

**CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD**8800 Cal Center Drive  
Sacramento, California 95826

Daniel G. Pennington, Chairman  
Sam Egigian, Member  
Janet Gotch, Member

Tuesday, October 17, 1995  
2:00 p.m.  
meeting of the

**ADMINISTRATION COMMITTEE**

of the  
**CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD**

8800 Cal Center Drive  
Sacramento, CA 95826

**AGENDA**

Note: o Agenda items may be taken out of order.  
o If written comments are submitted, please provide 15 two-sided copies.

**Important Notice:** The Board intends that Committee Meetings will constitute the time and place where the major discussion and deliberation of a listed matter will be initiated. After consideration by the Committee, matters requiring Board action will be placed on an upcoming Board Meeting Agenda. Discussion of matters on Board Meeting Agendas may be limited if the matters are placed on the Board's Consent Agenda by the Committee. Persons interested in commenting on an item being considered by a Board Committee or the full Board are advised to make comments at the Committee meeting where the matter is considered.

Some of the items listed below may be removed from the agenda prior to the Committee meeting. To verify whether an item will be heard, please call Marlene Kelly, Committee Secretary, at (916) 255-2151.

1. CONSIDERATION OF APPROVAL TO AWARD A CONTRACT TO CARROLL, BURDICK & MCDONOUGH FOR LEGAL SERVICES TO SUPPORT THE RECYCLING MARKET DEVELOPMENT ZONE LOAN PROGRAM

Page  
1

- 2. CONSIDERATION OF CONTRACT CONCEPT AND APPROVAL OF AWARD TO THE CITY OF SAN DIEGO FOR IMPLEMENTATION OF BINATIONAL SAN DIEGO-TIJUANA WASTE WISE PROGRAM
- 3. CONSIDERATION OF CONTRACT CONCEPT AND APPROVAL OF AWARD TO SCIENCE APPLICATIONS INTERNATIONAL CORPORATION (SAIC) FOR IMPLEMENTATION OF BINATIONAL SAN DIEGO-TIJUANA WASTE WISE PROGRAM
- 4. CONSIDERATION OF AUGMENTATION TO THE CALIFORNIA COMMUNITY COLLEGES FOUNDATION (CCCF) STUDENT CONTRACT
- 5. OPEN DISCUSSION
- 6. ADJOURNMENT

4

37

43

**Notice:**

The Committee may hold a closed session to discuss the appointment or employment of public employees and litigation under authority of Government Code Sections 11126 (a) and (q), respectively.

For further information contact:  
INTEGRATED WASTE MANAGEMENT BOARD  
8800 Cal Center Drive  
Sacramento, CA 95826

Patti Bertram  
(916) 255-2156

**CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD**

Administration Committee  
October 17, 1995

**AGENDA ITEM # 1**

**ITEM:** CONSIDERATION OF APPROVAL TO AWARD A CONTRACT TO CARROLL, BURDICK & MCDONOUGH FOR LEGAL SERVICES TO SUPPORT THE RECYCLING MARKET DEVELOPMENT ZONE LOAN PROGRAM

**BACKGROUND:**

The Board loans Recycling Market Development Zone monies for projects supporting recycling-based business development in the Recycling Market Development Zones (RMDZ). These loans are critical to the development of markets for recyclable materials and the treatment of solid waste as a resource.

The Board currently has a contract with Carroll, Burdick & McDonough, Attorneys at Law, to provide assistance and consultative services related to the implementation and operation of the loan program. The Carroll, Burdick & McDonough firm has served as outside legal counsel for the program since its inception. The firm developed all of the documentation that is being used to effectuate and close loans. It also provided training and consultative services, as needed. Continuing legal services are needed to assist staff with the loan program and to provide consultative services relevant to individual loans and sales of the loans on the secondary market or other financing options the Board may pursue.

**ANALYSIS:**

The RMDZ Loan Program was initiated in December, 1992, and began accepting applications for loans on February 11, 1993. During the initial phases of the program, Carroll, Burdick & McDonough provided continuous and reliable support for legal and loan program staff members. Attorneys from the firm drafted all the documents used for the program and have provided consultation services for the loans approved by the Board to date.

To ensure continuity of services and the continued success of the loan program, staff is requesting award of a contract with Carroll, Burdick & McDonough, Attorneys at Law, for needed legal services for the 1995/96 fiscal year. The proposed contract amount is \$188,000. This estimate has been prepared in light of our experiences to date. Carroll, Burdick & McDonough will continue to provide general consultation to staff regarding loan closure documentation and collateralization issues; will prepare and review loan documents as requested; and will supply assistance regarding specific loan closing mechanisms and

monitoring of loans.

Given the specialized nature of the legal and financial relationships created by the administration of the revolving loan fund program, it is necessary to retain specialized expertise in assisting the Board staff with these services. Continued retention of outside legal counsel with expertise in lending will ensure that the RMDZ loans are structured, closed and administered in a manner consistent with commercial lending practices while also considering the statutory mandates and the Board's interests.

**STAFF COMMENTS:**

Staff recommends approval of the award of a contract with Carroll, Burdick, & McDonough, Attorneys at Law, for legal services for the RMDZ Loan Program for the 1995/96 fiscal year.

**ATTACHMENT:**

1. Resolution

Prepared by	:	Deborah Borzelleri <i>DB</i>	255-2194
Reviewed by	:	Maureen Carr Morris <i>McM</i>	255-2192
Reviewed by	:	Marie LaVergne <i>JL</i>	255-2269

## California Integrated Waste Management Board

### Resolution October 26, 1995

BE IT RESOLVED that the Board hereby approves award of a contract for legal services in the amount of \$188,000 with Carroll, Burdick & McDonough, Attorneys at Law, for the 1995/96 fiscal year.

### CERTIFICATION

The undersigned Executive Director of the California Integrated Waste Management Board does hereby certify that the foregoing is a full, true and correct copy of a resolution duly and regularly adopted at a meeting of the California Integrated Waste Management Board on October 26, 1995.

Dated:

Ralph E. Chandler  
Executive Director

**CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD**

Administration Committee

October 17, 1995

**AGENDA ITEM 2**

**ITEM:** CONSIDERATION OF CONTRACT CONCEPT AND APPROVAL OF AWARD TO THE CITY OF SAN DIEGO FOR IMPLEMENTATION OF BINATIONAL SAN DIEGO-TIJUANA WASTE WISE PROGRAM

**I. SUMMARY**

This contract concept and proposed award of contract implements a grant workplan approved by the U.S. Environmental Protection Agency (EPA) under the federal Environmental Technology Initiative (ETI). The *San Diego-Tijuana Waste Wise* project is a public-private partnership focusing on economic and recycling market development, as well as providing waste reduction and waste management training for the border region's wastestream decision-makers.

The proposed grant, from the U.S. EPA to the Board, is for \$280,000, all of which would be disbursed by the Board as contract funds. This item would authorize a contract with the City of San Diego in the amount of \$80,000 (\$40,000 will be appropriated under subcontract to Eugene Tseng and Associates). Item 3 on the Committee's agenda would authorize a contract with Science Applications International Corporation (SAIC) for the remaining \$200,000 of the grant funds.

In addition to the Board, City of San Diego, and SAIC, project partners include San Diego State University, the City of Tijuana, and the Universidad Autonoma de Baja California.

Formal notice of the grant award to the Board is anticipated from U.S. EPA prior to the Administration Committee meeting.

**II. PREVIOUS COMMITTEE ACTION**

There has been no previous Committee action on this item. The item is to be heard at the October Administration Committee meeting.

### III. OPTIONS FOR THE COMMITTEE

Committee members may decide to:

1. Approve the contract concept and award of contract to the City of San Diego.
2. Disapprove the contract concept and provide direction to staff.

### IV. STAFF RECOMMENDATION

Staff recommends that the Committee adopt Option 1, and recommend approval of Resolution 95-761, awarding a contract to the City of San Diego in the amount of \$80,000, pending the availability of federal grant funds.

### V. ANALYSIS

#### Background

The *San Diego-Tijuana Waste Wise* project is a public-private partnership focusing on economic and recycling market development, as well as providing waste reduction and waste management training for the border region's wastestream decision-makers. Conceived by the City of San Diego's Environmental Services Department, in conjunction with SAIC, the project's goals include:

- Gaining sufficient data to make informed decisions regarding materials in the border region wastestream. This will be accomplished through a landfill waste composition study and comprehensive waste generator surveys of *maquiladoras* and Otay Mesa, San Diego area businesses;
- Designing and providing waste reduction, hazardous and solid waste management training to Tijuana officials and college students from the Universidad Autonoma de Baja California which will develop ongoing technical skill and expertise in waste handling methodologies;

- Utilizing data obtained through waste composition and generator studies to maximize waste reduction and recycling in the *maquiladora* and other border region industries; and
- Creating an Internet Newsgroup which will consolidate existing waste management databases and make them available using the World Wide Web.

The *San Diego-Tijuana Waste Wise* project workplan was developed jointly by the City of San Diego's Environmental Services Department and Science Application International Corporation (SAIC), in cooperation with the California Environmental Protection Agency (Cal/EPA). A complete project workplan, accepted by U.S. EPA, is included with this item as Attachment 1.

Following EPA's conceptual approval of the grant in June, the Office of the Secretary requested the Board's participation as the formal grant applicant. The application was submitted to EPA, on behalf of Cal/EPA, at the end of June. Due to uncertainties both in the federal grant process and over EPA's budget, the application's status was unclear until mid-September. EPA Region 9 staff then told the Board to expect formal notification of the grant award by mid-October.

Key Issues

Federal grant funds (\$280,000) are matched by in-kind contributions of \$237,600 from the project partners. A summary of federal and partner contributions is provided in Table 1.

**Table 1 - Federal vs. Non-federal Contributions**

<b>Partner</b>	<b>Federal \$\$</b>	<b>In-kind \$\$</b>
CIWMB	0	30,000
City of San Diego	40,000	59,600
Eugene Tseng & Assoc	40,000	5,000
SAIC	200,000	93,000
City of Tijuana	0	50,000
<b>TOTAL</b>	<b>280,000</b>	<b>237,600</b>

As the direct recipient of the federal grant funding, the Board would be responsible for financial management of the project and, in conjunction with U.S. EPA, Region 9, for overall policy

direction. The City of San Diego will be responsible for the quality and quantity of tasks as they are being performed, and will oversee and monitor work performed by SAIC, and by Eugene Tseng and Associates. Table 2 summarizes the grant-funded responsibilities of the City of San Diego (SD), Eugene Tseng and Associates (ETA), and SAIC. Task numbers correspond to the Project Workplan (see Attachment 1).

Table 2 - Waste Wi\$e Project Responsibilities

Task	Description	SD	ETA	SAIC
1	Waste Stream Analysis			
1.1	Waste Composition Study of Tijuana Landfill	XX	XX	
1.2	Generator-based Waste Characterization of Maquiladora Industries and Otay Mesa Businesses	XX	XX	
2	Review and Identification of Border Region Recyclers	XX		XX
3	Train-the-Trainers Education Program			
3.1	Develop and Compile Training Materials	XX		XX
3.2	Implement Train-the-Trainer Courses	XX		XX
4	Border Waste Wi\$e Implementation			
4.1	Onsite Technical Assistance Program	XX		XX
4.2	Develop "Border Waste Net On-line"	XX		XX
4.3	Border Waste Wi\$e Conference	XX		

Fiscal Impacts

This contract is contingent on the commitment and availability of federal grant funds. Staff from U.S. EPA, Region 9, have indicated their expectation that the Board will receive formal notification of the grant award in the second week of October.

The Board would provide overall project management on behalf of Cal/EPA and is committed, under the grant application, to an in-kind contribution of \$30,000. Most of this contribution will be fulfilled through the Board's contract administration and financial management responsibilities. Additional in-kind support could be provided through the Local Assistance and Planning Division, related to the waste analysis tasks; the Waste Prevention and Market Development Division could provide

---

technical assistance in the business waste reduction assessments and related tasks.

A Section 28 request to augment the Board's spending authority to include the \$280,000 has been submitted to Cal/EPA and the Department of Finance. Action on the request is pending Board approval of the contract concept and notification of the grant award from U.S. EPA.

**VI. ATTACHMENTS**

1. San Diego-Tijuana Border Waste Wise Program Workplan
2. Resolution No. 95-761

**VII. APPROVALS**

Prepared By:	<u>Chris Peck</u> <i>CP</i>	Phone:	<u>255-2427</u>
Reviewed By:	<u>Caren Trgovcich</u> <i>CT</i>	Phone:	<u>255-2700</u>
Reviewed By:	<u>Marie LaVergne</u> <i>MLV</i> 10/6/95	Phone:	<u>255-2269</u>

ENVIRONMENTAL TECHNOLOGY INITIATIVE  
PROJECT: SAN DIEGO-TIJUANA BORDER WASTE WISE PROGRAM

WORKPLAN

1.0 INTRODUCTION

Project Partners:

City of San Diego

Science Applications International Corporation

Municipality of Tijuana

California Integrated Waste Management Board

San Diego and Tijuana together form a region of over four million people. This project addresses increasing shortages of landfill space on both sides of the border and the economic and environmental opportunities available through waste reduction and recycling. With new data obtained through the *San Diego-Tijuana Waste Wise Program*, the region will be viewed as having a common wasteland with the benefits that the "untapped" industrial *maquiladora* sector of Tijuana offers in the area of recyclable commodities realized statewide and nationally.

This project focuses on pollution prevention and will produce data housed in a computer network form that can be continually updated. It will provide key Tijuana officials and community members with the training to better implement the necessary waste reduction and recycling programs both for pollution prevention in the border region and for area businesses to benefit from the availability of materials.

Project Overview

The first stage of the project will be to determine the contents of Tijuana's wastestream. This portion of the program will include a waste composition study of Tijuana's only landfill as well as a generator-based waste characterization study of the city's *maquiladora* sector. A characterization study of several businesses in the Otay Mesa area of San Diego will also be included in this section. Specific data will be obtained on materials disposed of in the landfill as well as on several industrial facilities' wastestreams using methods developed for the State of California's Integrated Waste Management Board. These methods will be adapted to fit special circumstances in Tijuana<sup>1</sup>.

---

<sup>1</sup>These methods are being developed by Dr. Eugene Tseng, who will support this project under contract to the City of San Diego.

The landfill waste composition study will identify and quantify all materials being disposed of in Tijuana. This will be an important tool to determine which materials should be targeted in the maquiladora industry that will be examined, as well as for the city of Tijuana to use in the structuring of any other municipal recycling programs.<sup>2</sup>

Prior to and following the landfill study, training sessions will take place involving all parties. Students from the Universidad Autonoma de Baja California as well as officials from Tijuana will be trained by Dr. Tseng on waste composition study and generator-based waste characterization study techniques and methods. Science Applications International Corporation will provide the students with the industry assistance training they will need for subsequent parts of the program. This portion will focus on using the data obtained through the waste generation surveys and audits of specific facilities' manufacturing processes to suggest improvements in the handling of their waste. The training will consist of three 3-day sessions.

An important component of the program will be to examine demographic information for the region as well as the existing recycling infrastructure in the border region. Information on recycling companies (collectors, processors, and brokers) in Tijuana and San Diego's South Bay will be compiled to determine what companies and municipal programs now serve the area. Any existing reports on waste tonnages or other information will be considered as overall background data when the project studies are conducted.

A key aspect of this program is encouraging waste reduction, recycling and affirmative procurement through an aggressive onsite technical assistance program directed towards Border businesses. This program will include waste reduction assessments and support, including training and follow-up activities. Onsite assessments will also help improve the accuracy of the waste characterization data.

The information that the studies provide will be aggregated, formatted and put into a computer database in the form of a Home Page on the World Wide Web which will be continually updated. It will be utilized by companies and individuals both locally and globally to locate specific materials that otherwise would go unrecognized and destined for landfill disposal instead of being reused. The data will form the basis for the first Binational Recycling Market Development Zone which will work to promote San Diego and Tijuana as a region with a large population base rich in recyclable materials for industrial purposes.

---

<sup>2</sup>Although, for health and safety reasons, the Project Team will be unable to give detailed characterization of the hazardous wastestream, identification of these waste streams, based on visual studies, will be provided wherever possible.

The work program is described in Section 2.0.

Section 3.0, Program Management, describes the management approach and responsibilities of the project partners. Section 4.0, Project Schedule, contains the projected schedule for the tasks and subtasks.

## 2.0 WORK PROGRAM

This work program includes four major tasks: 1) Waste stream analysis, 2) Recyclers identification, 3) Train-the-trainers education program, and 4) Border Waste WiSe implementation. For each task, the goal and specific objectives, subtasks and deliverables are stated.

### 2.1 Task 1 - Waste Stream Analysis

#### Goal

The project partners, lead by the City of San Diego (the City) with contract assistance from Eugene Tseng and Associates, will conduct a waste stream analysis. The goal of this analysis is to gain sufficient data of the waste stream to make informed decisions regarding waste reduction and recycling in the Border region.

Data will be collected in order to determine the waste streams that should be priorities for waste reduction and recycling. Although the analysis will focus on nonhazardous solid wastes, the potential types of hazardous wastes entering the Tijuana landfill will be listed and quantified, if possible. This information will help identify hazardous wastes that should be diverted through waste reduction, recycling and proper treatment and disposal. The waste stream analysis will be a preliminary baseline, and not definitive. The focus will be on identifying wastes that are candidates for reduction and recycling.

#### 2.1.1 Subtask 1.1: Waste Composition Study of Tijuana Landfill

The City, with assistance from Eugene Tseng and Associates, will conduct a waste composition study of the Tijuana landfill.

#### Objective

The objective of this subtask is to conduct a landfill study based on the methodology developed by California's Integrated Waste Management Board with contract assistance from Dr. Eugene

Tseng. The study will characterize a portion of what enters the landfill during the season when the sorts actually take place. Students and instructors from the University of California at Los Angeles and Tijuana's Universidad Autonoma de Baja California, who will have had training on the various protocols of such studies, will provide supervision and labor to complete the work.

Due to Tijuana's lack of procedures to screen hazardous material from the landfill, efforts to identify in detail the types of wastes here may pose health and safety risks to the team. Therefore, hazardous wastes will be identified and quantified by visual sorts only. If it is determined upon an initial site visit that these types of wastes are present in sufficient quantity to place the team members who are conducting the general sorts in danger, the methodology will be modified to base the study on visual sorts only. In any case, those officials and students involved in the studies will receive the proper training to handle either scenario.

### Technical Approach

The study itself will employ the following outline in its technical approach: (This is the standard protocol that will be used in all California jurisdictions. It will be used here to assure the integrity of the data and to remain consistent with those jurisdictions.)

- Health and Safety Protocols (Equipment and Plan)
- Uniform Materials Definitions (CIWMB 6/95 Draft version)
- Waste Characterization Protocols (Proposed CIWMB/USEPA) (i.e., Sampling, Physical field sorts, Visual sorts Highest/Lowest Common Denominator, Materials Disaggregation/Aggregation Protocols, and Rule for Composite Materials)

The landfill study will be divided by sectors: residential and nonresidential.

### Deliverables

The study will produce quality assured data that will contain specific information on material type and quantity. Material types will be listed by quantity and correlated with industry subpopulations. These subpopulations (based on U.S. Standard Industry Codes (SIC)) will be matched as close as possible with any similar Mexican SIC's.

## 2.1.2 Subtask 1.2: Generator-Based Waste Characterization of Maquiladora Industries and Otay Mesa Businesses

### Objective

The objective of this subtask will be to estimate the types and amounts of wastes available for waste reduction and recycling generated by these industries.

For both the Maquiladora industries in Tijuana and the Otay Mesa businesses in the San Diego area, Eugene Tseng and Associates, with assistance from SAIC, will prepare a waste stream characterization report. The report will quantify solid waste generation for major generating industries. Priority industries will be identified prior to conducting the survey. The goal would be to provide estimates to quantify a majority of the total solid waste stream (i.e., 60 to 90%). Solid waste generation data will be provided by type of industry and by type of waste. Major waste streams that will be focused on will include plastics, paper, cardboard, wood, etc. Based on the landfill waste composition study, types of hazardous waste that are found in the Tijuana landfill will be identified. With this information, the partners will identify the Maquiladora industries (but not specific businesses), that are generators of the types of hazardous wastes found in the landfill. Diverting these wastes from the landfill through source reduction, reuse and recycling will be a priority for the train-the-trainers sessions and technical assistance tasks and subtasks.

### Technical Approach

The following steps will be taken to characterize the waste stream.

- 1) Collect literature and existing information on the types, numbers and sizes (i.e., by number or range of employees) of Maquiladora and Otay Mesa businesses. This information will be obtained through Maquiladora associations, Otay Mesa business directories, the Cities of San Diego and Tijuana, and other sources.
- 2) Collect literature and existing studies and reports on solid and hazardous waste generation for these businesses. We anticipate that far more data will be available for the Otay Mesa businesses (e.g., city and county Solid Waste and Hazardous Waste Management Plans) than the Maquiladora industries.
- 3) Collect literature and existing studies and reports that characterize solid and hazardous waste generation for the types and sizes of businesses similar to those found along the border.

- 4) Develop an estimate of solid waste generation for each major Maquiladora and Otay Mesa industry populations. The major populations will be manufacturers, wholesalers and distributors. Within the manufacturers' population, major subpopulations may include electronics, metal finishing, food processing, etc. A standard reporting form will be developed that will be used for all data.

This estimate would be developed using the following methodology:

- a) Develop an estimate based on existing literature as described above.
- b) Verify and modify the estimate through onsite generator surveys (Stage 2 analysis, as described below). For example, if the literature search estimates that 25% by weight of a specific industry subpopulation's waste stream is cardboard, the generator surveys would help verify this percentage. It is anticipated that three to four businesses in each industry sector as identified in Step 4 will be surveyed. The survey will involve observing materials use and waste generation. Purchasing records may be reviewed.

Step (4)(b) will be completed under Task 4 in combination with the waste reduction assessment activities.

- 5) Compile and enter industry waste generation data for each major waste stream selected.

#### Deliverables

- Preliminary generator-based waste characterization reports (Stage 1)
- Final generator-based waste characterization reports (Stage 2)

A waste stream characterization report will be prepared. The generator-based waste characterization study for the Maquiladora industries and the Otay Mesa businesses will be accomplished in two stages: Stage 1, based primarily on existing literature of the industries, will be completed early on in the project, to identify a general profile of the waste stream which will help establish priorities for the waste reduction assessment subtask (see Task 4) and further waste stream characterization; Stage 2, will improve upon the preliminary data by supplementing it with the results of the onsite waste reduction assessments performed under Task 4. As described above, a subset of the waste reduction assessments will include detailed waste stream characterization in order to accomplish this objective.

## 2.2 Task 2: Review and Identification of Border Region Recyclers

### Goal

This task's goal is to identify existing recyclers in Tijuana and the San Diego Border region. This information will be made available to Border region businesses and others via the Border Waste Net On-line (see Task 4).

### Technical Approach

The listing of recyclers will be based on readily available information. After grant award, SAIC will organize a meeting with the Cities of San Diego and Tijuana in order to collect existing lists of recyclers. SAIC will supplement this information with readily available new listings of recyclers (principally from the "Yellow Pages") and then standardize the lists so that they contain similar information and are presented consistently.

### Deliverables

- Listing by material of Baja California recyclers
- Listing by material of U.S. San Diego Border Region recyclers

## 2.3 Task 3: Train the Trainers Education Program

### Goal

The project partners, lead by SAIC, will develop and implement a train-the-trainers education program in order to give Tijuana officials, trade association representatives, and college students the tools and information to support the waste stream analysis, technical assistance, and waste assessment tasks of the Border Waste Wi\$e Program (Tasks 1 and 4).

The goal of this task is to develop and provide waste management and reduction training to Tijuana officials and college students from the Universidad Autonoma de Baja California that will enable attendees to support the Border Waste Wi\$e Program and train and mentor others. Participants who attend the training sessions will become Border Waste Wi\$e Assistance Team (BWWAT) members. Each team member who attends Day 1 and/or Days 2 and 3 of the workshop will receive a certificate of completion. Team members who contribute a minimum of 40 hours of volunteer support for the program (not including the initial train-the-trainers session) in the areas of training, waste stream analysis or technical assistance will receive of a certificate of appreciation from Border Waste Wi\$e Project Partners.

The technical skills and expertise obtained from the training sessions will help attendees sustain waste reduction activities after implementation of this ETI grant. The training materials, which will be compiled into a coursebook, could also assist similar training activities in other border regions.

### 2.3.1 Subtask 3.1: Develop and Compile Training Materials

This subtask has the following objectives.

#### Objectives

1. Develop bilingual training materials on methodologies used to conduct landfill waste composition studies, waste generator studies and waste reduction assessments of the maquiladora industries.

#### Technical Approach

The training materials will be based as much as possible on existing materials. Upon grant award, a bibliography of existing materials will be compiled and reviewed by the project partners.

#### **AGENDA**

A preliminary agenda for the training sessions, including the organizations that will contribute to topics, is shown below:

Day 1

- I. INTRODUCTIONS AND OVERVIEW OF BORDER WASTE WISE PROGRAM AND TRAINING SESSION (Cities of San Diego and Tijuana, SAIC, Maquiladora Trade Association Representatives).
  - Opening Remarks
  - Introductions
  - Overview of Border Waste Wi\$e Program focusing on Team Member Responsibilities and Benefits
  - Overview of Training Session and Objectives

## AGENDA (continued)

### II. CONDUCTING LANDFILL WASTE COMPOSITION STUDIES (Eugene Tseng and Associates, Cities of San Diego and Tijuana)

- Health and Safety Protocols
- Uniform Materials Definitions (CIWMB 6/16/95 Draft Version)
- Waste Characterization Protocols (Proposed CIWMB/USEPA)
  - Sampling protocols
  - Physical field sort protocols
  - Visual sort protocols
  - Highest/lowest common denominator
  - Materials disaggregation/aggregation protocols
  - Rule for composite materials

### III. CONDUCTING A GENERATOR-BASED CHARACTERIZATION STUDY OF MAQUILADORA AND OTAY MESA INDUSTRIES (Eugene Tseng and Associates, and Cities of San Diego and Tijuana)

- Overview of Maquiladora and Otay Mesa Industries and Wastes
- Health and Safety Protocols
- Uniform Materials Definitions (CIWMB 6/16/95 Draft Version)
- Waste Characterization Protocols (Proposed CIWMB/USEPA)
  - Sampling protocols
  - Physical field sort protocols
  - Visual sort protocols
  - Highest/lowest common denominator
  - Materials disaggregation/aggregation protocols
  - Rule for composite materials

Day 2

### I. INTRODUCTIONS AND OVERVIEW OF BORDER WASTE WISE PROGRAM AND TRAINING SESSION<sup>3</sup> (cities of San Diego and Tijuana, SAIC, Maquiladora Trade Association Representatives)

- Opening Remarks

---

<sup>3</sup>Because some new Team Members may attend this session, this part of the agenda will be repeated from Day 1 of the session.

## AGENDA (continued)

- Introductions
- Overview of Border Waste Wi\$e Program focusing on Team Member Responsibilities and Benefits (e.g., responsibilities: technical assistance, training others; benefits: training, experience, solving problems, potential educational credit)
- Overview of Training Session and Objectives

## II. INDUSTRY SPECIFIC WASTE REDUCTION AND RECYCLING METHODS

- Defining Waste Reduction, Recycling, Recycled Products Procurement and Associated Benefits
- Role of Project Partners and Participants in Industry Specific Waste Reduction and Recycling
- Overview of Current Waste Reduction, Recycling Practices and Infrastructure in Border Region
- Industries Targeted for Technical Assistance
  - Industries (e.g., electronics, distribution, metal fabrication, metal finishing/plating)
  - Why were these industries selected?
  - Review and comparison of environmental and waste management laws and regulations that apply to Maquiladora and Otay Mesa Industries
- Goals and Objectives of Technical Assistance (see section 2.4 for more details)
  - Increase waste reduction and recycling
  - Assist industry in addressing waste-related problems and opportunities through waste reduction and recycling (e.g., reducing raw material and waste disposal costs, reducing hazardous wastes that could potentially enter the solid waste stream)
  - Increase industry understanding and interests in waste reduction, recycling, recycled products procurement
  - Collect information on materials use, waste generation, reduction and recycling activities in order to supplement and improve the reliability of data collected during waste stream study and recyclers identification tasks
  - Promote Border Waste Wi\$e Net on-line system and encourage businesses to participate in the program (i.e., by agreeing to supply data and investigate opportunities for waste exchanges with other businesses and for recycled products procurement through the Net)
- What is a Waste Reduction and Recycling Opportunity Assessment?
  - Baseline development (materials and wastes)
  - Waste reduction and recycling opportunities
  - Ranking and implementation (emphasis on solving business waste-related problems)

## AGENDA (continued)

- Case Study: Electronics Firm
  - Overview of processes, materials purchased, solid and hazardous wastes generated, and environmental/economic issues
  - Major waste reduction, recycling and procurement opportunities, technologies and methods
- Case Study and Facilitated Exercise of Conducting an Opportunity Assessment: Distribution Business (small groups formed for exercise; handouts provided)
  - Baseline development (materials and wastes)
  - Waste Reduction and recycling opportunities
  - Ranking and implementation (emphasis on solving business waste-related problems)
- Case Study and Facilitated Exercise of Conducting an Opportunity Assessment: Metal Fabrication Business (same training method as above)
- Schedule and Responsibilities for Facility Assessments during Day 3

### Day 3

- Facility Assessments
- Wrap-up Session

SAIC's project manager, Mr. Thomas Jensen, after award of the grant, will meet with the City's staff and Mr. Eugene Tseng to develop a specific course agenda and ideas on the types of businesses to visit. Prior to the course, SAIC, with assistance from Eugene Tseng and Associates will provide the City with a draft version of the training coursebook for review. Upon receipt of comments, SAIC and Eugene Tseng and Associates will provide the City with one camera-ready version of the coursebook. The City will be responsible for reproducing the coursebook which will be made available to course participants.

The coursebook will include overheads for specific presentations, case studies and exercises. These materials will be supplied in both Spanish and English. The coursebook will contain appendices of bilingual training materials on solid and hazardous waste management and reduction and related subjects compiled from existing sources.

### Deliverables

- Draft and final agendas
- Draft and final coursebooks (hard copy and disk [except appendices])

### 2.3.2 Subtask 3.2: Implement Train-the-Trainer Courses

This subtask includes the following training objectives. The courses would follow the agenda described under Subtask 3.1.

#### Objectives

1. Conduct one 3-day session to educate Tijuana officials in the current administration, Mexican university students and others (Maquiladora Trade Association representatives, San Diego State University students).
2. Conduct two 3-day sessions to educate entering Tijuana officials in the new administration and Mexican university students and others (Maquiladora Trade Association representatives, San Diego State University students).
3. Enable participants to support the Border Waste Wi\$e Program implementation, including waste composition studies, waste generator analysis, technical assistance and training and mentoring others.
4. Identify and motivate leaders and emerging leaders who can contribute to implementation of waste reduction and recycling and market development programs after this ETI project is completed.

#### Technical Approach

The approach will involve identifying and recruiting training program participants, making logistical arrangements, including procuring training facilities and equipment, mailing invitations, and holding a total of three, 3-day sessions. Because of the need to conduct the landfill waste composition study early in the project, the second and third course offerings, which will likely be held after the landfill composition study is initiated, will probably not address landfill composition methods. The second and third training sessions will, therefore, focus more on waste assessment methodologies and field activities.

The project partners and advisory committee will identify and recruit training program participants. Participants will include Tijuana officials in the current and new administrations, Mexican university students and Maquiladora Trade Association representatives. Although participants from these groups will be the priority, bilingual students from San Diego State University and other local universities and City and County of San Diego officials will be invited if space is available. Total enrollment for each session will be approximately 20 people.

The project partners and the advisory committee will have a number of initial suggestions for participants. In addition, the training program will be promoted through newsletters and announcements (e.g., university job placement centers). Minimum requirements for enrollment in the training program include a commitment to volunteer for Border Waste Wi\$e program activities (as described in Subtask 3.1) and educational/work experience in solid/hazardous waste management and reduction/recycling.

SAIC, in cooperation with the other project partners and the advisory committee, will schedule the training sessions. The training site will either be in Tijuana or San Diego. A public facility will be procured at no cost to the project. Refreshments will be provided, including coffee, tea, water, sodas. Lunch will not be provided.

The City of San Diego will perform the mailing to invites. SAIC, the City and other project partners and advisory committee members will help with telephone follow-up to ensure adequate attendance at the sessions.

The training sessions will be conducted following the agenda outlined in Subtask 3.1 as revised after award of the grant.

The third and final day of each train-the-trainer course will consist of conducting waste reduction assessments of Maquiladora and Otay Mesa businesses that volunteer to participate in the program. This session will enable course participants to practice the waste assessment and reduction skills learned during the course. SAIC and the other project partners and advisory committee members will schedule assessments with businesses. The 20 (approximate number) training session participants will be divided into three to four groups of between five and seven participants, each led by an SAIC trainer. Each group will conduct one to two assessments at businesses depending on the size and complexity of the facility and the number of businesses that volunteer.

The assessments will involve a pre-visit meeting with each group and trainer, a brief meeting with the facility contact, the facility assessment, debrief with facility contact, and review of lessons learned by group and trainer. After the facility assessments, each group will meet to review facility waste generation information collected, to identify and rank waste reduction priorities and to assign responsibilities for following up. Also, the group will discuss lessons learned from the facility assessments. Each participant will also be given an course evaluation form and Waste Wi\$e Team questionnaire to complete and note their observations. The questionnaire, which participants could complete either during the course (this will be preferred) or after (and mail to SAIC), will solicit their interests in particular Waste Wi\$e Assistance Team activities (like training and facility assessments).

The assessments completed during the training courses will help the project partners meet the technical assistance goals and objectives described under Task 4.

### Deliverables

- List of training course participants
- Completed course evaluation forms
- Completed Waste Wi\$e program questionnaires

## 2.4 Task 4: Border Waste Wi\$e Implementation

### Goals

1. Encourage waste reduction and recycling in the maquiladora and Otay Mesa industries through implementation of a technical assistance program.
2. Facilitate market development and waste exchanges by establishing an Internet Newsgroup which will consolidate existing waste management databases and make them available using the WorldWide Web.
3. Convene a Border Waste Wi\$e Conference.

This task, the focus of the Border Waste Wi\$e program, will provide an opportunity to pilot a technical assistance program that will include direct onsite waste reduction and recycling assistance to the maquiladora and Otay Mesa industries and a Border Waste-Net that will enable these industries to identify markets and buyers for secondary materials or opportunities for waste exchange. These two programs will complement each other in several ways. For example, the industry assistance program will provide an excellent opportunity to promote the Border Waste-Net and to encourage businesses to participate in the Border Waste-Net project. The Waste-Net will promote and advertise the onsite technical assistance program, including how to request assistance and providing online examples of assessment reports.

This task will also collect generator-based waste characterization data in order to complete the waste characterization report outlined under Subtask 2.2.

### 2.4.1 Subtask 4.1: Onsite Technical Assistance Program

This program will have the following objectives.

## Objectives

1. Provide onsite waste reduction and recycling assistance to the maquiladora industry through the Western Maquiladora Association and the Tijuana Maquiladora Association.
2. Conduct 25 to 40 waste reduction assessments of individual maquiladoras (specific industries to be identified in conjunction and with the assistance of the maquiladora associations).
3. Conduct 10 to 20 waste reduction assessments of Otay Mesa (U.S.) industries.
4. Identify potential users of reusable (and suppliers) and/or recyclable products in the border region (U.S. and Mexico).
5. Collect additional generator-based waste characterization data.

Specifically, the waste reduction assistance provided primarily through assessments will:

- Increase waste reduction and recycling
- Assist industry in addressing waste-related problems and opportunities through waste reduction and recycling (e.g., reducing raw material and waste disposal costs, reducing hazardous wastes that could potentially enter the solid waste stream)
- Increase industry understanding and interests in waste reduction, recycling, recycled products procurement
- Collect information on materials use, waste generation, reduction and recycling activities in order to supplement and improve the reliability of data collected during waste stream study and recycling infrastructure tasks
- Promote the Border Waste Net and encourage businesses to participate in the piloting of the program (i.e., by agreeing to supply data and investigate opportunities for waste exchanges and with other businesses and for recycled products procurement through the Net)

## Technical Approach

The waste reduction assessment program will pair SAIC engineers and scientists and Eugene Tseng and Associates staff with Border Waste Wi\$e Assistance Team members who complete the training course. Unless it is not possible, on each onsite assessment, one to two BWWAT members will accompany the SAIC or Eugene Tseng and Associates engineer or scientist.

Scheduling and conducting the assessments will involve a five step approach.

- Step 1: Identify participating businesses through the Western and Tijuana Maquiladora Associations and other organizations. Businesses would sign a letter releasing the project partners from any liability associated with the assessment. SAIC has found that this procedure does not dissuade businesses from participating in assessment programs. Unless use of the business name is approved in writing by the manager or owner, it would not be disclosed on any follow-up documentation that becomes public.
- Step 2: Schedule assessment visit
- Step 3: Schedule BWWAT member
- Step 4: Conduct onsite assessment. Each assessment will involve a previsit meeting or telephone call between the SAIC staff person and the BWWAT member(s) to discuss the business and the scope of the assessment based on the type of business and the issues that the business believes are important. Assessments would follow the approach presented in the training sessions. Once at the facility, a brief meeting will be held with the facility contact prior to the assessment. Assessments will take between four and eight hours depending on the size and complexity of the facility. Following the assessment, the assessment team will debrief with facility contact on findings and any immediate recommendations and identify follow-up activities. review facility waste generation information collected, to identify and rank waste reduction priorities and to assign responsibilities for drafting the assessment reports, if applicable, and following up with the facility.
- Step 5: Follow-up. Follow-up will occur in one or more ways depending on the needs of the businesses and project.

Detailed reports will be prepared for eight industry sub-populations (e.g., Printed Circuit Board Assembly). These reports, approximately 10 to 15 pages, will present and evaluate the technical and economic feasibility of specific reduction and recycling methods and technologies. These reports will serve as case studies for other businesses within the industry subpopulation.

These reports will be provided in draft and final to the business and the City.

For other businesses, the follow-up will include: 1) a brief assessment report (approximately one to two pages) which will be prepared and submitted to the business (draft and final); or, 2) Where a sector report has been prepared for the type of business, it may be more appropriate to spend more time following up with the

facility than writing a report; and/or 3) Providing informal training sessions to groups of similar businesses on waste reduction and recycling practices. A brief training report will be prepared for each training session.

For each facility assessment, a standard worksheet will be completed that will contain information on the type of business, number of employees, materials use, waste stream, current reduction, recycling and disposal practices, opportunities for improvement, and potential for participating in the Waste Net project. This worksheet is a standard form that will be completed by hand (English or Spanish).

In addition, during the course of the project, brief success stories (one page or less) will be prepared to demonstrate the benefits of the technical assistance program to businesses, project partners, the advisory committee and the public.

### Deliverables

- Sector assessment reports
- Facility-specific assessment reports
- Training reports
- Assessment worksheets
- Success stories

#### 2.4.2 Subtask 4.2: Develop "Border Waste Net On-line"

### Objectives

The Border Waste Net On-line concept provides a readily accessible information source for San Diego/Baja region businesses, recyclers, waste disposal firms, policy makers and the public which will address the generation, management, reduction, recycling and disposal of wastes in the area. The main idea behind Border Waste Net is to attract out-of-town recyclers to the San Diego region by identifying maquiladora feed stock in Tijuana.

Waste Net will employ the rapidly growing and dynamic Internet World Wide Web (WWW) technology to provide access to the information in an easy to use, real-time and "all the time" format via a standard connection to the Internet.

The Internet's "WWW" interface technology makes it easy for novice computer users to access a large amount of useful information about many subjects by dialing up an Internet connection through a local Internet access provider. The inclusion of Internet browsing capabilities in the

latest versions of personal computer operating system software make usage of this system quite easy.

Because of the already vast and continually growing amount of information present on the Internet in this area, Waste Net will primarily concentrate on being a regionally oriented "meta-index" to this existing (and growing) database of waste stream knowledge.

The success of the effort will center primarily in the development of access for regional users. In order for this to be a useful service, it is necessary that the concept of on-line information be introduced into the waste management and recycling industry in the area. This introduction, and eventual successful use, will depend on providing a simple mechanism for users to gain access, a simple user interface, and dynamic, relevant data and information within the system.

The Waste Net On-line system development effort will concentrate on three areas: (1) design and implementation of an easy to use and graphically pleasing information system consisting of the on-line data and other relevant information presented in a multimedia format, (2) assistance to the proposed end-user audience in obtaining and setting up the necessary computer and telecommunications capabilities in order to make use of the system, and (3) training of these users in how to best employ the system in their day-to-day business activities.

Content of the on-line system will consist of relevant local and regional information not available elsewhere and "hypertext" links to other existing information sources currently available on the Internet which relate to recycling, environmental concerns and waste stream management. Some examples of these are shown in the attached figures.

#### Technical Approach

To provide the necessary information system, the SAIC Information Management Laboratory will design and implement an Internet Information Server. This server will consist of a hypertext transport protocol ("http") server application running on a server computer located at the laboratory and connected to the Internet via SAIC's existing T1 (1.44 megabit per second) data lines. Content on this server will consist of a "home page" for the Border Waste Net site (the Internet address "[www.wastenet.org](http://www.wastenet.org)" has been reserved for the site), other pages containing local information content and hypertext links to other related sites on the Internet, and mechanisms for the users of the site to interact with the site maintainers and other users of the Information Server. These mechanisms include such things as e-mail and an Internet "listserver", which is a type of a bulletin board service ("BBS").

SAIC's Information Management Laboratory staff consists of approximately 8-12 full and part time personnel who are experienced in the design and implementation of Internet Information Services. This staff includes management, programmers, graphic artists, copy editors and information researchers. The lab has an active program to involve students from local colleges and universities as interns to enhance their educational experience by providing direct workplace experience. The IML also has access to the entire SAIC Information Technology Systems staff (over 300 professionals) as needed to solve programming, networking, hardware, or software applications related problems.

Local content suggested for inclusion would be:

- Local and regional recyclers and waste disposal businesses (sort of an on-line recycling "Yellow Pages")
- Local and regional regulatory and governmental points of contact and information
- Regional demographic and land use/geographic data (perhaps obtained from San Diego City's RUIS geographical information system database)
- Maquiladora "Yellow Pages"
- Waste stream composition data from the Tijuana landfill

Other suggested content:

- Links to existing material exchange and recycling operations on the Internet
- Links to state, federal and international environmental and waste management information and sites, such as CalEPA and the EPA
- Links to hazardous material databases and information
- Event calendar for meetings, etc. of local interest

Due to the rapid growth of the Internet as an information delivery system, additional content and functionality, currently not envisioned, will present itself during the course of this project. For instance, an interesting mechanism for buying, selling and trading recycled materials is just currently being developed (see Attachment 1). Border Waste Net On-line may wish to participate in this trading system at some point. Additionally, as the proposed "InfoSanDiego" electronic public information system is deployed, the potential audience for the information contained on the Border Waste Net site may expand considerably. Because of this projected growth and potential opportunities, some time and manpower has been allocated to respond in a flexible manner to such opportunities.

SAIC, in consultation with other project partners, will design, construct and implement the information database served by the Internet site. This task includes the markup of the "web"

pages, design of the information system and the user interface. The end users will employ commercially available ("off the shelf") Internet Web browsers, such as the Netscape Communications' Navigator, the Microsoft Network browser and the various implementations of NCSA Mosaic. The development of the user interface will be primarily concerned with the construction of the pages such that they are easily and effectively used by this client software. The client software (e.g., the Web browsers) is readily available to the user audience either commercially at low cost or through public domain software sites on the Internet.

This project will not provide either Internet access nor dial-up service into the Border Waste Net site. Internet access can now be obtained in both Tijuana and San Diego in a cost effective manner by the individual end users from various national and local Internet providers. SAIC will, however, provide two training sessions for the end user audience in how to effectively use the Internet to access relevant recycling and environmental information. These sessions will consist of half-day seminars conducted at locations to be determined in the San Diego/Tijuana area.

SAIC IML will maintain and update the Border Waste Net site during the course of this project. Maintenance of the site after the end of this contract is to be determined. Maintenance of the site includes the answering of e-mail inquiries related to the content of the site, weekly backup of the data contained on the server computer's disk system, maintenance of the listserver system, and weekly updating of the information content of the site. SAIC will provide the necessary computer and telecommunications equipment and facilities to host the http server and listserver systems. The equipment will be sized appropriately to handle the anticipated use of the system by the user audience.

#### Deliverables

- Design, develop and implement an http information server containing relevant recycling, environmental and waste stream information for the San Diego/Tijuana region. Implement an e-mail and listserver response and feedback system to allow interaction between Waste Net users and the project participants.
- Identify, develop and database relevant local, regional, national and international content for inclusion into the information system. This content may be textual, tabular, graphical and/or multimedia.
- Develop the materials for and conduct two half-day training sessions in the San Diego/Tijuana area for the end user audience. These will consist of "hands-on" sessions in the use of Internet technology and specific guidance in the location and use of environmental and recycling related resources available on the Internet, including the Border Waste Net site.

- Maintain and update the Information Server over the course of the project. This includes scheduled backup of the information, routine e-mail response and the updating of the server information to reflect changes and/or additions to the contained content.

#### 4.4 Subtask 2.4: Border Waste WiSe Conference

##### Objective

This conference will provide the various stakeholders in Border waste reduction, recycling and market development with an opportunity to learn about the Border Waste WiSe program and its findings and results.

##### Technical Approach

The City of San Diego will convene this conference. This will include establishing the agenda, specific panels and presentations, inviting speakers and attendees. The conference will be held in the San Diego/Tijuana region. Other project partners will be invited to participate.

##### Deliverables

- Border Waste WiSe Conference

### 3.0 PROGRAM MANAGEMENT

There are five separate entities responsible for the success of the San Diego-Tijuana Waste WiSe Program in addition to the overall Project Officer for the U.S. Environmental Protection Agency. While each entity will have a specific person assigned to managing either the overall project or a specific subtask, it will be each entity's responsibility to keep the project within budget, within the appropriate timeline, and to ensure the quality of the deliverables. The following six (6) people will have primary responsibility for the project:

Dona Orebic  
U.S./Mexico Border Coordinator  
Hazardous Waste Management Division

U.S. EPA Region IX

Chris Peck  
Ombudsman  
Executive Office

CIWMB

Yvonne Williams  
Border Environmental Affairs Manager  
Environmental Services Department

City of San Diego

Thomas Jensen  
Manager  
Environmental Policy and Planning Group  
San Francisco Regional Office

SAIC

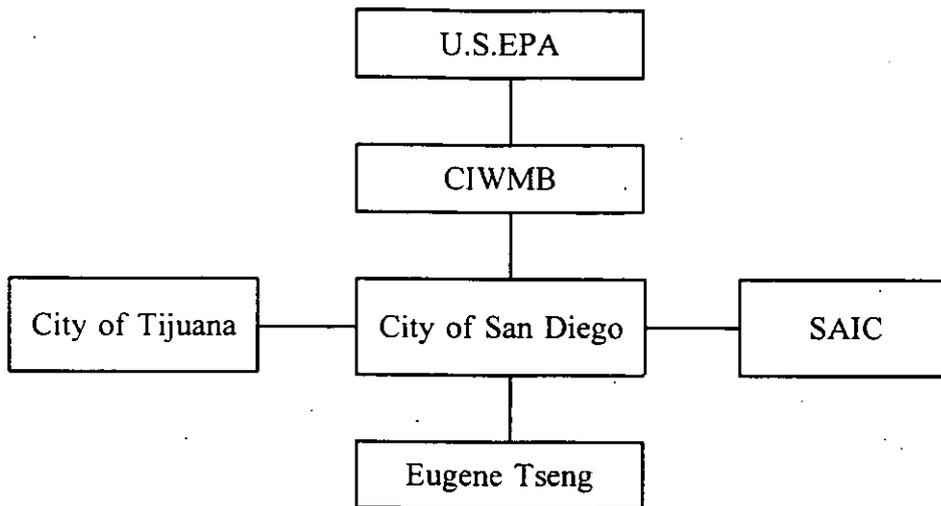
Dr. Eugene Tseng  
President

Eugene Tseng and Associates

Arq. Zeferino Sánchez  
Director  
Public Works and Services Department

City of Tijuana

### 3.1 ORGANIZATION CHART



### 3.2 Roles and Responsibilities

The California Integrated Waste Management Board (CIWMB) will be responsible for the financial management of the grant and general policy. As the Project Manager identified by the CIWMB, Chris Peck will review grant expenditures as well as the specific deliverables associated with each task identified in the grant.

The City of San Diego will be responsible for the quality and quantity of tasks as they are being performed and will take on the responsibility of oversight and monitoring of the work performed by both Science Applications International Corporation and Eugene Tseng and Associates. Yvonne Williams will be in weekly contact with Chris Peck and will report on the progress of both firms by subtask. Additionally, Ms. Williams will report on all activities performed by City of San Diego employees and the Municipality of Tijuana particularly involving the design and implementation of the San Diego/Tijuana Waste WiSe Conference.

Science Applications International Corporation will be responsible for the supervision and performance of all tasks and subtasks associated with the Train-the-Trainers component of the grant. review and identification of recyclers, technical assistance and auditing programs and the development of the Border Waste Net on-line system. Thomas Jensen, SAIC's Project Manager, will also assume responsibility for working with Eugene Tseng to conduct the waste characterization study, to identify the existing recycling infrastructure in Tijuana and to provide the waste composition and generation portions of the training.

Eugene Tseng and Associates will assume responsibility for the waste composition, and the generator-based characterization study. He will work with SAIC in providing appropriate training in the above areas as a part of the Train-the Trainers component.

The City of Tijuana will be responsible for providing municipal employees to participate in all field work and to cooperate with the Universidad Autonoma de Baja California in obtaining student assistance. The municipality will also provide all available solid waste and recycling data on Tijuana to the Project Team as necessary.

The Western Maquiladora Association and the Tijuana Maquiladora Association will be engaged in the project. SAIC and other project partners will meet with representatives from these organizations in August 1995 to discuss the project and their potential role.

The project partners will also meet with representatives of the National Institute of Ecology to discuss their role. This agency has already expressed strong interest in the project.

#### 4.0 PROJECT SCHEDULE

The exhibit on the following pages shows the project schedule.

Project Schedule  
U.S. Government Fiscal Year 1995-1996

Task/Subtask	October	November	December	January	February	March	April	May	June	July	August	September
Task 1: Waste Stream Analysis												
Subtask 1.1 Landfill Composition Study			█									
Subtask 1.2 Waste Characterization Study					█							
Stage 1 Report					█							
Stage 2 Report							█					
Data Processing									█			
Task 2: Identification of Recyclers	█											
Task 3: Train-the-Trainers Program												
Subtask 3.1 Training Coursebook	█											
Subtask 3.2 Workshop No. 1		█										
Workshop No. 2				█								

Project Schedule  
 U.S. Government Fiscal Year 1995-1996  
 (continued)

Task/Subtask	October	November	December	January	February	March	April	May	June	July	August	September
Workshop No. 3					■							
Task 4: Border Waste Wi\$e Implementation					■							
Subtask 4.1 Technical Assistance					■	■	■	■	■			
Subtask 4.2 Border Waste Net								■	■	■	■	■
Subtask 4.3 Border Waste Wi\$e Conference									■	■		

**CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD**

**RESOLUTION 95-761**

**APPROVAL OF CONTRACT AWARD FOR**

**BINATIONAL SAN DIEGO-TIJUANA WASTE WISE PROGRAM**

**OCTOBER 24, 1995**

**BE IT RESOLVED**, that the Board hereby authorizes a contract with the City of San Diego for the work outlined in the "San Diego-Tijuana Border Waste Wise Project Workplan." The contract amount shall not exceed \$80,000.

**CERTIFICATION**

The undersigned Executive Director of the California Integrated Waste Management Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the California Integrated Waste Management Board on October 24, 1995.

Dated:

Ralph E. Chandler  
Executive Director

CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

RESOLUTION 95-761

APPROVAL OF CONTRACT AWARD FOR

BINATIONAL SAN DIEGO-TIJUANA WASTE WISE PROGRAM

OCTOBER 24, 1995

BE IT RESOLVED, that the Board hereby authorizes a contract with the City of San Diego for the work outlined in the "San Diego-Tijuana Border Waste Wise Project Workplan." The contract amount shall not exceed \$80,000.

CERTIFICATION

The undersigned Executive Director of the California Integrated Waste Management Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the California Integrated Waste Management Board on October 24, 1995.

Dated:

Ralph E. Chandler  
Executive Director

**CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD**

Administration Committee  
October 17, 1995

**AGENDA ITEM 3**

**ITEM:** CONSIDERATION OF CONTRACT CONCEPT AND APPROVAL OF AWARD TO SCIENCE APPLICATIONS INTERNATIONAL CORPORATION (SAIC) FOR IMPLEMENTATION OF BINATIONAL SAN DIEGO-TIJUANA WASTE WISE PROGRAM

**I. SUMMARY**

This contract concept and proposed award of contract implements a grant workplan approved by the U.S. Environmental Protection Agency (EPA) under the federal Environmental Technology Initiative (ETI). The *San Diego-Tijuana Waste Wise* project is a public-private partnership focusing on economic and recycling market development, as well as providing waste reduction and waste management training for the border region's wastestream decision-makers.

The proposed grant, from the U.S. EPA to the Board, is for \$280,000, all of which would be disbursed by the Board as contract funds. This item would authorize a contract with Science Applications International Corporation (SAIC) in the amount of \$200,000. Item 2 on the Committee's agenda would authorize a contract with the City of San Diego for the remaining \$80,000 of the grant funds.

In addition to the Board, City of San Diego, and SAIC, project partners include San Diego State University, the City of Tijuana, and the Universidad Autonoma de Baja California.

Formal notice of the grant award to the Board is anticipated from U.S. EPA prior to the Administration Committee meeting.

**II. PREVIOUS COMMITTEE ACTION**

There has been no previous Committee action on this item. The item is to be heard at the October Administration Committee meeting.

### III. OPTIONS FOR THE COMMITTEE

Committee members may decide to:

1. Approve the contract concept and award of contract to SAIC.
2. Disapprove the contract concept and provide direction to staff.

### IV. STAFF RECOMMENDATION

Staff recommends that the Committee adopt Option 1, and recommend approval of Resolution 95-762, awarding a contract to Science Application International (SAIC) in the amount of \$200,000, pending the availability of federal grant funds.

### V. ANALYSIS

#### Background

The *San Diego-Tijuana Waste Wise* project is a public-private partnership focusing on economic and recycling market development, as well as providing waste reduction and waste management training for the border region's wastestream decision-makers. Conceived by the City of San Diego's Environmental Services Department, in conjunction with SAIC, the project's goals include:

- Gaining sufficient data to make informed decisions regarding materials in the border region wastestream. This will be accomplished through a landfill waste composition study and comprehensive waste generator surveys of *maquiladoras* and Otay Mesa, San Diego area businesses;
- Designing and providing waste reduction, hazardous and solid waste management training to Tijuana officials and college students from the Universidad Autonoma de Baja California which will develop ongoing technical skill and expertise in waste handling methodologies;
- Utilizing data obtained through waste composition and generator studies to maximize waste reduction and recycling in the *maquiladora* and other border region industries; and

- Creating an Internet Newsgroup which will consolidate existing waste management databases and make them available using the World Wide Web.

The *San Diego-Tijuana Waste Wise* project workplan was developed jointly by the City of San Diego's Environmental Services Department and Science Application International Corporation (SAIC), in cooperation with the California Environmental Protection Agency (Cal/EPA). A complete project workplan, accepted by U.S. EPA, is included as Attachment 1 to the previous item (2) in the Committee's packet.

Following EPA's conceptual approval of the grant in June, the Office of the Secretary requested the Board's participation as the formal grant applicant. The application was submitted to EPA, on behalf of Cal/EPA, at the end of June. Due to uncertainties both in the federal grant process and over EPA's budget, the application's status was unclear until mid-September. EPA Region 9 staff then told the Board to expect formal notification of the grant award by mid-October.

Key Issues

Federal grant funds (\$280,000) are matched by in-kind contributions of \$237,600 from the project partners. A summary of federal and partner contributions is provided in Table 1.

**Table 1 - Federal vs. Non-federal Contributions**

<b>Partner</b>	<b>Federal \$\$</b>	<b>In-kind \$\$</b>
CIWMB	0	30,000
City of San Diego	40,000	59,600
Eugene Tseng & Assoc	40,000	5,000
SAIC	200,000	93,000
City of Tijuana	0	50,000
<b>TOTAL</b>	<b>280,000</b>	<b>237,600</b>

As the direct recipient of the federal grant funding, the Board would be responsible for financial management of the project and, in conjunction with U.S. EPA, Region 9, for overall policy direction. The City of San Diego will be responsible for the

quality and quantity of tasks as they are being performed, and will oversee and monitor work performed by SAIC, and by Eugene Tseng and Associates. Table 2 summarizes the grant-funded responsibilities of the City of San Diego (SD), Eugene Tseng and Associates (ETA), and SAIC. Task numbers correspond to the Project Workplan (see Attachment 1).

**Table 2 - Waste WiSe Project Responsibilities**

Task	Description	SD	ETA	SAIC
1	Waste Stream Analysis			
1.1	Waste Composition Study of Tijuana Landfill	XX	XX	
1.2	Generator-based Waste Characterization of Maquiladora Industries and Otay Mesa Businesses	XX	XX	
2	Review and Identification of Border Region Recyclers	XX		XX
3	Train-the-Trainers Education Program			
3.1	Develop and Compile Training Materials	XX		XX
3.2	Implement Train-the-Trainer Courses	XX		XX
4	Border Waste WiSe Implementation			
4.1	Onsite Technical Assistance Program	XX		XX
4.2	Develop "Border Waste Net On-line"	XX		XX
4.3	Border Waste WiSe Conference	XX		

Fiscal Impacts

This contract is contingent on the commitment and availability of federal grant funds. Staff from U.S. EPA, Region 9, have indicated their expectation that the Board will receive formal notification of the grant award in the second week of October.

The Board would provide overall project management on behalf of Cal/EPA and is committed, under the grant application, to an in-kind contribution of \$30,000. Most of this contribution will be fulfilled through the Board's contract administration and financial management responsibilities. Additional in-kind support could be provided through the Local Assistance and Planning Division, related to the waste analysis tasks; the Waste Prevention and Market Development Division could provide

technical assistance in the business waste reduction assessments and related tasks.

A Section 28 request to augment the Board's spending authority to include the \$280,000 has been submitted to Cal/EPA and the Department of Finance. Action on the request is pending Board approval of the contract concept and notification of the grant award from U.S. EPA.

**VI. ATTACHMENTS**

1. San Diego-Tijuana Border Waste Wise Program Workplan (see agenda item 2)
2. Resolution No. 95-762

**VII. APPROVALS**

Prepared By:	<u>Chris Peck</u> <i>CP</i>	Phone:	<u>255-2427</u>
Reviewed By:	<u>Caren Trgovcich</u> <i>CT</i>	Phone:	<u>255-2700</u>
Reviewed By:	<u>Marie LaVergne</u> <i>MBL</i> <sup>10/6/95</sup>	Phone:	<u>255-2269</u>

In accord with the Board's waste reduction policies, Attachment 1 is not reproduced in this item. Please refer to the Attachment in the previous packet item.

CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

RESOLUTION 95-762

APPROVAL OF CONTRACT AWARD FOR

BINATIONAL SAN DIEGO-TIJUANA WASTE WISE PROGRAM

OCTOBER 24, 1995

BE IT RESOLVED, that the Board hereby authorizes a contract with Science Applications International (SAIC) for the work outlined in the "San Diego-Tijuana Border Waste Wise Project Workplan." The contract amount shall not exceed \$200,000.

CERTIFICATION

The undersigned Executive Director of the California Integrated Waste Management Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the California Integrated Waste Management Board on October 24, 1995.

Dated:

Ralph E. Chandler  
Executive Director

CALIFORNIA INTEGRATED WASTE MANAGEMENT BOARD

Administration Committee

October 17, 1995

AGENDA ITEM 4

**ITEM:** CONSIDERATION OF AUGMENTATION TO THE CALIFORNIA  
COMMUNITY COLLEGES FOUNDATION (CCCF) STUDENT CONTRACT

**I. SUMMARY**

The student assistant contract was approved at the June 28, 1995 Board Meeting. This augmentation will provide for additional funding of \$208,705, through redirection from existing resources, and extend the contract through August 31, 1996. Extending the contract through August 31, 1996 will assure the continuity of the student assistants with the Board until the 1996-97 Governor's budget is approved.

**II. ACTION BEFORE THE COMMITTEE**

Approve award of augmentation of \$208,705 and extension to August 31, 1996 to the California Community Colleges Foundation contract and forward to the full Board for action.

**III. ANALYSIS**

The student assistants contract augmentation will provide additional funding and extend the contract term to August 31, 1996. The proposed funding is listed below:

IWMA	\$ 79,705
PROJECT RECYCLE	\$ 20,000
TIRE	\$ 7,000
USED OIL	\$ 20,000
RMDZ	\$ 25,000
R-TEAM	\$ 30,000
SOLID WASTE TRUST FUND	<u>\$ 27,000</u>
<b>TOTAL REQUESTED</b>	<b><u>\$208,705</u></b>

Since 1991-92 fiscal year, the California Community College Foundation (CCCF) has provided annual Student Assistant services to the Integrated Waste Management Board. The CCCF provides students selected by the Board for assignment to specific areas.

---

Charges are computed in two basic areas: Direct Costs and Indirect Costs. Direct Costs can be defined as identifiable hourly wages and the related benefits. CCCF Administrative Costs (15% of direct costs) are classified as indirect costs.

Attached is a chart showing the 1995-96 Student Assistant Contract augmentation with a breakdown of funding by Division/Office.

#### **IV. STAFF RECOMMENDATION**

Staff recommends that the Committee approve the augmentation and time extension to the California Community Colleges Foundation contract.

#### **V. ATTACHMENTS**

Attachment 1: 1995-96 Student Assistant Contract Dollars  
Attachment 2: Resolution 95-757

VI. APPROVALS

Prepared by: Connie S. Dunn Phone 255-2717  
Connie S. Dunn

Reviewed by: Doug Okumura Phone 255-2431  
Doug Okumura

Reviewed by: Dan Gorfain Phone 255-2320  
Dan Gorfain

Reviewed by: J. Van Kesteren for Phone 255-4432  
Judith Friedman

Approved by: Marie LaVergne for Phone 255-2269  
Marie LaVergne

STUDENT ASSISTANT CONTRACT AUGMENTATION PROPOSED OCTOBER BOARD ITEM		
Office	AMOUNT	REDIRECT FROM LINE ITEM
Board Members/Executive Office		
	\$ 8,205.00	General Expense
Legal Office		
	7,000.00	Tire Fund
Policy & Analysis Office/Legislation & Regulations Office/Public Affairs Office		
	0	
Administration & Finance Division		
IWMA	12,500.00	General Expense \$12,500
Diversion, Planning, & Local Assistance Division		
IWMA	7,000.00	General Expense
IWMA PROJECT RECYCLE	20,000.00	Project Recycle
USED OIL	20,000.00	GE-Used Oil \$10,000 GE-Used Oil Filter \$10,000
Waste Prevention & Market Development Division		
IWMA	4,500.00	General Expense
RMDZ	25,000.00	RMDZ
R-TEAM	30,000.00	1/
Permitting & Enforcement Division		
IWMA	47,500.00	General Expense
SOLID WASTE TRUST FUND	27,000.00	SWTF
<b>TOTAL</b>	<b>\$ 208,705.00</b>	IWMA \$79,705 IWMA Project Recycle \$20,000 TIRE \$7,000 RMDZ \$25,000 R-TEAM \$30,000 USED OIL \$20,000 Solid Waste Trust Fund \$27,000

\*Funding requests reflect need through August 31, 1996.

Prepared by: JoAnne Byrne

1/ These funds have been previously approved by the Board July 1994 as part of the Federal Grant Proposal.

# California Integrated Waste Management Board

## Resolution 95-757

October 24, 1995

**BE IT RESOLVED** that the Board hereby augments the California Community Colleges Foundation by \$208,705.00. for a total not to exceed \$513,053.00 and extends the term of the contract to August 31, 1996.

### CERTIFICATION

The undersigned Executive Director of the California Integrated Waste Management Board does hereby certify that the foregoing is a full, true and correct copy of a resolution duly and regularly adopted at a meeting of the California Integrated Waste Management Board on October 24, 1995.

Dated:

Ralph E. Chandler  
Executive Director