File No.	101163	Committee Item No
		Board Item No

COMMITTEE/BOARD OF SUPERVISORS

AGENDA PACKET CONTENTS LIST

Committee CITY OPERATIONS AND NEIGHBORHOOD SERVICES	Date	9/27/10
Board of Supervisors Meeting	Date	
Cmte Board		
		ort
OTHER (Use back side if additional s	space is needed)	
Completed by: Gail Johnson Completed by:	Date Date	9/23/10

An asterisked item represents the cover sheet to a document that exceeds 25 pages. The complete document is in the file.

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Resolution authorizing the San Francisco Department of Public Health (DPH) to accept and expend retroactively a grant in the amount of \$49,995 from the Bay Area Air Quality Management District, to support a project entitled "Community Risk Reduction Plan (CRRP);" for the period of July 1, 2010 through December 30, 2011.

[Accept & Expend Grant -Community Risk Reduction Plan (CRRP) - \$49,995.]

WHEREAS, The Department of Public Health is the recipient of a grant award from the Bay Area Air Quality Management District to fund a project entitled "Community Risk Reduction Plan (CRRP);" and,

WHEREAS, Through this grant, the Bay Area Air Quality Management District has agreed to fund DPH in the amount of \$49,995 the period of July 1, 2010 through December 30, 2011; and,

WHEREAS, As a condition of receiving the grant funds, the Bay Area Air Quality

Management District requires the City to enter into an agreement (the "Agreement"), a copy of which is on file with the Clerk of the Board of Supervisors in File No. 101163; which is hereby declared to be a part of this resolution as if set forth fully herein; and,

WHEREAS, An ASO amendment is not required as the grant partially reimburses DPH for one existing position, Epidemiologist I (Job Class #2802) at 0.65 FTE; and,

WHEREAS, A request for retroactive approval is being sought because DPH did not receive notification of the Agreement until July 19, 2010 for a project start date of July 1, 2010; and,

WHEREAS, The budget does not include a provision for indirect costs as it is not allowed by the granting agency; now therefore, be it

FILE NO.

RESOLUTION NO.

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RESOLVED, That DPH is hereby authorized to accept and expend a grant retroactively in the amount of \$49,995 from the Bay Area Air Quality Management District; and, be it

FURTHER RESOLVED, That DPH is hereby authorized to retroactively accept and expend the grant funds pursuant to San Francisco Administrative Code section 10.170-1; and, be it

FURTHER RESOLVED, That the Board of Supervisors hereby waives inclusion of indirect costs in the grant budget; and be it

FURTHER RESOLVED, That the Director of Health is authorized to enter into the agreement on behalf of the City; and, be it

FURTHER RESOLVED, That the Controller is directed to designate all positions funded under this agreement as "G" or grant-funded positions which would terminate when the agreement expires.

RECOMMENDED:

APPROVED:

Mitchell Katz, M.D. Director of Health

Office of the Mayor

Office of the Controller

City and County of San Francisco

Department of Public Health

Mitchell H. Katz, MD Director of Health



Gavin Newsom Mayor

TO:	TO: Angela Calvillo, Clerk of the Board of Supervisors			
FRON	FROM: Mitchell H. Katz, M.D. WC Director of Health			
DATE:	·	August 30, 2010		
SUBJ	ECT:	Grant Accept and Ex	pend	
GRAN	IT TITLE:	Community Risk Re	duction Plan (CRRP) - \$49,995	
Attach	ned please fi	nd the original and 4 co	ppies of each of the following:	
	Proposed gra	ant resolution, original	signed by Department	
\boxtimes (Grant inform	ation form, including di	sability checklist -	
	Budget and l	Budget Justification	•	
	Grant applica	ation: Not Applicable, [PH did not apply for this grant	
	Award Letter participate ir Agreement		pplication was submitted, they were asked to	-
	Other (Expla	iin):		
Specia	al Timeline R	equirements:		
Depa	rtmental rep	presentative to receiv	e a copy of the adopted resolution:	
Name	e: Ann Santo	os	Phone: 255-3546	
	ffice Mail Ad Howard St.	dress: Dept. of Public	Health, Community Behavioral Health,	-
Certifi	ied copy req	uired Yes 🗌	No 🖂	

File Number:	
(Provided by	Clerk of Board of Supervisors)

Grant Information Form

(Effective March 2005)

Purpose: Accompanies proposed Board of Supervisors resolutions authorizing a Department to accept and expend grant funds.

The following describes the grant referred to in the accompanying resolution:

- 1. Grant Title: Community Risk Reduction Plan (CRRP)
- 2. Department: San Francisco Department of Public Health, Environmental Health
- 3. Contact Person: Thomas Rivard

Telephone: 415-252-3933

4. Grant Approval Status (check one):

[x] Approved by funding agency

[] Not yet approved

- 5. Amount of Grant Funding Approved or Applied for: \$49,995
- 6a. Matching Funds Required: none
 - b. Source(s) of matching funds (if applicable): N/A
- 7a. Grant Source Agency: Bay Area Air Quality Management District
- b. Grant Pass-Through Agency (if applicable): N/A
- 8. Proposed Grant Project Summary:

DPH in partnership with the DISTRICT aims to develop a Community Risk Reduction Plan (CRRP) to protect human health through the reduction of emissions of and exposure to ambient air pollutant in the City and County of San Francisco. Consistent with the DISTRICT's CRRP Guidelines, this Plan aims to reduce both air pollution exposure and associated health risk in measurable ways from current conditions for the entire population of San Francisco and reduces air pollution hotspots and exposure disparities. The Plan will ultimately include steps for identifying pollutants of local concern, establishing objectives and targets for air quality improvement, conducting ongoing assessment and monitoring activities, and establishing policies and implementing actions, including planning and regulation, to prevent avoidable air pollutant impacts.

When complete, the CRRP will include the following elements as specified in the DISTRICT's CEQA Guidelines (June 2, 2010):

- · Identify CRRP Plan Area;
- Include base year and future year emissions inventories of toxic air contaminants and particulate matter less than 2.5 microns in diameter (PM2.5);
- Establish risk and exposure reduction targets for the Plan Area;
- Identify measures to reduce emission and exposures;
- Include DISTRICT approved risk modeling;
- Include procedures for monitoring and updating the emissions inventory, modeling, and mitigation measures; and
- Include public participation process in developing the CRRP.

9. Grant Project Schedule, as allowed in approval docum	nents, or as proposed:
Start-Date: July 1, 2010	nd-Date: December 30, 2011
10a. Amount budgeted for contractual services: none	
b. Will contractual services be put out to bid? N/A	
c. If so, will contract services help to further the goals requirements? N/A	of the department's MBE/WBE
d. Is this likely to be a one-time or ongoing request for	r contracting out?N/A
11a. Does the budget include indirect costs?	[] Yes [x] No
b1. If yes, how much? \$ none b2. How was the amount calculated? N/A	
c. If no, why are indirect costs not included? [x] Not allowed by granting agency [] Other (please explain):	maximize use of grant funds on direct services
12. Any other significant grant requirements or commen We respectfully request for approval to accept and expended the agreement on July 19, 2010. **Disability Access Checklist***	ts: nd these funds retroactive to July 1, 2010. The
· V	onniv):
13. This Grant is intended for activities at (check all that	арріу).
[x] Existing Site(s) [x] Existing Structure(s) [] Rehabilitated Site(s) [] Rehabilitated Structure(s) [] New Site(s) [] New Structure(s) 14. The Departmental ADA Coordinator and/or the Mayor and concluded that the project as proposed will be in corrulational access laws and regular disabilities, or will require unreasonable hardship exceptions.	or's Office on Disability have reviewed the proposal impliance with the Americans with Disabilities Act and ations and will allow the full inclusion of persons with
Comments:	\sim Δ
Departmental or Mayor's Office of Disability Reviewer:_	Jos J (Jason Hashimoto)
Departmental or Mayor's Office of Disability Reviewer Date Reviewed:	
Department Approval: (Mitch Katz, MD)	(Director of Health)

Risk Reduction Plan Agreement Between The Bay Area Air Quality Management District And The San Francisco Department of Public Health

Contract No. 2010-086

Budget & Budget Justification

July 1, 2010 through Dec. 30, 2011

Salary	Year One	Total
64.6761% Epidemiologist 1, Step 1 (Job Class #2802)'	\$49,995	\$49,995

The budget for the development of a Community Risk Reduction Plan with the Bay Area Air Quality Management District consists only of the DPH salary cost of a 64.68% time Epidemiologist 1, Class 2802, Step 1. The purpose of this position is to prepare models of air pollution associated with roadway and point sources throughout San Francisco. Once the models have been completed an analysis of air pollution exposures will be conducted for the purpose of establishing communities at risk and designing mitigations and plans that can reduce exposures in the most highly impacted communities.

This position will quantitatively evaluate the effect of such various mitigation measures as freeway sound walls, vegetation, and hybrid transportation. In addition the position will work regularly with BAAQMD in the development of criteria for CEQA analysis and the development of such modeling tools as stack height analysis, meteorological data modification and validation, and various inputs into the EPA AERMOD air pollution model. The results of this data analysis will be provided to both BAAQMD and the San Francisco Planning Department for the purpose of creating a new Community Risk Reduction Plan for San Francisco.

RISK REDUCTION PLAN AGREEMENT BETWEEN THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT AND THE SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH

CONTRACT NO. 2010-086

 PARTIES - The parties to this Agreement ("Agreement") are the Bay Area Air Quality Management District ("DISTRICT") whose address is 939 Ellis Street, San Francisco, CA 94109, and San Francisco Department of Public Health ("DPH") whose address is 1390 Market Street, Suite 210, San Francisco, CA 94102.

2. RECITALS

- A. DISTRICT is the local agency with primary responsibility for regulating stationary source air pollution in the Bay Area Air Quality Management District in the State of California. DISTRICT is authorized to enter into this Agreement under California Health and Safety Code Section 40701.
- B. DISTRICT desires to award DPH a grant for the activities described in Attachment A, Work Plan.
- C. All parties to this Agreement have had the opportunity to have the Agreement reviewed by their attorney.
- 3. <u>TERM</u> The term of this Agreement is from July 1, 2010 to December 30, 2011, unless further extended by amendment of this Agreement in writing, or terminated earlier.
- 4. TERMINATION DISTRICT shall have the right to terminate this Agreement at its sole discretion at any time upon thirty (30) days written notice to DPH. The notice of termination shall specify the effective date of termination, which shall be no less than thirty (30) calendar days from the date of delivery of the notice of termination, and shall be delivered in accordance with the provisions of section 10 below. Immediately upon receipt of the notice of termination, DPH shall cease all activities under this Agreement, except such activities as are specified in the notice of termination. Within forty-five (45) days of receipt of written notice, DPH is required to:
 - A. Submit a final written report describing all work performed by DPH;
 - B. Submit an accounting of all grant funds expended up to and including the date of termination; and,
 - C. Reimburse DISTRICT for any unspent funds.
- 5. NO AGENCY RELATIONSHIP CREATED / INDEPENDENT CAPACITY DPH and the agents and employees of DPH, in the performance of this Agreement, shall act in an independent capacity and not as officers or employees or agents of DISTRICT, and nothing herein shall be construed to be inconsistent with that relationship or status. DISTRICT shall not have the right to direct or control the activities of DPH in performing the services provided herein.

6. CONTRACTORS / SUBCONTRACTORS / SUBGRANTEES

- A. DPH will be entitled to make use of its own staff and such contractors, subcontractors, and subgrantees as are mutually acceptable to DPH and DISTRICT. Any change in contractors, subcontractors, or subgrantees must be mutually acceptable to the parties. Immediately upon termination of any such contract, subcontract, or subgrant, DPH shall notify DISTRICT.
- B. Nothing contained in this Agreement or otherwise, shall create any contractual relation between DISTRICT and any contractors, subcontractors, or subgrantees of DPH, and no agreement with contractors, subcontractors, or subgrantees shall relieve DPH of its responsibilities and obligations hereunder. DPH agrees to be as fully responsible to DISTRICT for the acts and omissions of its contractors, subcontractors, and subgrantees and of persons either directly or indirectly employed by any of them as it is for the acts and omissions of persons directly employed by DPH. DPH's obligation to pay its contractors, subcontractors, and subgrantees is an independent obligation from DISTRICT's obligation to make payments to DPH. As a result, DISTRICT shall have no obligation to pay or to enforce the payment of any moneys to any contractor, subcontractor, or subgrantee.
- 7. INDEMNIFICATION DPH agrees to indemnify, defend, and hold harmless DISTRICT, its officers, employees, agents, representatives, and successors-in-interest against any and all liability, demands, claims, costs, losses, damages, recoveries, settlements, and expenses (including reasonable attorney fees) that DISTRICT, its officers, employees, agents, representatives, and successors-in-interest may incur or be required to pay arising from the death or injury of any person or persons (including employees of DPH), or from destruction of or damage to any property or properties, caused by or connected with the performance of this Agreement by DPH, its employees, subcontractors, subgrantees, or agents.

8. PAYMENT

- A. DISTRICT agrees to award DPH a grant of \$49,995 (forty nine thousand nine hundred ninety five dollars) for the activities described in Attachment A, Work Plan. This amount shall be payable as set forth in Attachment B, Payment Schedule.
- B. DPH shall carry out the work described in the Work Plan in accordance with the Work Plan and Payment Schedule, and shall obtain DISTRICT's written approval of any changes or modifications to the Work Plan or the Payment Schedule prior to performing the changed work or incurring the changed cost. If DPH fails to obtain such prior written approval, DISTRICT, at its sole discretion, may refuse to provide funds to pay for such work or costs.
- C. Payment will be made only to DPH.
- AUTHORIZED REPRESENTATIVE DPH shall continuously maintain a representative authorized to work with DISTRICT on all grant-related issues. DPH shall, at all times, keep DISTRICT informed as to the identity of the authorized representative.
- 10. NOTICES All notices that are required under this Agreement shall be provided in the manner set forth herein, unless specified otherwise. Notice to a party shall be delivered to the attention of the person listed below, or to such other person or persons as may hereafter be designated by that party in writing. Notice shall be in writing sent by e-mail, facsimile, or regular first class mail. In the case of e-mail and facsimile communications, valid notice shall be deemed to have been delivered upon sending, provided the sender obtained an electronic confirmation of delivery. E-mail and facsimile communications shall be deemed to have been received on the date of such transmission, provided such date was a business day and delivered prior to 4:00 p.m. PST. Otherwise, receipt of e-mail and facsimile communications shall be deemed to have occurred on the following business day. In the case of regular mail notice, notice shall be deemed to have been delivered on the mailing date and received five (5) business days after the date of mailing.

DISTRICT:

Bay Area Air Quality Management District 939 Ellis Street San Francisco, CA 94109

Attn: Virginia Lau

DPH:

San Francisco, Department of Public Health

1390 Market Street, Suite 210 San Francisco, CA 94102

Attn: Tom Rivard

- 11. <u>ADDITIONAL PROVISIONS</u> All attachment(s) to this Agreement are expressly incorporated herein by this reference and made a part hereof as though fully set forth.
- 12. <u>ACKNOWLEDGEMENTS</u> DPH shall acknowledge DISTRICT support each time the activities funded, in whole or in part, by this Agreement are publicized in any news media, brochures, or other type of promotional material. The acknowledgement of DISTRICT support must state "Funded by a Grant from the Bay Area Air Quality Management District." Initials or abbreviations for DISTRICT shall not be used.

13. FINANCIAL MANAGEMENT SYSTEM

- A. DPH shall be responsible for maintaining an adequate financial management system and will immediately notify DISTRICT when DPH cannot comply with the requirements in this section.
- B. DPH's financial management system shall provide for:
 - i) Financial reporting: accurate, current, and complete disclosure of the financial results of each grant in conformity with generally accepted principles of accounting, and reporting in a format that is in accordance with the financial reporting requirements of the grant.
 - ii) Accounting records: records that adequately identify the source and application of funds for DISTRICT-supported activities. These records must contain information pertaining to grant awards and authorizations, obligations, unobligated balances, assets, liabilities, outlays or expenditures and income.
 - iii) Internal control: effective internal and accounting controls over all funds, property and other assets. DPH shall adequately safeguard all such assets and assure that they are used solely for authorized purposes.
 - iv) Budget control: comparison of actual expenditures or outlays with budgeted amounts for each grant.
 - v) Allowable cost: procedures for determining reasonableness, allowability, and allocability of costs generally consistent with the provisions of federal and state requirements.
 - vi) Source documentation: accounting records that are supported by source documentation.
 - vii) Cash management: procedures to minimize the time elapsing between the advance of funds from DISTRICT and the disbursement by DPH, whenever funds are advanced by DISTRICT.
- C. DISTRICT may review the adequacy of the financial management system of DPH at any time subsequent to the award of the grant. If DISTRICT determines that DPH's accounting system does not meet the standards described in paragraph B above, additional information to monitor the grant may be required by DISTRICT upon written notice to DPH, until such time as the system meets with DISTRICT approval.

- 14. <u>AUDIT / RECORDS ACCESS</u> DPH agrees that DISTRICT shall have the right to review and to copy any DPH records and supporting documentation pertaining to the performance of this Agreement. DPH agrees to maintain such records for possible audit for a minimum of three (3) years after final payment, unless a longer period of records retention is stipulated, or until completion of any action and resolution of all issues which may arise as a result of any litigation, dispute, or audit, whichever is later. DPH agrees to allow the DISTRICT's designated representative(s) access to such records during normal business hours and to allow interviews of any employees who might reasonably have information related to such records. Further, DPH agrees to include a similar right of DISTRICT to audit records and interview staff in any contract, subcontract, or subgrant related to performance of this Agreement.
- 15. FORFEIT OF GRANT FUNDS / REPAYMENT OF FUNDS IMPROPERLY EXPENDED If grant finds are not expended, or have not been expended, in accordance with this Agreement, or if real or personal property acquired with grant funds is not being used, or has not been used, for grant purposes in accordance with this Agreement, DISTRICT, at its sole discretion, may take appropriate action under this Agreement, at law or in equity, including requiring DPH to forfeit the unexpended portion of the grant funds and/or to repay to DISTRICT any funds improperly expended.
- 16. <u>COMPLIANCE</u> DPH shall comply fully with all applicable federal, state, and local laws, ordinances, regulations, and permits. DPH shall provide evidence, upon request, that all local, state, and/or federal permits, licenses, registrations, and approvals have been secured for the purposes for which grant funds are to be expended. DPH shall maintain compliance with such requirements throughout the grant period. DPH shall ensure that the requirements of the California Environmental Quality Act are met for any approvals or other requirements necessary to carry out the terms of this Agreement. Any deviation from the requirements of this section shall result in the return of unexpended grant funds.
- 17. <u>ASSIGNMENT</u> No party shall assign, sell, license, or otherwise transfer any rights or obligations under this Agreement to a third party without the prior written consent of the other party, and any attempt to do so shall be void upon inception.
- 18. WAIVER No waiver of a breach, of failure of any condition, or of any right or remedy contained in or granted by the provisions of this Agreement shall be effective unless it is in writing and signed by the party waiving the breach, failure, right, or remedy. No waiver of any breach, failure, right, or remedy shall be deemed a waiver of any other breach, whether or not similar, nor shall any waiver constitute a continuing waiver unless the writing so specifies. Further, the failure of a party to enforce performance by the other party of any term, covenant, or condition of this Agreement, and the failure of a party to exercise any rights or remedies hereunder, shall not be deemed a waiver or relinquishment by that party to enforce future performance of any such terms, covenants, or conditions, or to exercise any future rights or remedies.
- 19. FORCE MAJEURE Neither DISTRICT nor DPH shall be liable for or deemed to be in default for any delay or failure in performance under this Agreement or interruption of services resulting, directly or indirectly, from acts of God, enemy or hostile governmental action, civil commotion, strikes, lockouts, labor disputes, fire or other casualty, judicial orders, governmental controls, regulations or restrictions, inability to obtain labor or materials or reasonable substitutes for labor or materials necessary for performance of the services, or other causes, except financial, that are beyond the reasonable control of DISTRICT or DPH, for a period of time equal to the period of such force majeure event, provided that the party failing to perform notifies the other party within

- fifteen calendar days of discovery of the force majeure event, and provided further that that party takes all reasonable action to mitigate the damages resulting from the failure to perform. Notwithstanding the above, if the cause of the force majeure event is due to party's own action or inaction, then such cause shall not excuse that party from performance under this Agreement.
- 20. <u>SEVERABILITY</u> If a court of competent jurisdiction holds any provision of this Agreement to be illegal, unenforceable or invalid in whole or in part for any reason, the validity and enforceability of the remaining provisions, or portions of them will not be affected.
- 21. <u>HEADINGS</u> Headings on the sections and paragraphs of this Agreement are for convenience and reference only, and the words contained therein shall in no way be held to explain, modify, amplify, or aid in the interpretation, construction, or meaning of the provisions of this Agreement.
- 22. <u>DUPLICATE EXECUTION</u> This Agreement is executed in duplicate. Each signed copy shall have the force and effect of an original.
- 23. GOVERNING LAW Any dispute that arises under or relates to this Agreement shall be governed by California law, excluding any laws that direct the application to another jurisdiction's laws. Venue for resolution of any dispute that arises under or relates to this Agreement, including mediation, shall be San Francisco, California.
- 24. ENTIRE AGREEMENT AND MODIFICATION This Agreement represents the final, complete, and exclusive statement of the agreement between the parties and supersedes all prior and contemporaneous understandings and agreements of the parties. No party has been induced to enter into this Agreement by, nor is any party relying upon, any representation or warranty outside those expressly set forth herein. This Agreement may only be amended by mutual agreement of the parties in writing and signed by both parties.
- 25. <u>SURVIVAL OF TERMS</u> The provisions of sections 7 (Indemnification), 14 (Audit / Records Access), and 15 (Forfeit of Grant Funds / Repayment of Funds Improperly Expended) shall survive the expiration or termination of this Agreement.

IN WITNESS WHEREOF, the parties to this Agreement have caused this Agreement to be duly executed on their behalf by their authorized representatives.

BAY AREA AIR QUALITY MANAGEMENT DISTRICT		SAN FRANCISCO, DEPARTMENT OF PUBLIC HEALTH		
By: Jack P. Broadbent Executive Officer/APCO		Mitch Katz Director of Public Health		
Date:	Date:			
Approved as to form: District Counsel				
Brian C. Bunger District Counsel	- -			

ATTACHMENT A

Scope of Work

DPH in partnership with the DISTRICT aims to develop a Community Risk Reduction Plan (CRRP) to protect human health through the reduction of emissions of and exposure to ambient air pollutant in the City and County of San Francisco. Consistent with the DISTRICT's CRRP Guidelines, this Plan aims to reduce both air pollution exposure and associated health risk in measurable ways from current conditions for the entire population of San Francisco and reduces air pollution hotspots and exposure disparities. The Plan will ultimately include steps for identifying pollutants of local concern, establishing objectives and targets for air quality improvement, conducting ongoing assessment and monitoring activities, and establishing policies and implementing actions, including planning and regulation, to prevent avoidable air pollutant impacts.

When complete, the CRRP will include the following elements as specified in the DISTRICT's CEQA Guidelines (June 2, 2010):

- Identify CRRP Plan Area;
- Include base year and future year emissions inventories of toxic air contaminants and particulate matter less than 2.5 microns in diameter (PM2.5);
- Establish risk and exposure reduction targets for the Plan Area;
- Identify measures to reduce emission and exposures;
- Include DISTRICT approved risk modeling;
- Include procedures for monitoring and updating the emissions inventory, modeling, and mitigation measures; and
- Include public participation process in developing the CRRP.

The DISTRICT encourages the preparation of CRRPs as an alternative to evaluating individual project compliance with the DISTRICT's CEQA guidelines. CRRPs will be particularly helpful for Eastern San Francisco, which was identified by the DISTRICT's Community Air Risk Evaluation (CARE) program as an impacted community based on presence of high emission sources, high exposures, and sensitive populations. DPH will work with the San Francisco Planning Department and other San Francisco departments and will utilize modeling, exposure, and health indicator data to refine the areas that have increased risk due to air pollution exposures such that air quality improvements and mitigations will be prioritized in these communities. DPH will include metrics consistent with the CEQA thresholds in evaluating exposure and risk assessment results. Other metrics and modeling approaches may be incorporated at the discretion of DPH upon review by the DISTRICT. The Plan may lead to amendments to local air quality ordinance, Article 38 of San Francisco's Health Code to protect new sensitive receptors from air pollution hazards.

The development of a CRRP will require substantial investments of resources on behalf of DPH. Through this contract the DISTRICT aims to support the beginning steps of developing a CRRP by initiating the emissions inventory and quantifying the baseline and future risks from both mobile and stationary sources. The data can then be used to identify the most impacted areas of San Francisco and assess appropriate mitigation and prevention measures.

The Scope of Work for this agreement will involve completion of the following tasks:

Task 1. Model Mobile Source Emissions for Years 2010 and 2020

- A. Develop years 2012 and 2020 traffic volumes.
 - Review and validate the San Francisco's SFCHAMP traffic volume database, include 2010 and 2020 projected traffic volumes from SFCHAMP as delivered by the San Francisco County Transit Authority.
 - Convert TAZ traffic volume zones to street segment traffic volumes.
 - Attribute street widths to each street segment. Assign elevations to roadways.
 - Attribute heavy truck percentages to each street segment utilizing estimation by orthophoto analysis of truck percentages by neighborhood and street type (arterial, highway, and freeway). Where appropriate include DISTRICT's emissions reduction factors for mobile sources for 2015 and 2020.
- B. Develop an emissions estimate for each street segment for PM 2.5, NOx, DPM, benzene, 1,3 butadiene and acrolein. Additional TAC's may be included based on consultation with the DISTRICT.
 - Use EMFAC 2007 to extract emissions for San Francisco County. Diesel emission
 will be estimated from orthophoto analysis of truck volumes per neighborhood. The
 DISTRICT will be consulted as to the approach that will be used to estimate roadway
 emissions to ensure consistency with the DISTRICT's Recommended Methods for
 Screening and Modeling Local Risks and Hazards. Where appropriate and
 applicable, include project future emissions reductions from CARB adopted
 regulations using factors developed by the DISTRICT for 2015 and 2020.
 - Weighted emissions for each roadway segment will be calculated based upon the relationship between autos and heavy trucks determined above.
 - Calculate the emission of benzene and 1,3 butadiene and acrolein based upon percent emissions of total organic gases.
 - · Attribute emissions to each street segment.
- C. Identify an existing meteorological station within San Francisco from which the DISTRICT can produce one year of AERMET compatible data. The monitoring location will be selected in consultation with the DISTRICT such that it is best suited to citywide screening maps and is appropriate for modeling exposure to the most impacted areas of San Francisco and planned future residential development areas.
- D. Combine all data developed in the above steps into AERMOD for dispersion modeling.
 - Develop a PERL program that enables the preparation and importation of volume sources for all roadways in San Francisco.
 - Develop an ArcGIS program that enables the spatial referencing of all non-linear roadways and the assignment of volume sources to those roadways.
- E. Create dispersion models with various levels of precision and accuracy ranging from 500 meter grid citywide level to focused 50 meter grid at the neighborhood level.
 - Consult with DISTRICT to ensure that the modeling protocol is consistent with CEQA guidelines.

- Run the AERMOD model at various levels of both citywide and local focus. Local
 focus models would be in those areas the citywide model indicates potential for
 higher risk.
- Procure second AERMOD license and an 8 CPU computer with sufficient processing power to model citywide data in reasonable timeframes with varying levels of resolution.
- Provide an exposure map for each of the designated air pollutants.
- Provide preliminary modeling results for both mobile and stationary sources for DISTRICT review.

Task 2. Model Emissions from Stationary Sources for Years 2010 and 2020

The DISTRICT will be providing emissions inventory for all permitted stationary sources in San Francisco County for 2009.

- Randomly validate DISTRICT stationary source database for geographical coordinates as well as stack emission height, gas velocity, stack diameter, and exhaust temperature.
- Import all point and area sources into AERMOD.
- Utilize AERMET data developed in Task 1, Part C, above.
- Create citywide exposure model for the common TAC's found in San Francisco.
 Roadway sources of TACs will be modeled separate from stationary sources.
- Incorporate growth projections for specific category of sources based on factors developed by the DISTRICT for 2015 and 2020.

Task 3. Conduct Health Risk Assessment Based on the Modeled Air Concentrations

The modeled air concentrations from AERMOD will be multiplied by appropriate Office of Environmental Health and Hazards Assessment (OEHAA) approved toxicity values and agesensitivity factors to produce cancer risk, noncancer hazard, and cumulative health risk isopleths. Risk assessment of PM2.5 will be based on concentration-response functions developed by EPA¹. Concentration-response functions for NOx will be based on published meta-analyses and focus on heath outcomes for which the US EPA scientific advisory report has determined adequate causal evidence. The modeled outcomes will be overlaid upon available San Francisco planning maps, land use and zoning maps (current and projected), current and planned residential, schools, hospitals, etc. and future development and planned areas provided by the Planning Department. The intersection of high concentration areas and population densities will be used to identify the impacted areas of San Francisco based upon both DISTRICT's CEQA thresholds and San Francisco's Article 38 traffic hazard screening maps. The modeling results will identify the significant sources of air pollution in the community such that appropriate mitigation strategies can be implemented.

 Provide preliminary list of ambient pollutant and associated toxicity factors for DISTRICT review.

¹ U.S. Environmental Protection Agency. 2006. Expanded Expert Judgment Assessment of the Concentration-Response Relationship between PM2.5 Exposure and Mortality, prepared for OAQPS-EPA by Industrial Economics Inc., September 21, 2006. A summary of this study is provided in Roman, HA et al., Environ. Sci. Tech. 2008, 42, 2268-2274.

- Create PM2.5 concentrations and cancer risk and cumulative non-cancer toxicity hazard isopleths in ArcGIS based on predicted air concentrations from mobile and stationary sources.
- Create mortality risk hazard isopleths in ArcGIS based on predicted air concentrations from mobile and stationary sources.
- Create an ArcGIS program that sums the cancer risk from individual air pollutant in order to estimate aggregate cancer risk per-receptor in San Francisco.
- Overlay the cancer risk, PM2.5, and non-cancer risk estimates upon current and projected land use and zoning maps for San Francisco.
- Identify all parcels where more refined receptor grid (<500 meters grid spacing) is necessary based on exceedances above the DISTRICT's CEQA thresholds and presence of sensitive receptors. Evaluate results to ensure that safety factors are adequately health protective of the most vulnerable population. Consult with the DISTRICT regarding the criteria for determining cumulative health impacts.
- Use other supporting health indicators and metrics of vulnerability including, but not limited to asthma hospitalization, respiratory disease, lung cancer, and cardiopulmenary mortality to assist in defining the impacted areas.

Task 4. Proposed Mitigation Strategy

DPH will use the exposure and risk modeling to propose prevention and mitigation strategies for the CRRP. DPH will also review existing programs within city agencies with the intent of identifying local policies that could be directed toward improving air quality. These policies may include: the SFMTA "Traffic Calming", the SF Planning "Better Streets" programs, and various greening projects within the Department of Public Works.

- Identify the sources of pollution in the most impacted areas of San Francisco with the highest population densities based on the modeling results.
- Identify pollution reduction targets to be achieved by 2020 in consultation with the DISTRICT that are related to the CEQA thresholds.
- Develop policies, ordinances, and programs as applicable to minimize and mitigate current and future exposures of air toxics and particulate matter to local plan area.
- Incorporate new and upcoming regulations adopted by federal, state, and/or local agencies that will reduce emissions from significant sources in the plan area.
- Develop an approach to track progress of mitigation measures at reducing pollution through updates to the emission inventory, modeling, monitoring, or other methods.
- Reassess the implementation and effectiveness of mitigation measures and make changes or adopt other risk reduction measures, accordingly such that reduction targets can be achieved.
- Communicate and coordinate the development mitigation strategies with regional agencies to support SB 375, transit improvements, and other regional planning efforts as appropriate.
- Discuss the CRRP relationship to other planning documents (e.g. neighborhood plans, Specific Plans, and the General Plan). Focus on approaches to capitalize on CEQA streamlining provisions.
- Assess requirements to allow for tiering (i.e. sufficient detail and adequacy of analysis.) Reiterate CEQA's requirements and limitations.

Task 5. Public Participation

DPH will have meetings with groups of representative San Francisco residents that include, but are not limited to local non-profit organizations and community groups. The meetings will be held, as appropriate, to discuss the modeling results and solicit input regarding exposures, health outcomes, pollution reduction targets, and mitigation strategies. Once a draft Plan is available, DPH will make the Plan available for public review.

- CRRP will be crafted in an effort to include community concerns.
- Criteria used to determine vulnerability will be developed with community input.
- Community will be involved in the discussion regarding remediation methods especially as they relate to the balancing of community-wide air quality improvements versus specific local receptor exposures.

Task 6. Meetings and Communications with the DISTRICT

The success of developing CRRP will rely heavily on the coordination between DPH and the DISTRICT. DPH will share modeling results and status of modeling efforts with the DISTRICT. DPH and the DISTRICT will hold monthly progress meetings to discuss the modeling approach, modeling outcomes, and other outstanding issues. DPH will provide monthly progress reports to the DISTRICT via e-mail that describes the work completed to date, planned upcoming work and deliverables, and obstacles that may impact the schedule.

Task 7. Develop Draft CRRP

DPH intends to use the outcomes and products outlined in Tasks 1 though 5 to develop a draft CRRP. The document is expected to be complete in a form that can be considered by the San Francisco Board of Supervisors within 18 months of contract inception, assuming resources become available for completing the necessary CEQA clearance for the CRRP itself.

List of Deliverables and Schedule

DPH's deliverables and the delivery schedule are listed in **Table 1**. Note that the duration to complete each task is contingent upon receipt of the 2009 permitted sources database from the DISTRICT and AERMET compatible meteorological dataset.

Table 1.	Anticipated Duration to Complete Each Task.	
		-

Task(s)	Deliverable	Duration ^a
	Contract initiation	0 days
1	Estimating mobile source emissions for 2012 and 2020	4 months
2	Estimating emissions from stationary sources in 2012 and 2020	DISTRICT provide within 3 months
3	Identifying impacted areas and conducting health risk assessment	8 months

Task(s)	Deliverable	Duration ^a
4	Develop mitigation strategy	4 months
5	Public participation	· Ongoing
6	Meetings and Communications with DISTRICT	Monthly
7	Develop Draft CRRP	18 months

^a These durations are estimated from the time DISTRICT provides DPH with permitted sources inventory for 2009. Tasks are anticipated to occur concurrently.

DPH will be generating the following maps² during the course of their evaluation that will be discussed at the monthly meetings with the DISTRICT:

- 1. Citywide exposure model for acrolein
- 2. Citywide exposure model selected TAC
- 3. Citywide exposure model of mobile source emitting 1,3, butadiene.
- 4. Citywide exposure model of mobile and stationary diesel particulate matter.
- 5. Citywide exposure model of mobile and stationary sources of benzene
- 6. Citywide exposure model of NOx from mobile sources and major stationary sources of combustion
- 7. Citywide exposure model of PM 2.5 mobile sources only for comparison to Article 38 in San Francisco's Health Code
- 8. High resolution exposure model of communities and locations identified in citywide model as at risk.
- GIS model integrating model output into a cumulative risk model for cancer and noncancer health outcomes.
- Incorporate exposure and risk assessment modeling into a map identifying communities at risk.

² All citywide maps with receptors at 500 meter grid resolution. High risk locations at 50 meter grid.

ATTACHMENT B

Cost Schedule

DPH's total cost to perform all the tasks in the Scope of Work (Attachment A) will not exceed \$49,995. Table 2 shows a breakdown of labor hours and costs by task; all costs are based on labor rate of \$55 per hour.

Table 2. Cost and labor estimate by task.

Task	Description	Hours	Cost
1	Develop 2010 and 2020 emissions for mobile sources	110	\$6,050
7	Develop TAC emission estimates for street segments	75	\$4,125
1	Validate AERMET dataset for San Francisco	75	\$4,125
1	Develop AERMOD input file for mobile sources	100	\$5,500
1	Perform air dispersion modeling for mobile sources	110	\$6,050
2	Perform air dispersion modeling for stationary sources	110	\$6,050
3	Conduct health risk assessment	100	\$5,500
5	Public Participation .	125	\$6,875
6	Meetings and Communication with DISTRICT	104	\$5,720
	TOTAL	909	\$49,995

In order to facilitate the analysis, DISTRICT agrees to award DPH for the activities described in Attachment A with an initial payment of \$45,000 (forty-five thousand dollars) within thirty (30) days after the execution of this contract.

The final payment of \$4,995 (four thousand nine hundred and ninety-five dollars) will be awarded to DPH at the completion of Task 7 to the satisfaction of the DISTRICT.

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