TASK ORDER 1-11 SW

ENGINEERING SERVICES FOR THE SITE SAMPLING AND DEMOLITION DOCUMENTS FOR THE SOLID WASTE TO ENERGY FACILITY

This TASK ORDER 1-11 SW is issued under the terms and conditions of the MASTER AGREEMENT TO FURNISH GENERAL ENGINEERING SERVICES TO THE CITY OF KEY WEST ("AGREEMENT") between the City of Key West ("CITY") and CH2M HILL, Inc. ("ENGINEER") executed on September 18, 2007, which is incorporated herein by this reference.

A. SCOPE OF SERVICES

Specific services that the ENGINEER agrees to furnish are summarized on the attached statement entitled TASK ORDER 1-11 SW SCOPE OF SERVICES. The Scope of Services defines the work effort anticipated for the Task Order.

B. TIME OF COMPLETION

Work under this Task Order will begin immediately following acceptance and be completed expeditiously subject to coordination with the City of Key West staff. Work may be performed at any time as requested by the CITY within 12 months after the date of execution of this Task Order, at which time the Task Order will expire.

C. COMPENSATION

Compensation for the labor portions of TASK ORDER 1-11 SW, Tasks A, C and E on a lump sum fee basis as stipulated in Article 2, Paragraph 2.1 of the AGREEMENT. Compensation for the labor portions of Tasks, B, D, F and all expenses will be on a Cost Reimbursable-Per Diem basis as stipulated in Article 2, Paragraph 2.2 of the AGREEMENT. The estimated compensation is shown on the attached statement entitled TASK ORDER 1-11 SW COMPENSATION.

D. ACCEPTANCE

By signature, the parties each accept the provisions of this TASK ORDER 1-11 SW, and authorize the ENGINEER to proceed at the direction of the CITY's representative in accordance with Article 1, SCOPE OF SERVICES. Start date for this project will be no later than ten (10) days after execution of this authorization.

For CH2M HILL, INC.

By: _____
Matthew Alvarez, P.E.
South Florida Area Manager

_____
Andrew H. Smyth, P.E.
Key West Office Manager

For CITY OF KEY WEST

By: _____
Jim Scholl
City Manager

Dated the _____ day of _____, 20__

ATTEST: _____

TASK ORDER 1-11 SW

ENGINEERING SERVICES FOR THE SITE SAMPLING AND DEMOLITION DOCUMENTS FOR THE SOLID WASTE TO ENERGY FACILITY

SCOPE OF SERVICES

Project Description

The City of Key West (CITY) plans to relocate their existing downtown Key West Department of Transportation bus maintenance building and facilities (Transit Facility) to the Solid Waste to Energy Facility site located at Stock Island. The project will be funded in part by state and federal grants. Compliance with the National Environmental Policy Act (NEPA) for the proposed site improvements are being required for the federal funding aspects for the project. The funding and grants are to be used for the construction of the new transit facility only and not for the site restoration and/or demolition of the existing Solid Waste to Energy (SWTE) facility.

The City plans on using Solid Waste funds to demolish the existing facilities and bring the site into compliance with the transit facility funding requirements. Additionally the City is looking to complete any FDEP requirements for closing out the SWTE Solid Waste permit.

The demolition and site restoration is planned on being completed by the awarded transit facility construction contractor, under a design build contract. This work will be bid as a separate phase of work so that the costs will be clearly delineated from the work being funded by grants.

Purpose

The CITY has requested that the ENGINEER provide engineering services for ground water and soil sampling activities, preparation of an Interim Remedial Action Plan (if required) and Demolition Bid Documents to be included in the Design Build Contract for the transit facility. This Task Order describes the ENGINEER's Scope of Services.

Scope of Services

The scope of services provided below addresses the work to be completed for the project, and includes the following;

- Preparation of an Interim Remedial Action Plan (IRAP)
- Groundwater and Soil Field Sampling
- Preparation of an Interim Remedial Action Report (IRAR)
- Asbestos and Lead Paint Inspection

- Preparation of SWTE Site Demolition Documents to be included in the Transit facility design build criteria

- An allowance for SWTE Site Remediation Requirements if required

The following tasks describe the activities to be performed and the work products to be prepared by the ENGINEER.

Task A – Interim Remedial Action Plan (IRAP)

The ENGINEER will prepare an Interim Remediation Action Plan (IRAP) for the SWTE facility based on the results and recommendations from the *Preliminary Site Assessment Report, Southernmost Waste-to-Energy Facility* (CH2M HILL, April 2007), the *Resampling of Specific Monitoring Wells* (CH2M HILL September 2007) and coordination with the Florida Department of Environmental Protection (FDEP). The purpose of the IRAP will be to further assess contaminate concentrations at the SWTE facility and to develop site remediation requirements for future use of the facility by the City. This plan will identify sampling activities to be provided in Task B.

Specific activities to be included in the plan are:

- Sampling location by media (e.g., groundwater, soil sediment)
- Sampling procedures
- Analytical requirements for each sample
- Minimum detection/quantification limits for each parameter and media
- Proposed remedial alternatives depending on sampling results

A draft plan will be submitted to the City for review and comment. Upon receipt and incorporation of City comments, the plan will be submitted to FDEP for review and acceptance, prior to start the sampling. It is assumed that at least one round of comments will be received from FDEP and responded to by ENGINEER.

Deliverables

The following deliverables will be provided under this Task:

- One electronic copy of the Draft Interim Remediation Action Plan (IRAP)
- Two (2) copies of the Final Interim Remediation Action Plan (IRAP)
- Two (2) copies of the responses to FDEP comments, if required.

Task B – Groundwater and Soil Field Sampling

The ENGINEER will perform the work to assess the potential ground water and soil impacts resulting from past land use activities and operations at the site. This sampling activity will be previous sampling results. The actual scope of work for this task will be further defined in the IRAP. For planning and funding purposes, the following work is assumed for inclusion in this task:

- The Engineer will develop a Site Specific Health and Safety Plan (H&S Plan). The purpose of the H&S Plan is to identify and address, prior to initiation of work, the potential hazards associated with performing the groundwater and soil sampling field event.
- Engineer will collect groundwater samples from two existing monitoring wells plus appropriate quality assurance (QA) and quality control (QC) samples. The rational for selection of the groundwater sample location, is presented below:
  - **MW AOC 1 –** Based on previous groundwater sampling results and review of previous data, the results for Aroclor 1016 has exceeded the groundwater cleanup target level.
  - **MW AOC 7** - Based on previous groundwater sampling results and review of previous data, the results for thallium has exceeded the groundwater cleanup target level.
- Engineer will collect soil samples at the following locations:
  - Soil samples were collected during installation of the groundwater monitoring well for the site assessment. An attempt was made to collect two soil samples per monitoring well location. Samples were successfully collected from six of the nine wells from the 0 to 2-foot interval and 2 to 4-foot interval. Soil sample recovery was unsuccessful at three of the monitoring well locations. During sampling for the IRAP, samples will be obtained from each at three areas of concern (AOC) where recovery was unsuccessful during site assessment sampling. Two depth intervals will be collected at each location. Sample intervals may vary depending on depth to groundwater. Six samples total plus QA/QC samples.
  - Samples will be obtained from two locations beneath the former incinerator building tipping floor. Two depth intervals will be collected at each location. Samples will be obtained by coring through the tipping floor. Four samples total plus QA/QC samples.
  - Samples will be obtained from two locations immediately adjacent to the west wall of the former incinerator building waste storage pit. This area is also beneath the former incinerator and ash quenching area. Two depth intervals will be collected at each location. Sample intervals may vary depending on depth to groundwater. Four samples total plus QA/QC samples.
  - Samples will be obtained from three locations beneath the ash transfer building. Two depth intervals will be collected at each location. Sample intervals may vary depending on depth to groundwater. Six samples total plus QA/QC samples.
  - Samples will be obtained from three locations beneath the maintenance/office building. Two depth intervals will be collected at each location. Sample intervals

may vary depending on depth to groundwater. Six samples total plus QA/QC samples.

- Groundwater and soil samples will be analyzed for the constituents listed in Attachment A.
- Remaining soils from the soil borings will be placed back into the hole or spread on site and do not need any special sampling or disposal.

Deliverables

Field data and laboratory analysis will be included in the Interim Remediation Action Report (IRAR)

Task C – Interim Remedial Action Report (IRAR)

The ENGINEER will prepare an Interim Remediation Action Report (IRAR) for the SWTE facility documenting the result of the IRAP sampling activities. The purpose of the IRAR will be to document field sampling procedures and analytical results, evaluate data collected during the IRAP field activities and recommend further action including, but not limit to remediation requirements necessary for future use of the SWTE facility as a bus facility by the City.

A draft report will be submitted to the City for review and comment. Upon receipt and incorporation of City comments, the report will be submitted to FDEP for review and acceptance. It is assumed that at least one round of comments will be received from FDEP and responded to by ENGINEER.

Deliverables

The following deliverables will be provided under this Task:

- One electronic copy of the Draft Interim Remediation Action Report (IRAR).
- Two (2) copies of the Final Interim Remediation Action Report (IRAR).
- Two (2) copies of the responses to FDEP comments, if required.

Task Assumptions

- The ENGINEER will not certify or express an opinion regarding "safe" levels of contamination. Contaminate levels will be compared to published Florida rules, regulations and guidelines for site clean-up activities.

Task D – Asbestos and Lead Paint Inspection

The ENGINEER will retain a certified sub consultant to conduct an assessment of the buildings to be removed from the site for the presence of asbestos or lead paint. The assessment will include the following:

- Pre-bid meeting and site walk-through allowing photographs
- Room by room survey of building or each homogeneous survey area to identify the extent, location and quantity of asbestos containing building materials (ACBM) and lead-based paint
- The Subcontractor shall provide a work plan before commencing work indicating sampling approaches, QA/QC methods, and proposed schedule.
- Determination if the asbestos is encapsulated (If found)
- Preparation of a report detailing the findings of the assessment and recommendations for removal and disposal
- Any abatement that would come out of (recommended in) the inspection services report would be included in the design build criteria for the demolition contractor. The abatement would be completed during the construction demolition activities.

Deliverable

The following deliverable will be provided under this Task:

- Four (4) copies of Inspection report

Task E – SWTE Site Demolition Documents

The ENGINEER will prepare the required drawings and technical specifications to complete the demolition and disposal work at the SWTE facility, in preparation of the new Transit facility. The ENGINEER will work with the Transit Facility Design Build (DB) consultant to verify completeness and conformance with the final bid documents. Activities to be completed in this task are as follows;

- Prepare site demolition drawings
- Prepare site grading plan with 2-feet fill over the entire site for closure compliance
- Prepare technical specifications for removal and disposal of designated buildings, concrete pads, underground tanks, equipment, asphalt, and miscellaneous material located onsite
- Prepare applicable drawings and specifications package to be included in DB criteria bid package (by others).

Deliverables

The following deliverables will be provided under this Task:

- Four (4) copies of the Site Demolition and Closure Package
- One (1) electronic copy of the Site Demolition and Restoration Package

Task Assumptions

- The site will be graded once designated buildings and equipment are removed
- The underground utilities within 2 feet of the surface will be removed. All other underground utilities and foundations will be abandoned in-place
- All material can be disposed of in a municipal landfill
- All contaminants will be below industrial levels
- No additional contamination will be found
- 2-feet of fill across the site will meet FDEP requirements for closure
- No asbestos or lead paint is present on-site

Task F – SWTE Site Remediation Requirements (Allowance)

The ENGINEER will provide additional work items for Remediation of the SWTE facility (if required). These additional activities will be based on the outcome of the site sampling results and IRAR, completed in Tasks B and C. An allowance of $25,000 has been included, and may used toward the following items;

- Additional site sampling and laboratory analysis if delineation of contamination limits is required.
- Revisions to the Interim Remediation Action Report (IRAR)
- Additional coordination with FDEP
- Groundwater and/or Soil Remediation Specifications and drawings to be included in the design build criteria
- Asbestos and/or lead based paint Remediation Specifications and drawings to be included in the design build criteria

The allowance shall be utilized under the approval and direction of the City.

Deliverables

The following deliverables may be provided under this Task:

- One electronic copy of the revised Draft Interim Remediation Action Report (IRAR).
- One electronic copy of the any additional FDEP correspondence.
- One (1) electronic copy of the Site Remediation Package

Task Assumptions

- The ENGINEER will not certify or express an opinion regarding "safe" levels of contamination. Contaminate levels will be compared to published Florida rules, regulations and guidelines for site clean-up activities.

Obligations of the CITY

To assist meeting schedule and budget estimates contained in this proposal, the CITY will provide the following:

- Facilitate access to any required facilities, including the existing bus facilities & Stock Island Waste Energy site
- Attendance of key personnel at meetings as requested
- Any previous design or as-built drawings of the SWTE facility and/or other documents relative to the current site operations
- Existing topographic & site survey information if available for the design of the proposed transit facilities.
- Existing groundwater or soil sampling and analysis data collected by the City.
- Provide floor slab core holes, at locations stated in Task B, to allow access for sampling equipment.

Assumptions and Limitations Supplemental Terms and Conditions

Assumptions and Limitations

Due to the nature of environmental site assessments, the following assumptions apply to this proposed scope of work and the estimated costs. In the event that the scope of work changes, the proposed work, cost, and schedule will need to be revised.

For the sole purpose of this project, the Assumptions and Limitations detailed below will take precedence, over the terms and conditions in the contract between ENGINEER and the CITY. In the event of a conflict, the specified Assumptions and Limitations listed in this proposal govern. Acceptance of this proposal will serve as authorization that the Assumptions and Limitations are hereby incorporated by reference to the Master Agreement for General Engineering Services August 2007.

Limitation of Liability

ENGINEER's services will be governed by the negligence standard for professional services, measured as of the time those services are performed. To the maximum extent permitted by law, ENGINEER's liability for the CITY's damages for any cause or combination of causes, which arise from ENGINEER's services under this agreement, in the aggregate, not exceed

$100,000 or the fee for this project, whichever is lower. This indemnity will not apply to claims or damages caused by ENGINEER's intentional misconduct or sole negligence, and takes precedence over any conflicting articles of this contract. As used herein, ENGINEER includes any affiliated corporations, subcontractors, and any of its officers or employees.

In no event shall ENGINEER, its affiliates, officers, employees or subcontractors be liable for any incidental, indirect, special, punitive, economic or consequential damages, including but not limited to, loss of revenue or profits, suffered or incurred by CITY or any of its agents, including Sponsor and other contractors engaged at the site, as a result of this Agreement or ENGINEER's performance or nonperformance of services.

This Provision takes precedence over any conflicting Provision of the AGREEMENT between ENGINEER and the CITY, and any document incorporated into it or referenced by it. These limitations of liabilities shall apply whether such liability is claimed to arise in breach of contract or warranty, tort (including negligence), strict or statutory liability or otherwise.

The CITY waives all claims against ENGINEER, including those for latent defects that are not brought within two years of substantial completion of the work or final payment to ENGINEER, whichever is later.

Third Party Beneficiary

This proposed scope of services gives no rights or benefits to anyone other than the CITY; and ENGINEER has no third party beneficiaries. ENGINEER's services are defined solely by this proposed scope of services, and not by any other contract or agreement that may be associated with the PROJECT.

All work products will be prepared for the exclusive use of the CITY, for specific application to the property described in the proposed scope of services. No warranty, expressed or implied, is made. There are no beneficiaries of the work products other than The CITY, and no other person or entity is entitled to rely upon the work products without the written consent of ENGINEER. CITY agrees to indemnify ENGINEER, its affiliates, officers, employees or subcontractors from all claims, damages, losses, and costs, including but not limited to litigation expenses and attorney's fees arising out of or related to the unauthorized disclosure, reuse, change or alteration of such work product.

Should CITY and ENGINEER agree that the work product will be released to a financial institution or others for review, CITY will obtain an executed reliance letter from the financial institution which states that ENGINEER's liability for any reliance on the work product will be subject to the same limitations as agreed between CITY and ENGINEER in this AGREEMENT.

- It is beyond ENGINEER's scope of work to review or examine: (1) materials containing asbestos; (2) the presence of radon; (3) the presence of lead-based paint; (4) presence of lead in drinking water; (5) identification or delineation of jurisdictional wetlands or ecological resources; (6) issues associated with worker health and safety; (7) issues pertaining to compliance with environmental

regulations; or (8) liabilities associated with the offsite management of solid or hazardous wastes, (9) cultural or historical resources; (10) endangered species; (11) indoor air quality; or (12) liabilities associated with biological agents or molds. The exclusion of the listed items is not a representation of the relevance of these non-scope considerations to the subject property. See assumptions provided in Task 3 ESA of this proposal.

- Unless specifically identified in the Scope of Work, cost estimates for clean up and identification of parties potentially responsible for the cleanup of hazardous substance releases are not included.
- The ENGINEER staff who performs the site assessment are not attorneys; therefore, the final report is not a legal representation or interpretation of environmental laws, rules, regulations, or policies of local, state or federal government agencies.
- Any opinions or recommendations presented apply to site conditions existing when services were performed. ENGINEER cannot report on, or accurately predict events that may change the site conditions after the described services are performed, whether occurring naturally or caused by external forces.
- ENGINEER assumes no responsibility for conditions we are not authorized to investigate, or which are not in our specific Scope of Work. ENGINEER has not performed any surface or subsurface sampling and cannot therefore give any assurance as to the absence or presence of surface or subsurface contamination.
- ENGINEER's services will not include directly or indirectly storing, arranging for or actually transporting, disposing, treating or monitoring hazardous substances, hazardous materials, hazardous waste or hazardous soils.
- Draft and final ENGINEER reports shall include the following language, the terms of which are incorporated into this Agreement:
  ""In preparing this report, ENGINEER relied, in whole or in part, on data and information provided by CITY and third parties, which information has not been independently verified by ENGINEER and which ENGINEER has assumed to be accurate, complete, reliable, and current. Therefore, while ENGINEER has utilized its best efforts in preparing this Report, ENGINEER does not warrant or guarantee the conclusions set forth in this Report which are dependent or based upon data, information, or statements supplied by CITY or third parties.

  This Report is intended for CITY's sole and exclusive use and is not for the benefit of any third party and may not be distributed to, disclosed in any form to, used by, or relied upon by, any third party without prior written consent of ENGINEER, which consent may be withheld in its sole discretion.

  Use of this Report or any information contained herein, if by any party other than CITY, shall be at the sole risk of such party and shall constitute a release and agreement by such party to defend and indemnify ENGINEER and its affiliates, officers, employees and subcontractors from and against any liability for direct, indirect, incidental, consequential or special loss or damage or other liability of any nature arising from its use of the Report or reliance upon any of its content. To the maximum extent permitted by law, such release from and indemnification against

liability shall apply in contract, tort (including negligence), strict liability, or any other theory of liability."

Hazardous Substances Indemnification:

It is understood and agreed to between the parties, that City shall indemnify and hold harmless Engineer from and against any and all claims, losses, damages, liabilities, and costs, including but not limited, to costs of defense arising out of or in any way connected with the presence, discharge, release, or escape of contaminants of any kind, excepting only such liability as may arise out of the negligence or willful misconduct of Engineer, its employees, consultants or subcontractors in the performance of this Agreement.

Additional Services

The ENGINEER will, as directed, provide additional services that are related to the project but not included within this Scope of Services. These and other services can be provided, if desired by the CITY, as an amendment to the Task Order. Work will begin for the Additional Services after receipt of a written notice to proceed from the CITY.

- Additional Soil and or groundwater testing/sampling is not included in this scope of work

Compensation

The estimated compensation for TASK ORDER 1-11 SW, is shown on Attachment A entitled TASK ORDER 1-11 SW, COMPENSATION.

Attachment A

TASK ORDER 1-11 SW, COMPENSATION

TASK ORDER 1-11 SW - SWTE Site Sampling and Demolition Documents

ENGINEERING SERVICES FOR THE SITE SAMPLING AND DEMOLITION DOCUMENTS FOR THE SOLID WASTE TO ENERGY FACILITY

Task	Hours	Labor Cost	Expenses	Total Cost
Task A - Interim Remedial Action Plan (IRAP)	81	$10,142	$200	$10,342
Task B - Groundwater and Soil sampling	118	$12,052	$37,300	$49,352
Task C - Interim Remediation Action Report (IRAR)	120	$13,894	$100	$13,994
Task D - Asbestos and Lead Paint Inspections	18	$2,008	$8,000	$10,008
Task E - Demolition documents	158	$17,532	$400	$17,932
Task F - Site Remediation Requirements (Allowance)	123	$12,905	$11,745	$24,650
Total	**618**	**$68,533**	**$57,745**	**$126,278**

COMPENSATION BREAKDOWN Task Order 1-11 SW						
TASK NO.	**TASK DESCRIPTION**	**HOURLY RATE**	**TOTAL HOURS**	**LABOR**	**EXPENSES**	**TOTAL COST**
A	**Interim Remedial Action Plan (IRAP)**					
	Principal Project Manager	$172.00	8	$1,376		$1,376
	Senior Technologist	$158.00	4	$632		$632
	Senior Professional	$148.00	40	$5,920		$5,920
	Tech 5	$ 96.00	6	$576		$576
	Tech 4	$ 93.00	6	$558		$558
	Technical Editor	$ 84.00	5	$420		$420
	Clerical	$ 55.00	12	$660		$660
	PRINTING/REPROGRAPHICS/SHIPPING				$200	$200
Interim Remedial Action Plan (IRAP) SUBTOTAL			81	$10,142	$200	$10,342
B	**Groundwater and Soil sampling**					
	Principal Project Manager	$172.00	6	$1,032		$1,032
	Senior Technologist	$158.00	6	$948		$948
	Senior Professional	$148.00	6	$888		$888
	Tech 5	$ 96.00	88	$8,448		$8,448
	Tech 4	$ 93.00	2	$186		$186
	Clerical	$ 55.00	10	$550		$550
	Travel 2 - (5) day Key West				$4,000	$4,000
	PRINTING/REPRO/SHIPPING/EQUIPMENT				$1,300	$1,300
	LABORATORY				$32,000	$32,000
Groundwater and Soil sampling SUBTOTAL			118	$12,052	$37,300	$49,352
C	**Interim Remediation Action Report (IRAR)**					
	Principal Project Manager	$172.00	6	$1,032		$1,032
	Senior Technologist	$158.00	2	$316		$316
	Senior Professional	$148.00	44	$6,512		$6,512
	Assoc Engineer	$110.00	24	$2,640		$2,640
	Tech 4	$ 93.00	18	$1,674		$1,674
	Technical Editor	$ 84.00	10	$840		$840
	Clerical	$ 55.00	16	$880		$880
	PRINTING/REPROGRAPHICS/SHIPPING				$100	$100
Interim Remediation Action Report (IRAR) SUBTOTAL			120	$13,894	$100	$13,994
D	**Asbestos and Lead Paint Inspections**					
	Principal Project Manager	$172.00	2	$344		$344
	Senior Technologist	$158.00	4	$632		$632
	Senior Professional	$148.00	4	$592		$592
	Clerical	$ 55.00	8	$440		$440
	INSPECTION SERVICES				$8,000	$8,000
Asbestos and Lead Paint Inspections SUBTOTAL			18	$2,008	$8,000	$10,008

E	**Demolition documents**					
	Principal Project Manager	$172.00	4	$688		$688
	Senior Technologist	$158.00	6	$948		$948
	Senior Professional	$148.00	32	$4,736		$4,736
	Project Engineer	$122.00	40	$4,880		$4,880
	Tech 4	$ 93.00	40	$3,720		$3,720
	Technical Editor	$ 84.00	20	$1,680		$1,680
	Clerical	$ 55.00	16	$880		$880
	PRINTING/REPROGRAPHICS/SHIPPING				$400	$400
Demolition documents SUBTOTAL			158	$17,532	$400	$17,932
F	**Site Remediation Requirements (Allowance)**					
	Principal Project Manager	$172.00	6	$1,032		$1,032
	Senior Technologist	$158.00	2	$316		$316
	Senior Professional	$148.00	16	$2,368		$2,368
	Project Engineer	$122.00	8	$976		$976
	Assoc Engineer	$110.00	13	$1,430		$1,430
	Tech 5	$ 96.00	48	$4,608		$4,608
	Tech 4	$ 93.00	10	$930		$930
	Technical Editor	$ 84.00	5	$420		$420
	Clerical	$ 55.00	15	$825		$825
	Travel 2 - (3) day Key West				$3,000	$3,000
	PRINTING/REPRO/SHIPPING/EQUIPMENT				$745	$745
	LABORATORY				$8,000	$8,000
Site Remediation Requirements (Allowance)SUBTOTAL			123	$12,905	$11,745	$24,650
PROJECT TOTALS						
	TOTAL HOURS		618			
	TOTAL FEE ESTIMATE			$68,533	$57,745	$126,278

Attachment B

SAMPLING AND ANALYTICAL REQUIREMENTS

ATTACHMENT B
Estimated Number of Samples and Parameter Coverage
IRAP Former SWTE Facility

Parameter	Analytical Method	Field Samples	Field Duplicates	MS/MSD [1] Samples	Field Blank[2]	Trip Blank[2]	Equipment Blank[2]	Total Samples
GROUNDWATER								
Volatile Organic Compounds	SW8260B	2	1	1	0	1	1	6
Semivolatile Organic Compounds	SW8270C	2	1	1	0	0	1	5
Organochlorine Pesticides	SW8081A	2	1	1	0	0	1	5
Polychlorinated Biphenyls	SW8082	2	1	1	0	0	1	5
Organophosphorous Pesticides	SW8141A	2	1	1	0	0	1	5
Herbicides	SW8151A	2	1	1	0	0	1	5
Metals	SW6010B	2	1	1	0	0	1	5
Mercury	SW7470A	2	1	1	0	0	1	5
Cyanide	SW9010B/ 9012A	2	1	1	0	0	1	5
SOIL								
Volatile Organic Compounds	SW8260B	26	3	2/2	0	3	3	37
Semivolatile Organic Compounds	SW8270C	26	3	2/2	0	3	0	34
Organochlorine Pesticides	SW8081	26	3	2/2	0	3	0	34
Polychlorinated Biphenyls	SW8082	26	3	2/2	0	3	0	34
Organophosphorous Pesticides	SW8141	26	3	2/2	0	3	0	34
Herbicides	SW8151	26	3	2/2	0	3	0	34
Appendix IX Metals	SW6010B	26	3	2/2	0	3	0	34
Mercury	SW7471A	26	3	2/2	0	3	0	34
Cyanide	SW9010B/ 9012A	26	3	2/2	0	3	0	34