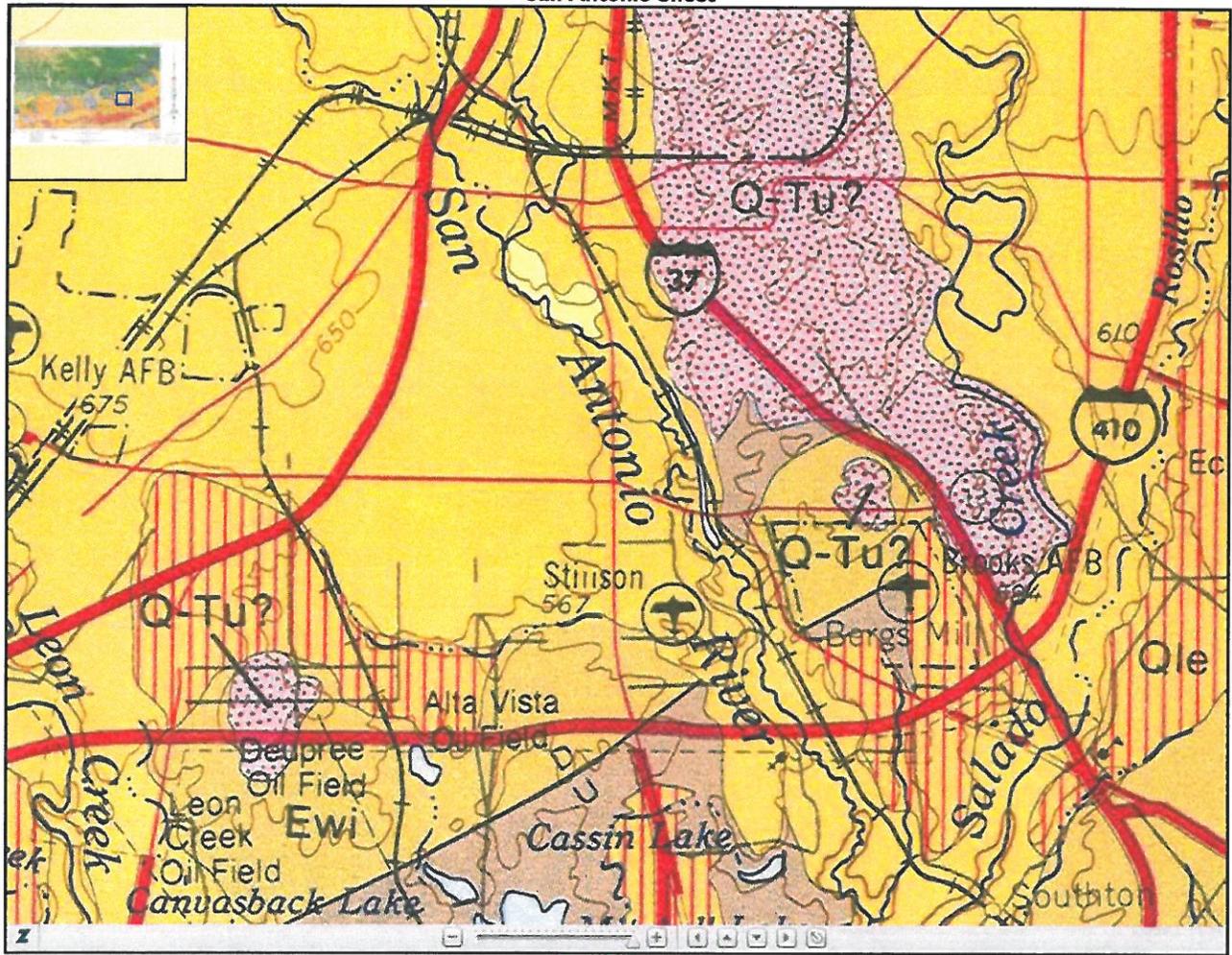
Map Unit Legend

Bexar County, Texas (TX029)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Fr	Loire clay loam, 0 to 2 percent slopes, occasionally flooded	19.1	3.7%
HgD	Rock outcrop-Olmos complex, 5 to 25 percent slopes	43.3	8.3%
HsB	Houston Black clay, 1 to 3 percent slopes	2.1	0.4%
HtB	Branyon clay, 1 to 3 percent slopes	1.6	0.3%
LvA	Lewisville silty clay, 0 to 1 percent slopes	161.2	30.8%
LvB	Lewisville silty clay, 1 to 3 percent slopes	107.8	20.6%
PaC	Patrick soils, 3 to 5 percent slopes, rarely flooded	74.5	14.3%
Pt	Pits and Quarries, 1 to 90 percent slopes	34.7	6.6%
SaB	San Antonio clay loam, 1 to 3 percent slopes	57.9	11.1%
Tf	Tinn and Frio soils, 0 to 1 percent slopes, frequently flooded	20.6	3.9%
Totals for Area of Interest		522.7	100.0%

Stinson Municipal Airport – Soil Table

Soil	Symbol	Landform	Slope	Depth to restrictive feature	Drainage class	Depth to water table	Frequency of flooding	Frequency of ponding	Available water capacity	Typical profile
Loire Clay Loam, occasionally flooded	Fr	Flood plain	0-2%	> 80"	Well drained	> 80"	Occasionally	None	High	0-25": Clay loam 25-35": Clay loam 35-56": Loam 56-80": Fine sandy loam
Rock Outcrop – Olmos Complex (Rock Outcrop)	HgD	Rock outcrop	5-25%	0-2" to lithic bedrock	Not listed	Not listed	Not listed	Not listed	Moderately low to very high	0-80": Bedrock
Rock Outcrop- Olmos Complex (Olmos)	HgD	Ridges	5-25%	4-20" to petrocalcic	Well drained	> 80"	None	None	Very low	0-14": Very gravelly loam 14-18": Cemented material 18-60": Gravelly loam
Houston Black Clay	HsB	Ridges	1-3%	> 80"	Moderately well drained	> 80"	None	None	Moderate	0-8": Clay 8-38": Clay
Branyon Clay	HtB	Stream Terraces	1-3%	>80"	Moderately Well drained	> 80"	None	None	Moderate	0-8": Clay 8-34": Clay 34-60": Clay
Lewisville Silty Clay	LvA	Stream Terraces	0-1%	> 80"	Well drained	> 80"	None	None	High	0-6": Silty clay 6-44": Silty clay 44-62": Silty clay
Lewisville Silty Clay	LvB	Stream Terraces	1-3%	> 80"	Well drained	> 80"	None	None	High	0-6": Silty clay 6-44": Silty clay 44-62": Silty clay
Patrick soils, rarely flooded	PaC	Paleo-terraces	3-5%	> 80"	Well drained	> 80"	Rare	None	Low	0-17": Gravelly clay loam 17-60": Very gravelly sand
Pits and Quarries	Pt	Pits	1-90%	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed	0-80": Variable
San Antonio clay loam	SaB	Stream Terraces	1-3%	> 80"	Moderately low to moderately high	> 80"	None	None	High	0-10": Clay loam 10-38": Clay 38-60": Clay loam
Tinn and Frio soils, frequently flooded (Tinn)	Tf	Flood plains	0-1%	> 80"	Moderately well drained	> 80"	Frequent	None	High	0-8": Clay 8-65": Clay 65-80": Clay
Tinn and Frio soils, frequently flooded (Frio)	Tf	Flood plains	0-1%	> 80"	Well drained	> 80"	Frequent	None	High	0-30": Silty clay loam 30-50": Silty clay loam 50-80": Clay loam

Texas Water Development Board
San Antonio Sheet



[Back to index map](#)

Stinson Municipal Airport – Geology Table

Formation Name	Symbol	Age	Description	Primary Rock Type	Secondary Rock Type	Tertiary Rock Type
Fluviatile Terrace Deposits	Qt	Phanerozoic Cenozoic Quaternary Pleistocene Holocene	<p>Sand, silt, clay, and gravel in various proportions, with gravel more predominant in older, higher terrace deposits. Locally indurated with calcium carbonate (caliche) in terraces along streams. Along Colorado River clasts mostly limestone, chert, quartz, and various igneous and metamorphic rocks from Llano region and Edwards Plateau. Includes point bar, natural levee, stream channel deposits along valley walls; probably in large part correlatives of Deweyville, Beaumont, Lissie, and Willis deposits. In upland regions (Rolling Plains, Edwards Plateau, etc.) unit includes fluvial terrace deposits, undivided. Light-brown, reddish-brown, gray, or yellowish brown, gravelly quartz and lithic sand and silt to sandy gravel (Moore and Wermund, 1993). Deposits become increasingly fine grained on Coastal and Nueces Plains. Locally, calcium carbonate-cemented quartz sand, silt, clay, and gravel intermixed and interbedded. Low terraces of major rivers are capped by 2-4 m of clayey sand and silt. Sandy gravel on higher terraces varies somewhat in composition from river to river.</p>	Terrace	Sand	Gravel, silt, clay or mud

Appendix B

COC Acceptable Concentration Limits

Table 1
Tier 1 Residential Soil PCLs¹
May 24, 2011

Chemical of Concern	CAS	0.5 acre source area					30 acre source area							
		T ₁ Soil C ₁₀₀ (mg/kg) note3	C ₁₀₀ Soil (mg/kg) note3	M ₁₀₀ Soil (mg/kg) note3	M ₁₀₀ Soil (mg/kg) note3	C ₁₀₀ Soil (mg/kg) note3	T ₁ Soil C ₁₀₀ (mg/kg) note3	C ₁₀₀ Soil (mg/kg) note3	M ₁₀₀ Soil (mg/kg) note3	M ₁₀₀ Soil (mg/kg) note3	C ₁₀₀ Soil (mg/kg) note3			
Chloroethene, p- (4-chloroethene)	106-43-4	1.6E+03	1.1E+01	1.1E+03	1.1E+03	1.1E+03	1.6E+03	5.4E+01	5.4E+02	5.4E+02	1.6E+03	5.4E+01	5.4E+02	5.4E+02
Chlorpyrifos	2921-88-2	1.3E+02	1.5E+01	1.5E+03	1.5E+03	1.5E+03	1.3E+02	7.4E+00	7.4E+02	7.4E+02	1.3E+02	7.4E+00	7.4E+02	7.4E+02
Chromium (III)	16065-83-1	3.3E+04	2.4E+03	2.4E+05	2.4E+05	2.4E+05	2.7E+04	1.2E+03	1.2E+05	1.2E+05	2.7E+04	1.2E+03	1.2E+05	1.2E+05
Chromium (total)	7440-47-3	3.3E+04	2.4E+03	2.4E+05	2.4E+05	2.4E+05	2.7E+04	1.2E+03	1.2E+05	1.2E+05	2.7E+04	1.2E+03	1.2E+05	1.2E+05
Chromium (VI)	18540-29-9	1.2E+02	1.2E+01	1.2E+03	1.2E+03	1.2E+03	1.2E+02	1.4E+01	1.4E+03	1.4E+03	1.2E+02	1.4E+01	1.4E+03	1.4E+03
Chrysene	218-01-9	5.6E+02	1.5E+03	1.5E+05	1.5E+05	1.5E+05	5.6E+02	7.7E+02	7.7E+04	7.7E+04	5.6E+02	7.7E+02	7.7E+04	7.7E+04
Coalbit	7440-48-4	2.1E+01	6.6E+00	6.6E+02	6.6E+02	6.6E+02	2.1E+01	3.9E+01	3.9E+02	3.9E+02	2.1E+01	3.9E+01	3.9E+02	3.9E+02
Copolymer acrylamide	69418-26-4	1.3E+01	9.4E+03	9.4E+01	9.4E+01	9.4E+01	1.3E+01	4.7E+03	4.7E+01	4.7E+01	1.3E+01	4.7E+03	4.7E+01	4.7E+01
Copper	7440-50-8	5.5E+02	1.0E+03	1.0E+05	1.0E+05	1.0E+05	5.5E+02	5.2E+02	5.2E+04	5.2E+04	5.5E+02	5.2E+02	5.2E+04	5.2E+04
Coronene	191-07-1	1.3E+02	5.6E+04	1.0E+06	1.0E+06	1.0E+06	1.3E+02	2.8E+04	1.0E+06	1.0E+06	1.3E+02	2.8E+04	1.0E+06	1.0E+06
Coumaphos	56-72-4	4.3E+02	1.1E+02	1.1E+04	1.1E+04	1.1E+04	4.3E+02	5.5E+01	5.5E+03	5.5E+03	4.3E+02	5.5E+01	5.5E+03	5.5E+03
Cresol	1319-77-3	3.3E+03	6.6E+00	6.6E+02	6.6E+02	6.6E+02	3.3E+03	3.3E+00	3.3E+02	3.3E+02	3.3E+03	3.3E+00	3.3E+02	3.3E+02
Cresol, m-(3-methylphenol)	108-59-4	3.3E+03	6.6E+00	6.6E+02	6.6E+02	6.6E+02	3.3E+03	3.3E+00	3.3E+02	3.3E+02	3.3E+03	3.3E+00	3.3E+02	3.3E+02
Cresol, o-(2-methylphenol)	95-48-7	3.3E+03	7.1E+00	7.1E+02	7.1E+02	7.1E+02	3.3E+03	3.6E+00	3.6E+02	3.6E+02	3.3E+03	3.6E+00	3.6E+02	3.6E+02
Cresol, p-(4-methylphenol)	106-44-5	3.3E+02	6.3E+01	6.3E+01	6.3E+01	6.3E+01	3.3E+02	3.2E+01	3.2E+01	3.2E+01	3.3E+02	3.2E+01	3.2E+01	3.2E+01
Crotonaldehyde	123-73-9	3.2E+00	9.5E+04	9.5E+02	9.5E+02	9.5E+02	3.2E+00	4.8E+04	4.8E+02	4.8E+02	3.2E+00	4.8E+04	4.8E+02	4.8E+02
Cumene (isopropylbenzene)	98-82-8	4.3E+03	3.5E+02	3.5E+04	3.5E+04	3.5E+04	4.3E+03	1.7E+02	1.7E+04	1.7E+04	4.3E+03	1.7E+02	1.7E+04	1.7E+04
Cyanazine	21725-46-2	5.6E+00	4.2E+03	4.2E+01	4.2E+01	4.2E+01	5.6E+00	2.1E+03	2.1E+01	2.1E+01	5.6E+00	2.1E+03	2.1E+01	2.1E+01
Cyanidide	57-12-5	4.8E+01	4.0E+01	4.0E+03	4.0E+03	4.0E+03	4.8E+01	2.0E+01	2.0E+03	2.0E+03	4.8E+01	2.0E+01	2.0E+03	2.0E+03
Cyanogen	460-19-5	1.1E+01	6.1E+02	6.1E+00	6.1E+00	6.1E+00	1.1E+01	3.0E+02	3.0E+00	3.0E+00	1.1E+01	3.0E+02	3.0E+00	3.0E+00
Cyfluthrin	1134-23-2	3.7E+03	1.5E+02	1.5E+04	1.5E+04	1.5E+04	3.7E+03	7.6E+01	7.6E+03	7.6E+03	3.7E+03	7.6E+01	7.6E+03	7.6E+03
Cyclohexane	110-82-7	7.5E+04	5.9E+03	5.9E+05	5.9E+05	5.9E+05	7.5E+04	2.9E+02	2.9E+04	2.9E+04	7.5E+04	2.9E+02	2.9E+04	2.9E+04
Cyclohexanol	108-91-0	3.2E+04	2.6E+02	2.6E+04	2.6E+04	2.6E+04	3.2E+04	1.9E+00	1.9E+02	1.9E+02	3.2E+04	1.9E+00	1.9E+02	1.9E+02
Cyclohexanone	108-94-1	3.2E+04	2.6E+02	2.6E+04	2.6E+04	2.6E+04	3.2E+04	1.9E+00	1.9E+02	1.9E+02	3.2E+04	1.9E+00	1.9E+02	1.9E+02
Cyclohexanone, 3-	1679-51-2	1.6E+03	3.8E+00	3.8E+02	3.8E+02	3.8E+02	1.6E+03	1.3E+02	1.3E+04	1.3E+04	1.6E+03	1.3E+02	1.3E+04	1.3E+04
Cyclopentane, methyl-	96-37-7	5.3E+03	1.4E+02	1.4E+04	1.4E+04	1.4E+04	5.3E+03	6.8E+01	6.8E+03	6.8E+03	5.3E+03	6.8E+01	6.8E+03	6.8E+03
Cyclopentene	142-29-0	4.1E+05	1.1E+03	1.1E+05	1.1E+05	1.1E+05	4.1E+05	5.3E+02	5.3E+04	5.3E+04	4.1E+05	5.3E+02	5.3E+04	5.3E+04
Cyclotrimethylguanetransamine (HMX)	2691-41-0	1.6E+03	2.3E+00	2.3E+02	2.3E+02	2.3E+02	1.6E+03	1.2E+02	1.2E+04	1.2E+04	1.6E+03	1.2E+02	1.2E+04	1.2E+04
Cyclotrimethylguanetransamine (RDX)	121-52-4	4.3E+01	3.7E+02	3.7E+00	3.7E+00	3.7E+00	4.3E+01	1.8E+02	1.8E+00	1.8E+00	4.3E+01	1.8E+02	1.8E+00	1.8E+00
Cymene (isopropyltoluene)	99-87-6	8.2E+03	2.3E+02	2.3E+04	2.3E+04	2.3E+04	8.2E+03	1.2E+02	1.2E+04	1.2E+04	8.2E+03	1.2E+02	1.2E+04	1.2E+04
Cymolol	57966-95-7	8.7E+02	6.1E+01	6.1E+01	6.1E+01	6.1E+01	8.7E+02	3.0E+01	3.0E+01	3.0E+01	8.7E+02	3.0E+01	3.0E+01	3.0E+01
Daical (DCEA)	1861-32-1	2.0E+02	4.5E+02	4.5E+04	4.5E+04	4.5E+04	2.0E+02	2.3E+02	2.3E+04	2.3E+04	2.0E+02	2.3E+02	2.3E+04	2.3E+04
Dalapon, sodium salt (2,2-dichloropropionic acid)	75-95-0	6.2E+03	5.8E+01	5.8E+01	5.8E+01	5.8E+01	6.2E+03	2.9E+01	2.9E+01	2.9E+01	6.2E+03	2.9E+01	2.9E+01	2.9E+01
DDD	72-54-8	1.4E+01	1.3E+01	1.3E+03	1.3E+03	1.3E+03	1.4E+01	6.5E+00	6.5E+02	6.5E+02	1.4E+01	6.5E+00	6.5E+02	6.5E+02
DDT	72-55-9	1.0E+01	1.2E+01	1.2E+03	1.2E+03	1.2E+03	1.0E+01	7.4E+00	7.4E+02	7.4E+02	1.0E+01	7.4E+00	7.4E+02	7.4E+02
Demeton	50-29-3	5.4E+00	1.5E+01	1.5E+03	1.5E+03	1.5E+03	5.4E+00	5.9E+00	5.9E+02	5.9E+02	5.4E+00	5.9E+00	5.9E+02	5.9E+02
Diaceton alcohol (4-hydroxy-4-methyl-2-pentanone)	123-42-2	2.7E+03	1.9E+00	1.9E+02	1.9E+02	1.9E+02	2.7E+03	6.2E+02	6.2E+04	6.2E+04	2.7E+03	6.2E+02	6.2E+04	6.2E+04
Diallic	2303-16-4	3.8E+01	1.2E+00	1.2E+02	1.2E+02	1.2E+02	3.8E+01	9.7E+01	9.7E+01	9.7E+01	3.8E+01	9.7E+01	9.7E+01	9.7E+01
Diazinon	333-41-5	3.1E+01	1.6E+01	1.6E+01	1.6E+01	1.6E+01	3.1E+01	7.9E+02	7.9E+00	7.9E+00	3.1E+01	7.9E+02	7.9E+00	7.9E+00
Dibenz(a,b)acridine	226-36-5	3.7E+00	5.8E+01	5.8E+03	5.8E+03	5.8E+03	3.7E+00	2.9E+01	2.9E+03	2.9E+03	3.7E+00	2.9E+01	2.9E+03	2.9E+03
Dibenz(a,h)acridine	224-42-0	5.8E+00	1.1E+02	1.1E+04	1.1E+04	1.1E+04	5.8E+00	5.6E+01	5.6E+03	5.6E+03	5.8E+00	5.6E+01	5.6E+03	5.6E+03
Dibenz(a,i)acridine	54-70-3	5.5E+01	1.5E+03	1.5E+05	1.5E+05	1.5E+05	5.5E+01	7.6E+02	7.6E+04	7.6E+04	5.5E+01	7.6E+02	7.6E+04	7.6E+04
Dibenz(a,e)pyrene	192-65-4	6.1E+01	1.3E+02	1.3E+04	1.3E+04	1.3E+04	6.1E+01	6.5E+01	6.5E+03	6.5E+03	6.1E+01	6.5E+01	6.5E+03	6.5E+03
Dibenz(a,b)pyrene	189-64-0	6.1E+02	1.2E+01	1.2E+03	1.2E+03	1.2E+03	6.1E+02	6.0E+00	6.0E+02	6.0E+02	6.1E+02	6.0E+00	6.0E+02	6.0E+02
Dibenz(a,d)pyrene	189-55-9	6.1E+02	1.2E+01	1.2E+03	1.2E+03	1.2E+03	6.1E+02	6.0E+00	6.0E+02	6.0E+02	6.1E+02	6.0E+00	6.0E+02	6.0E+02
Dibenzofuran	132-64-9	2.7E+02	3.3E+03	3.3E+03	3.3E+03	3.3E+03	2.7E+02	1.7E+01	1.7E+03	1.7E+03	2.7E+02	1.7E+01	1.7E+03	1.7E+03
Dibenzothiophene	132-65-0	1.0E+02	1.0E+02	1.0E+04	1.0E+04	1.0E+04	1.0E+02	5.0E+01	5.0E+03	5.0E+03	1.0E+02	5.0E+01	5.0E+03	5.0E+03
Dibenzothiazole	96-12-8	1.5E+01	1.7E+03	1.7E+01	1.7E+01	1.7E+01	1.5E+01	8.7E+02	8.7E+00	8.7E+00	1.5E+01	8.7E+02	8.7E+00	8.7E+00
Dibromochloromethane (chlorodibromomethane)	124-48-1	7.2E+01	4.9E+02	4.9E+00	4.9E+00	4.9E+00	7.2E+01	2.5E+02	2.5E+00	2.5E+00	7.2E+01	2.5E+02	2.5E+00	2.5E+00
Dibromodifluoromethane	1868-53-7	1.6E+01	1.6E+01	1.6E+03	1.6E+03	1.6E+03	1.6E+01	7.8E+00	7.8E+02	7.8E+02	1.6E+01	7.8E+00	7.8E+02	7.8E+02
Dicamba	1918-00-9	2.0E+03	1.5E+00	1.5E+02	1.5E+02	1.5E+02	2.0E+03	7.3E+01	7.3E+01	7.3E+01	2.0E+03	7.3E+01	7.3E+01	7.3E+01
Dichloramid	37764-25-3	1.7E+03	2.6E+00	2.6E+02	2.6E+02	2.6E+02	1.7E+03	1.3E+01	1.3E+01	1.3E+01	1.7E+03	1.3E+01	1.3E+01	1.3E+01

Table 1
Tier 1 Residential Soil PCLs¹
May 24, 2011

Chemical of Concern	CAS	0.5 acre source area						30 acre source area								
		1 st Soil Comb 1 (mg/kg)	CV Soil Inq (mg/kg) note3	CV Soil Chas 3 (mg/kg) note3	Air Soil Inq (mg/kg) note3	Air GW- Soil Inq (mg/kg) note3	CV Soil for Secondary MCL (mg/kg) note3	1 st Soil Comb 2 (mg/kg) note3	CV Soil Inq (mg/kg) note3	CV Soil Chas 3 (mg/kg) note3	Air Soil Inq (mg/kg) note3	Air GW- Soil Inq (mg/kg) note3	CV Soil for Secondary MCL (mg/kg) note3			
Methyl acrylate	96-33-3	1.6E+02	n	1.0E+01	n	1.6E+01	n	1.0E+02	n	5.2E+00	n	5.7E+04	n	2.8E+05	n	>S
Methyl amyl ketone (2-heptanone)	110-43-0	3.9E+03	n	4.7E+02	n	4.7E+02	n	1.0E+06	n	2.4E+00	n	5.7E+04	n	2.8E+05	n	>S
Methyl chrysene, 1-	3351-28-8	5.8E+02	c	2.2E+04	c	2.2E+04	c	1.0E+06	c	1.1E+04	c	1.0E+06	c	1.0E+06	c	>S
Methyl chrysene, 2-	3351-32-4	5.8E+02	c	2.2E+04	c	2.2E+04	c	1.0E+06	c	1.1E+04	c	1.0E+06	c	1.0E+06	c	>S
Methyl chrysene, 6-	1705-85-7	5.7E+03	c	1.8E+03	c	1.8E+03	c	1.0E+06	c	8.8E+02	c	1.2E+05	c	1.0E+06	c	>S
Methyl cyclohexane	108-87-2	4.1E+04	n	1.6E+04	n	1.6E+04	n	1.8E+05	n	7.8E+03	n	2.4E+04	n	1.2E+04	n	>S
Methyl ethyl ketone (2-butanone)	78-93-3	4.0E+04	n	2.9E+01	n	2.9E+03	n	1.0E+06	n	1.9E+01	n	1.0E+05	n	6.2E+05	n	>S
Methyl iodide (iodomethane)	74-88-4	1.1E+02	n	1.1E+01	n	1.1E+01	n	1.0E+06	n	5.7E+02	n	3.0E+04	n	1.1E+05	n	>S
Methyl isobutyl ketone (4-methyl-2-pentanone)	108-10-1	5.9E+03	n	4.9E+02	n	4.9E+02	n	1.0E+06	n	2.3E+00	n	3.0E+04	n	1.1E+05	n	>S
Methyl mercury	22967-92-6	8.0E+00	n	n	n	n	n	n	n	8.0E+00	n	n	n	n	n	>S
Methyl methacrylate	80-62-6	9.8E+01	n	9.8E+03	n	9.8E+03	n	2.3E+05	n	4.9E+01	n	5.5E+03	n	1.5E+04	n	>S
Methyl methanesulfonate	66-27-3	3.3E+01	c	1.8E+02	c	1.8E+02	c	3.2E+04	c	8.9E+03	c	5.7E+01	c	2.1E+03	c	>S
Methyl parathion	298-08-0	1.7E+01	n	1.7E+01	n	1.7E+01	n	1.7E+01	n	8.5E+02	n	1.4E+05	n	2.2E+04	n	>S
Methyl-1-butene, 2-	563-46-2	4.8E+03	n	6.5E+01	n	6.5E+03	n	3.4E+05	n	3.2E+03	n	1.4E+05	n	2.2E+04	n	>S
Methyl-1-propenal, 2- (sobutylaldehyde)	76-84-2	3.3E+03	n	2.1E+02	n	2.1E+02	n	4.0E+05	n	1.0E+00	n	1.4E+05	n	2.2E+04	n	>S
Methyl-2-butene, 2-	513-35-9	4.8E+03	n	3.9E+01	n	3.9E+03	n	4.0E+05	n	1.9E+01	n	1.4E+05	n	2.2E+04	n	>S
Methyl-2-pentanol, 2-	623-36-9	3.2E+00	c	1.5E+03	c	1.5E+03	c	7.3E+02	c	7.3E+02	c	7.3E+02	c	7.3E+02	c	>S
Methyl-5-nitroamine, 2- (5-nitro-o-toluidine)	99-55-8	1.4E+02	c	1.4E+01	c	1.4E+01	c	1.4E+01	c	7.1E+02	c	7.1E+02	c	7.1E+02	c	>S
Methylolnitrone, 3-	56-49-5	1.9E+01	c	1.5E+01	c	1.5E+03	c	1.0E+05	c	1.9E+01	c	9.0E+02	c	1.0E+06	c	>S
Methylene bromide (dibromomethane)	74-95-3	8.1E+01	c	1.1E+00	c	1.1E+02	n	2.2E+03	n	5.6E+01	c	4.2E+01	c	1.4E+02	c	>S
Methylene chloride (dichloromethane)	75-09-2	3.9E+02	c	1.3E+02	m	1.3E+02	m	7.6E+02	c	6.5E+03	m	3.9E+02	c	2.2E+02	c	>S
Methylene-bis (2-chloroaniline) 4,4'-	101-14-4	4.6E+01	c	2.9E+00	c	2.9E+02	c	1.0E+06	c	1.4E+02	c	1.4E+02	c	4.1E+05	c	>S
Methylvinylcarbazole	1181-57-2	6.7E+00	n	4.8E+03	n	4.8E+01	n	2.4E+03	n	2.4E+03	n	2.4E+03	n	2.4E+03	n	>S
Methylvinylketone	90-12-0	1.5E+02	c	2.9E+00	c	2.9E+02	c	1.5E+02	c	1.5E+00	c	1.5E+02	c	1.5E+02	c	>S
Methylnaphthalene, 1-	91-57-6	2.3E+02	n	1.7E+01	n	1.7E+03	n	2.9E+02	n	8.5E+00	n	8.5E+02	n	8.5E+02	n	>S
Methylnaphthalene, 2-	872-50-4	1.3E+03	n	9.6E+01	n	9.6E+01	n	4.8E+01	n	4.8E+01	n	4.8E+01	n	4.8E+01	n	>S
Methylpyrrolidone, N-	96-47-9	1.5E+02	c	2.7E+01	c	2.7E+01	c	4.2E+03	c	1.4E+01	c	9.7E+01	c	2.7E+02	c	>S
Methyltetrahydrofuran, 2-	10141-72-7	1.7E+02	c	3.3E+01	c	3.3E+01	c	2.2E+02	c	1.6E+01	c	1.1E+02	c	3.7E+02	c	>S
Metolachlor	51218-45-2	1.0E+04	n	1.1E+02	n	1.1E+04	n	1.1E+04	n	5.5E+03	n	5.5E+03	n	5.5E+03	n	>S
Metricarbonyl	21087-64-9	1.7E+03	n	1.2E+00	n	1.2E+02	n	1.2E+02	n	6.1E+01	n	6.1E+01	n	6.1E+01	n	>S
Mifex	2385-85-5	1.3E+01	n	4.5E+03	n	4.5E+05	n	4.5E+05	n	2.2E+03	n	2.2E+03	n	2.2E+03	n	>S
Molinate	2212-67-1	1.3E+02	n	1.9E+01	n	1.9E+01	n	1.9E+01	n	9.6E+00	n	9.6E+00	n	9.6E+00	n	>S
Molylbiscoum	7439-98-7	1.6E+02	n	4.9E+01	n	4.9E+03	n	4.9E+03	n	2.5E+03	n	2.5E+03	n	2.5E+03	n	>S
Monocrotophos	2157-98-4	4.0E+01	n	2.9E+02	n	2.9E+00	n	2.9E+00	n	1.5E+00	n	1.5E+00	n	1.5E+00	n	>S
Morpholine	110-91-8	1.0E+06	n	2.4E+04	n	2.4E+06	n	2.4E+06	n	1.0E+06	n	1.0E+06	n	1.0E+06	n	>S
MTBE (methyl tert-butyl ether) ⁷	1634-04-4	8.0E+02	n	6.2E+01	n	6.2E+01	n	1.4E+03	c	3.1E+01	n	7.1E+02	c	6.6E+02	c	1.9E+02
Naled	300-76-5	1.3E+02	n	3.5E+01	n	3.5E+01	n	3.5E+01	n	1.3E+01	n	1.3E+01	n	1.3E+01	n	>S
Naphthalene	91-20-3	2.2E+02	n	3.1E+01	n	3.1E+03	n	2.0E+04	n	1.6E+01	n	1.6E+01	n	1.6E+01	n	>S
Naphthoquinone, 1,4-	130-15-4	4.7E+02	n	4.6E+01	n	4.6E+01	n	4.6E+01	n	2.3E+01	n	2.3E+01	n	2.3E+01	n	>S
Naphthylamine, 1-	134-32-7	1.3E+03	n	9.4E+00	n	9.4E+02	n	9.4E+02	n	4.7E+02	n	4.7E+02	n	4.7E+02	n	>S
Naphthylamine, 2-	91-56-8	2.6E+00	c	1.3E+02	c	1.3E+00	c	1.3E+00	c	6.4E+01	c	6.4E+01	c	6.4E+01	c	>S
Napropamide	15299-99-7	6.7E+03	n	5.5E+02	n	5.5E+04	n	5.5E+04	n	2.7E+04	n	2.7E+04	n	2.7E+04	n	>S
Neopentyl glycol	740-30-7	3.0E+04	n	1.5E+01	n	1.5E+03	n	1.5E+03	n	7.3E+02	n	7.3E+02	n	7.3E+02	n	>S
Nickel and compounds	7440-02-0	8.4E+02	n	1.6E+02	n	1.6E+04	n	1.6E+04	n	7.9E+03	n	7.9E+03	n	7.9E+03	n	>S
Nitrate	14797-55-8	1.3E+05	n	1.9E+01	m	1.9E+03	m	1.9E+03	m	9.6E+00	m	9.6E+00	m	9.6E+00	m	>S
Nitro	14797-65-0	8.0E+03	n	8.0E+03	n	8.0E+03	n	8.0E+03	n	8.0E+03	n	8.0E+03	n	8.0E+03	n	>S
Nitroamine, 2-	88-74-4	1.4E+01	n	2.2E+02	n	2.2E+00	n	4.8E+01	n	1.2E+04	n	2.4E+01	n	7.7E+02	n	>S
Nitroamine, 3-	99-09-2	1.5E+01	n	2.6E+02	n	2.6E+00	n	6.0E+01	n	1.7E+04	n	3.1E+01	n	1.1E+03	n	>S
Nitroamine, 4-	100-01-6	2.2E+02	n	1.1E+01	n	1.1E+01	n	1.2E+03	n	5.4E+02	n	5.4E+02	n	5.4E+02	n	>S
Nitrobenzene	98-95-3	6.6E+01	c	3.5E+01	c	3.5E+01	c	6.6E+01	c	1.8E+01	n	1.8E+01	n	1.8E+01	n	>S
Nitroglycerin	55-63-0	6.7E+00	n	1.4E+02	n	1.4E+00	n	1.4E+00	n	6.9E+03	n	6.9E+03	n	6.9E+03	n	>S
Nitrophenol, 2-	88-75-5	1.3E+02	n	1.3E+01	n	1.3E+01	n	1.3E+01	n	6.7E+02	n	6.7E+02	n	6.7E+02	n	>S
Nitrophenol, 3-	551-63-7	1.3E+02	n	2.3E+01	n	2.3E+01	n	1.3E+01	n	1.1E+01	n	1.1E+01	n	1.1E+01	n	>S

Table 1
Tier I Residential Soil PCLs¹
May 24, 2011

Chemical of Concern	CAS	0.5 acre source area						30 acre source area							
		Soil Comb ² (mg/kg) note3	Soil Inq (mg/kg) note3	Soil Inq (mg/kg) note3	Soil Inq ⁴ (mg/kg) note3	Soil Inq ⁵ (mg/kg) note3	Soil Inq ⁶ (mg/kg) note3	Soil Comb ² (mg/kg) note3	Soil Inq (mg/kg) note3	Soil Inq (mg/kg) note3	Soil Inq ⁴ (mg/kg) note3	Soil Inq ⁵ (mg/kg) note3	Soil Inq ⁶ (mg/kg) note3		
Nitrophenol, 4-	100-02-7	1.3E+02	1.0E-01	1.0E+01	1.3E-01	3.6E+00	1.3E+02	5.0E-02	5.0E+00	6.8E-02	3.5E-03	3.5E-01	6.8E-02	2.3E-01	c
Nitropropene, 2-	79-46-9	1.3E-01	7.1E-03	7.1E-01	1.3E-01	3.6E+00	6.8E-02	3.5E-03	3.5E-01	3.3E-01	1.2E-04	1.2E-02	9.7E-01	1.3E+04	c
Nitroquinoline-N-oxide, 4-	56-57-5	4.0E-01	2.3E-04	2.3E-02	1.9E+00	2.7E+04	3.3E-01	1.2E-04	1.2E-02	1.7E-04	3.3E-04	3.3E-02	9.7E-01	1.3E+04	c
Nitrosodibenzofuran	11106-54-7	1.7E+00	6.6E-04	6.6E-02	6.6E-02	6.6E-02	1.8E-02	6.2E-06	6.2E-04	1.8E-02	6.2E-06	6.2E-04	3.4E-02	9.7E-01	c
Nitrosodimethylamine, n-	55-18-5	2.5E-02	1.2E-05	1.2E-03	2.0E-01	4.3E+01	5.5E-02	1.8E-05	1.8E-03	3.3E-01	9.4E-04	9.4E-02	3.4E+00	3.4E+00	c
Nitrosodi-n-butylamine, n-	924-16-3	4.7E-01	1.9E-03	1.9E-01	1.0E+00	5.2E+01	4.0E-01	1.8E-04	1.8E-02	5.7E-05	5.7E-03	5.7E-03	3.4E+01	3.4E+01	c
Nitrosodipropylamine, n-	621-64-7	4.0E-01	3.8E-04	3.8E-02	2.8E+00	2.8E+02	5.7E-02	1.4E-00	1.4E+02	2.8E-01	1.3E-04	1.3E-02	8.8E-01	8.8E-01	c
Nitrosodiphenylamine, n-	10595-95-6	2.8E-01	1.1E-04	1.1E-02	1.7E+00	5.2E+02	3.9E-01	1.3E-04	1.3E-02	3.4E-02	1.0E-03	1.0E-03	6.9E-01	2.3E+01	c
Nitrosomorpholine, N-	59-89-2	5.0E-01	2.6E-04	2.6E-02	1.7E+00	5.2E+02	3.9E-01	1.3E-04	1.3E-02	3.4E-02	1.0E-03	1.0E-03	6.9E-01	2.3E+01	c
Nitroso-n-ethylurea, n-	7597-73-9	3.4E-02	2.1E-05	2.1E-03	1.3E+00	3.9E+02	2.9E-01	1.0E-04	1.0E-02	1.3E+00	4.2E-04	4.2E-02	3.0E+00	1.2E+02	c
Nitrosopiperidine, N-	100-75-4	3.6E-01	2.1E-04	2.1E-02	1.3E+00	3.9E+02	1.3E+00	1.0E-04	1.0E-02	1.3E+00	4.2E-04	4.2E-02	3.0E+00	1.2E+02	c
Nitrosopyrrolidine, n-	930-55-2	1.6E-00	8.4E-04	8.4E-02	5.8E-00	1.9E+03	6.7E+02	9.2E-01	9.2E+01	2.7E+01	1.6E-02	1.6E-00	2.7E+01	2.7E+01	c
Nitrotoluene, m-	99-08-1	6.7E-02	1.8E+00	1.8E+02	1.8E+00	1.8E+00	2.7E+01	1.6E-02	1.6E-00	2.7E+01	1.6E-02	1.6E-00	2.7E+01	2.7E+01	c
Nitrotoluene, o-	88-72-2	2.1E+01	3.1E-02	3.1E+00	4.3E-01	4.3E+01	2.7E+02	2.2E-01	2.2E+01	5.6E-00	6.3E-00	6.3E+02	2.4E+05	2.4E+05	c
Nitrotoluene, p-	99-09-0	2.7E+02	4.3E-01	4.3E+01	4.3E+01	4.3E+01	2.7E+02	2.2E-01	2.2E+01	5.6E-00	6.3E-00	6.3E+02	2.4E+05	2.4E+05	c
Nonachlor, cis-	5103-73-1	5.6E+00	1.3E-01	1.3E-03	1.2E+03	1.0E+06	5.6E+00	6.3E-00	6.3E+02	5.6E+00	6.3E-00	6.3E+02	2.4E+05	2.4E+05	c
Nonachlor, trans-	39765-80-5	5.6E+00	1.3E-01	1.3E-03	1.2E+03	1.0E+06	5.6E+00	6.3E-00	6.3E+02	5.6E+00	6.3E-00	6.3E+02	2.4E+05	2.4E+05	c
Nonaphthalene, N-	124-19-6	1.3E+04	1.3E+02	1.3E+04	1.3E+04	1.3E+04	1.3E+04	1.3E+02	1.3E+04	1.3E+04	1.3E+02	1.3E+04	1.3E+04	1.3E+04	c
Nonene, 1-n	124-11-8	8.2E+03	3.3E+03	3.3E+05	3.3E+05	3.3E+05	8.2E+03	3.3E+03	3.3E+05	8.2E+03	3.3E+03	3.3E+05	3.3E+05	3.3E+05	c
Nonylphenol	104-40-5	6.5E+03	3.0E+05	3.0E+06	3.0E+06	3.0E+06	6.5E+03	3.0E+05	3.0E+06	6.5E+03	3.0E+05	3.0E+06	3.0E+06	3.0E+06	c
Nonylphenol	25154-52-3	6.5E+03	3.0E+05	3.0E+06	3.0E+06	3.0E+06	6.5E+03	3.0E+05	3.0E+06	6.5E+03	3.0E+05	3.0E+06	3.0E+06	3.0E+06	c
Nonylphenol	84882-15-3	6.5E+03	3.0E+05	3.0E+06	3.0E+06	3.0E+06	6.5E+03	3.0E+05	3.0E+06	6.5E+03	3.0E+05	3.0E+06	3.0E+06	3.0E+06	c
Nonylphenol ethoxylate	9016-45-9	8.0E+03	7.5E+05	1.0E+06	1.0E+06	1.0E+06	8.0E+03	7.5E+05	1.0E+06	8.0E+03	7.5E+05	1.0E+06	1.0E+06	1.0E+06	c
Octamethyl pyrophosphoramide	152-16-9	1.3E+02	9.4E-02	9.4E+00	9.4E+00	9.4E+00	1.3E+02	9.4E-02	9.4E+00	1.3E+02	9.4E-02	9.4E+00	9.4E+00	9.4E+00	c
Oxanone	106-68-3	4.9E+03	1.1E-01	1.1E-03	1.0E+05	1.0E+06	4.9E+03	1.1E-01	1.1E-03	4.9E+03	1.1E-01	1.1E-03	1.0E+06	1.0E+06	c
Oxanylin	23135-22-0	1.7E-03	4.2E-01	4.2E+01	4.2E+01	4.2E+01	1.7E-03	4.2E-01	4.2E+01	1.7E-03	4.2E-01	4.2E+01	4.2E+01	4.2E+01	c
Oxychloridane	27304-13-8	5.6E+00	1.3E-01	1.3E-03	1.2E+03	1.0E+06	5.6E+00	6.3E-00	6.3E+02	5.6E+00	6.3E-00	6.3E+02	2.4E+05	2.4E+05	c
Paraoquat	19104-42-5	3.0E+02	2.1E-01	2.1E+01	2.1E+01	2.1E+01	3.0E+02	2.1E-01	2.1E+01	3.0E+02	2.1E-01	2.1E+01	2.1E+01	2.1E+01	c
Parathion (ethyl parathion)	56-38-2	4.0E+02	3.3E-01	3.3E+03	3.3E+03	3.3E+03	4.0E+02	3.3E-01	3.3E+03	4.0E+02	3.3E-01	3.3E+03	3.3E+03	3.3E+03	c
Pebsalate	1114-71-2	3.3E+03	2.3E+01	2.3E+03	2.3E+03	2.3E+03	3.3E+03	2.3E+01	2.3E+03	3.3E+03	2.3E+01	2.3E+03	2.3E+03	2.3E+03	c
Pendimethalin	40487-42-1	2.5E+03	7.5E-03	7.5E+05	7.5E+05	7.5E+05	2.5E+03	7.5E-03	7.5E+05	2.5E+03	7.5E-03	7.5E+05	7.5E+05	7.5E+05	c
Pentachlorobenzene	608-93-5	5.3E-01	2.5E+01	2.5E+03	2.5E+03	2.5E+03	5.3E-01	2.5E+01	2.5E+03	5.3E-01	2.5E+01	2.5E+03	2.5E+03	2.5E+03	c
Pentachloroethane	76-01-7	3.9E+01	9.7E-02	9.7E+00	9.4E+01	2.8E+03	2.8E+01	4.8E-02	4.8E+00	2.8E+01	4.8E-02	4.8E+00	4.8E+01	1.8E+02	c
Pentachloronitrobenzene	82-68-8	1.0E-01	1.8E+00	1.8E-02	1.8E-02	1.8E-02	1.0E-01	1.8E+00	1.8E-02	1.0E-01	1.8E+00	1.8E-02	1.8E-02	1.8E-02	c
Pentachlorophenol	87-86-5	7.3E-01	1.8E-02	1.8E+00	1.8E+00	1.8E+00	7.3E-01	1.8E-02	1.8E+00	7.3E-01	1.8E-02	1.8E+00	1.8E+00	1.8E+00	c
Pentachloro-1,3-cis-	1574-41-0	4.8E+03	1.9E+01	1.9E+03	1.9E+03	1.9E+03	4.8E+03	1.9E+01	1.9E+03	4.8E+03	1.9E+01	1.9E+03	1.9E+03	1.9E+03	c
Pentachloro-1,3-trans-	2004-70-8	4.8E+03	1.3E-01	1.3E+03	1.3E+03	1.3E+03	4.8E+03	1.3E-01	1.3E+03	4.8E+03	1.3E-01	1.3E+03	1.3E+03	1.3E+03	c
Pentachloro (tetranitrate) (PETN)	78-11-5	1.3E-02	1.2E+01	1.2E+03	1.2E+03	1.2E+03	1.3E-02	1.2E+01	1.2E+03	1.3E-02	1.2E+01	1.2E+03	1.2E+03	1.2E+03	c
Pentane, 2-methyl-	107-83-5	4.8E+03	3.8E-02	3.8E+04	3.8E+04	3.8E+04	4.8E+03	3.8E-02	3.8E+04	4.8E+03	3.8E-02	3.8E+04	3.8E+04	3.8E+04	c
Pentane, 3-methyl-	96-14-0	4.8E+03	3.1E+02	3.1E+04	3.1E+04	3.1E+04	4.8E+03	3.1E+02	3.1E+04	4.8E+03	3.1E+02	3.1E+04	3.1E+04	3.1E+04	c
Pentanol, 1,5-	111-29-5	3.0E+05	2.4E+02	2.4E-04	1.0E+06	1.0E+06	3.0E+05	2.4E+02	2.4E-04	3.0E+05	2.4E+02	2.4E-04	1.0E+06	1.0E+06	c
Pentanol, 1-	71-41-0	2.7E+03	2.3E+00	2.3E+02	2.3E+02	2.3E+02	2.7E+03	2.3E+00	2.3E+02	2.7E+03	2.3E+00	2.3E+02	2.3E+02	2.3E+02	c
Pentanol, 4-methyl-2-	108-111-2	2.1E+03	1.8E+00	1.8E+02	1.8E+02	1.8E+02	2.1E+03	1.8E+00	1.8E+02	2.1E+03	1.8E+00	1.8E+02	1.8E+02	1.8E+02	c
Pentaneone, 2-	107-87-9	3.3E+03	2.2E+00	2.2E+02	2.2E+02	2.2E+02	3.3E+03	2.2E+00	2.2E+02	3.3E+03	2.2E+00	2.2E+02	2.2E+02	2.2E+02	c
Pentene, 1-	109-68-2	4.8E+03	4.7E+01	4.7E+03	4.7E+03	4.7E+03	4.8E+03	4.7E+01	4.7E+03	4.8E+03	4.7E+01	4.7E+03	4.7E+03	4.7E+03	c
Pentene, 2-	627-19-0	4.8E+03	1.3E+01	1.3E+03	1.3E+03	1.3E+03	4.8E+03	1.3E+01	1.3E+03	4.8E+03	1.3E+01	1.3E+03	1.3E+03	1.3E+03	c
Pentylacetate	14797-73-0	5.1E-01	1.4E-01	1.4E+01	1.4E+01	1.4E+01	5.1E-01	1.4E-01	1.4E+01	5.1E-01	1.4E-01	1.4E+01	1.4E+01	1.4E+01	c
Perylene	198-55-0	1.3E+03	7.6E+04	7.6E+06	7.6E+06	7.6E+06	1.3E+03	7.6E+04	7.6E+06	1.3E+03	7.6E+04	7.6E+06	7.6E+06	7.6E+06	c
Phenacetim	62-44-2	1.8E+00	1.2E+00	1.2E-02	1.1E-04	1.0E+05	1.8E+00	1.2E+00	1.2E-02	1.8E+00	1.2E+00	1.2E-02	1.2E+00	1.2E+00	c
Phenanthrene	85-01-8	1.7E+03	4.2E+02	4.2E+04	4.2E+04	4.2E+04	1.7E+03	4.2E+02	4.2E+04	1.7E+03	4.2E+02	4.2E+04	4.2E+04	4.2E+04	c

Table 1
Tier 1 Residential Soil PCLs¹
May 24, 2011

Chemical of Concern	CAS	0.5 acre source area										30 acre source area									
		Soil Comb ² (mg/kg)	Soil Int ³ (mg/kg)	Soil Class ³ (mg/kg)	Soil Lab ⁴ (mg/kg)	Soil Lab ⁵ (mg/kg)	Soil for Secondary MCL (mg/kg)	Soil Comb ² (mg/kg)	Soil Int ³ (mg/kg)	Soil Class ³ (mg/kg)	Soil Lab ⁴ (mg/kg)	Soil Lab ⁵ (mg/kg)	Soil for Secondary MCL (mg/kg)	Soil Comb ² (mg/kg)	Soil Int ³ (mg/kg)	Soil Class ³ (mg/kg)	Soil Lab ⁴ (mg/kg)	Soil Lab ⁵ (mg/kg)	Soil for Secondary MCL (mg/kg)		
Sodium polyacrylate	9003-04-7	1.2E+02	2.4E+01	2.4E+03	1.2E+02	3.0E+04	6.2E+01	1.2E+01	1.2E+03	6.2E+01	1.9E+03	>S	6.2E+01	1.2E+01	1.2E+03	6.2E+01	1.9E+03	>S			
Strontium	7440-24-6	4.0E+04	6.1E+02	6.1E+04	1.2E+02	3.0E+04	4.4E+04	3.1E+02	3.1E+04	4.4E+04	3.1E+04	>S	4.4E+04	3.1E+02	3.1E+04	4.4E+04	3.1E+04	>S			
Strychnine	57-24-9	2.0E+01	3.7E+02	3.7E+00	1.1E+04	4.9E+05	2.0E+01	1.9E+02	1.9E+00	2.0E+01	1.9E+00	>S	2.0E+01	1.9E+02	1.9E+00	2.0E+01	1.9E+00	>S			
Styrene	100-42-5	6.7E+03	3.3E+00	3.3E+02	1.1E+04	4.9E+05	4.3E+03	3.3E+02	3.3E+00	4.3E+03	3.3E+00	>S	4.3E+03	3.3E+02	3.3E+00	4.3E+03	3.3E+00	>S			
Sulfide*	14806-79-8	18496-25-8																			
Sulfonate	126-33-0	1.9E+02	1.7E+01	1.7E+01	8.6E+02	2.5E+05	1.6E+02	8.7E+02	8.7E+00	1.6E+02	8.7E+00	>S	1.6E+02	8.7E+02	8.7E+00	1.6E+02	8.7E+00	>S			
Sulfur*	7704-34-9																				
Subprofos (Bolstar)	35400-43-2	2.0E+02	7.5E+03	7.5E+05	>S		2.0E+02	3.8E+03	3.8E+05	2.0E+02	3.8E+05	>S	2.0E+02	3.8E+03	3.8E+05	2.0E+02	3.8E+05	>S			
Tebucumazole	107534-96-3	2.0E+03	3.1E+01	3.1E+03	>S		2.0E+03	1.6E+01	1.6E+03	2.0E+03	1.6E+03	>S	2.0E+03	1.6E+01	1.6E+03	2.0E+03	1.6E+03	>S			
Terbuthion	34014-18-1	4.7E+03	5.4E+00	5.4E+02			4.7E+03	2.7E+00	2.7E+02	4.7E+03	2.7E+02	>S	4.7E+03	2.7E+00	2.7E+02	4.7E+03	2.7E+02	>S			
Terbufos	13071-79-9	1.7E+00	3.4E+01	3.4E+01			1.7E+00	1.7E+01	1.7E+01	1.7E+00	1.7E+01	>S	1.7E+00	1.7E+01	1.7E+01	1.7E+00	1.7E+01	>S			
Tert-amyl ethyl ether (TAEE)	919-94-8	3.3E+03	9.5E+00	9.5E+02			3.3E+03	4.7E+00	4.7E+02	3.3E+03	4.7E+02	>S	3.3E+03	4.7E+00	4.7E+02	3.3E+03	4.7E+02	>S			
Tert-amyl methyl ether (TAME)	994-05-8	3.3E+03	3.8E+00	3.8E+02			3.3E+03	1.9E+00	1.9E+02	3.3E+03	1.9E+02	>S	3.3E+03	1.9E+00	1.9E+02	3.3E+03	1.9E+02	>S			
Tert-butyl alcohol (2-methyl-2-propanol)	75-65-0	7.4E+03	4.6E+00	4.6E+02			7.4E+03	2.3E+00	2.3E+02	7.4E+03	2.3E+02	>S	7.4E+03	2.3E+00	2.3E+02	7.4E+03	2.3E+02	>S			
Tetrahydrobenzene, 1,2,3,4-	634-66-2	2.0E+01	1.2E+01	1.2E+03			2.0E+01	6.0E+00	6.0E+02	2.0E+01	6.0E+02	>S	2.0E+01	6.0E+00	6.0E+02	2.0E+01	6.0E+02	>S			
Tetrahydrobenzene, 1,2,3,5-	634-90-2	1.3E+01	1.9E+00	1.9E+02			1.3E+01	9.4E+01	9.4E+01	1.3E+01	9.4E+01	>S	1.3E+01	9.4E+01	9.4E+01	1.3E+01	9.4E+01	>S			
Tetrahydrobenzene, 1,1,1,2-	95-94-3	2.0E+01	4.8E+01	4.8E+01	>S		2.0E+01	2.4E+01	2.4E+01	2.0E+01	2.4E+01	>S	2.0E+01	2.4E+01	2.4E+01	2.0E+01	2.4E+01	>S			
Tetrahydrofuran	630-20-6	6.5E+01	1.4E+00	1.4E+02			6.5E+01	1.4E+02	1.4E+02	6.5E+01	1.4E+02	>S	6.5E+01	1.4E+02	1.4E+02	6.5E+01	1.4E+02	>S			
Tetrahydrofuran, 1,1,1,2-	79-34-5	3.0E+01	2.3E+00	2.3E+00			3.0E+01	2.3E+00	2.3E+00	3.0E+01	2.3E+00	>S	3.0E+01	2.3E+00	2.3E+00	3.0E+01	2.3E+00	>S			
Tetrahydrofuran, 1,1,2,2-	127-18-4	1.0E+02	5.0E+02	5.0E+00			9.4E+01	9.4E+02	5.0E+03	9.4E+01	9.4E+02	>S	9.4E+01	9.4E+02	5.0E+00	9.4E+01	9.4E+02	>S			
Tetrahydrofuran, 2,3,4,5-	4901-51-3	4.0E+02	1.5E+01	1.5E+03			4.0E+02	7.4E+00	7.4E+02	4.0E+02	7.4E+02	>S	4.0E+02	7.4E+00	7.4E+02	4.0E+02	7.4E+02	>S			
Tetrahydrofuran, 2,3,4,6-	58-90-2	1.8E+00	4.5E+00	4.5E+02			1.8E+00	2.2E+00	2.2E+02	1.8E+00	2.2E+02	>S	1.8E+00	2.2E+00	2.2E+02	1.8E+00	2.2E+02	>S			
Tetrahydrofuran, 2,3,5,6-	935-95-5	2.3E+01	2.2E+00	2.2E+02			2.3E+01	1.1E+00	1.1E+02	2.3E+01	1.1E+02	>S	2.3E+01	1.1E+00	1.1E+02	2.3E+01	1.1E+02	>S			
Tetrahydrofuran, 2,3,5,6-	22248-79-9	2.6E+03	2.4E+03	2.4E+05			2.6E+03	1.2E+03	1.2E+05	2.6E+03	1.2E+05	>S	2.6E+03	1.2E+03	1.2E+05	2.6E+03	1.2E+05	>S			
Tetrahydrofuran, 2,3,5,6-	116-29-0	1.0E+03	8.7E+01	8.7E+03			1.0E+03	4.4E+01	4.4E+03	1.0E+03	4.4E+03	>S	1.0E+03	4.4E+01	4.4E+03	1.0E+03	4.4E+03	>S			
Tetrahydrofuran, 2,3,5,6-	3689-24-5	3.3E+01	3.9E+01	3.9E+01			3.3E+01	1.9E+01	1.9E+01	3.3E+01	1.9E+01	>S	3.3E+01	1.9E+01	1.9E+01	3.3E+01	1.9E+01	>S			
Tetrahydrofuran, 2,3,5,6-	78-00-2	6.2E+03	5.0E+04	5.0E+02			6.2E+03	2.5E+04	2.5E+02	6.2E+03	2.5E+02	>S	6.2E+03	2.5E+04	2.5E+02	6.2E+03	2.5E+02	>S			
Tetrahydrofuran, 2,3,5,6-	107-49-3	7.3E+01	9.3E+03	9.3E+01			7.3E+01	4.6E+03	4.6E+01	7.3E+01	4.6E+01	>S	7.3E+01	4.6E+03	4.6E+01	7.3E+01	4.6E+01	>S			
Tetrahydrofuran, 2,3,5,6-	112-60-7	2.2E+04	1.6E+01	1.6E+03			2.2E+04	7.3E+03	7.3E+02	2.2E+04	7.3E+02	>S	2.2E+04	7.3E+03	7.3E+02	2.2E+04	7.3E+02	>S			
Tetrahydrofuran, 2,3,5,6-	109-99-9	1.5E+02	2.7E+01	2.7E+01			1.5E+02	1.2E+01	1.2E+01	1.5E+02	1.2E+01	>S	1.5E+02	1.2E+01	1.2E+01	1.5E+02	1.2E+01	>S			
Tetrahydrofuran, 2,3,5,6-	142-68-7	1.6E+02	2.7E+01	2.7E+01			1.6E+02	1.4E+01	1.4E+01	1.6E+02	1.4E+01	>S	1.6E+02	1.4E+01	1.4E+01	1.6E+02	1.4E+01	>S			
Tetrahydrofuran, 2,3,5,6-	112-49-2	2.0E+03	1.7E+00	1.7E+02			2.0E+03	8.6E+01	8.6E+01	2.0E+03	8.6E+01	>S	2.0E+03	8.6E+01	8.6E+01	2.0E+03	8.6E+01	>S			
Tetrahydrofuran, 2,3,5,6-	7791-12-0	6.3E+00	1.7E+00	1.7E+02			6.3E+00	8.7E+01	8.7E+01	6.3E+00	8.7E+01	>S	6.3E+00	8.7E+01	8.7E+01	6.3E+00	8.7E+01	>S			
Tetrahydrofuran, 2,3,5,6-	39196-18-4	2.0E+01	3.1E+02	3.1E+00			2.0E+01	1.6E+02	1.6E+00	2.0E+01	1.6E+00	>S	2.0E+01	1.6E+02	1.6E+00	2.0E+01	1.6E+00	>S			
Tetrahydrofuran, 2,3,5,6-	297-97-2	4.7E+00	1.1E+02	1.1E+00			4.7E+00	5.5E+03	5.5E+01	4.7E+00	5.5E+01	>S	4.7E+00	5.5E+03	5.5E+01	4.7E+00	5.5E+01	>S			
Tetrahydrofuran, 2,3,5,6-	23564-05-8	5.3E+03	4.5E+00	4.5E+02			5.3E+03	2.2E+00	2.2E+02	5.3E+03	2.2E+02	>S	5.3E+03	2.2E+00	2.2E+02	5.3E+03	2.2E+02	>S			
Tetrahydrofuran, 2,3,5,6-	137-26-8	3.3E+02	3.5E+04	3.5E+02			3.3E+02	1.8E+00	1.8E+02	3.3E+02	1.8E+02	>S	3.3E+02	1.8E+00	1.8E+02	3.3E+02	1.8E+02	>S			
Tetrahydrofuran, 2,3,5,6-	7440-31-5	3.5E+04	3.7E+00	3.7E+02			3.5E+04	1.8E+04	1.8E+04	3.5E+04	1.8E+04	>S	3.5E+04	1.8E+04	1.8E+04	3.5E+04	1.8E+04	>S			
Tetrahydrofuran, 2,3,5,6-	108-88-3	5.9E+03	8.2E+00	8.2E+02			5.4E+03	4.1E+00	4.1E+02	5.4E+03	4.1E+02	>S	5.4E+03	4.1E+00	4.1E+02	5.4E+03	4.1E+02	>S			
Tetrahydrofuran, 2,3,5,6-	26471-92-5	1.5E+02	1.5E+02	1.5E+02			7.5E+01	7.6E+03	7.6E+03	7.5E+01	7.6E+03	>S	7.5E+01	7.6E+03	7.6E+03	7.5E+01	7.6E+03	>S			
Tetrahydrofuran, 2,3,5,6-	95-80-7	1.5E+00	1.4E+00	1.4E+00			1.5E+00	7.2E+01	7.2E+01	1.5E+00	7.2E+01	>S	1.5E+00	7.2E+01	7.2E+01	1.5E+00	7.2E+01	>S			
Tetrahydrofuran, 2,3,5,6-	523-40-5	2.0E+03	3.8E+02	3.8E+00			1.5E+01	1.9E+02	1.9E+00	1.5E+01	1.9E+00	>S	1.5E+01	1.9E+02	1.9E+00	1.5E+01	1.9E+00	>S			
Tetrahydrofuran, 2,3,5,6-	95-53-4	1.7E+01	3.8E+02	3.8E+00			1.5E+01	1.9E+02	1.9E+00	1.5E+01	1.9E+00	>S	1.5E+01	1.9E+02	1.9E+00	1.5E+01	1.9E+00	>S			
Tetrahydrofuran, 2,3,5,6-	106-49-0	2.2E+01	1.4E+02	1.4E+00			2.5E+01	7.0E+03	7.0E+03	2.5E+01	7.0E+03	>S	2.5E+01	7.0E+03	7.0E+03	2.5E+01	7.0E+03	>S			
Tetrahydrofuran, 2,3,5,6-	8001-35-2	1.2E+01	1.2E+03	1.2E+03			1.2E+01	5.8E+00	5.8E+00	1.2E+01	5.8E+00	>S	1.2E+01	5.8E+00	5.8E+00	1.2E+01	5.8E+00	>S			
Tetrahydrofuran, 2,3,5,6-	TPH 1X1005, C6-C12	1.6E+03	6.5E+01	6.5E+03			1.1E+03	3.1E+03	3.1E+03	1.1E+03	3.1E+03	>S	1.1E+03	3.1E+03	3.1E+03	1.1E+03	3.1E+03	>S			
Tetrahydrofuran, 2,3,5,6-	TPH 1X1005-1	2.3E+03	2.0E+02	2.0E+04			2.0E+03	9.9E+01	9.9E+03	2.0E+03	9.9E+03	>S	2.0E+03	9.9E+01	9.9E+03	2.0E+03	9.9E+03	>S			
Tetrahydrofuran, 2,3,5,6-	TPH 1X1005-2	2.3E+03	2.0E+02	2.0E+04			2.0E+03	9.9E+01	9.9E+03	2.0E+03	9.9E+03	>S	2.0E+03	9.9E+01	9.9E+03	2.0E+03	9.9E+03	>S			
Tetrahydrofuran, 2,3,5,6-	TPH 1X1005-3	2.3E+03	2.0E+02	2.0E+04			2.0E+03	9.9E+01	9.9E+03	2.0E+03	9.9E+03	>S	2.0E+03	9.9E+01	9.9E+03	2.0E+03	9.9E+03	>S			
Tetrahydrofuran, 2,3,5,6-	TPH 1X1005-4	2.3E+03	2.0E+02	2.0E+04			2.0E+03	9.9E+01	9.9E+03	2.0E+03	9.9E+03	>S	2.0E+03	9.9E+01	9.9E+03	2.0E+03	9.9E+03	>S			
Tetrahydrofuran, 2,3,5,6-	TPH 1X1005-5	2.3E+03	2.0E+02	2.0E+04			2.0E+03	9.9E+01	9.9E+03	2.0E+03	9.9E+03	>S	2.0E+03	9.9E+01	9.9						

Table 1
Tier 1 Residential Soil PCLs¹
May 24, 2011

Chemical of Concern	CAS	0.5 acre source area						30 acre source area						
		1 st Soil C _{comb} ² (mg/kg)	GW ³ Soil C _{haz} ³ (mg/kg)	Air ⁴ Soil C _{inh} ⁴ (mg/kg)	Air ⁴ GW- Soil _{inh} ⁴ (mg/kg)	GW ³ Soil C _{inh} ³ (mg/kg)	GW ³ Soil C _{haz} ³ (mg/kg)	1 st Soil C _{comb} ² (mg/kg)	GW ³ Soil C _{inh} ³ (mg/kg)	GW ³ Soil C _{haz} ³ (mg/kg)	Air ⁴ Soil C _{inh} ⁴ (mg/kg)	Air ⁴ GW- Soil _{inh} ⁴ (mg/kg)	GW ³ Soil C _{inh} ³ (mg/kg)	GW ³ Soil C _{haz} ³ (mg/kg)
>16-21 C, >21-35 C aliphatics (TPH) (for transformer mineral oil releases only)	NA	1.1E+05	1.0E+06	>S	1.0E+06	>S	1.1E+05	1.0E+06	>S	1.0E+06	>S	1.1E+05	1.0E+06	>S
>7-8 C aromatics (TPH)	NA	6.4E+03	2.0E+01	>S	2.0E+03	>S	5.3E+03	1.0E+01	>S	1.0E+03	>S	5.3E+03	1.0E+03	>S
>8-10 C aromatics (TPH)	NA	1.6E+03	6.5E+01	>S	6.5E+03	>S	1.1E+03	3.3E+01	>S	3.3E+03	>S	1.1E+03	3.3E+03	>S
>10-12 C aromatics (TPH)	NA	1.9E+03	1.0E+02	>S	1.0E+04	>S	1.5E+03	5.0E+01	>S	5.0E+03	>S	1.5E+03	5.0E+03	>S
>12-16 C aromatics (TPH)	NA	2.3E+03	2.0E+02	>S	2.0E+04	>S	2.0E+03	9.9E+01	>S	9.9E+03	>S	2.0E+03	9.9E+03	>S
>16-21 C aromatics (TPH)	NA	1.9E+03	4.7E+02	>S	4.7E+04	>S	1.9E+03	2.3E+02	>S	2.3E+04	>S	1.9E+03	2.3E+04	>S
>21-35 C aromatics (TPH)	NA	1.9E+03	3.7E+03	>S	3.7E+05	>S	1.9E+03	1.8E+03	>S	1.8E+05	>S	1.9E+03	1.8E+05	>S
Transformer mineral oil	NA	2.6E+04	2.5E+05	>S	1.0E+06	>S	2.0E+04	1.3E+05	>S	1.0E+06	>S	2.0E+04	1.3E+06	>S

¹In accordance with §350.72(b), when establishing Tier 1 PCLs for individual COCs for each of the individual and combined human health exposure pathways, the person must evaluate whether the PCLs need to be adjusted to lower concentrations to meet the cumulative carcinogenic risk level and hazard index criteria specified in §350.72(c). For COCs which exhibit both carcinogenic and noncarcinogenic characteristics, they shall be evaluated as both a carcinogen and noncarcinogen when determining whether the PCL established for an individual COC for each of the individual and combined human health exposure pathways needs to be adjusted to a lower concentration to meet the cumulative risk and hazard criteria. The person shall then use the lower of the carcinogenic or noncarcinogenic PCL as the Tier 1 human health PCL. In other words, the Tier 1 PCLs provided in this table for an individual COC should not be used as the final Tier 1 human health PCL for any of the individual or combined exposure pathways in cases where there are more than 10 noncarcinogenic COCs within a source medium unless it can be demonstrated that further downward adjustment is not necessary to meet the cumulative risk and hazard criteria.

²Combined includes: inhalation, ingestion, dermal, vegetable consumption pathways
³c = carcinogenic; n = noncarcinogenic; m = primary MCL-based; a = EPA Action Level-based; > S = solubility limit exceeded during calculation; < GW Ing = less than GWGWing value
⁴For subsurface soils only

⁵Please contact the TCEQ for assistance in determining a site-specific approach for GWSolling values for these compounds.
⁶Note that much higher PCLs for mercury may be obtained using a pH-dependent Kd based on site-specific information (see Figure 30 TAC §350.73(e)(1)(C)).

⁷Persons must use the value provided in the "GWSoil for Secondary MCL" column of this table as the GWSoil PCL for MTBE if the conditions described in §350.74(d)(3) exist.
⁸Asbestos URF and soil PCLs removed. Contact your TCEQ Project Manager if asbestos may be a chemical of concern.

⁹These compounds, acetic acid, ammonium polyphosphate, ammonium salts, calcium chloride, ethylene, hydrogen chloride (hydrochloric acid), iron, limonene, d-, magnesium, phosphorus, total, potassium, sodium, sulfate, sulfide, and sulfur, are not necessarily of concern from a human health standpoint, therefore calculation of human health-based values is not required. However, aesthetics and ecological criteria would still apply. See table entitled "Compounds for which Calculation of a Human Health PCL is Not Required" available on the TCEQ website at <http://www.tceq.texas.gov/remediation/trp/trp.htm>.

All values capped at 1E+06

Texas-Specific Soil Background Concentrations milligrams per kilogram (mg/kg) ¹	
Metal	Median Background Concentration (mg/kg)
Aluminum	30,000
Antimony	1
Arsenic	5.9
Barium	300
Beryllium	1.5
Boron	30
Total Chromium	30
Cobalt	7
Copper	15
Fluoride	190
Iron	15,000
Lead	15
Manganese	300
Mercury	0.04
Nickel	10
Selenium	0.3
Strontium	100
Tin	0.9
Titanium	2,000
Thorium	9.3
Vanadium	50
Zinc	30

¹ Source: "Background Geochemistry of Some Rocks, Soils, Plants, and Vegetables in the Conterminous United States", by Jon J. Connor, Hansford T. Shacklette, et al., Geological Survey Professional Paper 574-F, US Geological Survey.

Appendix C

Soil Stockpile Plan

SAAS Material Stockpiles

Stockpile Number	Approximate			Estimated *** Volume (yd ³)	Material Type	Location (See Maps)
	Length (ft)	Width (ft)	Height (ft)			
SP-1	33	23	12	169	Base Material	North side by Valero
SP-2*	150	115	5	1,600	Topsoil, rock, paint chips	ARFF
SP-3**	350	290	10	18,800	Topsoil, rock, concrete, asphalt, pipe	Mt. Yantis
SP-4	23	25	4	25	4" to 6" Rock	Northeast of Cessna
SP-5	21	15	6	35	2" to 4" Rock	Northeast of Cessna
SP-6	79	27	12	475	Base Material	Northeast of Cessna
SP-7	18	14	5	24	Sand	Northeast of Cessna
SP-8	34	30	10	180	Topsoil	Northeast of Cessna
SP-9	30	16	12	107	Pea gravel	Northeast of Cessna
SP-10	22	17	8	55	Pea gravel	Northeast of Cessna
SP-11	17	14	5	22	1" Rock	Northeast of Cessna
SP-12	14	8	3	6	River Rock	Northeast of Cessna
SP-13	25	24	10	111	Mulch	Northeast of Cessna
SP-14	18	16	8	43	Mulch	Northeast of Cessna
SP-15	65	42	10	506	Recycle Material	Northeast of Cessna
SP-16	17	14	6	26	Topsoil	Northeast of Cessna
SP-17	205	175	18	24,000	Concrete Rubble	Northeast corner of AOA
SP-18	168	65	18	7,300	Concrete Rubble	Northeast corner of AOA
SP-19	215	75	10	6,000	Concrete Rubble	Northeast corner of AOA
SP-20	164	100	6	3,640	Topsoil, concrete, pipe, rock	Northeast corner of AOA
SP-21	21	15	3	18	Rock	Northeast corner of AOA
SP-22	180	15	8	400	Construction Debris	East side near Greenlight
SP-23	355	270	12	21,300	Construction Debris	East side near Greenlight
SP-24	62	32	10	368	Concrete Rubble	East side near Greenlight
SP-25	440	245	15	37,000	Fill Material	Buckhorn
SP-26	180	140	15			
SP-26	240	175	3	1,333	Fill Material	Buckhorn
SP-27	190	150	2	1,055	Fill Material	Buckhorn
SP-28	220	135	15	8,250	Fill Material	Buckhorn
SP-29	350	80	10	5,185	Fill Material	Buckhorn
SP-30	315	87	10	5,075	Fill Material	Buckhorn
SP-31	330	140	8	6,845	Fill Material	Buckhorn
SP-32	440	240	5	9,800	Fill Material	Buckhorn
SP-33	200	25	5	460	Fill Material	Buckhorn
SP-34	300	32	5	889	Fill Material	Buckhorn
SP-35	250	50	10	232	Fill Material	Buckhorn

* - See SP-13 photograph and drawing

** - See SP-14 photograph and drawing

*** - Volumes are very rough estimates



Google Earth

Earth - 2025/1/29

29.321254 N - 87.751111 W Elev: 775 ft

Image Date: 1/29/2016 19:55



Google earth

feet
meters

800
200



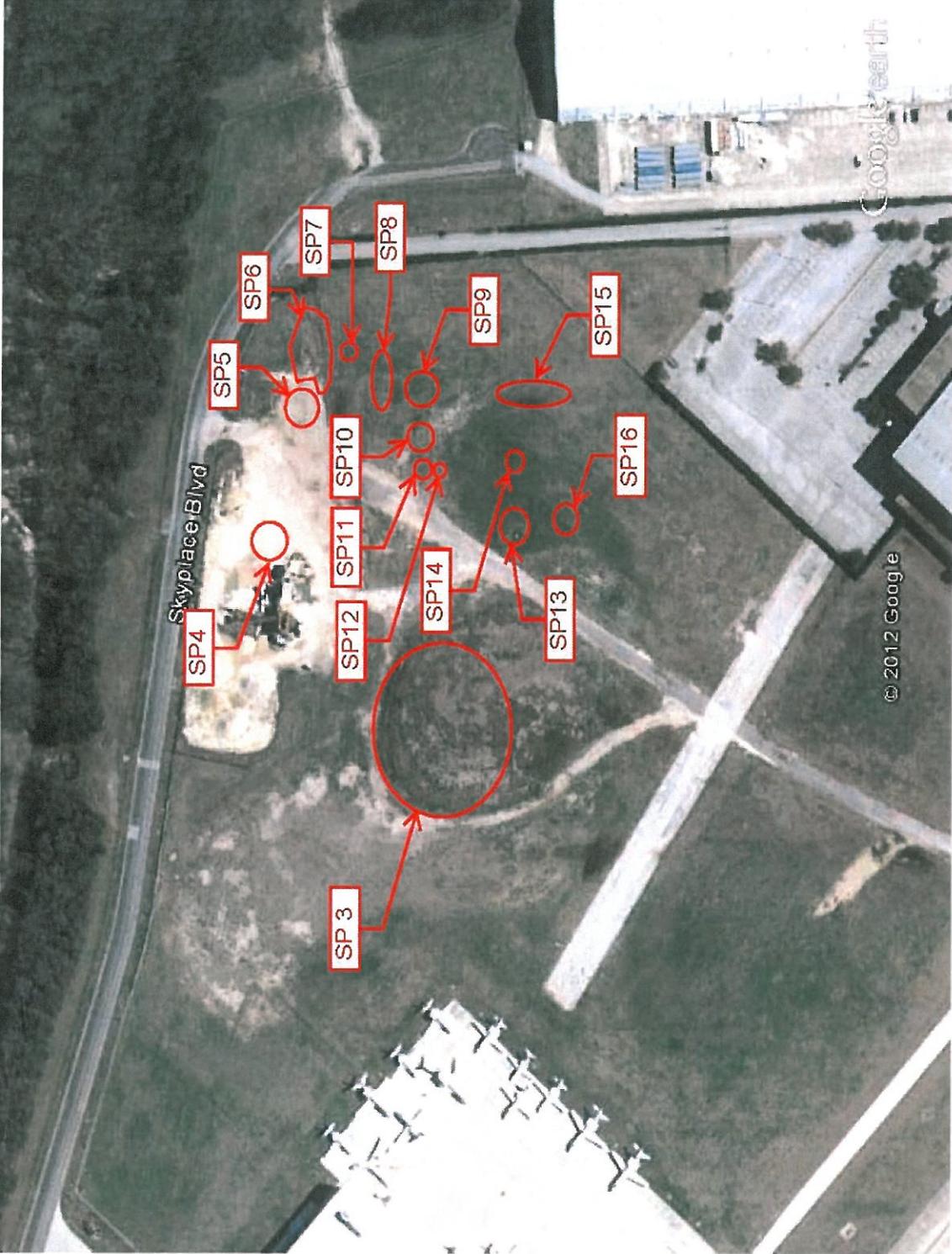


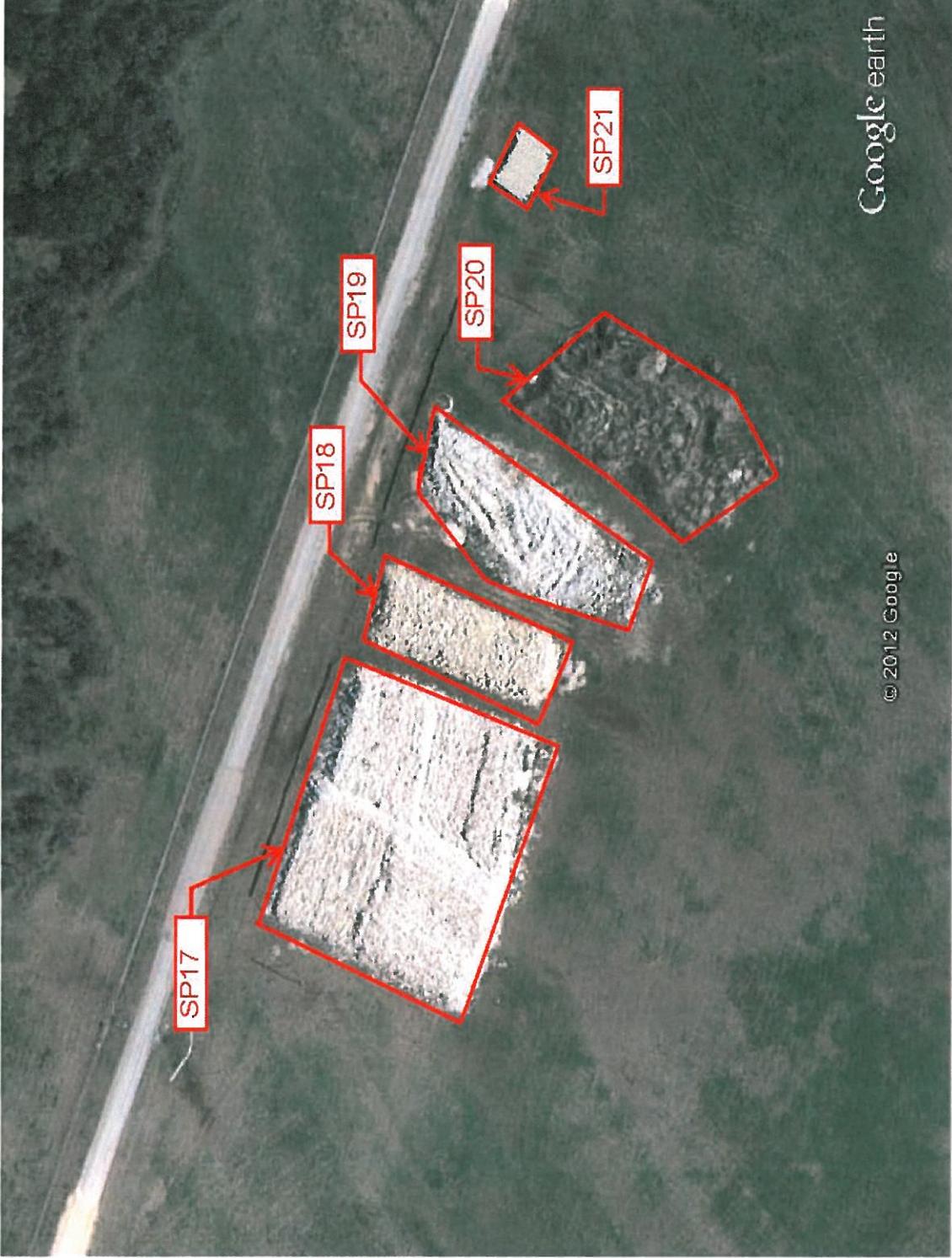
Google earth

feet
meters

700
200







Google earth

feet
meters

100

500



Google earth

© 2012 Google



Google earth

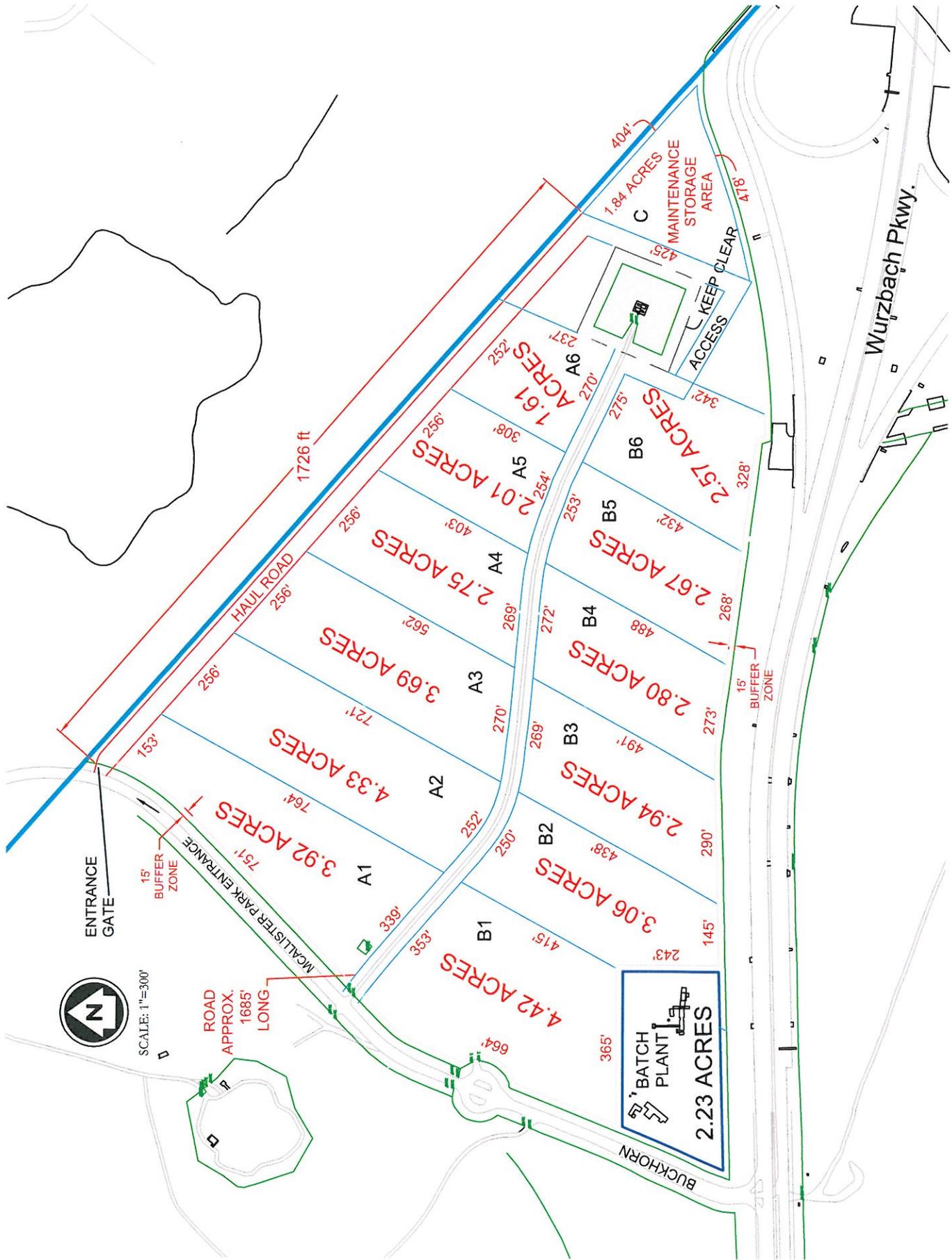


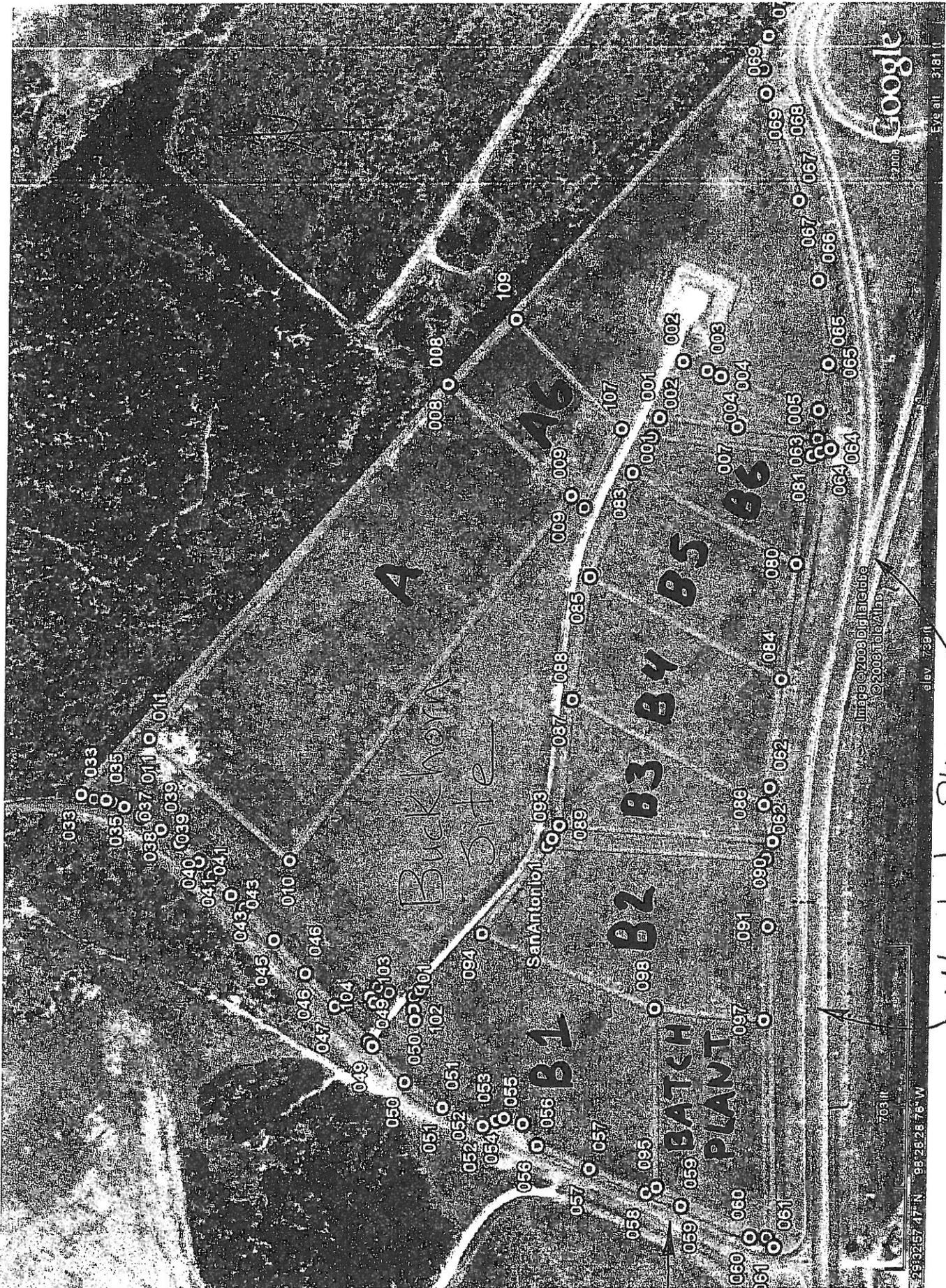
Google earth

feet
meters

1000
300







McAllister Park Entrance

7/19/08

Wurzbach Pkwy.

Image © 2008 DigitalGlobe
© 2008 Tele Atlas

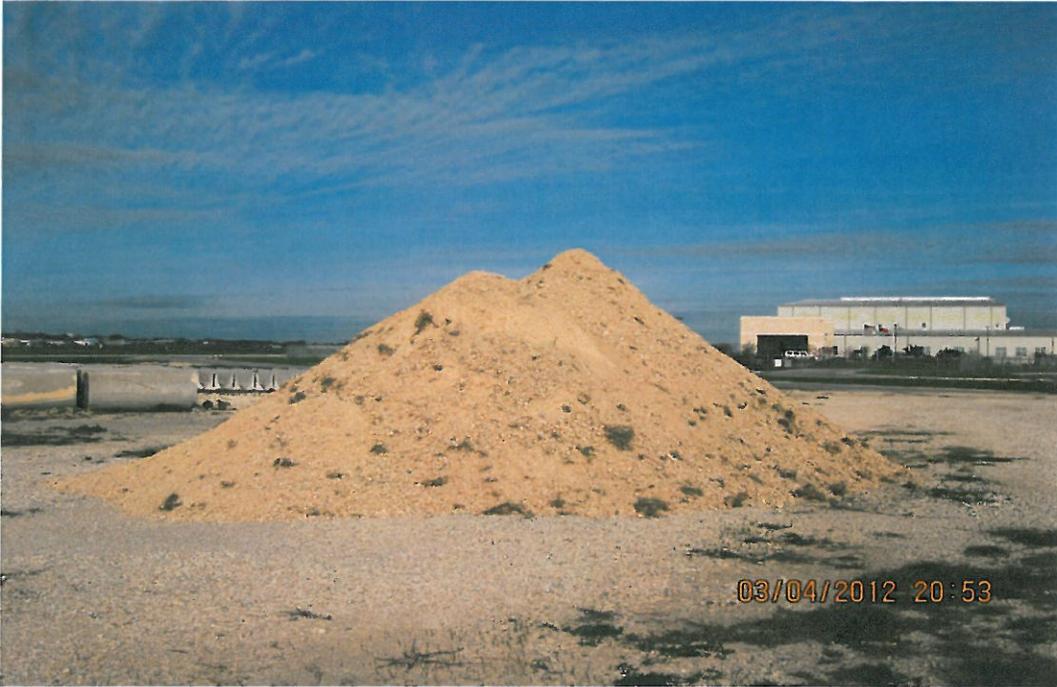
703 ft
98°28'57.41" N 98°28'26.76" W

Google

Eye alt: 3181 ft

SAT Material Stockpiles

SP -1



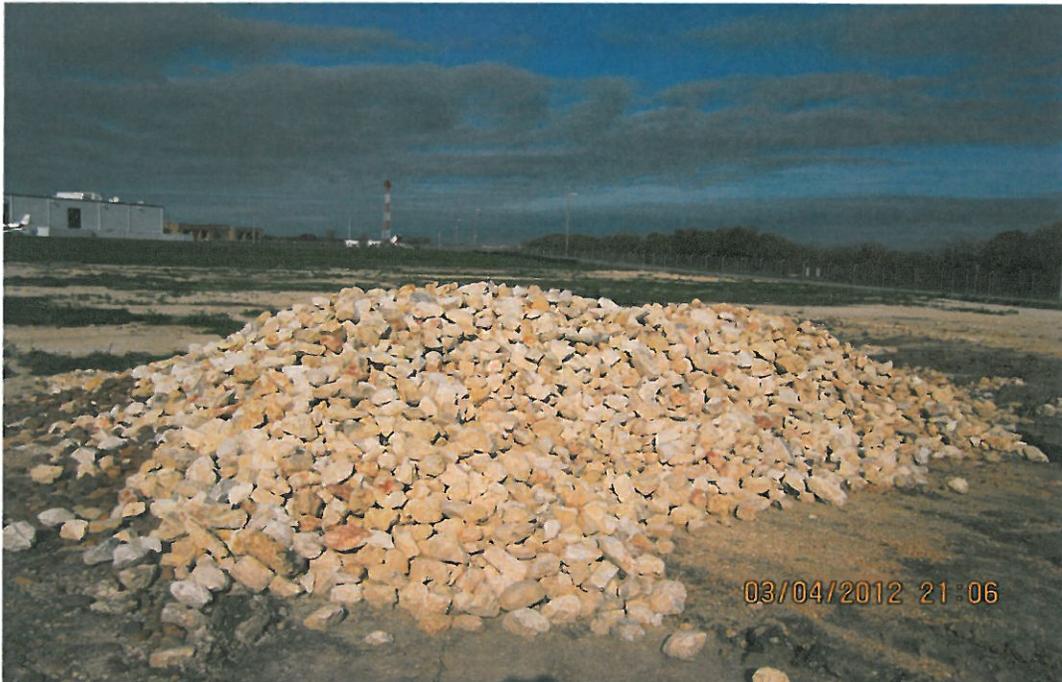
SP-2



SP-3



SP-4



SP-5



SP-6



SP-7



SP-8



SP-9



SP-10



SP-11



SP-12



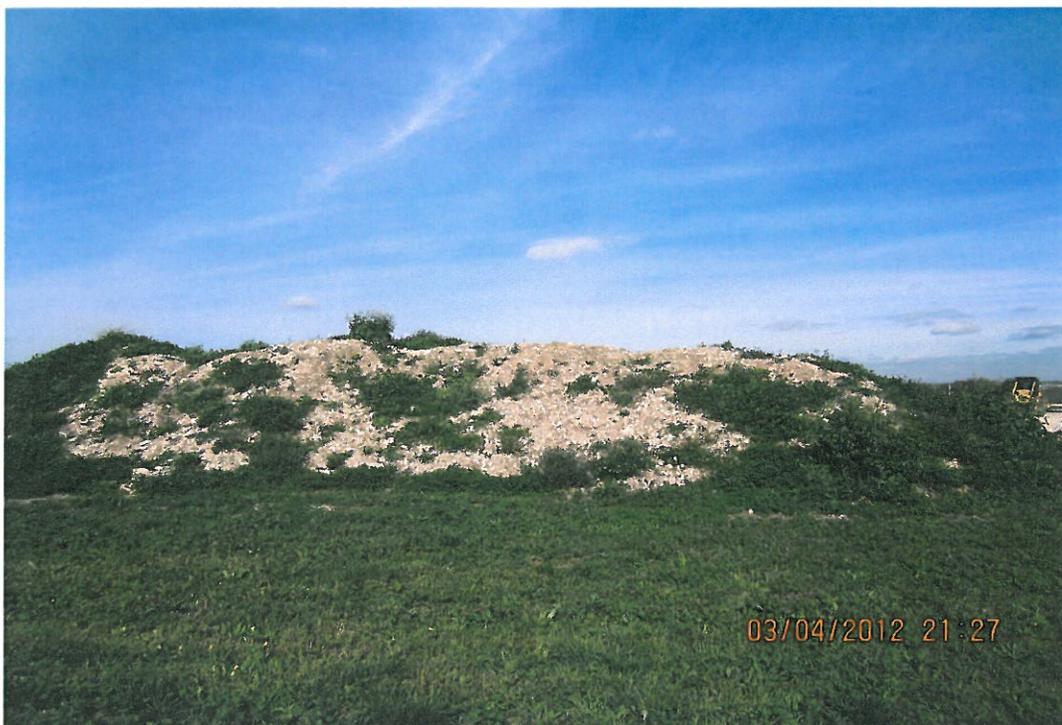
SP-13



SP-14



SP-15



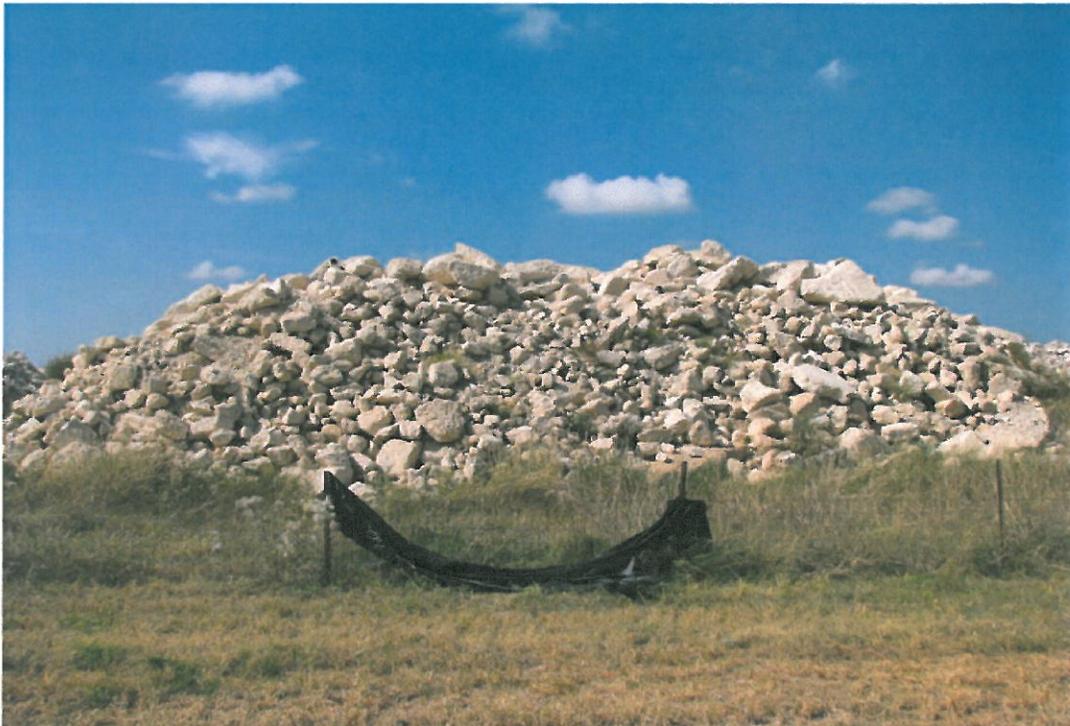
SP-16



SP-17



SP-18



SP-19



SP-20



SP-21



SP-22



SP-23



SP-24



SP-25



SP-26



SP-27



SP-28



SP-29



SP-30



SP-31



SP-32



SP-33



SP-34



SP-35



Appendix D

SMP Authorization Form



San Antonio Airport System
457 Sandau Road
San Antonio, Texas 78216
Phone: (210) 207-3402
Fax: (210) 207-3544

San Antonio Airport System
Environmental Stewardship Division
&
Planning and Development Division

SMP Authorization Form

Project Name:

Project Location:

Company Name: Project Manager:

Address: City, State & Zip:

Telephone/Fax: Email:

Secondary Contact: Telephone/Fax:

Stockpile Volume (yd3)	Type of Material	Importation/Exportation	Material Tested (Y or N) Attach Analytical Results

Please provide the following information for any imported soil:

Origin of soil (Company Name): Telephone/Fax:

Address: Contact Name:

Submittal Requirements:

- Copy of any and all soil sampling and analytical results (attached behind this form).
- Copy of you Soil Screening Plan.
- I understand the following requirements: 1) No material shall be moved, imported, exported, etc... without the written consent of either the Environmental Stewardship Division (ESD) and/or Planning & Development (P&D); 2) Potential/suspected contaminated material must be properly stockpiled on the project site. Upon analytical confirmation, contaminated soil must be properly profiled and disposed; and 3) Material stockpiling on Airport Property, including Buckhorn, must be authorized by either ESD and/or P&D.

Signature: Title: Date:

Internal Use Only

Received By: Date:

Approved (Y or N): Date:

Staff Signature:

SPECIAL CONDITIONS FOR CONSTRUCTION WITHIN THE AIR OPERATIONS AREA AT SAN ANTONIO INTERNATIONAL AIRPORT

San Antonio International Airport maintains operations 24 hours a day, 365 days per year for General Aviation and Air Carrier Service. Safety, Security and Operations will take precedence over all construction activities within the Airport Property. As such, all construction activity shall be conducted in accordance with the stipulations outlined below:

SECURITY

FINES

Any fines assessed to the Aviation Department due to the contractor's violations of any security requirements will be passed on to the contractor.

BADGING

Personnel working within the AOA must display current Airport issued identification at all times. The contractor shall be responsible for providing the necessary background checks for these personnel as well as maintaining personnel files for the project duration. These files are subject to FAA, TSA and Airport Police review. Subsequent to the pre-construction meeting, the contractor must arrange for all badged personnel to attend the SIDA class. Not all personnel must be badged.

It is permissible to have one (1) red-badge (with "E") personnel to escort and be responsible for up to two (2) unbadged persons. All unescorted equipment operators and drivers must be badged. SIDA classes are coordinated through Airport Police and take approximately two (2) hours. All badges remain the property of the Aviation Department and must be returned at the completion of the contract.

CONSTRUCTION ACCESS

The contractor will be issued ingress/egress into the AOA at a point designated by the Aviation Department, Airport Police. This point will be as close and practicable to the marshalling area as possible. The contractor will be required to enter into a security amendment, which shall be issued and kept, on file with Airport Police. It will be the contractor's responsibility to maintain security at all times during the duration of the contract. The access will be locked at all times while unattended and shall be manned by approved badged personnel only. It includes the access to the borrow site, the batch plant site, the storage site and/or the fill area.

OPERATIONS

Aviation Department, Planning and Development Section (P&D) is charged with the responsibility of overseeing construction projects within the airport property, including the

proper execution of all facets of the construction activities and compliance with applicable Federal Regulations. The Aviation Operations Section is responsible for the safety and efficiency of the airport operation through daily operation management. The contractor shall comply with all directives issued by Aviation P&D and Operations Section in a timely manner.

VEHICULAR OPERATIONS

Not all badged personnel need to have an airfield driver license. If the badge personnel need to drive in the airport operations area (AOA), he/she must attend the required driving course sponsored by Airport Operations and takes approximately four (4) hours to complete. No vehicles may be operated within the Air Operations Area (AOA) until the drivers successfully pass the driving course and satisfactory Insurance Certificates are on file with the office of Planning & Development. Upon course completion, the individual will be required to demonstrate knowledge of rules, regulations, and procedures governing their behavior while in movement area via written and practical examinations.

All vehicular movement areas used by the contractor will be subject to the approval of the Aviation Department. All airfield drivers who are found in violation of the Airfield Driver's Training guidelines or the Airport Rules and Regulations will be issued a written citation and will be subject to possible revocation and termination of AOA driving privileges.

All construction vehicles/mechanized equipment operating on Airport property needs to have a 12" company logos or 6" letters identifying the company, displayed on both doors. All construction vehicles and mechanized equipment authorized within the airfield Movement area, ramps or related safety areas shall also need to have one FAA approved flag located on the uppermost portion of the vehicle/ mechanized equipment or is escorted by a vehicle so equipped. The FAA approved flag is a 3'*3' orange and white checkered flag with each box being 1' square.

During the periods of low visibility or evening, the contractor shall follow Advisory Circular 150/5210-5D, Painting, Marking, and Lighting of Vehicles Used on an Airport to provide identification lighting devices on vehicles and construction equipment while working in the airport operations area (AOA).

During the night time hours, all equipment operating on the airport exceeding 15 feet in height shall be lit with a red obstruction light in accordance with Advisory Circular 70/7460-1K, Obstruction Marking and Lighting. The light is to be located on the uppermost portion of the equipment.

ESCORT

Any vehicle operated by personnel authorized to drive and to escort (red-badge with "E") within the AOA can only escort two vehicles and equipment being operated by personnel without having successfully completed the driving course. The escorted vehicles must be behind and proximate to the vehicle at all times while within the AOA including departing through the construction access. All escorted vehicles must have a 12" company logo each on the driver door and passenger door. Should the need arise to enter or cross an active runway, the escort

must be done by personnel from Airport Operations and coordinated through Airport Operations.

BARRICADES

All construction areas shall be properly barricaded, signed and marked as directed by the Aviation Department in accordance with the barricade markings shown on the drawings. Barricades shall be properly secured as necessary to prevent overturning or displacement from wind or jet blast and shall be illuminated. Refer to FAA Advisory Circular 150/5340-1K "Standards for Airport Markings" for FAA lighting and marking standards on airport runways, taxiways and aprons and FAA AC 150/5370-2F "Operational Safety on Airports during Construction" for aviation safety during construction. Excavated areas shall not be left unattended unless appropriate barricades are provided. The contractor shall have a designated contact person with a telephone number on file with the Airport Operations who shall be on call 24 hours a day in order to maintain the barricades. Location and placement shall be adjusted as necessitated by changes in construction progress.

Safety netting shall be installed in locations as shown on the drawings or as directed by the Resident Engineer on the field. Netting shall be installed prior to the start of construction and shall be maintained for the duration of the project. Adjustments in location shall be made as directed by the Aviation Department.

Should the contractor fail to maintain barricades, barriers, signage and/or erosion control devices and Aviation Department Personnel are required to perform corrective action, the contractor will be charged for this service.

COMMUNICATION:

In order to maintain constant communication with the air traffic control tower, the contractor shall furnish and maintain in good operating condition, at least one two-way portable VHF radio having a frequency of 121.9 MHZ to aid in the control of vehicles on the airfield.

Operators of any radio equipped vehicles on Movement areas must be trained and familiar with airport radio procedures prior to operating on movement and safety areas.

Vehicle operators must obtain ATCT clearance before entering/operating on Movement area. If working in the Movement area and runways/taxiways safety areas, the contractor must continuously monitor radio. Vehicles, equipment and pedestrians will not be allowed into any taxiway/runway safety area while aircraft operations are being conducted.

ACCIDENT REPORT:

Contractor must immediately report in writing to the Airport Communication Center (207-3433) for all accidents in connection with the performance of work, whether on or adjacent to the site. He also needs to send a copy of the report to SAIA Planning and Development Division.

STORAGE & MARSHALLING AREAS

EXCESS MATERIAL

All material removed from the construction site, which is not to be used in the final construction shall be removed from the Airport Property and disposed of in a legal manner. No excess material shall be disposed of on Airport Property unless prior written approval from the Aviation Department is issued.

CONSTRUCTION MATERIALS

Construction materials not for immediate use shall be stockpiled at the Designated Marshalling Area. Other materials may be stored at approved locations proximate to the work area provided however that the piles are no greater than 18" in height. Higher piles may be permitted only during working hours and in such quantity that they may be reduced in height to 18" maximum within thirty (30) minutes of notification.

EQUIPMENT

All equipment shall be stored at the designated storage areas during non-working times. The Aviation Department may grant special provisions for equipment, which is not readily movable to store elsewhere upon approval.

NAVIGATIONAL EQUIPMENT

TESTING

The FAA maintains various forms of navigational equipment and appurtenances throughout the airport. There may be times during construction where tests and/or equipment checks must be run to maintain serviceability. The contractor shall comply with all requests and directives during the prosecution of the tests. Timely notification of such tests cannot be guaranteed.

CABLES

The Aviation Department and the FAA communication cables, navigational cables, monitor cables and power cables traverse the construction area. Every effort has been made to identify and properly depict the locations of all cables on the drawings. It is the contractor's responsibility to contact the Aviation Department at 207-3519, one week in advance of any construction in order for the cables within the construction area to be properly located and identified by Aviation Dept. and FAA San Antonio office.

The contractor shall identify the location and alignment of these cables along and throughout the entire project area using orange safety netting. Gaps to facilitate vehicular crossings will be permitted as required. These crossings shall be protected using 1½" thick by 8' long steel plates placed along the full width of each crossing. No construction shall commence prior to identifying the cables and placing the required steel plates.

Should the contractor encounter cables not identified on the drawings or field located or cut or otherwise damage any cable, he shall immediately cease operation in the area and notify the Aviation Department at 207-3519, in order for the FAA to identify the cable.

Unless directed otherwise, cut or damaged cables shall be replaced between the existing pull boxes (typically 2,000' (ft.) apart). An FAA certified splicer shall perform all splicing. After all splices are completed, the cables shall be tested for continuity and meggered by the contractor.

Installation of FAA underground cables to be done in accordance with FAA-C-1391b, Installation and Splicing of Underground Cables.

LIGHTING SYSTEMS

The Aviation Department and the FAA maintain the various forms of lighting systems throughout the airport. All portions of these systems shall be properly located and identified prior to the start of construction. The contractor is to contact the Aviation Department at 207-3519, one week in advance of any construction in order that these systems may be properly identified. All electrical work shall be coordinated through the Aviation Department to insure circuit outages are avoided and that the appropriate circuits are properly tagged out. Where directed, the contractor shall provide the necessary safety netting and vehicular crossings as outlined in the section entitled **Cables**.

Any circuit damaged by the contractor shall be repaired at the sole expense of the contractor. Splices will not be allowed. All repairs shall be made from existing splice to existing splice complete with new conduit. Should the contractor have no electricians available to complete the repair, the Aviation Department electricians will complete the repairs and the contractor will be charged for this service.

All labor, materials, tools, cables and connectors necessary to provide temporary circuits as required shall be provided by the contractor.

May 27, 2009

This Page Intentionally Left Blank

ATTACHMENT A

PROCEDURES FOR OBTAINING AIRPORT PERSONNEL IDENTIFICATION MEDIA/BADGE AND AIRFIELD DRIVER'S LICENSE AT SAN ANTONIO INTERNATIONAL AIRPORT (SAT)

As per FAA/TSA guidelines, a person performing work in the Security Identification Display Area (SIDA), Secured Area, Sterile Area or Airport Operations Area must have a valid Airport Identification Media (known as a SAT badge) or be under an airport approved escort by a person having a SAT badge with the white "E" (escort endorsement) on the badge. Furthermore, each badge holder with the white "E" may escort up to five (5) unbadged individuals while keeping same under positive control at all times while in the SIDA, Secured Area, Sterile Area and/or the project site. **Note:** If the person is disqualified from receiving a SAT badge during the badge application process, or becomes disqualified after receiving a SAT badge, the individual can no longer be present anywhere within the SIDA, Secured Area, Sterile area and/or the project areas. Furthermore, any contractor assigned to the project who has a business related need to be present within the SIDA, Secured Area or Sterile Area for more than 14 days (consecutive or intermittently) must be processed for a SAT badge.

If driving is involved, the person must have a valid SAT badge and the appropriate airfield driver's license to operate a vehicle in the SIDA and/or the project site. If a vehicle escort is required, each SAT badge holder with the white "E" on his badge (and the appropriate airfield driver's license) may escort up to two (2) vehicles if there is only one unbadged person in each vehicle being escorted.

All vehicles operating in the SIDA or the project area must have the appropriate airport approved company signage on the vehicle. The signage must meet the following requirements: Company name must be in at least six inch (6") tall lettering and/or the company logo must be at least twelve inches (12") tall. The signage must be placed on both vertical sides of any self propelled, motorized vehicle at all times while within the SIDA or the project site. If signage is not available, an Airport issued "Top Hat" may be used for vehicles under an airport approved vehicle escort or while parked in the SIDA. A Top Hat may be obtained at SIDA vehicle gate #20 at the end of each work day.

The procedures to obtain an Airport Identification Media (badge) and/or an airport driver's license are as follows:

A) Airport Badge and ID Office

1) The Airport Security Badge and ID Office is located at 9623 West Terminal Drive, Bldg. #1322.

2) Hours of Operation are as follows:

Monday – Thursday	8:00 am – 4:00 pm
Friday	8:00 am – 3:00 pm
Office is closed for lunch daily from 11:30 am – 12:30 pm	

3) Once an Aviation Department division has notified the Airport Security of an approved City contract which will require the badging of personnel, the Contactor's designated representative for badging must call Kenneth Barrett at (210) 207-3840 to arrange to become an Authorizing Signatory. The Authorized Signatory will be responsible for all Airport Identification Media (badges) to be issued to the Contractor's employees working on the contract. Mr. Barrett will send the appropriate link to the person in order to complete an application for badge processing. Once the application has been approved an appointment

will be set to come to the Badge and ID Office for processing and training. Once the person has completed the required training they will then be authorized to approve applications for other Contractor employees under their responsibility. **Note:** If an employee of the Contractor has been convicted of any of the offenses listed in Exhibit 1 hereto, that employee will be immediately disqualified from obtaining an Airport Identification Media (badge) and will be ineligible to perform work at SAT.

4) All Airport Identification Media (badge) applications are processed electronically via an online application process. Once the Contractor’s Authorizing Signatory has been trained successfully on their responsibilities and completed all phases of the badging process, the website address for Contractor’s employees to use to complete the application will be provided. Furthermore, the Authorizing Signatory will be provided instructions on how to setup, use and approve badge applications via the online badging system.

5) As of October 1, 2010 badge processing fees are:

Fingerprint-based Criminal History Records Check(CHRC)/STA	\$65.00
SAT Identification Media/badge (new, renewal, replacement)	\$35.00
Lost Identification Media/badge	\$25.00
Not Returned Identification Media/badge	\$75.00
Reactivation of Identification Media/badge (Security Violation)	
1 st Offense	\$25.00
2 nd Offense	\$50.00
3 rd Offense	\$75.00
Progressive Security Fee Program	Sliding Scale
AOA Parking Decal (General Aviation leaseholds only)	\$5.00

6) Payment for processing is as follows:

- Each applicant can pay individually at their first appointment with cash, check or personal credit card.
- If the applicants wish to pay with a company credit card, the company representative whom the credit card is issued to must accompany the applicant and submit payment at their first appointment.
- With prior coordination with the Fiscal Operations Division the Authorized Signatory can complete and sign an “Authorization to Bill” form and send it with the applicant on the day they are to process. The City of San Antonio will then bill the company for the applicants processed.

There is no refund for badge processing fees.

7) When the applicant comes in to process to the Badge and ID Office they must present identification in compliance with the “List of Acceptable Documents” see Exhibit II.

8) As part of the badging process, all Contractor employees are required to complete a computer-based SIDA training class. All documents necessary to complete the application process (including obtaining the applicants fingerprints to conduct a Criminal History Records Check (CHRC) and Security Threat

Assessment (STA) must be completed before the Contractor's employees may attend the computer-based SIDA training class. The SIDA class takes approximately 1-1 ½ hours to complete and the applicant must make a 100% on the final test to successfully complete this stage of the badging process. The SAT badge will only be issued after the applicant successfully completes the SIDA class; Airport Security completes the CHRC and receives an approved STA. It may take anywhere from five (5) business days to four (4) weeks before the applicant may be issued a Airport Identification Media (badge).

- 9) At the end of the contract, the Contractor's Authorizing Signatory is required to return all issued Airport Identification Media (badge) to the Airport Security Badge and ID Office directly and inform the Aviation Department division that managed the contract that all badges have been returned before final payment for the work can be processed. Each SAT badge that is not returned to the Airport Security Badge and ID Office is subject to a \$75.00 non-returned badge fee.
- 10) Any lost or stolen Airport Identification Media (badge) must be reported to Airport Security immediately by contacting (210) 207-3526 or 207-3433 so the badge can be deactivated. The Contractor's employee must contact the Contractor's Authorizing Signatory to make arrangements to complete the necessary paperwork to receive a replacement SAT badge. The Contractor shall be responsible for any fees/fines resulting from the lost, stolen, or otherwise unaccounted for SAT badge.

B) Airfield Driver License:

- 1) The Airport Operations Office is located at 457 Sandau Rd., San Antonio, TX 78216.
- 2) It is the sole responsibility of the tenants, airlines or contractors to select the correct training course needed for their employees. There are two types of airfield training courses: non-movement areas and movements areas. Non-movement areas are aprons and parking areas in the Airport Operation Area (AOA). No ATCT clearance is required. Movement w/Restrictions: Taxiways as well as other areas using for taxiing aircraft and aircraft parking areas. ATCT clearance is required.
- 3) To obtain an Airfield Driver's License an employee must attend an Airport sponsored drivers training class and pass a written test at the end of each class with a 90% or better. The airfield driver license can only be issued to a person passing the test.
- 4) The non-movement classes are held on every Monday and Tuesday at 9:00 a.m. and Thursday at 1:00 p.m. The movement classes are held every Tuesday at 1:00 p.m. and Thursday at 9:00 a.m. All classes must be scheduled in advance. To schedule a class call Airport Operations at 207-3475.
- 5) A valid State driver's license and a SAT Security Identification Display Area (SIDA) badge and a copy of certificate of insurance document of the individual's employer with the proper coverage must be presented at the time of the class. The copy of all three items stated must be submitted to the AOO for record on file.
- 6) You must have radio contact with FAA Air Traffic Controller to receive clearance to cross taxiways at all times.
- 7) Airfield Driver's Training Program Fees:

<u>Course</u>	<u>Amount:</u>
Non-Movement Area	\$ 20.00
Movement Area	\$ 25.00
Replacement License	\$ 10.00
Expired License Penalty	\$ 20.00

We will continue sending renewal notices approximately one month in advance to assure that drivers have enough time to schedule to attend the class prior to expiration.

- 8) For the construction contracts, there is no separate line item on the bid proposal for the costs involved and the costs shall be considered incidental to mobilization expenses.
- 9) The licensed driver can only travel on the areas authorized and use the gate approved by the Airport Security Office. A driver who loses his or her Airfield Driver License is responsible for reporting the loss immediately to Airport Operations Office. The employee will be responsible to pay the replacement fee for his/her airfield license.
- 10) The company shall have coverage for the vehicles used inside Air Operations Area for the project involved at all times. An Automobile Liability Policy with no less than a Combined, Single Limit for Bodily Injury and Property Damage of \$5,000,000 per occurrence, or its equivalent in Umbrella or Excess Liability Coverage.

In addition, the City of San Antonio must be listed as an "additional insured" in the endorsement section. The Insurance can be under the Company name if a company vehicle will be used and the vehicle must be listed in the insurance policy either specifically by VIN number or generally by covering all autos owned, leased or operated while conducting business on behalf of the company. If this is a private vehicle covered only by personal insurance, the insurance must be under the drivers name and VIN number must be listed. It is the company's responsibility to notify the Aviation Department for any insurance changes.

- 11) At the end of the project, the authorized Project Manager shall return all airfield driver licenses to the Airport Operations Office and notify Planning and Development and at the end of the return process so that the final payment to the consultants or contractors for the work involved can be processed.
- 12) Vehicles routinely operating within the Movement area shall have an operating yellow flashing light mounted on the uppermost part of the Vehicle.

EXHIBIT I TO ATTACHMENT A
LIST OF DISQUALIFYING CRIMES

Title 49, Code of § 1542.209 Fingerprint-based criminal history records checks (CHRC).

- (1) Forgery of certificates, false marking of aircraft, and other aircraft registration violation; 49 U.S.C. 46306.
- (2) Interference with air navigation; 49 U.S.C. 46308.
- (3) Improper transportation of a hazardous material; 49 U.S.C. 46312.
- (4) Aircraft piracy; 49 U.S.C. 46502.
- (5) Interference with flight crew members or flight attendants; 49 U.S.C. 46504.
- (6) Commission of certain crimes aboard aircraft in flight; 49 U.S.C. 46506.
- (7) Carrying a weapon or explosive aboard aircraft; 49 U.S.C. 46505.
- (8) Conveying false information and threats; 49 U.S.C. 46507.
- (9) Aircraft piracy outside the special aircraft jurisdiction of the United States; 49 U.S.C. 46502(b).
- (10) Lighting violations involving transporting controlled substances; 49 U.S.C. 46315.
- (11) Unlawful entry into an aircraft or airport area that serves air carriers or foreign air carriers contrary to established security requirements; 49 U.S.C. 46314.
- (12) Destruction of an aircraft or aircraft facility; 18 U.S.C. 32.
- (13) Murder.
- (14) Assault with intent to murder.
- (15) Espionage.
- (16) Sedition.
- (17) Kidnapping or hostage taking.
- (18) Treason.
- (19) Rape or aggravated sexual abuse.
- (20) Unlawful possession, use, sale, distribution, or manufacture of an explosive or weapon.
- (21) Extortion.

- (22) Armed or felony unarmed robbery.
- (23) Distribution of, or intent to distribute, a controlled substance.
- (24) Felony arson.
- (25) Felony involving a threat.
- (26) Felony involving—
 - (i) Willful destruction of property;
 - (ii) Importation or manufacture of a controlled substance;
 - (iii) Burglary;
 - (iv) Theft;
 - (v) Dishonesty, fraud, or misrepresentation;
 - (vi) Possession or distribution of stolen property;
 - (vii) Aggravated assault;
 - (viii) Bribery; or
 - (ix) Illegal possession of a controlled substance punishable by a maximum term of imprisonment of more than 1 year.
- (27) Violence at international airports; 18 U.S.C. 37.
- (28) Conspiracy or attempt to commit any of the criminal acts listed in this paragraph (d).

EXHIBIT II TO ATTACHMENT A

List of Acceptable Documents For Employment Verification

All documents must be valid, expired documents will NOT be accepted

All applicants requiring fingerprints must also provide at least one (1) form of photo identification.

List A OR List B AND List C

Documents that Establish Both Identity and Employment Eligibility	Documents that Establish Identity	Documents that Establish Employment Eligibility
<ol style="list-style-type: none"> 1. U.S. Passport or Passport Card 2. Permanent Resident Card or Alien Registration Receipt Card (Form I-551) 3. Foreign passport that contains a temporary I-551 stamp or temporary I-551 printed notation on a machine-readable immigrant visa 4. Employment Authorization Document that contains a photograph (Form I-766) 5. Form I-94 or Form I-94A bearing the same name as the passport and containing an endorsement of the alien's nonimmigrant status, as long as the period of endorsement has not yet expired and the proposed employment is not in conflict with any restrictions or limitations identified on the form 6. Passport from the Federated States of Micronesia (FSM) or the Republic of the Marshall Islands (RMI) with Form I-94 or Form I-94A indicating nonimmigrant admission under the Compact of Free Association Between the United States and the FSM or RMI 	<ol style="list-style-type: none"> 1. Driver's license or ID card issued by a State or outlying possession of the United States 2. ID card issued by Federal, State, or local government agency or entities, provided it contains a photograph or information such as name, date of birth, gender, height, eye color, and address 3. School ID card with a photograph 4. Voter's registration card 5. U.S. Military card or draft record 6. Military dependent's ID card 7. U.S. Coast Guard Merchant Mariner Card 8. Native American tribal document 9. Driver's license issued by a Canadian government authority <p style="text-align: center; margin: 5px 0;">For persons under the age of 18 who are unable to present a document listed above:</p> <ol style="list-style-type: none"> 10. School record or report card 11. Clinic, doctor, or hospital record 12. Day-care or nursery school record 	<ol style="list-style-type: none"> 1. Social Security Card other than one that specifies on the face that the issuance of the card does not authorize employment in the United States. 2. Certification of Birth Abroad Issued by the Department of State (Form FS-545) 3. Certification of Report of Birth issued by the Department of State (Form DS-1350) 4. Original or certified copy of birth certificate issued by a State, county, municipal authority, or territory of the United States bearing an official seal 5. Native American tribal document 6. U.S. Citizen ID Card (Form I-197) 7. Identification Card for Use of Resident Citizen in the United States (Form I-179) 8. Employment authorization document issued by the Department of Homeland Security

<p>Applicants who are U.S. Citizens Born Abroad or Naturalized U.S. Citizens using documents from List B and List C to establish Identity and Employment Eligibility must additionally present one of the following:</p>	<ul style="list-style-type: none"> U.S Passport Number or Passport Card Number Certificate of Naturalization (Form N-550 or N-570) Certificate of US Citizenship (Form N-560 or N-561) Certification of Report of Birth (Form DS-1350) Consular Report of Birth Abroad (Form FS-240) Certification of Birth Abroad (Form FS-545)
---	--



September 25, 2013

RE: New Rates and Charges for Airfield Driver's Training Course

Airfield Driver's Training License Holders:

The Airport Operations Division would like to announce a change to the rates for the Airfield Driver's Training Course. Effective October 1, 2013, the fees for a Non-Movement class will be \$20 and Movement will be \$25. The cost for a replacement licenses will remain the same. Replacement charges will be for lost, stolen or company changes. A replacement fee will be charged to the individual and not the company, unless otherwise advised to do so.

The Non-Movement and Movement Class schedule will remain the same as indicated below:

<u>Course</u>	<u>Time</u>	<u>2012</u>	<u>2013</u>
Non-Movement			
Mondays	9:00 a.m.	\$15.00	\$20.00
Tuesdays	9:00 a.m.	\$15.00	\$20.00
Thursdays	1:00 p.m.	\$15.00	\$20.00
Movement			
Tuesdays	1:00 p.m.	\$20.00	\$25.00
Thursdays	9:00 a.m.	\$20.00	\$25.00
Replacement License		\$10.00	\$10.00
Expired License Penalty		n/a	\$20.00

CITY OF SAN ANTONIO AVIATION DEPARTMENT
 457 Sandau Rd., San Antonio, TX 78216 | Phone 210.207.3475 | Fax 210.207.3516

Our Mission:

To innovatively manage our airports to provide a positive customer experience while supporting economic development.

A new expired Airfield Driver's license penalty of \$20 will be in effect Oct. 1, 2013. The penalty fee must be paid prior to scheduling for a class.

Operations will continue sending renewal notices approximately one month in advance to ensure that drivers have enough time to schedule a class prior to expiration.

Please feel free to contact Mari Ramirez-Garcia at (210) 207-3540 if you have any questions.

Thanks,

Ryan E. Rocha, A.A.E., IAP
Airport Operations Manager

RER:mrg

BADGE & ID PROCESS
Effective 8/8/2013

The following change has been approved by the Airport Security Manager, Robert Klimt:

Due to current staffing constraints at the Badge and ID office, walk-ins will no longer be accepted for badge applicants. Only personnel with scheduled appointments will be seen and processed at their appointed date and time. If an employee misses their appointment please have them reschedule prior to arriving at the Badge and ID office.

Friendly reminders:

Please ensure applications are completely filled out and include any required Immigration numbers (Alien, Visa, Passport, etc.) if they are born outside of the United States. This will prevent any delay in processing once it is submitted to TSA.

When approving an application, please schedule the appointment for badging at least 24 hours after the approval. This allows for the staff to be fully prepared when the applicant arrives by having their folders created and applications printed.



Safety Bulletin 13-01

Operational Safety on the Airport During Construction

This bulletin comes to you from the Safety Division

PURPOSE: To enhance the visibility and safety of airport employees

Today the San Antonio Airport has many Construction projects taking place. Some on the AOA side and others on the Non-AOA side (Terminal A Renovation).

NON-AOA Side:

Everyone that is entering the construction site must comply with the Contractor Safety Rules. At a minimum, you must have a Hard Hat, Safety Glasses, and Reflective Safety Vest (ANSI 2, Class 2) to enter. ***This is to protect the Contractor, from possible fines. Please do not ask for any exceptions to this rule.***

AOA Side:

Runway Safety Areas (RSA): No construction may occur within the existing RSA while the runway is open for aircraft operations. The RSA dimensions may be temporarily adjusted if the runway is restricted to aircraft operations requiring an RSA that is equal to the RSA width and length beyond the runway ends available during construction. The temporary use of declared distances and/or partial runway closures may provide the necessary RSA under certain circumstances. Open trenches or excavations are not permitted within the RSA while the runway is open.

Runway Object Free Areas (ROFA): Construction, including excavations, may be permitted in the ROFA. However, equipment must be removed from the ROFA when not in use, and material should not be stockpiled in the ROFA. Stockpiling material in the OFA requires submittal of a 7460-1 form and justification provided to the appropriate FAA Airports District Office for approval.

Runway Approach/Departure Areas: All personnel, materials, and/or equipment, must remain clear of the applicable threshold sitting surfaces, as defined in Appendix 2, "Threshold Sitting Requirements," of AC 150/5300-13. Objects that do not penetrate these surfaces may still be obstructions to air navigation and may affect standard instrument approach procedures.

Obstacle Free Zone (OFZ): In general, personnel, material, and/or equipment may not penetrate the OFZ while the runway is open for aircraft operations. If a penetration to the OFZ is necessary, it may be possible to continue aircraft operations through operational restrictions.

Taxiway Safety Areas (TSA): No construction may occur within the TSA while the taxiway is open for aircraft operations. The TSA dimensions may be temporarily adjusted when the taxiway is restricted to aircraft operations requiring a TSA that is equal to the TSA width available during construction. Open trenches or excavations are not permitted within the TSA while the taxiway is open.

Taxiway Object Free Areas (TOFA): Restrictions are more stringent compared to the ROFA as aircraft wings regularly penetrate the TOFA. No construction may occur within the TOFA while the taxiway is open for aircraft operations, except as noted in AC 150/5370-2F.

Barricades: Barricades are not permitted in any active safety area. Use of barricades is an acceptable method used to identify and define the limits of construction and hazardous areas on airports. The spacing of barricades must prevent a breach, barring a deliberate act. For example, if barricades are intended to exclude vehicles, gaps between barricades must be smaller than the width of the excluded vehicles, generally 4 ft.

The FAA has placed emphasis on Construction Safety on the AOA by publishing Airport Certification Information Bulletin (ACIB) 12-04.

Safety Reporting Methods: Use Voluntary Safety Report Form (SMS FM 02)

SAFETY HOTLINE – 1 (210) 207-1600

FAX – 1 (210) 207-1689

E MAIL – safety.report@sanantonio.gov

John Chase (210) 207-1656

CITY OF SAN ANTONIO



**CRANE AND/OR TEMPORARY
CONSTRUCTION EQUIPMENT
PROCEDURES IN AND AROUND AIRPORTS
BUILDING PERMIT FORM**

Permit No. _____

Crane Co.: _____

Max Tip Height: _____

Duration of Crane: _____

Hours of Operation: _____

Address: _____

Crane Co. Signature (Print and Sign):

The purpose of the Airport Zoning ordinance is to prevent hazards to air navigation and airspace so as to protect the lives and property within the limits of San Antonio and the vicinity of airports (San Antonio International and Stinson Municipal Airports, Randolph and Lackland Air Force Bases, and Martindale and Camp Bullis Airfields). The ordinance is to prevent cranes and construction equipment from penetrating; however briefly, the City's airspace unless a special temporary authorization is obtained from the Aviation Department or the FAA. The primary considerations, before approving a crane or temporary construction equipment are the height and location/site of the equipment. The Aviation Department will decide to either approve the request or to involve the FAA based on the height and location of the equipment. The FAA's processing time is at least 60 workdays.

When using a crane or temporary construction equipment, please comply with the following:

1. Notify the Aviation Department as soon as it is decided obstruction equipment is needed for the project, but minimally 48 hours before the actual work starts. Phone numbers are 210-207-3514 and/or cell phone 210-355-2214.
2. Provide a detailed description of where the crane will be used. Use crossing or intersecting streets not an address.
3. Provide the date the equipment will be used, the hours of operation and the maximum height of the equipment.

Once approval is given, it is imperative to comply with the following:

1. The equipment will only operate during daylight hours.
2. The equipment will only operate during Visual Flight Rules (VFR) conditions, which is 3 mile visibility or greater.
3. The equipment will be lowered to the surrounding height when not in use.
4. The equipment will be obstruction flagged.

Thank you for maintaining a safe environment for the traveling public. If you have any questions please call Jim Wingate at 210-207-3514 or Alan Lopez at 210-207-3897.

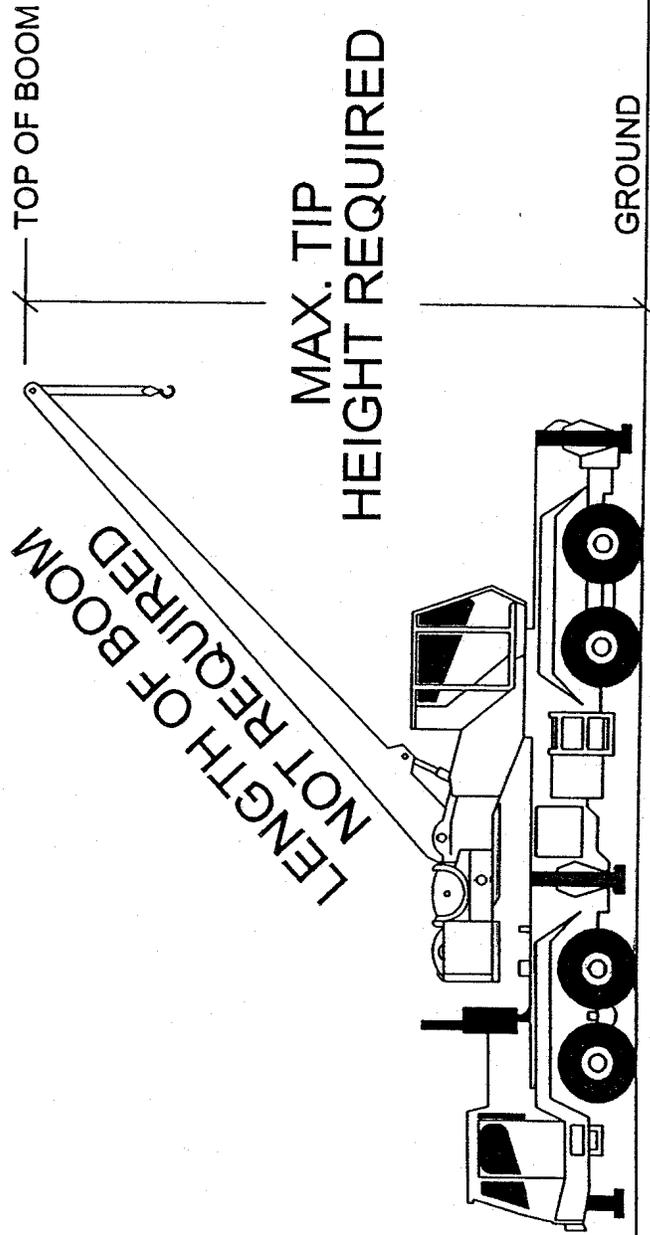
E-Mail Address and phone numbers

Federal Aviation Administration – www.faa.gov

Bruce Beard - 817-838-1996, bruce.beard@faa.gov fax: 817-838-1991

Jim Wingate -210-207-3514, james.wingate@sanantonio.gov fax: 210-207-3544

~~Alan Lopez – 210-207-3897, alan.lopez@sanantonio.gov fax: 210-207-3544~~



DEFINITION OF CRANE HEIGHT

FAA Underground Cable Notes:

Location of existing FAA control and communications cables are shown in approximate general locations. The contractor shall coordinate with appropriate representative at least 48 hours in advance prior to commencing excavation in all areas.

If contractor cuts an FAA communications cable, the following will apply:

- A. Contractor will be required to replace the cut cable between the existing pull boxes. The average distance between two pull boxes is over 2,000 L.F.
- B. All communications cable-splicing must be performed by the contractor utilizing FAA approved and certified splicers. Prior to commencing any splicing activities, an FAA representative shall be contacted to have him/her identify cable strands.
- C. After splicing, cables will be tested by the contractor for continuity and for insulation leakage (Hi-Pot test to ground), as directed by the FAA representative.
- D. The contractor shall coordinate all matters relating to FAA cables with the project manager and FAA representatives before commencing excavation or repair work.
- E. The contractor shall be required to have splice kits located on site. Kits & FAA certified splicer personnel shall be readily available in the event that any communications cables are cut or damaged. All repairs shall be initiated immediately & completed the same day.
- F. The driving of heavy equipment or machinery across existing underground cable shall be restricted to designated crossings only. All underground cable crossings shall be protected with ½" * 10' * 4' steel plates. No costs will be charged to the City. All steel plates must be removed by the contractor after the work is completed and return the field to the previous condition or better.

Safety Notes:

- 1) The contractor shall remain clear of all taxiways, runways, taxilanes, non-movement areas and the tenant areas at all times.
- 2) All contaminated soil must be transported to the designated soil staging facility temporarily. If the contractor contaminates the site, the contractor must notify the City of San Antonio Aviation Department at 207-3506. The contractor must also clean the affected area at their own expense.
- 3) Any additional costs, and/or fines, charged to the City of San Antonio Aviation Department due to contractor error, or violations will be passed on to the contractor for payment.
- 4) The contractor shall provide a uniformed and licensed security guard with adequate airport badge, acceptable to the owner and a functioning telephone at the AOA gate at all times while the gate is unlocked. All personnel and vehicles requiring access to the airfield (AOA) shall comply with all requirements of the airport police.
- 5) If the project is in or next to any taxiway, taxilane or runway, the contractor must have a mobile VHF radio with ATC ground control frequency 121.9 to aid in the control of vehicles on the airfield.
- 6) All vehicles and/or equipment operating inside Airport Operations Area must be provided with an FAA approved flag on a staff and attached to the vehicle so that the flag will be readily visible. The flag shall not be less than three feet square consisting of Aviation Orange and white squares of not less than a foot of each side.

5/27/2009

DIVISION C:

ADDITIONAL REQUIREMENTS FROM THE FAA

ACCESS TO RECORDS AND REPORTS

The Contractor must maintain an acceptable cost accounting system. The Contractor agrees to provide the sponsor, the Federal Aviation Administration, and the Comptroller General of the United States or any of their duly authorized representatives, access to any books, documents, papers, and records of the contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

BUY AMERICAN PREFERENCE

The contractor agrees to comply with 49 USC § 50101, which provides that Federal funds may not be obligated unless all steel and manufactured goods used in AIP funded projects are produced in the United States, unless the FAA has issued a waiver for the product; the product is listed as an Excepted Article, Material Or Supply in Federal Acquisition Regulation subpart 25.108; or is included in the FAA Nationwide Buy American Waivers Issued list.

A bidder or offeror must complete and submit the Buy America certification included herein with their bid or offer. The Owner will reject as nonresponsive any bid or offer that does not include a completed Certificate of Buy American Compliance.

CERTIFICATE OF BUY AMERICAN COMPLIANCE FOR MANUFACTURED PRODUCTS

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with their proposal. The bidder or offeror must indicate how they intend to comply with 49 USC § 50101 by selecting one on the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (not both) by inserting a checkmark (✓) or the letter “X”.

- Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:
- a) Only installing steel and manufactured products produced in the United States, or;
 - b) Installing manufactured products for which the FAA has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing, or;
 - c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

1. To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
2. To faithfully comply with providing US domestic product
3. To furnish US domestic product for any waiver request that the FAA rejects
4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

- The bidder or offeror hereby certifies it cannot comply with the 100% Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:

1. To submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that support the type of waiver being requested.
2. That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination may result in rejection of the proposal.
3. To faithfully comply with providing US domestic products at or above the approved US domestic content percentage as approved by the FAA.
4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

Required Documentation

Type 3 Waiver - The cost of the item components and subcomponents produced in the United States is more than 60% of the cost of all components and subcomponents of the “item”. The required documentation for a type 3 waiver is:

- a) Listing of all product components and subcomponents that are not comprised of 100% US domestic content (Excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).

- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly at place of manufacture.
- c) Percentage of non-domestic component and subcomponent cost as compared to total “item” component and subcomponent costs, excluding labor costs associated with final assembly at place of manufacture.

Type 4 Waiver – Total cost of project using US domestic source product exceeds the total project cost using non-domestic product by 25%. The required documentation for a type 4 of waiver is:

- a) Detailed cost information for total project using US domestic product
- b) Detailed cost information for total project using non-domestic product

False Statements: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

Date

Signature

Company Name

Title

GENERAL CIVIL RIGHTS PROVISIONS

The contractor agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision binds the contractor and subtier contractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

TITLE VI SOLICITATION NOTICE:

The City of San Antonio, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

TITLE VI CLAUSES COMPLIANCE WITH NON DISCRIMINATION REQUIREMENTS

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees as follows:

- 1. Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts And Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
- 2. Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.
- 3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor’s obligations under this contract and the Nondiscrimination Acts And Authorities on the grounds of race, color, or national origin.
- 4. Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts And Authorities and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the sponsor or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
- 5. Sanctions for Noncompliance:** In the event of a contractor’s noncompliance with the Non-discrimination provisions of this contract, the sponsor will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:
 - a. Withholding payments to the contractor under the contract until the contractor complies; and/or
 - b. Cancelling, terminating, or suspending a contract, in whole or in part.
- 6. Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the sponsor or the Federal

Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the sponsor to enter into any litigation to protect the interests of the sponsor. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

TITLE VI LIST OF PERTINENT NONDISCRIMINATION ACTS AND AUTHORITIES

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination In Federally-Assisted Programs of The Department of Transportation—Effectuation of Title VI of The Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 – 12189) as implemented by Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration’s Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 *et seq.*).

DISADVANTAGED BUSINESS ENTERPRISES

Contract Assurance (§ 26.13) - The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate.

Prompt Payment (§26.29) - The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than {specify number} days from the receipt of each payment the prime contractor receives from {Name of recipient}. The prime contractor agrees further to return retainage payments to each subcontractor within {specify the same number as above} days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the {Name of Recipient}. This clause applies to both DBE and non-DBE subcontractors.

DISADVANTAGED BUSINESS ENTERPRISE

The Owner's award of this contract is conditioned upon Bidder or Offeror satisfying the good faith effort requirements of 49 CFR § 26.53.

As a condition of bid responsiveness, the Bidder or Offeror must submit the following information with their proposal on the forms provided herein:

- (1) The names and addresses of Disadvantaged Business Enterprise (DBE) firms that will participate in the contract;
- (2) A description of the work that each DBE firm will perform;
- (3) The dollar amount of the participation of each DBE firm listed under (1);
- (4) Written statement from bidder or Offeror that attests their commitment to use the DBE firm(s) listed under (1) to meet the Owner's project goal;
- (5) If Bidder or Offeror cannot meet the advertised project DBE goal, evidence of good faith efforts undertaken by the Bidder or Offeror as described in appendix A to 49 CFR Part 26.

The successful Bidder or Offeror must provide written confirmation of participation from each of the DBE firms the Bidder or Offeror lists in their commitment. This Bidder or Offeror must submit the DBE's written confirmation of participation with the proposal documents as a condition of bid responsiveness.

ENERGY CONSERVATION REQUIREMENTS

Contractor and Subcontractor agree to comply with mandatory standards and policies relating to energy efficiency as contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6201*et seq*).

RACE/GENDER NEUTRAL LANGUAGE

The requirements of 49 CFR part apply to this contract. It is policy of the City to practice nondiscrimination based on race, color, sex or national origin in the award or performance of this contract. The Owner encourages participation by all firms qualifying under this solicitation regardless of business size or ownership.

FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE)

All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR part 201, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part time workers.

The Contractor has full responsibility to monitor compliance to the referenced statute or regulation. The contractor must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division.

OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. Contractor must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The Contractor retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (20 CFR Part 1910). Contractor must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

TRADE RESTRICTION CERTIFICATION

By submission of an offer, the Contractor certifies that with respect to this solicitation and any resultant contract, the Offeror –

Contractor by entering into the Agreement certifies that-

- a. is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (U.S.T.R.);
- b. has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country included on the list of countries that discriminate against U.S. firms as published by the U.S.T.R; and
- c. has not entered into any subcontract for any product to be used on the Federal on the project that is produced in a foreign country included on the list of countries that discriminate against U.S. firms published by the U.S.T.R.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

The Offeror/Contractor must provide immediate written notice to the Owner if the Offeror/Contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The Contractor must require subcontractors provide immediate written notice to the Contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to an Offeror or subcontractor:

- (1) who is owned or controlled by one or more citizens or nationals of a foreign country included on the list of countries that discriminate against U.S. firms published by the U.S.T.R. or
- (2) whose subcontractors are owned or controlled by one or more citizens or nationals of a foreign country on such U.S.T.R. list or
- (3) who incorporates in the public works project any product of a foreign country on such U.S.T.R. list;

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

Contractor agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in all lower tier subcontracts. The contractor may rely on the certification of a prospective subcontractor that it is not a firm from a foreign country included on the list of countries that discriminate against U.S. firms as published by U.S.T.R, unless the Contractor has knowledge that the certification is erroneous.

This certification is a material representation of fact upon which reliance was placed when making an award. If it is later determined that the Contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration may direct through the Owner cancellation of the

contract or subcontract for default at no cost to the Owner or the FAA.

VETERAN'S PREFERENCE

In the employment of labor (excluding executive, administrative, and supervisory positions), the contractor and all sub-tier contractors must give preference to covered veterans as defined within Title 49 United States Code Section 47112. Covered veterans include Vietnam-era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns (as defined by 15 U.S.C. 632) owned and controlled by disabled veterans. This preference only applies when there are covered veterans readily available and qualified to perform the work to which the employment relates.

COPELAND "ANTI-KICKBACK" ACT

Contractor must comply with the requirements of the Copeland "Anti-Kickback" Act (18 U.S.C. 874 and 40 U.S.C. 3145), as supplemented by Department of Labor regulation 29 CFR part 3. Contractor and subcontractors are prohibited from inducing, by any means, any person employed on the project to give up any part of the compensation to which the employee is entitled. The Contractor and each Subcontractor must submit to the Owner, a weekly statement on the wages paid to each employee performing on covered work during the prior week. Owner must report any violations of the Act to the Federal Aviation Administration.

DAVIS-BACON REQUIREMENTS

All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR Part 5, the Davis-Bacon Act, with the same force and effect as if given in full text. The Davis-Bacon Act ensures that laborers and mechanics employed under the contract receive pay no less than the locally prevailing wages and fringe benefits as determined by the Department of Labor.

1. Minimum Wages

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalent thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can easily be seen by the workers.

(ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards

Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii) (B) or (C) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2 Withholding.

The Federal Aviation Administration or the sponsor shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of work, all or part of the wages required by the contract, the Federal Aviation Administration may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types

described in 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the Federal Aviation Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (*e.g.*, the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit them to the applicant, sponsor, or owner, as the case may be, for transmission to the Federal Aviation Administration, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR § 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR § 5.5 (a)(3)(i) and that such information is correct and complete;

(2) That each laborer and mechanic (including each helper, apprentice and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (3)(i) of this section available for inspection, copying or transcription by authorized representatives of the sponsor, the Federal Aviation Administration or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the

Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate that is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal Employment Opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act Requirements.

The contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

6. Subcontracts.

The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR Part 5.5(a)(1) through (10) and such other clauses as the Federal Aviation Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

7. Contract Termination: Debarment.

A breach of the contract clauses in paragraph 1 through 10 of this section may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance With Davis-Bacon and Related Act Requirements.

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes Concerning Labor Standards.

Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6 and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of Eligibility.

(i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 100

TEXTING WHEN DRIVING

In accordance with Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving" (10/1/2009) and DOT Order 3902.10 "Text Messaging While Driving" (12/30/2009), the FAA encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or sub-grant.

In support of this initiative, the Owner encourages the Contractor to promote policies and initiatives for its employees and other work personnel that decrease crashes by distracted drivers, including policies that ban text messaging while driving motor vehicles while performing work activities associated with the project. The Contractor must include the substance of this clause in all sub-tier contracts exceeding \$3,500 and involve driving a motor vehicle in performance of work activities associated with the project.

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to abide by and comply with the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein the goals and timetables for minority and female participation set out below.

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables

Goals for minority participation for each trade: As set out in the standard instructions to bidders.

Goals for female participation in each trade: 6.9%

These goals are applicable to all of the contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs (OFCCP) within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this notice and in the contract resulting from this solicitation, the "covered area" is State of Texas, Bexar County, City of San Antonio.

EQUAL OPPORTUNITY CLAUSE

During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identify or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.

(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: *Provided, however,* That in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency

the contractor may request the United States to enter into such litigation to protect the interests of the United States.

STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS

1. As used in these specifications:

- a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
- b. "Director" means Director, Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor, or any person to whom the Director delegates authority;
- c. "Employer identification number" means the Federal social security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;
- d. "Minority" includes:
 - (1) Black (all) persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin regardless of race);
 - (3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (4) American Indian or Alaskan native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors shall be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in a geographical area where they do not have a Federal or federally assisted construction contract

shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the contractor has a collective bargaining agreement to refer either minorities or women shall excuse the contractor's obligations under these specifications, Executive Order 11246 or the regulations promulgated pursuant thereto.

6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees shall be employed by the contractor during the training period and the contractor shall have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:

a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the contractor's employees are assigned to work. The contractor, where possible, will assign two or more women to each construction project. The contractor shall specifically ensure that all foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the contractor by the union or, if referred, not employed by the contractor, this shall be documented in the file with the reason therefore along with whatever additional actions the contractor may have taken.

d. Provide immediate written notification to the Director when the union or unions with which the contractor has a collective bargaining agreement has not referred to the contractor a minority person or female sent by the contractor, or when the contractor has other information that the union referral process has impeded the contractor's efforts to meet its obligations.

e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the contractor's employment needs, especially those programs

funded or approved by the Department of Labor. The contractor shall provide notice of these programs to the sources compiled under 7b above.

f. Disseminate the contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with onsite supervisory personnel such as superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

h. Disseminate the contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the contractor's EEO policy with other contractors and subcontractors with whom the contractor does or anticipates doing business.

i. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students; and to minority and female recruitment and training organizations serving the contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the contractor shall send written notification to organizations, such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel, for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the contractor's obligations under these specifications are being carried out.

- n. Ensure that all facilities and company activities are non-segregated except that separate or single user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
- p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (7a through 7p). The efforts of a contractor association, joint contractor union, contractor community, or other similar groups of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through 7p of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the contractor. The obligation to comply, however, is the contractor's and failure of such a group to fulfill an obligation shall not be a defense for the contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, if the particular group is employed in a substantially disparate manner (for example, even though the contractor has achieved its goals for women generally,) the contractor may be in violation of the Executive Order if a specific minority group of women is underutilized.

10. The contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee, the name, address, telephone number, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

PROHIBITION OF SEGREGATED FACILITIES

(a) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in this contract.

(b) “Segregated facilities,” as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

(c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Opportunity clause of this contract.

PROCUREMENT OF RECOVERED MATERIALS

Contractor and subcontractor agree to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, and the regulatory provisions of 40 CFR Part 247. In the performance of this contract and to the extent practicable, the Contractor and subcontractors are to use of products containing the highest percentage of recovered materials for items designated by the Environmental Protection Agency (EPA) under 40 CFR Part 247 whenever:

- a) The contract requires procurement of \$10,000 or more of a designated item during the fiscal year; or,
- b) The contractor has procured \$10,000 or more of a designated item using Federal funding during the previous fiscal year.

The list of EPA-designated items is available at www.epa.gov/epawaste/consERVE/tools/cpg/products/.

Section 6002(c) establishes exceptions to the preference for recovery of EPA-designated products if the contractor can demonstrate the item is:

- a) Not reasonably available within a timeframe providing for compliance with the contract performance schedule;
- b) Fails to meet reasonable contract performance requirements; or
- c) Is only available at an unreasonable price.

TERMINATION FOR CONVENIENCE

The Owner may terminate this contract in whole or in part at any time by providing written notice to the Contractor. Such action may be without cause and without prejudice to any other right or remedy of Owner. Upon receipt of a written notice of termination, except as explicitly directed by the Owner, the Contractor shall immediately proceed with the following obligations regardless of any delay in determining or adjusting amounts due under this clause:

1. Contractor must immediately discontinue work as specified in the written notice.
2. Terminate all subcontracts to the extent they relate to the work terminated under the notice.
3. Discontinue orders for materials and services except as directed by the written notice.
4. Deliver to the owner all fabricated and partially fabricated parts, completed and partially completed work, supplies, equipment and materials acquired prior to termination of the work and as directed in the written notice.
5. Complete performance of the work not terminated by the notice.
6. Take action as directed by the owner to protect and preserve property and work related to this contract that Owner will take possession.

Owner agrees to pay Contractor for:

- a) completed and acceptable work executed in accordance with the contract documents prior to the effective date of termination;
- b) documented expenses sustained prior to the effective date of termination in performing work and furnishing labor, materials, or equipment as required by the contract documents in connection with uncompleted work;
- c) reasonable and substantiated claims, costs and damages incurred in settlement of terminated contracts with Subcontractors and Suppliers; and
- d) reasonable and substantiated expenses to the contractor directly attributable to Owner's termination action

Owner will not pay Contractor for loss of anticipated profits or revenue or other economic loss arising out of or resulting from the Owner's termination action.

The rights and remedies this clause provides are in addition to any other rights and remedies provided by law or under this contract.

Termination for Default

Section 80-09 of FAA Advisory Circular 150/5370-10 establishes conditions, rights and remedies associated with Owner termination of this contract due default of the Contractor.

If one or more of the stated events occur, the Owner will give notice in writing to the Contractor and Surety of its intent to terminate the contract for cause. At the Owner's discretion, the notice may allow the Contractor and Surety an opportunity to cure the breach or default.

If within [10] days of the receipt of notice, the Contractor or Surety fails to remedy the breach or default to the satisfaction of the Owner, the Owner has authority to acquire equipment by other procurement action. The Contractor will be liable to the Owner for any excess costs the Owner incurs for acquiring such similar equipment.

Payment for completed equipment delivered to and accepted by the Owner shall be at the Contract price. The Owner may withhold from amounts otherwise due the Contractor for such completed equipment, such sum as the Owner determines to be necessary to protect the Owner against loss because of Contractor default.

Owner will not terminate the Contractor's right to proceed with the Work under this clause if the delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such acceptable causes include: acts of God, acts of the Owner, acts of another Contractor in the performance of a contract with the Owner, and severe weather events that substantially exceed normal conditions for the location.

If, after termination of the Contractor's right to proceed, the Owner determines that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the Owner issued the termination for the convenience the Owner.

The rights and remedies of the Owner in this clause are in addition to any other rights and remedies provided by law or under this contract.

CERTIFICATION OF OFFERER/BIDDER REGARDING DEBARMENT

By submitting a bid/proposal under this solicitation, the bidder or offeror certifies that neither it nor its principals are presently debarred or suspended by any Federal department or agency from participation in this transaction.

CERTIFICATION OF CONSULTANT REGARDING DEBARMENT

By entering into this agreement contractor certifies that neither it nor its principles are presently debarred or suspended by any Federal department or agency from participation in this transaction.

CERTIFICATION OF LOWER TIER CONTRACTORS REGARDING DEBARMENT

Contractor, by administering each lower tier subcontract that exceeds \$25,000 as a “covered transaction”, must verify each lower tier participant of a “covered transaction” under the project is not presently debarred or otherwise disqualified from participation in this federally assisted project. The successful bidder will accomplish this by:

1. Checking the System for Award Management at website: <http://www.sam.gov>
2. Collecting a certification statement similar to the Certificate Regarding Debarment and Suspension (Bidder or Offeror), above.
3. Inserting a clause or condition in the covered transaction with the lower tier contract.

If the FAA later determines that a lower tier participant failed to disclose to a higher tier participant that it was excluded or disqualified at the time it entered the covered transaction, the FAA may pursue any available remedies, including suspension and debarment of the non-compliant participant.

CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

1. Overtime Requirements.

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic, including watchmen and guards, in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; Liability for Unpaid Wages; Liquidated Damages.

In the event of any violation of the clause set forth in paragraph (1) of this clause, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this clause, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this clause.

3. Withholding for Unpaid Wages and Liquidated Damages.

The Federal Aviation Administration (FAA) or the Owner shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 2 of this clause.

4. Subcontractors.

The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (1) through (4) and also a clause requiring the subcontractor to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this clause.

CERTIFICATION REGARDING LOBBYING

Contractor certifies by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Bidder or Offeror, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

BREACH OF CONTRACT TERMS

Any violation or breach of terms of this contract on the part of the contractor or its subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement.

City will provide Contractor written notice that describes the nature of the breach and corrective actions the Contractor must undertake in order to avoid termination of the contract. Owner reserves the right to withhold payments to Contractor until such time the Contractor corrects the breach or the Owner elects to terminate the contract. The Owner's notice will identify a specific date by which the Contractor must correct the breach. Owner may proceed with termination of the contract if the Contractor fails to correct the breach by deadline indicated in the Owner's notice.

The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder are in addition to, and not a limitation of, any duties, obligations, rights and remedies otherwise imposed or available by law.

CLEAN AIR AND WATER POLLUTION CONTROL

Contractor agrees to comply with all applicable standards, orders, and regulations issued pursuant to the Clean Air Act (42 U.S.C. § 740-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. § 1251-1387). The Contractor agrees to report any violation to the Owner immediately upon discovery. The Owner assumes responsibility for notifying the Environmental Protection Agency (EPA) and the Federal Aviation Administration.

Contractor must include this requirement in all subcontracts that exceeds \$150,000.

DRUG-FREE WORKPLACE

(a) Definitions. As used in this clause—

“Controlled substance” means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11 - 1308.15.

“Conviction” means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes.

“Criminal drug statute” means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession, or use of any controlled substance.

“Drug-free workplace” means the site(s) for the performance of work done by the Contractor in connection with a specific contract where employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

“Employee” means an employee of a Contractor directly engaged in the performance of work under a Government contract. “Directly engaged” is defined to include all direct cost employees and any other Contractor employee who has other than a minimal impact or involvement in contract performance.

“Individual” means an offeror/contractor that has no more than one employee including the offeror/contractor.

(b) The Contractor, if other than an individual, shall—within 30 days after award (unless a longer period is agreed to in writing for contracts of 30 days or more performance duration), or as soon as possible for contracts of less than 30 days performance duration—

- (1) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Contractor’s workplace and specifying the actions that will be taken against employees for violations of such prohibition;
- (2) Establish an ongoing drug-free awareness program to inform such employees about—
 - (i) The dangers of drug abuse in the workplace;
 - (ii) The Contractor’s policy of maintaining a drug-free workplace;
 - (iii) Any available drug counseling, rehabilitation, and employee assistance programs; and
 - (iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
- (3) Provide all employees engaged in performance of the contract with a copy of the statement required by paragraph (b)(1) of this clause;
- (4) Notify such employees in writing in the statement required by paragraph (b)(1) of this clause that, as a condition of continued employment on this contract, the employee will—
 - (i) Abide by the terms of the statement; and
 - (ii) Notify the employer in writing of the employee’s conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction;

- (5) Notify the Contracting Officer in writing within 10 days after receiving notice under subdivision (b)(4)(ii) of this clause, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;
 - (6) Within 30 days after receiving notice under subdivision (b)(4)(ii) of this clause of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:
 - (i) Taking appropriate personnel action against such employee, up to and including termination; or
 - (ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency; and
 - (7) Make a good faith effort to maintain a drug-free workplace through implementation of paragraphs (b)(1) through (b)(6) of this clause.
- (c) The Contractor, if an individual, agrees by award of the contract or acceptance of a purchase order, not to engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance while performing this contract.
- (d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraph (b) or (c) of this clause may, pursuant to FAR 23.506, render the Contractor subject to suspension of contract payments, termination of the contract or default, and suspension or debarment.

PROMPT PAYMENT AND RETAINAGE

What must recipients do to ensure compliance with the requirement that subcontractors (which includes subconsultants) must be promptly paid for work performed on a U.S. Department of Transportation funded (DOT-assisted) contract?

- The recipient's approved DBE program plan should outline the steps it will take to address the barriers created by delays in payment to subcontractors. First and foremost, the DBE program plan must contain the prompt payment and release of retainage (where applicable) contract clause that must be included in every DOT-assisted contract. As required by the DBE program regulation, 49 C.F.R. § 26.29 (2016), the contract clause must obligate the contractor to pay the subcontractor for satisfactory completion of the subcontract no later than 30 days after the contractor receives payment from the recipient for the work performed by the subcontractor.
- Second, the recipient must implement appropriate mechanisms to ensure compliance with prompt payment and retainage requirements by all program participants. This means recipients must use legal and contract remedies available under Federal, state, and local law. See 49 C.F.R. § 26.37 (2016). The contract remedies to be used or available penalties or sanctions that may be imposed by the recipient in the event of a breach of the prompt payment or release of retainage contract clause should be set forth in the appropriate contract document. See 49 C.F.R. § 26.13(b) (2016). Other compliance mechanisms must be described in the recipient's DBE program plan, which is subject to approval by the appropriate DOT Operating Administration (OA).
- Some, but not all, of the mechanisms a recipient may use to enforce compliance with the prompt payment requirement are contained in 49 C.F.R. § 26.29 (2016). For example, recipients may require the contractor to obtain its prior written consent for good cause delays in or postponement of payment. The available remedies should be set forth in the DBE program plan, which is subject to approval by the appropriate DOT OA.
- The rule authorizes, but does not require, recipients to use the particular methods described in section 26.29. This does not mean, however, that enforcement of the prompt payment or release of retainage requirement itself is optional. Recipients are expected to enforce the terms of the contract that specifies what happens if this provision of the contract is breached. If the recipient does not choose to use the methods mentioned in the rule, then it must use other methods that are equally effective in achieving compliance. This information must be set forth in the contract and in recipient's DBE program plan document.
- Third, the DBE program plan also must describe the process used by the recipient, if any, to resolve disputes concerning the subcontractor's performance or indicate what happens in the event of a dispute (e.g., governed by the terms of the relevant prime or sub contract document). The appropriate OA is expected to review the DBE program plan to ensure the process is adequately described.

When are prime contractors required to return retainage to subcontractors?

- Withholding a certain percentage of the payment that is owed the prime contractor or the subcontractor until all the work of the prime contractor has been satisfactorily completed is known as “retainage.” The prompt payment provision of the DBE rule is intended to change when retainage is released. Prime contractors’ traditional practice of holding retainage until the recipient has made final payment to the prime contractor, even though the subcontractor’s work may have been satisfactorily completed months or years earlier, is not permitted.
- For example, suppose there is a prime contract that will take three years to complete. Subcontractor A satisfactorily completes its work at the end of year one. The prime contractor must pay the retainage it has held to Subcontractor A at the end of year one. The prime contractor cannot wait until the end of year three, when the entire prime contract has been completed and the recipient has paid its retainage (if any) to the prime contractor, to make this payment to Subcontractor A.
- Recipients that hold retainage must make incremental acceptances of portions of the prime contract as the work is completed so that retainage that covers that work is released before final payment for completion of the entire contract.
- If retainage is held by the recipient against the prime contractor or held by the prime contractor against the subcontractor, there must be a contract clause obligating the payment of retainage within 30 days of the recipient’s incremental acceptance of the work performed by the subcontractor (option three under 49 C.F.R. § 26.29(b) (2016)) or payment of retainage by the prime contractor (option two or three under 49 C.F.R. § 26.29(b) (2016)) within 30 days of satisfactory completion of the work performed by the subcontractor.

Does the prompt payment and release of retainage requirements apply only to DBE subcontractors?

- No. The prompt payment and release of retainage (where applicable) obligation is a race- and gender-neutral requirement that applies to DBE and non-DBE subcontractors alike. It is intended to apply to all subcontractors at all tiers.

When does the time period for payment or release of retainage begin to run?

- The 30-day time period for payment of subcontractors begins when the contractor receives payment from the recipient for satisfactory completion of the work. Satisfactory completion is defined by the regulations as “when all the tasks called for in the subcontract have been accomplished and documented as required by the recipient.” In the case of a second or third tier subcontractor, the 30-day time period begins to run when the 1st tier subcontractor receives payment from the prime contractor or when the 2nd tier subcontractor receives payment from the 1st tier subcontractor.
- As stated above, the incremental acceptance of a portion of a contract also will trigger release of retainage. The work of a subcontractor that is covered by the recipient’s acceptance of that

portion of the prime contract is deemed satisfactorily completed. For purposes of 49 C.F.R. § 26.29(b)(3) (2016), incremental or monthly progress payments for completed work may constitute incremental acceptance by the recipient.

- Contractors must submit the required documentation to recipients to begin the payment process. Similarly, subcontractors may be required to submit documentation to the prime contractor. In the interest of transparency, recipients are encouraged to share information regarding required documentation with subcontractors, to take steps to promote the timely submission by contractors of invoices for payment, especially when notified by a subcontractor that the work has been completed but payment has not been received, and to have adequate internal controls in place to facilitate timely payment at all tiers of contracting. Many state transportation agencies require at least monthly invoicing by the prime contractor. Delays by contractors of more than 30 days in submitting invoices for payment on completed work creates undue hardship on subcontractors and should be discouraged by recipients.

How does a delay in payment by the recipient affect the prompt payment obligation imposed on contractors?

- Because the regulatory requirement to promptly pay subcontractors is activated once the contractor receives payment from the recipient, a delay in payment by the recipient will have a direct impact on how quickly a subcontractor is paid for completed work.
- Like the Federal Prompt Pay Act that applies to contracts that are let by Federal government agencies, many state laws require state government agencies to promptly pay their contractors within a certain number of days (typically 7 – 30 days) of receipt of relevant documents (e.g., a proper invoice for the amount due and confirmation that the goods and services have been received and accepted by the recipient). Based on a search of state laws, all states have some kind of prompt payment law for public projects with one exception -- New Hampshire. This information is subject to change. Recipients that are covered by such state law requirements are encouraged to reference applicable prompt payment laws in their contract documents and their DBE program plan. This will assist program participants (e.g., prime contractors and subcontractors) in managing expectations.

What happens when there is a dispute over the satisfactory completion of the work performed by the subcontractor?

- The obligation to promptly pay subcontractors or to release retainage does not arise if there is a legitimate dispute over the subcontractor's performance. Recipients are encouraged to develop a dispute resolution process as a mechanism to ensure compliance with the purpose and intent of the prompt payment and release of retainage requirements. As stated above, the process used should be described in the DBE program plan and in the relevant contract document.
- A prime contractor may not withhold payment to a subcontractor that has satisfactorily completed work on the contract (contract A) as a means to address a dispute between the prime contractor on an unrelated contract (contract B). That would not constitute a legitimate dispute over the subcontractor's performance on contract A.

What effect does the absence of a direct relationship between the recipient and the subcontractor have on the obligation imposed on the recipient under the DBE program regulations?

- None. The prompt payment and release of retainage obligation is both a regulatory requirement that recipients are expected to comply with in administering their DBE program and a contractual obligation recipients are expected to enforce. Under the financial assistance agreement signed by the recipient, it is contractually obligated to implement a DBE program that complies with 49 C.F.R. Part 26 (2016), which includes the prompt payment requirement. The lack of a direct contractual relationship between the recipient and a subcontractor does not relieve the recipient of its obligation to ensure compliance with DBE program requirements by program participants as a condition of the recipient's receipt of DOT financial assistance.

Is the obligation to promptly pay subcontractors a material term of a DOT-assisted contract?

- Yes. Every DOT-assisted contract must include a commitment by the parties to carry out all applicable requirements of 49 C.F.R. Part 26 (2016) in the administration of the contract. See 49 C.F.R. § 26.13 (2016). This commitment covers the prompt payment and release of retainage requirements in 49 C.F.R. § 26.29 (2016). Failure by the contractor to honor this commitment is considered a material breach of the contract, subject to the penalties, sanctions, and remedies listed in section 26.13 and any other equally effective remedies the recipient deems appropriate. An effective remedy recognizes the importance of this obligation and seeks to correct the problem.
- The contractual commitment is a material term of the contract between the recipient and the prime contractor, and it is a material term of the contract between the prime contractor and the subcontractor under 49 C.F.R. § 26.13(b) (2016). The term "contractor" is defined to mean "one who participates, through a contract or subcontract (at any tier) in a DOT-assisted highway, transit, or airport program." 49 C.F.R. § 26.5 (2016). Consultants and sub-consultants (e.g., architecture and engineering firms) are contractors. All forms of contractual agreements (e.g., truck leasing agreements, task orders, etc.) are covered by the prompt payment requirement, which cannot be waived.

What are some of the contractual penalties that may be imposed by a recipient when a subcontractor is not promptly paid?

- Under 49 C.F.R. § 26.13(b) (2016), the penalties imposed by the recipient may include, but are not limited to, the following:
 1. terminating the contract,
 2. withholding progress payments,
 3. assessing sanctions,
 4. imposing liquidated damages,
 5. disqualifying the contractor from bidding on future contracts, or
 6. other remedies the recipient deems appropriate.
- DOT OAs are expected to ensure recipients enforce compliance with DBE program contractual commitments in DOT-assisted contracts.

How are prompt payment complaints processed?

- Complaints of non-payment should be submitted first to the recipient (i.e., the state or local transportation agency, transit authority, or airport that awarded the DOT-assisted contract).
- The recipient has an obligation to investigate the complaint and provide a timely response to the complainant. A timely response should be no more than the time required to promptly pay the subcontractor for completed work.
- If the recipient fails to respond to the complaint or otherwise fails to comply with DBE program regulations, the subcontractor may contact the appropriate OA providing financial assistance on the contract. The OA will investigate the complaint of noncompliance by program participants.
- The OA contact information is posted on the DOT DBE program websites hosted by the Departmental Office of Civil Rights, the Federal Highway Administration, the Federal Transit Administration, and the Federal Aviation Administration.

Is relying on complaints an appropriate means of enforcing the prompt payment and retainage requirements of the rule?

- No. Relying only on complaints or notifications from subcontractors about a contractor's failure to comply with prompt payment and retainage requirements is not a sufficient mechanism to enforce the requirements of section 26.29.
- Subcontractors are often reluctant to complain about contractors for fear that doing so will make it more difficult to get work in the future, despite the prohibition in the regulations against retaliation against individuals who file a complaint (49 C.F.R. § 26.109(d) (2016)). This may result in recipients not receiving complaints that would timely alert them to noncompliance by contractors.
- While this section does not mandate that a recipient employ a specific type of mechanism for monitoring prompt payment, recipients are expected to take affirmative steps to monitor and enforce prompt payment and retainage requirements. For example, posting prime contractor payment information on a recipient's website, database, or other place accessible to subcontractors may be effective in alerting small business subcontractors to the start of the 30 day clock. Using automated systems that require real time entry of payments to, and receipts by, prime contractors and subcontractors and that is regularly monitored is another example of a proactive compliance mechanism that flags late entries/acceptances for follow-up. Notarized certification from the prime contractor that payment was made to subcontractors and verification of that information also is a form of active monitoring.

What records should recipients and contractors retain to document compliance with the prompt payment requirement?

- To ensure compliance with the prompt payment provision, recipients may require prime contractors to provide information concerning payments to subcontractors and release of retainage where held. Data collected from contractors may include copies of cancelled checks. All participants in the Department's DBE program, including contractors, are required to cooperate fully and promptly with requests for information pursuant to 49 C.F.R. § 26.109(c) (2016).

The General Counsel of the Department of Transportation has reviewed this document and approved it as consistent with the language and intent of 49 C.F.R. part 26 (2016).