

REGIONAL TRANSIT ISSUE PAPER

Agenda Item No.	Board Meeting Date	Open/Closed Session	Information/Action Item	Issue Date
6	7/22/13	Open	Action	07/08/13

Subject: Approving a Resolution Adopting an Initial Study/Negative Declaration for the Installation of the Stand By Emergency Generator Project Supporting the Main Administrative Building and Approving the Project

ISSUE

Whether or not to Approve a Resolution Adopting an Initial Study/Negative Declaration for installation of a Stand-By Emergency Power Generator Project Supporting the Main Administrative Building and Approve the Project.

RECOMMENDED ACTION

Adopt Resolution No. 12-07-_____, Adopting and Approving an Initial Study/Negative Declaration for the Installation and Operation of a Stand-By Emergency Power Generator Supporting the Main Administrative Building and Approving the Project.

FISCAL IMPACT

None as a result of this action.

DISCUSSION

In order to provide emergency power (in case of a power outage) to the RT main administrative facility located at 1400 29th Street , RT proposed to install and operate (as necessary) a stand-by emergency power generator at the south side of N Street/O Street Alley between 28th and 29th Streets. The emergency generator would be an EPA-certified stationary 175-kW system that would use ultra low-sulfur diesel fuel. The generator would include a 300 gallon above-ground storage tank (AST) for diesel fuel. The generator, AST, and ancillary features would be contained within a weatherproof and sound-attenuated enclosure.

In order to comply with the California Environmental Quality Act (CEQA), an Initial Study was performed to ascertain whether the proposed project may have a significant effect on the environment. On the basis of this study, it was determined that the proposed Stand-By Power Generator will not have any significant effects on the environment and that a Negative Declaration is appropriate.

As the lead agency under CEQA, RT must determine whether the Initial Study/Negative Declaration satisfies the requirements under CEQA. If the Board adopts the Initial Study/Negative Declaration and makes the required findings, the Board may approve the project. RT must file a Notice of Determination within five working days of such approval.

Approved:

Presented:

Final 7/11/2013
General Manager/CEO

Chief of Facilities and Business Support Services

REGIONAL TRANSIT ISSUE PAPER

Agenda Item No.	Board Meeting Date	Open/Closed Session	Information/Action Item	Issue Date
6	7/22/13	Open	Action	07/08/13

Subject: Approving a Resolution Adopting an Initial Study/Negative Declaration for the Installation of the Stand By Emergency Generator Project Supporting the Main Administrative Building and Approving the Project

Staff recommends that the Board adopt the attached resolution: 1) adopting an Initial Study/Negative Declaration for a Stand-By Emergency Power Generator supporting the Main Administrative Building, (Exhibit A) 2) making the findings required under CEQA; and 3) approving the project and directing the filing of a Notice of Determination.

RESOLUTION NO. 13-07-_____

Adopted by the Board of Directors of the Sacramento Regional Transit District on this date:

July 22, 2013

**ADOPTING AND APPROVING AN INITIAL STUDY/NEGATIVE DECLARATION FOR
THE INSTALLATION AND OPERATION OF A STAND-BY EMERGENCY POWER
GENERATOR SUPPORTING THE MAIN ADMINISTRATIVE BUILDING AND
APPROVING THE PROJECT**

BE IT HEREBY RESOLVED BY THE BOARD OF DIRECTORS OF THE SACRAMENTO REGIONAL TRANSIT DISTRICT AS FOLLOWS:

WHEREAS, the Sacramento Regional Transit District (RT) operates an administrative facility at 1400 29th Street which is critical to the daily operation of RT's public/transit services; and

WHEREAS, the main administrative building located at 1400 29th Street does not have a reliable emergency power source in the event of a power outage; and

WHEREAS, RT has identified a need to provide an emergency back-up source of power for continued operations at this location during a power outage; and

WHEREAS, an Initial Study was prepared by and for RT to ascertain whether the installation of a stand-by emergency power generator supporting the main administrative building would have a significant effect on the environment; and

WHEREAS, RT consulted with and requested comments on the Initial Study from Responsible Agencies, Trustee Agencies, and other federal, state and local agencies in compliance with CEQA Guidelines; and

WHEREAS, RT provided a Notice of Intent to adopt a Negative Declaration on June 25, 2013; and

WHEREAS, the County Clerk posted the proposed Negative Declaration for at least 20 days.

THEREFORE, BE IT FURTHER RESOLVED, that this Board does hereby adopt the following findings, which this Board finds are supported by substantial evidence in light of the whole record:

- A. THAT, an Initial Study has been prepared pursuant to CEQA;
- B. THAT, the Initial Study did not identify any potentially significant effects on the environment from the proposed Project;

- C. THAT, the Board certifies the Initial Study/Negative Declaration (Exhibit A) has been completed and circulated in compliance with CEQA and is consistent with state and RT guidelines implementing CEQA;
- D. THAT, the Board has reviewed and considered the subject Initial Study, the proposed Negative Declaration, all comments received during the public review period, as well as written and oral comments and other evidence presented by all persons, including members of the public and staff members, who appeared and addressed the board;
- E. THAT, the Board has before it all of the necessary environmental information required by CEQA to properly analyze and evaluate any and all of the potential environmental effects of the proposed modifications to the Project;
- F. THAT, the Board has reviewed and considered the Initial Study and Negative Declaration which reflect the Board's independent judgment;
- G. THAT, the Board finds that there is no substantial evidence in the record that the Project will have a significant effort on the environment.
- H. THAT, based on the evidence presented and the records and files herein, the Board determines that the proposed Project will not have a significant effect on the environment.

RESOLVED FURTHER THAT, the Board approves and adopts a Negative Declaration for the installation of a Stand-by Emergency Power Generator supporting the main administrative building.

RESOLVED FURTHER THAT, the Board approves the Project and directs staff to file a Notice of Determination within five working days of this approval; and

RESOLVED FURTHER THAT, the Board designates the Assistant General Manager for Engineering and Construction, or his/her designee, located at 1400 29th Street, Sacramento, CA, 95812, as the custodian of the records in this matter.

PATRICK HUME, Chair

A T T E S T:

MICHAEL R. WILEY, Secretary

By: _____
Cindy Brooks, Assistant Secretary

INITIAL STUDY/ NEGATIVE DECLARATION

**Downtown Control Center
Stand-By Power Generator**

Sacramento Regional Transit District

June 25, 2013

NEGATIVE DECLARATION

Date of Publication of Initial Study/Negative Declaration: June 25, 2013

Project Title: Downtown Control Center Stand-By Power Generator

Lead Agency and Project Sponsor: Sacramento Regional Transit District

Lead Agency Contact Person: Dawn Fairbrother

Address: PO Box 2110, Sacramento, CA 95812

Telephone: (916) 321-3830

E-mail: dfairbrother@sacrt.com

Project Location: south side of N Street/O Street Alley, between 28th and 29th Streets

City and County: City of Sacramento, Sacramento County

Project Description: The proposed project is the installation and operation of a stand-by emergency generator. It would be an EPA-certified stationary 175-kW system that would use ultra low-sulfur diesel fuel. The generator would be installed on an existing paved area adjoining an RT building, and would include an above-ground approximately 300-gallon tank for diesel fuel storage. The generator would be tested monthly, on a quarterly basis for one hour, and once annually for a longer period. The generator, fuel tank, and ancillary features would be contained within a weatherproof and sound-attenuated enclosure.

THIS PROJECT WILL NOT HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT. This finding is based upon the criteria of the Guidelines of the State Secretary for Resources, Sections 15064 (Determining Significant Effect), 15065 (Mandatory Findings of Significance), and 15070 (Decision to Prepare a Negative Declaration), and the reasons documented in the Environmental Evaluation (Initial Study) for the proposed project, which is attached. No mitigation measures are required.

INITIAL STUDY

Contents

I.	BACKGROUND.....	1
II.	ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED.....	2
III.	DETERMINATION.....	2
IV.	PROJECT DESCRIPTION.....	3
	Project Location.....	3
	Surrounding Land Uses and Setting.....	3
	Project Characteristics.....	3
V.	ENVIRONMENTAL CHECKLIST.....	7
	Introduction.....	7
	1. Aesthetics.....	8
	2. Agriculture and Forest Resources.....	9
	3. Air Quality.....	9
	4. Biological Resources.....	12
	5. Cultural Resources.....	14
	6. Geology and Soils.....	14
	7. Greenhouse Gas Emissions.....	15
	8. Hazards and Hazardous Materials.....	16
	9. Hydrology and Water Quality.....	19
	10. Land Use and Planning.....	20
	11. Mineral Resources.....	21
	12. Noise.....	22
	13. Population and Housing.....	26
	14. Public Services.....	27
	15. Recreation.....	27
	16. Transportation/Traffic.....	28
	17. Utilities and Service Systems.....	29
	18. Other Issues (Energy).....	30
	19. Mandatory Findings of Significance.....	30
VI.	REPORT PREPARERS.....	31
FIGURES		
Figure 1	Project Location.....	5
Figure 2	Project Site.....	6
Figure 3	Generator Operation Noise Level Contours.....	25
TABLES		
Table 1	Existing Noise Levels Within and Around the Project Site.....	22
APPENDIX		
Appendix A	Supporting Documentation: Air Quality and Greenhouse Gas Emissions	

I. BACKGROUND

- 1. Project Title:** Downtown Control Center Stand-By Power Generator
- 2. Lead Agency Name and Address:** Sacramento Regional Transit District
1400 29th Street
Sacramento, CA 95816
- 3. Contact Person, Phone Number, and E-mail:** Dawn Fairbrother
(916) 321-3830
dfairbrother@sacrt.com
- 4. Project Location:** south side of N Street/O Street Alley, between 28th and 29th Streets, downtown Sacramento
- 5. Project Sponsor's Name and Address:** Sacramento Regional Transit District
Dawn Fairbrother
P.O. Box 2110
Sacramento, CA 95812
- 6. General Plan Designation:** City of Sacramento, Central City Community Plan: Urban Corridor Low
- 7. Zoning:** C-2-SPD General Commercial – Special Planning District
- 8. Description of Project:** See Section IV, Project Description.
- 9. Surrounding Land Uses and Setting:** See Section IV, Project Description.
- 10. Other Public Agencies Whose Approval is Required:** See Section IV, Project Description.

II. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|---|--|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality |
| <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Transportation/Traffic | <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Mandatory Findings of Significance |

III. DETERMINATION

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the proposed project have been made by or agreed to by the applicant. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR OR NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Michael R. Wiley
Signature

June 21, 2013
Date

Michael R. Wiley
Name (printed)

IV. PROJECT DESCRIPTION

PROJECT LOCATION

The proposed project is located on the south side of N Street/O Street Alley between 28th and 29th Streets in downtown Sacramento. The site is a paved and landscaped area immediately east of a single-story RT building. (Figures 1 and 2).

SURROUNDING LAND USES AND SETTING

Adjacent land uses are RT administrative offices on the north, west, and south. There is a small two-story apartment building complex southeast of the site at O and 29th Streets, and a three-story apartment building southwest of the site at 28th and O Streets. There is a fast-food restaurant on 29th Street east of the site. Access to the drive-through window at the fast food restaurant is from a driveway on the N Street/O Street Alley. The driveway adjoins the parking lot where the proposed generator would be located. RT's Midtown Bus Maintenance operations are east and north.

PROJECT CHARACTERISTICS

The proposed project is the installation and operation of a stand-by generator to provide emergency power to RT's downtown Control Center. It would be an EPA-certified stationary 175-kW system that would use ultra low-sulfur diesel fuel. The generator would include an above-ground approximately 300-gallon tank (AST) for diesel fuel storage. The generator, AST, and ancillary features would be contained within a weatherproof and sound-attenuated (Level 2) enclosure installed on an existing paved area adjoining an RT building. In accordance with the 2010 California Fire Code,¹ guard posts (bollards) would be placed around the fuel tank to prevent vehicle impact.

A crane would be used to place the generator and ancillary features on the pavement. Minor utility improvements would be necessary to connect the generator into the electrical system that serves the Control Center.

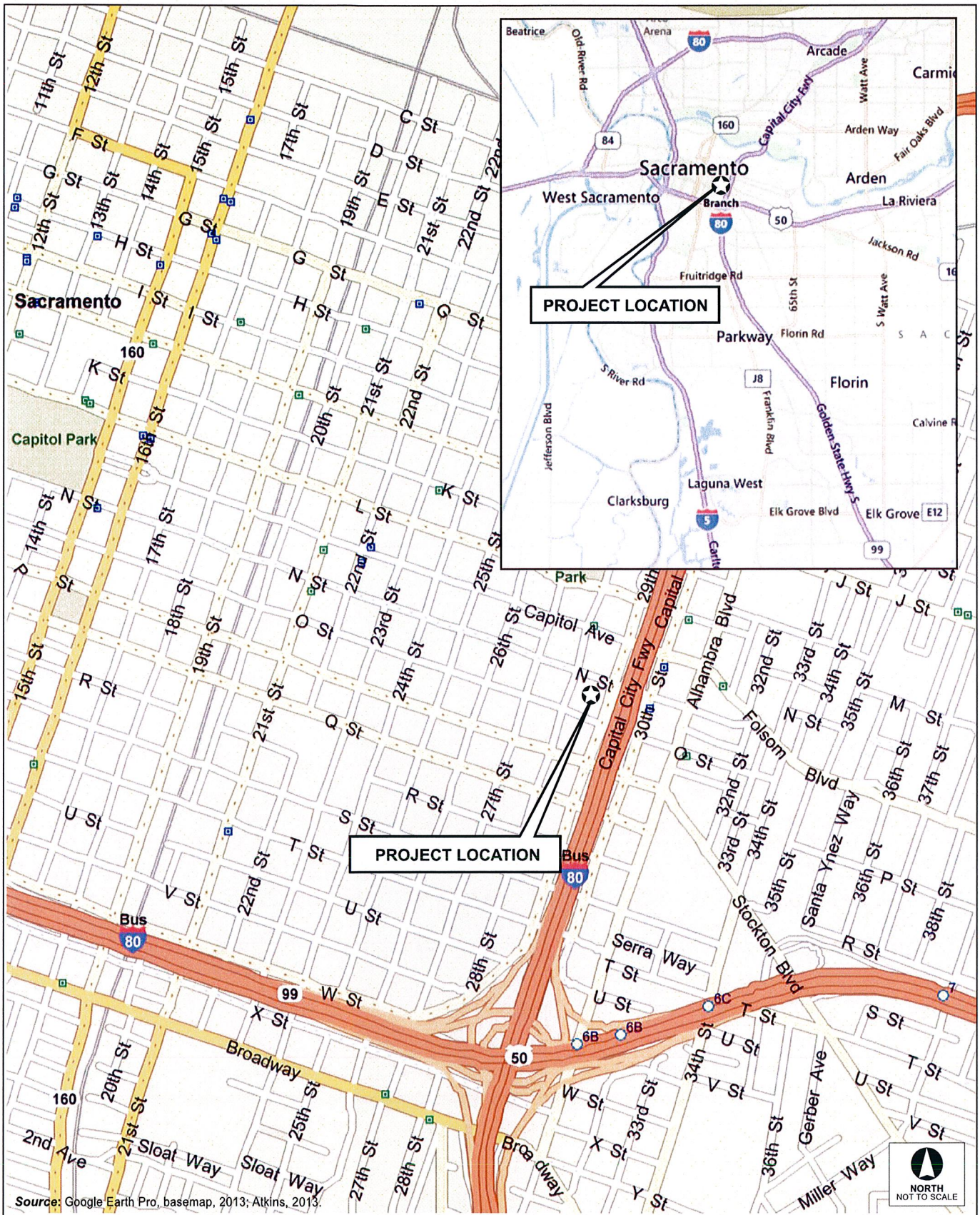
The generator would undergo regular maintenance, which would include testing on monthly and quarterly basis for one hour, and once annually for a longer period. Fuel levels and quality in the AST would also be checked during maintenance. Fuel that does not meet specifications² would be pumped out and replaced with new fuel. The removal of poor quality fuel and replacement would be infrequent, likely no more than once a year.

¹ *California Code of Regulations*, Title 24, Part 9, Chapter 34, Section 3404.2.9.7.5. Effective January 1, 2011.

² Diesel fuel contains additives and other compounds, including some water, that separate into layers during long periods of inactivity. This degrades the fuel quality.

REQUIRED PERMITS AND COORDINATION

The proposed project is subject to the California Environmental Quality Act (CEQA). RT is the lead agency for the project. As such, RT must oversee environmental review of the project under CEQA, prior to approving the project. An authority to construct/permit to operate (ATC/PTO) would be required from the Sacramento Metropolitan Air Quality Management District (SMAQMD). Permits would be obtained by the vendor selected by RT to install the generator. The vendor would also be required to obtain all necessary permits from the City of Sacramento.



100030384 | RT Downtown Generator

Source: Google Earth Pro, basemap, 2013; Atkins, 2013.

Figure 1
Project Location



100030384 | RT Downtown Generator

Source: Google Earth Pro, basemap, 2013; Atkins, 2013.

Figure 2
Project Site

ATKINS

V. ENVIRONMENTAL CHECKLIST

INTRODUCTION

The following Checklist contains the environmental checklist form from Appendix G of the CEQA Guidelines. The checklist form is used to identify the impacts of the proposed project. A discussion follows each environmental issue identified in the checklist to provide an explanation for how the checklist was filled out. Included in each discussion are project-specific mitigation measures, where appropriate, to reduce potentially significant impacts to less than significant.

For this checklist, the following designations are used:

Potentially Significant Impact: An impact that could be significant, and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared.

Less than Significant With Mitigation Incorporated: An impact that requires mitigation to reduce the impact to a less-than-significant level.

Less-Than-Significant Impact: Any impact that would not be considered significant under CEQA based on established significance thresholds.

No Impact: The project would not have any impact.

1. AESTHETICS

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a,b. **No Impact.** The project site is a paved area with mature landscaping (tall Italian cypress trees) adjoining a one-story RT building. It is not readily visible to the public, other than patrons using the driveway from the N Street/O Street Alley to access the drive-through window at the fast food restaurant. The paved area, landscaping, and buildings combined do not exhibit unique aesthetic value. Surrounding land uses are highly urbanized and of similar visual quality. The site is not within a scenic corridor or scenic vista. The project would have no effect on scenic resources.
- c,d. **Less-than-Significant Impact.** The generator and above-ground fuel tank would occupy a footprint of approximately 100 square feet and would be approximately 10 feet high. All features would be within an enclosure for weatherproofing and sound attenuation. While this would alter the visual character of the site, it would blend in with the surrounding buildings. Thus, it would not substantially contrast with or be visually obtrusive in the context of surrounding land uses. The enclosure would be finished with non-reflective paint, and there would be no nighttime lighting that could contribute to glare or alter night views.

2. AGRICULTURE AND FOREST RESOURCES

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a-e. **No Impact.** There would be no impact on agricultural and timber resources because these resources are not present at the project site or adjoining properties.

3. AIR QUALITY

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a non-attainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a. **Less-Than-Significant Impact.** The applicable regional air quality plans in effect that apply to RT's network are the Sacramento Metropolitan Air Quality Management District (SMAQMD) State of Progress Plan and 2011 Reasonable Further Progress Plan, both of which address attainment of the federal 8-hour ozone standard. Installation of the generator would generate minor amounts of emissions, but these would be of limited duration and a one-time occurrence. Operation of the generator would occur only during routine maintenance testing and in event of emergency, which would result in only periodic and minimal emissions. For those reasons, the proposed project would not conflict with applicable plans.
- b,c. **Less-Than-Significant Impact.** Implementation of the proposed project would result in minor construction and limited operational emissions of criteria air pollutants.

The generator and fuel tank would be installed on the pavement using a crane. This activity is expected to take no longer than a few weeks. According to the SMAQMD CEQA Guidelines,³ if the proposed construction activities are less than identified in the NO_x Construction Screening Level Tables, then the project would not require full quantification of construction emissions. The proposed project, in terms of square footage and acreage, would not meet any of the established screening thresholds that would indicate that construction emissions may exceed SMAQMD-established thresholds. As such, the pollutant amount would be expected to be well below the SMAQMD construction threshold of significance of 85 pounds per day for NO_x. It should be noted that SMAQMD does not have a threshold of significance for construction ROG because ROG is not normally generated in large amounts during construction activities. With the implementation of the SMAQMD's Basic Construction Emission Control Practices, which would be required in the contract specifications, the proposed project would not exceed NO_x or ROG emissions of 85 lbs/day, and, therefore, would not require full quantification and would be less than significant.

Operational emissions associated with the proposed project would be limited to the periods during which the generator is in operation. This would be during maintenance (which would include routine testing) and for power outage emergencies. Because the proposed project would not create any new uses, but is intended to ensure the adequate provision of backup electrical power for RT's Control Center under emergency conditions, it would not result in energy consumption that would result in indirect air emissions. Other than trips associated with periodic maintenance, the proposed generator

³ Sacramento Metropolitan Air Quality Management District, *CEQA Guidelines*, December 2009.

would not generate permanent or long-term additional vehicle trips during operation, and, therefore, no substantial mobile source emissions would be anticipated. Further, the proposed generator would include Best Available Control Technology (BACT) and U.S. EPA Tier III standards for emissions. Based on a combined ROG and NO_x emission factor of 3.8 grams/kilowatt-hour and conservatively assuming that on a given day the generator may operate for up to 2 hours during either emergency or maintenance activities, the proposed generator would emit approximately 2.93 lbs/day of ROG and NO_x combined, which is less than the 65 lbs/day operational threshold for ROG and NO_x when considered separately.⁴ Further, such operation would occur only intermittently, so actual emissions would be substantially lower on an annualized or long-term basis. Even if the unit ran for 24 hours continuously, ROG and NO_x emissions combined would result in 30.16 lbs/day, which is less than the 65 lbs/day each threshold for ROG and NO_x when considered separately. Further, such operation would occur only intermittently, so actual emissions would be substantially lower on an annualized or long-term basis.

Therefore, because both construction and operational maximum per-day emissions associated with the proposed project would be below SMAQMD thresholds of significance, this would be a less-than-significant impact. No mitigation is required. Given the minimal amount of construction and limited duration of operation when criteria air pollutants would be generated, this would not result in a cumulatively considerable net increase in pollutants.

- d. **Less-Than-Significant Impact.** Emissions of CO and PM are identified as localized emissions and have the potential to adversely impact sensitive receptors from the emission of these pollutants in a relatively small area, most notably at congested intersections. As described above, implementation of the proposed project would not result in an increase in vehicles on the roads, thus not impacting intersections.

Diesel particulate matter (DPM) is emitted from the combustion of diesel fuel, which can be used in generators and vehicles. DPM is a toxic air contamination (TAC). Other TACs are also emitted from the combustion of diesel fuel. The proposed project would generate TAC emissions when the generator is tested and used for emergencies. The generator would be a permitted source under the SMAQMD regulations and would be required to comply with all conditions of the permit once obtained. Based on typical permitting requirements, the generator could be operated up to 50 hours per year. The proposed project anticipates a maximum of 28 hours per year; however, because the SMAQMD methodology requires the generator's emissions to be modeled at full usage, the analysis in this document identifies maximum risk potential for the 50-hour operational period.

Using emissions data provided by the generator manufacturer, the ISCST3 model was used to determine the concentration of DPM emissions at nearby receptors.⁵ These concentrations were then converted to an anticipated lifetime cancer risk. Based on the modeling, the maximum potential cancer risk to nearby

⁴ Emissions model output are included in Appendix A.

⁵ While other chemical TACs are emitted, they are emitted in negligible amounts. Because DPM is the greatest contributor to overall TAC risk, and the model assumes a lifetime exposure (which would not occur with an emergency generator used only for testing and emergency operation), the results presented herein are overly conservative.

receptors is 1.67 in a million for a 50-hour annual usage. The maximum potential non-cancer risk to nearby receptors is 0.00105 for a 50-hour annual usage.⁶

The SMAQMD thresholds of significance are 10 in a million for cancer risk and 1 for non-cancer risk on both a project level and cumulative basis. Both the 28- and 50-hour annual usage scenarios result in emissions well below the SMAQMD thresholds. Therefore, emissions from TAC would be less than significant at both a project and cumulative level.

- e. **Less-Than-Significant Impact.** During construction of the proposed project, emissions from construction equipment, such as diesel exhaust, and VOCs may create objectionable odors. However, these odors would be temporary in nature and would not affect a substantial number of people. During operation of the proposed generator, odors would be primarily associated with the operation of the generator; however, proper maintenance and BACT would reduce the potential for objectionable odors during operation of the generator.

4. BIOLOGICAL RESOURCES

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

⁶ Emissions model output are included in Appendix A.

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
f. Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a. **No Impact.** Eleven special-status plant and animal species have been observed within the Sacramento East USGS quadrangle: American badger (*Taxidea taxus*), Cooper’s hawk (*Accipiter cooperii*), burrowing owl (*Athene cunicularia*), Swainson’s hawk (*Buteo swainsoni*), purple martin (*Progne subis*), bank swallow (*Riparia riparia*), Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), vernal pool fairy shrimp (*Branchinecta lynchi*), vernal pool tadpole shrimp (*Lepidurus packardii*), California linderiella (*Linderiella occidentalis*), and Sanford’s arrowhead (*Sagittaria sandrodii*). Of these special-status species, only four have the potential to occur within the site. There are some mature Italian cypress trees on-site that are well-established and could provide suitable nest sites for Cooper’s hawk, Swainson’s hawk, bank swallow, and purple martin. However, raptor habitat is marginal due to the urban nature of the project site and surroundings and distance from foraging areas (open grasslands), so the available nesting habitat is unlikely to be used by either of the hawk species. No nest structures or evidence of nesting, such as whitewash, feathers, castings, or prey remains, were observed in any of the trees on the project site during a site visit in August 2012. The only bird species observed on-site was a northern mockingbird (*Mimus polyglottus*). There is no suitable habitat for the other eight species. Therefore, modification of vegetation to accommodate the project would not result in a loss of protected species, habitat, or nests.
- b. **No Impact.** There are no riparian habitat or sensitive natural communities at or adjoining the project site.
- c. **No Impact.** There are no federally protected wetlands on or in the vicinity of the project site.
- d. **No Impact.** The project site is located in a highly urbanized area, where there is no native habitat. The project site has been disturbed by construction of the adjacent buildings, roadways, parking areas, and installation of landscaping. There are no native resident or migratory fish or wildlife species or established native resident or migratory wildlife corridors or nursery sites. The federal Migratory Bird Treaty Act (MBTA) protects all common wild birds found in the United States except the house sparrow, starling, feral pigeon, and resident game birds such as pheasant, grouse, quail, and wild turkey. The MBTA makes it unlawful for anyone to kill, capture, collect, possess, buy, sell, trade, ship, import, or export any migratory bird including feathers, parts, nests, or eggs. In addition, California Fish and Game Code Sections 3503, 3503.5, and 3513 prohibit take of all birds and their active nests, including raptors (birds of prey, such as hawks and owls) and other migratory non-game birds that are protected under the MBTA. As noted above, no nests were observed in any of the trees on the project site. Therefore, removal of vegetation (if any) would not remove any nests.

- e. **No Impact.** The proposed project would not involve activities that would conflict with local policies or ordinances protecting biological resources.
- f. **No Impact.** There are no approved Habitat Conservation Plans, Natural Conservation Community Plans, or other adopted plans that would apply to the proposed project.

5. CULTURAL RESOURCES

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a-d. **No Impact.** The project site is a paved and landscaped area adjoining modern buildings and has been disturbed by urban development. Installation of the generator would not involve removal, modification, or any improvements to existing structures. Minor trenching would be needed to install underground electrical connections, but this would only affect subsurface fill at the project site.

6. GEOLOGY AND SOILS

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: <ul style="list-style-type: none"> i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
ii. Strong seismic groundshaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on expansive soil, as defined in Section 1803.5.3 of the 2010 CBC, creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a-d. **No Impact.** The project site is a paved flat area with landscaping. It is not vulnerable to fault rupture, liquefaction and related effects, or slope stability problems. Sacramento is not subject to strong groundshaking, but design specifications for the generator will require the unit meet seismic certification in accordance with industry standards for its intended use and location. Other than minor trenching, no earthwork is proposed that would be a source of erosion.

7. GREENHOUSE GAS EMISSIONS

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a,b. **Less-than-Significant Impact.** Greenhouse gas (GHG) emissions would be generated by the combustion of diesel fuel used in the emergency back-up generator. The generator is expected to be operated up to 28 hours per year. However, the generator would be required to be permitted by the SMAQMD, and the SMAQMD permit allows up to 50 hours of operation per year. Therefore, GHG

emissions were conservatively estimated as if the generator would operate for the full 50 hours. SMAQMD methodology requires the construction emission to be combined with the operational emission to provide a combined annual emission. The methodology assumes that a project's lifetime is 40 years; therefore, the construction emissions are amortized over 40 years before being combined with the operational emissions.

The proposed project would result in 5.00 metric tons of carbon dioxide equivalents per year (MT CO₂e/year).⁷ The SMAQMD does not have a quantitative threshold for determining significance of a project's emissions. However, the BAAQMD's *Revised Draft Options and Justifications Report for California Environmental Quality Act Thresholds of Significance* document (October 2009) indicates that a project generating below 1,100 MT CO₂e annually would be considered to be less than significant. Because the SCAQMD does not have an established threshold, this analysis uses the conservative BAAQMD documented level of 1,100 MT CO₂e as the significance threshold for this project. The proposed project emissions are well below this threshold. Therefore, the proposed project would result in a less-than-significant impact for GHG emissions generation, when both construction and operations are considered together. Further, because the generator is not implementing any new land uses or increasing vehicle miles traveled, and it would operate only during maintenance testing and in case of emergency, it would result in a minimal annual contribution to cumulative GHGs that would not be cumulatively considerable or conflict with applicable plans or regulations.

8. HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

⁷ Emissions model output are included in Appendix A.

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
e. Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project vicinity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project vicinity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a,b. **Less-Than-Significant Impact.** The generator would be powered by diesel fuel, which would be stored in an adjacent above-ground storage tank (AST) with a capacity of 300 gallons. Diesel is a flammable material regulated under existing hazardous material management regulations and State and local Fire Code regulations. RT is required to comply with all applicable hazardous materials management laws and regulations, which minimizes potential risks during day-to-day operations, and reduces risk for upset or accident conditions. The storage of diesel and transportation of diesel to the site, along with the generation of small amounts of waste oil and lubricants from the generator, have the potential to increase risks to the public and environment. However, such risks would be minimal and would not present a substantial hazard, as described below.

The AST that would contain diesel fuel would be double-walled and insulated and would conform to National Fire Protection Association (NFPA) standards for protected steel tanks. The tank would consist of a top-fill system with overfill prevention and spill containment, emergency vent and secondary containment monitoring port, fire extinguisher, and fuel spill countermeasures kit. In accordance with the 2010 California Fire Code,⁸ guard posts (bollards) would be required to prevent vehicle impact.

Hazardous materials used and stored in larger quantities (i.e., greater than 55 gallons for liquids, 500 pounds for solids, or 200 cubic feet for gases) are subject to Hazardous Materials Management Plan (HMMP) reporting under Section 25503.3(c) of the California Health and Safety Code. The proposed quantity of diesel to be stored in the AST would be subject to HMMP reporting. The HMBP identifies the location of the AST, and the information in the HMBP is readily available to the City of Sacramento Fire Department in case of emergency. In addition, the Sacramento County Environmental Management

⁸ *California Code of Regulations*, Title 24, Part 9, Chapter 34, Section 3404.2.9.7.5. Effective January 1, 2011.

Department (SCEMD) – as the Certified Unified Program Agency (CUPA) – has monitoring and enforcement authority for ensuring the AST is maintained in accordance with hazardous materials regulations. SCEMD will inspect the tank as required by law.

Fuel in the AST would be tested during routine maintenance for level and quality. If the fuel does not meet specifications, the portion of the fuel not meeting specifications would be pumped out, and new fuel would be added. Waste fuel would be removed by licensed vendor and transported for disposal at a permitted facility to accept hazardous waste. The removal of waste fuel and refueling would be infrequent, no more than once a year. As a result, the amount of hazardous waste would be minimal, and the volume of fuel transported to the site and transferred to the generator would also be minimal, which would minimize the risk of upset or accident conditions.

However, in the unlikely event of a spill or release on-site of 42 gallons or more, in accordance with federal regulations, RT is responsible for notifying SCEMD and the California Emergency Management Agency (Cal EMA). In addition, the City of Sacramento Fire Department provides fire protection and hazardous materials incident response. There is one fire station within a few blocks of the site (Station 4 at 3145 Granada Way). There are three other stations approximately 1 mile away (Station 1 at 624 Q Street, Station 2 at 1229 I Street, and Station 5 at 731 Broadway).

- c. **Less-Than-Significant Impact.** There are no public or private schools or day care centers located within ¼ mile of the project site. Operation of the generator would result in TAC emissions, as identified in Item 3d, but the potential impacts at any single receptor would be miniscule, and would not pose a health risk to any sensitive receptors, as explained in Item 3d.
- d. **No Impact.** The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.⁹
- e,f. **No Impact.** The project site is not within a public airport land use plan. Helicopter operations at the UC Davis Medical Center, a few miles away, would not be affected by the project location or operation.
- g. **No Impact.** The proposed project is intended to provide backup power for RT's system in the event of emergency to allow administrative functions and light rail operation to function in an emergency, which would be a benefit of the project. During installation of the generator, equipment would be situated so that it would result in minimal disruption to the adjacent light rail line, which does not provide public roadway access.
- h. **No Impact.** The project site is in an urbanized area of Sacramento that is not adjacent to wildland areas where high fire hazard potential exists.

⁹ California Department of Toxic Substances Control, EnviroStor. Search criteria: 1400 29th Street, Sacramento, California. <http://www.envirostor.dtsc.ca.gov/public/>. August 2012.

9. HYDROLOGY AND WATER QUALITY

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Place structures within a 100-year flood hazard area that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. Contribute to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a,f. **No Impact.** The proposed project would not generate any discharges subject to water quality regulations or permits, or otherwise contribute pollutants that could degrade water quality. As described in Item 8a, the generator would include secondary containment features to ensure fuel leaks, if any,

would be contained so that they do not enter the storm drain system, which drains to the Sacramento River.

- b. **No Impact.** The proposed project would not involve groundwater use and would not affect recharge potential. There would be no effect on groundwater supplies.
- c,d. **No Impact.** The proposed project would have no effect on drainage patterns, erosion/siltation potential, or cause or exacerbate on- or off-site flooding due to its distant location relative to surface water bodies and minimal footprint.
- e. **No Impact.** There would be no changes to the existing rate and amount of stormwater entering local drainages and the stormwater drain system that could affect capacity as a result of the project.
- g,h. **No Impact.** The proposed project would not place housing in special flood hazard areas, and it would not redirect or impede flood flows because no physical changes in flood-prone areas are proposed.
- i. **No Impact.** The project site is in an area protected from flooding by levees along the Sacramento and American rivers and Nimbus and Folsom dams. While flood risk does exist at the project site, this is an existing condition that would not change as a result of the project, and there are no aspects of the project that would alter inundation areas.
- j. **No Impact.** The project site is not located near an ocean coast or enclosed body of water that could produce a seiche. It is not located near areas having steep slopes that would create mudflows.

10. LAND USE AND PLANNING

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in land use/operational conflicts between existing and proposed on-site or off-site land uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a. **No Impact.** The project site is a paved area with mature landscaping adjoining an RT building. There is an alley-access driveway to the drive-through window for the fast food restaurant. Installation and operation of the generator would not preclude access to the fast food restaurant. This would not involve land use changes that would divide an established community.
- b. **No Impact.** The project site is within the City of Sacramento General Plan Central City Community Plan area. The land use designation is urban corridor low and the zoning is C-2-SPD (general commercial – special planning district). The land use plans and policies and zoning regulations prescribe development standards for mixed uses, such as floor area, density, height, and setbacks for such development, among other items. The analysis provided in this checklist concludes the proposed project would not result in any significant environmental effects that would conflict with applicable land use plans, polices, or regulations of any agency with jurisdiction over the project. Further, RT would be required to obtain all necessary permits from the City of Sacramento to construct and operate the generator to ensure it meets City requirements concerning utility connections and public safety.
- c. **No Impact.** There is no applicable habitat conservation plan or natural community conservation plan.
- d. **No Impact.** The proposed project is situated in a fully developed urban environment within RT existing facilities and is consistent with existing RT administrative and bus maintenance operations and surrounding land use context. It would not be a substantial source of noise or air emissions, create a public safety risk, or cause an adverse change in the visual environment. Therefore, it would not result in land use or operational conflicts on- or off-site.

11. MINERAL RESOURCES

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a,b. **No Impact.** The availability of mineral resources would not be affected by the proposed project because there are no mineral resources at the project site.

12. NOISE

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Expose persons to or generate excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project vicinity to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Be located in the vicinity of a private airstrip and expose people residing or working in the project vicinity to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

Existing measured noise levels at the nearest residential property are presented in Table 1, which demonstrate the existing ambient noise level in the vicinity of the project site is already high (approximately 70 dBA).

No	Location	Time of Day	Observed Primary Sources of Noise	Noise Level Statistics		
				L _{eq} (dBA)	L _{min} (dBA)	L _{max} (dBA)
1	At proposed generator location	11:18 am	Traffic (Business 80, 29th Street, N Street O Street Alley, Jimboy's Taco Drive Thru) rooftop HVAC, people walking and talking	69.3	65.9	79.6
2	Adjacent to residential property (southeast of) project site: 2827) O St – parking lot	11:35 am	Light Rail (warning bells, approach, braking, speaker announcements, depart) HVAC, platform noise (people talking loudly)	70.3	65.5	86.3

Notes: Measurements taken between 11:00 AM and 12:00 PM on August 27, 2012.
Source: Atkins, 2012.

The applicable noise standards for evaluating the proposed project are:

City of Sacramento Noise Ordinance. The City of Sacramento Noise Control Ordinance, found in the Sacramento Municipal Code Title 8 – Health and Safety, Chapter 8.68, sets limits for exterior noise levels on designated residential property. The ordinance states that noise shall not exceed 55 dBA (“A-weighted decibels”)¹⁰ during any cumulative 30-minute period in any hour during the day (7:00 a.m. to 10:00 p.m.), and 50 dBA during any cumulative 30-minute period in any hour during the night (10:00 p.m. to 7:00 a.m.). The ordinance sets somewhat higher noise limits for noise of shorter duration; however, noise shall never exceed 75 dBA in the day and 70 dBA at night. Construction activities are conditionally exempt from the Noise Ordinance, subject to certain limitations.

City of Sacramento General Plan. The City of Sacramento General Plan Environmental Constraints Noise section has established Goals and Policies relating to evaluating noise impacts due to projects. The noise reduction goal for the City is to minimize noise impacts on human activity to ensure the health and safety of the community. The City of Sacramento General Plan (2009) policies establish interior and exterior noise standards for land use compatibility and allowable exterior incremental noise standards for projects that would increase existing noise levels that would require mitigation measures when the allowable noise level increment is exceeded (General Plan Environmental Constraints Table EC2). For the measured ambient noise environment at the project site (73 dBA, see Table 1, above), the applicable exterior incremental noise impact standard is an increase of 1 dBA. The City also requires projects to mitigate operational noise impacts to adjacent noise sensitive uses when operational noise thresholds contained in the City of Sacramento Noise Ordinance are exceeded.

- a. **Less-Than-Significant Impact.** Temporary, intermittent elevated noise levels would occur on and near the proposed project site during the construction phase that could affect nearby sensitive receptors. The mix of equipment operating would vary depending on the activity being conducted on-site and noise levels would vary based on the amount of equipment in operation and the location of the activity. Reference data illustrate that operation of anticipated on-site construction equipment (cement truck, crane) would result in noise levels between approximately 75 A-weighted decibels (dBA) and 100 dBA when measured 50 feet from the source. The closest noise-sensitive receptors are single-family residences approximately 100 feet southeast. Assuming a noise reduction of approximately 6 dBA for every doubling of distance from the source, the closest receptors could experience intermittent noise levels ranging from 69 dBA to 79 dBA. However, as required by Section 8.68.080(E) of the City Code, construction activities would be limited to occur only between the hours of 7:00 A.M. and 6:00 P.M., Monday through Saturday, and 9:00 A.M. and 6:00 P.M. on Sundays and public holidays. Section 8.68.080(E) also requires the use of exhaust and intake silencers for internal combustion engines used during construction to reduce noise levels associated with construction activities. These restrictions would be included in contract specifications.

¹⁰ The A-weighted decibel scale (dBA) is an industry convention that specifically relates noise to human sensitivity because humans are not equally sensitive to a given sound level at all frequencies. The A-weighted decibel scale does this by placing more importance on frequencies that are more noticeable to the human ear.

Operational noise would be limited to noise levels associated with the periodic testing during maintenance, and from operation of the generator itself in an emergency. Figure 3 shows estimated noise levels near the enclosure and off-site. Based on generator specifications, with a Level 2 sound enclosure, and accounting for additional attenuation of noise over distance, noise levels from generator operation would not be expected to exceed 67 dBA at the nearest sensitive receptor property line – the apartments southeast of the project site. For the measured ambient noise environment at the project site (70 dBA), the applicable exterior incremental noise impact standard is an increase of 1 dBA. The noise levels from generator operation would contribute to ambient noise levels, but it would not exceed the allowable threshold of 1 dBA established by the City of Sacramento General Plan. It also would not result in an increase in noise levels that would be considered readily discernible (i.e. more than 3 dBA).

Further, it should be noted that the generator would not be run on a continuing basis, only periodically for maintenance, (which would include testing), and, when necessary, during a power emergency affecting the Call Center. Therefore, the proposed project is not expected to generate a substantial temporary or periodic increase in ambient noise at sensitive receptors.

- b. **Less-Than-Significant Impact.** Installation of the generator and AST enclosure could expose nearby off-site noise-sensitive receptors to elevated levels of groundborne vibration. Based on FTA's Transit Noise and Vibration Impact Assessment (2006) reference vibration levels for a heavy truck (86 VdB at 25 feet) and the existing distance to adjacent sensitive receptors from the project site (approximately 100 feet), groundborne vibration associated from installation equipment would attenuate to 69 VdB at the nearest sensitive receptor. The FTA identifies a vibration level of 72 VdB to be the level where residences where people normally sleep would be impacted. Equipment installation activities would occur during the daytime and would be below the vibration level FTA criteria. Therefore, equipment used to install the generator would not be considered substantial or excessive.

Operation of the proposed generator would occur periodically at the project site and within a developed area that is subject to regular light-rail activity. As such, potential vibration associated within the proposed generator would not be considered substantial or occur over larger periods of time. Further, the proposed project would be designed in accordance with National Electrical Manufacturers Association (NEMA) standards. As such, the proposed generator is not anticipated to result in excessive vibration at the nearest sensitive receptors (residences along O Street and 29th streets).

- c. **Less-Than-Significant Impact.** The long-term operation of the proposed project would consist only of periodic maintenance, testing, and only in case of emergency. It would not be a continuous or permanent source of noise. Noise increases would not be considered substantial. Therefore, impacts would be less than significant.



- d. **Less-Than-Significant Impact.** The proposed project would have a less-than-significant impact associated with a temporary or periodic increase in ambient noise levels in the proposed project vicinity. As discussed above, noise generated during installation of the equipment could create temporary or periodic increases in ambient noise levels. However, construction work hours are restricted by provisions in the Municipal Code.
- e,f. **No Impact.** The proposed project is an unoccupied non-residential use, and no people would be exposed to aircraft noise.

13. POPULATION AND HOUSING

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a. **No Impact.** The proposed project would not result in an increase in population that would result in the need for new housing or require the extension of infrastructure.
- b,c. **No Impact.** The proposed project would not displace people or housing.

14. PUBLIC SERVICES

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
a. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
b. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a. **Less-than-Significant Impact.** The project would include an above-ground diesel fuel storage tank. In the unlikely event of a spill or fire, the City of Sacramento Fire Department could provide response services from Station 4 at 3145 Granada Way, located a few blocks from the project site. There are three other stations approximately 1 mile away (Station 1 at 624 Q Street, Station 2 at 1229 I Street, and Station 5 at 731 Broadway). However, given the small volume of stored fuel and operational characteristics of the generator, no additional fire protection services would be required that would result in the need for additional fire facilities.
- b,e. **No Impact.** The proposed project would not require increased police protection because RT provides its own security for its facilities.
- c,d. **No Impact.** The proposed project would not result in a population increase that would require schools or parks.

15. RECREATION

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a,b. **No Impact.** The proposed project would have no impact on recreational facilities because there are no facilities at the site, and the project would not increase the demand for facilities.

16. TRANSPORTATION/TRAFFIC

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a,b. **No Impact.** The proposed project is the construction and operation of an emergency generator located on RT property, which would not conflict with any plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, congestion management program.
- c. **No Impact.** The proposed project would not result in a change in air traffic patterns. See Item 9e.
- d. **No Impact.** The project site is a paved area adjacent to an RT building. The site is physically separated from a private parking lot for the fast food restaurant and the driveway that provides access to a drive-through window for the restaurant. Therefore, the project would not affect the design of the existing driveway to the fast food restaurant or preclude access or otherwise increase hazards because of a design feature.
- e. **No Impact.** See Item 9g.
- f. **No Impact.** There are no adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities that apply to the proposed project.

17. UTILITIES AND SERVICE SYSTEMS

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a-e. **No Impact.** The proposed project would not generate wastewater, require water, or increase storm flows that would require new facilities. There are no applicable wastewater treatment requirements.
- f,g. **No Impact.** Installation of the equipment would result a minor amount of solid waste (e.g., packaging materials), which would not affect landfill capacity.

18. OTHER ISSUES (ENERGY)

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Result in, contribute to, or substantially affect other environmental issues(s)? If so, specify below and evaluate:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a. **Less-Than-Significant Impact.** The generator would only operate during testing and in an emergency and would rely on diesel fuel to generate electricity. Minimal amounts of electricity would be used during construction. There would be no substantial long-term or permanent increase in energy demand as a result of the proposed project.

19. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project have impacts that are individually	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the project:	Significant or Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
limited but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)				
c. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a. **No Impact.** The proposed project does not involve any activities that would involve ground-disturbance beyond the top few inches of soil in a landscaped area adjacent to an existing building or alteration of any existing structures at the site. There would be no biological resources or cultural resources impacts.
- b. **No Impact.** The proposed project would generate air emissions and GHGs, but the project’s contribution would not be cumulatively considerable, and the project would not conflict or obstruct implementation of the applicable air quality plan (Item 3a-b) or laws adopted to address GHG (Item 7). The proposed project would result in negligible noise impacts at the project level (refer to Item 12), and would not contribute to a cumulative impact.

For all other remaining topics, due to the nature of project, the project would have no impact or less-than-significant impact, and, therefore, would not result in cumulatively considerable impacts at the project level for aesthetics, agriculture and forest resources, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, utilities and service systems, and energy.

- c. **Less-Than-Significant Impact.** There would be no significant adverse effects on human beings. As explained in Items 3 (Air Quality) and 11 (Noise), there would be no substantial increase in air emissions or noise levels as a result of the proposed project. For all other topics, there would be either no impact or a less-than-significant impact.

VI. REPORT PREPARERS

Atkins
 1410 Rocky Ridge Drive, Suite 140
 Roseville, CA 95661
 916-782-7275
 Project Manager: Alice Tackett

Appendix A

Supporting Documentation:

Air Quality and Greenhouse Gas Emissions

SRT Admin Center Generator

Assumptions

8/29/2012

Health Risk Assumptions

Project is using a GENERAC Industrial Diesel Generator Set (SD175)
 Generator Specs:^{1,2}

	kW	150 2011 or newer model			
	Grams/kW-hr	0.08 PM			
		3.80 NO _x +NMHC			
		1.20 CO			
	Exhaust Flow internal			At exhaust port	
		1,050.0 cfm			
		29.7 m ³ /min	0.495 m ³ /sec	45.3 m/s	
	Exhaust Temp internal			At exhaust port	
		895.0 °F			739.8 °F
		479.0 °C			872 °C
	Exhaust Outlet	4.0 inch	0.33333333	ft	0.1028 meters
	Enclosure length	143.0 feet	44.110452	meters	
	Enclosure Width	50.4 feet	15.54336	meters	
	Enclosure Height	68.2 feet	21.023628	meters	
	Emissions Std. Category	Tier 3 EPA Rating			

Assumptions

	Hours of Operation ³	50.0 maximum hours per year
		28.0 hours per year (project. 80 min/month + 60 minutes per quarter + 8 hours per year) ⁴
	lbs/gram	0.0022
	UTM	

Emissions:		g/KW-hr	KW	Hours/year	g/year	sec/year	g/sec	lbs/year	lbs/hour	lbs/day
	PM	0.08	150.0	50.0	600	3.15E+07	1.90E-05	-	-	
		0.08	150.0	28.0	336	3.15E+07	1.07E-05	-	-	
	NO _x	3.80	150.0	50.0	28,500	-	-	62.83	1.26	2.51 2 hr
		3.80	150.0	28.0	15,960	-	-	35.19	1.26	30.16 24 hr
	CO	1.20	150.0	50.0	9,000	-	-	19.84	0.40	0.79 2 hr
		1.20	150.0	28.0	5,040	-	-	11.11	0.40	9.52 24 hr

Sources:

- 1 GENERAC Industrial Power, *Industrial Diesel Generator Set Primary Codes and Standards SD150*, 9/15/2011.
- 2 GENERAC Industrial Power, *Statement of Exhaust Emissions 2011 IVECO Diesel Fueled Generator*, 2/2011.
 GENERAC Industrial Power, *Statement of Exhaust Emissions 2012 IVECO Diesel Fueled Generator*, 2/2012.
- 3 Sacramento Metropolitan Air Quality Management District. *Stationary Internal Combustion Engine Policy Manual*. January 1, 2001.
- 4 SRT (Project Description)

SRT Admin Center Generator
 Health Risk Assessment Calculations
 Operational Year 2013 50 hours of operation/year

Receptor	Modeled		Emission Factor	Annual DPM ($\mu\text{g}/\text{m}^3$)	Daily breathing rate (DBR) (L/kg bw-day)	Inhalation absorption factor	Exposure frequency (EF) (days/year)	Exposure Duration (ED) (years)	Conversion factor (1×10^{-6})
	DPM ($\mu\text{g}/\text{m}^3$)	DPM ($\mu\text{g}/\text{m}^3$)							
Max: Residential	353.188	0.00672	1.90E-05	0.00672	302	1	350	70	0.000001
Max Modeled	274.716	0.00523	1.90E-05	0.00523	302	1	350	70	0.000001
R_1	127.137	0.00242	1.90E-05	0.00242	302	1	350	70	0.000001
R_2	252.172	0.00480	1.90E-05	0.00480	302	1	350	70	0.000001
R_3	58.396	0.00111	1.90E-05	0.00111	302	1	350	70	0.000001
R_4	16.309	0.00031	1.90E-05	0.00031	302	1	350	70	0.000001
R_5	12.212	0.00023	1.90E-05	0.00023	302	1	350	70	0.000001
R_6	23.687	0.00045	1.90E-05	0.00045	302	1	350	70	0.000001
R_7	10.232	0.00019	1.90E-05	0.00019	302	1	350	70	0.000001
R_8	3.352	0.00006	1.90E-05	0.00006	302	1	350	70	0.000001
R_9	4.342	0.00008	1.90E-05	0.00008	302	1	350	70	0.000001
R_10	5.800	0.00011	1.90E-05	0.00011	302	1	350	70	0.000001
R_11	12.081	0.00023	1.90E-05	0.00023	302	1	350	70	0.000001
R_12	24.874	0.00047	1.90E-05	0.00047	302	1	350	70	0.000001
R_13	33.804	0.00064	1.90E-05	0.00064	302	1	350	70	0.000001
R_14	15.304	0.00029	1.90E-05	0.00029	302	1	350	70	0.000001
R_15	11.583	0.00022	1.90E-05	0.00022	302	1	350	70	0.000001

SRT Admin Center Generato
 Health Risk Assessment Cal
 Operational Year 2013

Receptor	Averaging period (AT) (days)	Dose	Cancer		Reference Level	Non- Cancer	
			Potency Value	Risk		Risk	Significant?
Max: Residential	25550	1.95E-06	1.1	2.141	5	0.00134	No
Max Modeled	25550	1.51E-06	1.1	1.665	5	0.00105	No
R_1	25550	7.00E-07	1.1	0.771	5	0.00048	No
R_2	25550	1.39E-06	1.1	1.528	5	0.00096	No
R_3	25550	3.22E-07	1.1	0.354	5	0.00022	No
R_4	25550	8.99E-08	1.1	0.099	5	0.00006	No
R_5	25550	6.73E-08	1.1	0.074	5	0.00005	No
R_6	25550	1.31E-07	1.1	0.144	5	0.00009	No
R_7	25550	5.64E-08	1.1	0.062	5	0.00004	No
R_8	25550	1.85E-08	1.1	0.020	5	0.00001	No
R_9	25550	2.39E-08	1.1	0.026	5	0.00002	No
R_10	25550	3.20E-08	1.1	0.035	5	0.00002	No
R_11	25550	6.66E-08	1.1	0.073	5	0.00005	No
R_12	25550	1.37E-07	1.1	0.151	5	0.00009	No
R_13	25550	1.86E-07	1.1	0.205	5	0.00013	No
R_14	25550	8.43E-08	1.1	0.093	5	0.00006	No
R_15	25550	6.38E-08	1.1	0.070	5	0.00004	No

```

**
*****
**
** ISCST3 Input Produced by:
** AERMOD View Ver. 7.6.1
** Lakes Environmental Software Inc.
** Date: 8/29/2012
** File: C:\AERMOD\SRT Projects\Admin Center\AdminCtr.INP
**
*****
**
**
** ISCST3 Control Pathway
*****
**
**
CO STARTING
TITLEONE C:\AERMOD\SRT Projects\Admin Center\AdminCtr.isc
MODELOPT DEFAULT CONC URBAN
AVERTIME 24 ANNUAL
POLLUTID PM 10
TERRHGT5 ELEV
RUNORNOT RUN
ERRORFIL AdminCtr.err
CO FINISHED
**
*****
** ISCST3 Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
LOCATION STCK1 POINT 633233.617 4270013.726 6.400
** Source Parameters **
SRCPARAM STCK1 1.0 2.362 666.372 45.30000 0.101

** Building Downwash **
BUILDHGT STCK1 7.62 9.14 9.14 9.14 9.14 9.14
BUILDHGT STCK1 9.14 9.14 9.14 4.57 4.57 7.62
BUILDHGT STCK1 7.62 7.62 7.62 7.62 7.62 7.62
BUILDHGT STCK1 7.62 9.14 9.14 9.14 9.14 9.14
BUILDHGT STCK1 9.14 9.14 9.14 0.00 5.49 7.62
BUILDHGT STCK1 7.62 7.62 7.62 7.62 7.62 7.62

BUILDWID STCK1 41.17 39.54 46.53 52.11 56.61 59.50
BUILDWID STCK1 60.58 59.92 57.24 13.53 11.00 62.11
BUILDWID STCK1 58.71 60.19 59.84 57.67 53.75 48.19
BUILDWID STCK1 41.17 39.54 46.53 38.78 44.43 48.84
BUILDWID STCK1 51.77 53.12 52.86 0.00 13.73 62.11
BUILDWID STCK1 58.71 34.34 34.92 34.43 32.90 30.37

SRCGROUP ALL
SO FINISHED
**
*****
** ISCST3 Receptor Pathway
*****
**
**
RE STARTING
GRIDCART UCART1 STA
XYINC 633020.30 20 15.00 4269883.08 20 15.00
ELEV 1 6.71 6.71 6.71 6.71 6.71 6.71
ELEV 1 6.40 6.40 6.40 6.40 6.10 6.10
ELEV 1 6.10 6.71 7.01 8.84 8.84 8.84
ELEV 1 8.84 7.62
ELEV 2 6.40 6.40 6.40 6.40 6.40 6.40
ELEV 2 6.40 6.40 6.40 6.10 6.10 6.10
ELEV 2 6.10 6.71 6.71 8.84 8.84 8.84
ELEV 2 8.84 7.62
ELEV 3 6.40 6.40 6.40 6.40 6.40 6.40
ELEV 3 6.40 6.40 6.10 6.10 6.10 6.10
ELEV 3 6.10 6.40 6.71 7.32 8.84 8.84
ELEV 3 7.92 7.92
ELEV 4 6.40 6.40 6.40 6.40 6.40 6.40
ELEV 4 6.40 6.10 6.10 6.10 6.10 6.10
ELEV 4 6.10 6.40 6.40 7.32 7.32 7.92
ELEV 4 7.92 7.92
ELEV 5 6.40 6.40 6.40 6.40 6.40 6.40
ELEV 5 6.40 6.10 6.10 6.10 6.10 6.10
ELEV 5 6.10 6.40 6.40 7.01 7.32 7.92
ELEV 5 7.92 7.92
ELEV 6 6.40 6.40 6.40 6.40 6.40 6.40
ELEV 6 6.40 6.10 6.10 6.10 6.10 6.10
ELEV 6 6.10 6.40 6.40 7.01 7.01 7.92
ELEV 6 7.92 7.92
ELEV 7 6.40 6.40 6.40 6.40 6.40 6.40
ELEV 7 6.40 6.10 6.10 6.10 6.10 6.10
ELEV 7 6.10 6.40 6.40 7.01 7.01 7.62
ELEV 7 7.92 7.92
ELEV 8 6.40 6.40 6.40 6.40 6.40 6.40
ELEV 8 6.40 6.10 6.10 6.10 6.10 6.10

```

ELEV	8	6.10	6.40	6.40	7.01	7.01	7.62
ELEV	8	7.62	7.62				
ELEV	9	6.40	6.40	6.40	6.40	6.40	6.40
ELEV	9	6.10	6.10	6.10	6.10	6.10	6.10
ELEV	9	6.10	6.40	6.40	7.01	7.01	7.32
ELEV	9	7.62	7.62				
ELEV	10	6.40	6.40	6.40	6.40	6.40	6.10
ELEV	10	6.10	6.10	6.10	6.10	6.10	6.10
ELEV	10	6.10	6.40	6.40	7.01	7.01	7.32
ELEV	10	7.32	7.62				
ELEV	11	6.40	6.40	6.40	6.40	6.40	6.10
ELEV	11	6.10	6.10	6.10	6.10	6.10	6.10
ELEV	11	6.10	6.40	6.40	6.40	7.01	7.01
ELEV	11	7.32	7.32				
ELEV	12	6.40	6.40	6.40	6.40	6.40	6.10
ELEV	12	6.10	6.10	6.10	6.10	6.10	6.10
ELEV	12	6.10	6.40	6.40	6.40	6.40	6.71
ELEV	12	6.71	7.01				
ELEV	13	6.40	6.40	6.40	6.40	6.10	6.10
ELEV	13	6.10	6.10	6.10	6.10	6.10	6.10
ELEV	13	6.10	6.10	6.40	6.40	6.40	6.71
ELEV	13	6.71	6.71				
ELEV	14	6.40	6.40	6.40	6.10	6.10	6.10
ELEV	14	6.10	6.10	6.10	6.10	6.10	6.10
ELEV	14	6.10	6.10	6.10	6.40	6.40	6.71
ELEV	14	6.71	6.71				
ELEV	15	6.40	6.40	6.10	6.10	6.10	6.10
ELEV	15	6.10	6.10	6.10	6.10	6.10	6.10
ELEV	15	6.10	6.10	6.10	6.10	6.40	6.40
ELEV	15	6.71	6.71				
ELEV	16	6.40	6.10	6.10	6.10	6.10	6.10
ELEV	16	6.10	6.10	6.10	6.10	6.10	6.10
ELEV	16	6.10	6.10	6.10	6.40	6.40	6.40
ELEV	16	6.40	6.71				
ELEV	17	6.10	6.10	6.10	6.10	6.10	6.10
ELEV	17	6.10	6.10	6.10	6.10	6.10	6.10
ELEV	17	6.40	6.40	6.40	6.40	6.40	6.40
ELEV	17	6.40	6.40				
ELEV	18	6.10	6.10	6.10	6.10	6.10	6.10
ELEV	18	6.10	6.10	6.10	6.10	6.10	6.40
ELEV	18	6.40	6.40	6.40	6.40	6.40	6.40
ELEV	18	6.40	6.71				
ELEV	19	6.10	6.10	6.10	6.10	6.10	6.10
ELEV	19	6.10	6.10	6.10	6.10	6.40	6.40
ELEV	19	6.40	6.40	6.40	6.40	6.40	6.40
ELEV	19	6.40	6.71				
ELEV	20	6.10	6.10	6.10	6.10	6.10	6.10
ELEV	20	6.10	6.10	6.10	6.40	6.40	6.40
ELEV	20	6.40	6.40	6.40	6.40	6.40	6.40
ELEV	20	6.40	6.71				

```

GRIDCART UCART1 END
** DESCRREC "" ""
DISCCART 633265.52 4269980.26 7.62
DISCCART 633242.43 4269988.27 7.01
DISCCART 633235.83 4269962.82 7.01
DISCCART 633239.60 4269911.92 7.32
DISCCART 633224.05 4269917.57 6.40
DISCCART 633230.17 4269940.67 6.40
DISCCART 633196.24 4269951.51 6.10
DISCCART 633130.26 4269957.63 6.10
DISCCART 633137.33 4269976.49 6.10
DISCCART 633120.36 4270004.29 6.10
DISCCART 633132.14 4270045.77 6.10
DISCCART 633135.44 4270064.15 6.10
DISCCART 633151.47 4270105.15 6.10
DISCCART 633182.72 4269999.24 6.10
DISCCART 633178.91 4269987.79 6.10
RE FINISHED
**
*****
** ISCST3 Meteorology Pathway
*****
**
**
ME STARTING
INPUTFIL MnM\SACOAK-1.ASC
ANEMHGHT 10 METERS
SURFDATA 23232 1985 SACRAMENTO/EXECUTIVE_ARPT
UAIRDATA 23230 1985 OAKLAND/WSO_AF
ME FINISHED
**
*****
** ISCST3 Output Pathway
*****
**
**
OU STARTING
RECTABLE ALLAVE 1ST
RECTABLE 24 1ST
** Auto-Generated Plotfiles
PLOTFILE 24 ALL 1ST AdminCtr.IS\24H1GALL.PLT 31
PLOTFILE ANNUAL ALL AdminCtr.IS\AN00GALL.PLT 32
OU FINISHED

```

*** Message Summary For ISC3 Model Setup ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 1 Warning Message(s)
A Total of 0 Informational Message(s)

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
RE W282 163 CHK_EL:RecElev < SrcBase; See non-DEFAULT HE>ZI option in MCB#9

*** SETUP Finishes Successfully ***

```

*** ISCST3 - VERSION 02035 ***      *** C:\AERMOD\SRT Projects\Admin Center\AdminCtr.isc      ***      08/29/12
***                                     ***                                     ***      09:44:27
**MODELOPTs:                          URBAN ELEV          DFAULT          ***      PAGE 1
CONC
-----
***      MODEL SETUP OPTIONS SUMMARY      ***
-----
**Intermediate Terrain Processing is Selected
**Model Is Setup For Calculation of Average CONCentration Values.

-- SCAVENGING/DEPOSITION LOGIC --
**Model Uses NO DRY DEPLETION.  DDPLETE = F
**Model Uses NO WET DEPLETION.  WDPLETE = F
**NO WET SCAVENGING Data Provided.
**NO GAS DRY DEPOSITION Data Provided.
**Model Does NOT Use GRIDDED TERRAIN Data for Depletion Calculations

**Model Uses URBAN Dispersion.

**Model Uses Regulatory DEFAULT Options:
  1. Final Plume Rise.
  2. Stack-tip Downwash.
  3. Buoyancy-induced Dispersion.
  4. Use Calms Processing Routine.
  5. Not Use Missing Data Processing Routine.
  6. Default Wind Profile Exponents.
  7. Default Vertical Potential Temperature Gradients.
  8. "Upper Bound" Values for Supersquat Buildings.
  9. No Exponential Decay for URBAN/Non-SO2

**Model Accepts Receptors on ELEV Terrain.
**Model Assumes No FLAGPOLE Receptor Heights.
**Model Calculates 1 Short Term Average(s) of: 24-HR
and Calculates ANNUAL Averages

**This Run Includes:      1 Source(s);      1 Source Group(s); and      415 Receptor(s)
**The Model Assumes A Pollutant Type of:  PM_10
**Model Set To Continue RUNning After the Setup Testing.

**Output Options Selected:
Model Outputs Tables of ANNUAL Averages by Receptor
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                           m for Missing Hours
                                                           b for Both Calm and Missing Hours

**Misc. Inputs:  Anem. Hgt. (m) = 10.00 ;      Decay Coef. = 0.000      ;      Rot. Angle = 0.0
Emission Units = GRAMS/SEC      ;      Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 1.2 MB of RAM.

**Input Runstream File:      AdminCtr.INP
**Output Print File:      AdminCtr.OUT
**Detailed Error/Message File:  AdminCtr.err

```

**MODELOPTs:
 CONC URBAN ELEV DFAULT

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RATE SCALAR VARY BY
STCK1	0	0.10000E+01	633233.6	4270013.5	6.4	2.36	666.37	45.30	0.10	YES	

**MODELOPTS:
CONC URBAN ELEV DEFAULT

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: STCK1

IFV	BH	BW	WAK	IFV	BH	BW	WAK	IFV	BH	BW	WAK	IFV	BH	BW	WAK	IFV	BH	BW	WAK
1	7.6	41.2	0	2	9.1	39.5	0	3	9.1	46.5	0	4	9.1	52.1	0	5	9.1	56.6	0
7	9.1	60.6	0	8	9.1	59.8	0	9	9.1	57.2	0	10	4.6	13.5	0	11	4.6	11.0	0
13	7.6	58.7	0	14	7.6	60.2	0	15	7.6	59.8	0	16	7.6	57.7	0	17	7.6	53.8	0
19	7.6	41.2	0	20	9.1	39.5	0	21	9.1	46.5	0	22	9.1	38.8	0	23	9.1	44.4	0
25	9.1	51.8	0	26	9.1	53.1	0	27	9.1	52.9	0	28	0.0	0.0	0	29	5.5	13.7	0
31	7.6	58.7	0	32	7.6	34.3	0	33	7.6	34.9	0	34	7.6	34.4	0	35	7.6	32.9	0
																36	7.6	30.4	0

*** ISCST3 - VERSION 02035 *** *** C:\AERMOD\SRT Projects\Admin Center\AdminCtr.isc

*** 08/29/12
*** 09:44:27
PAGE 5

**MODELOPTs:
CONC URBAN ELEV DFAULT

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

*** X-COORDINATES OF GRID ***
(METERS)

633020.3, 633035.3, 633050.3, 633065.3, 633080.3, 633095.3, 633110.3, 633125.3, 633140.3, 633155.3,
633170.3, 633185.3, 633200.3, 633215.3, 633230.3, 633245.3, 633260.3, 633275.3, 633290.3, 633305.3,

*** Y-COORDINATES OF GRID ***
(METERS)

4269883.0, 4269898.0, 4269913.0, 4269928.0, 4269943.0, 4269958.0, 4269973.0, 4269988.0, 4270003.0, 4270018.0,
4270033.0, 4270048.0, 4270063.0, 4270078.0, 4270093.0, 4270108.0, 4270123.0, 4270138.0, 4270153.0, 4270168.0,

*** ISCST3 - VERSION 02035 ***

*** C:\AERMOD\SRT Projects\Admin Center\AdminCtr.isc

08/29/12

09:44:27

**MODELOPTs:

URBAN ELEV

DEFAULT

PAGE 6

CONC

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	633020.31	633035.31	633050.31	633065.31	X-COORD (METERS) 633080.31	633095.31	633110.31	633125.31	633140.31
4270168.00	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10
4270153.00	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10
4270138.00	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10
4270123.00	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10
4270108.00	6.40	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10
4270093.00	6.40	6.40	6.10	6.10	6.10	6.10	6.10	6.10	6.10
4270078.00	6.40	6.40	6.40	6.10	6.10	6.10	6.10	6.10	6.10
4270063.00	6.40	6.40	6.40	6.40	6.10	6.10	6.10	6.10	6.10
4270048.00	6.40	6.40	6.40	6.40	6.40	6.10	6.10	6.10	6.10
4270033.00	6.40	6.40	6.40	6.40	6.40	6.10	6.10	6.10	6.10
4270018.00	6.40	6.40	6.40	6.40	6.40	6.10	6.10	6.10	6.10
4270003.00	6.40	6.40	6.40	6.40	6.40	6.40	6.10	6.10	6.10
4269988.00	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.10	6.10
4269973.00	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.10	6.10
4269958.00	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.10	6.10
4269943.00	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.10	6.10
4269928.00	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.10	6.10
4269913.00	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.10
4269898.00	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40
4269883.00	6.71	6.71	6.71	6.71	6.71	6.71	6.40	6.40	6.40

**MODELOPTs:
 CONC URBAN ELEV DFAULT

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	633155.31	633170.31	633185.31	X-COORD (METERS)		633230.31	633245.31	633260.31	633275.31
				633200.31	633215.31				
4270168.00	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40
4270153.00	6.10	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40
4270138.00	6.10	6.10	6.40	6.40	6.40	6.40	6.40	6.40	6.40
4270123.00	6.10	6.10	6.10	6.40	6.40	6.40	6.40	6.40	6.40
4270108.00	6.10	6.10	6.10	6.10	6.10	6.10	6.40	6.40	6.40
4270093.00	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.40	6.40
4270078.00	6.10	6.10	6.10	6.10	6.10	6.10	6.40	6.40	6.40
4270063.00	6.10	6.10	6.10	6.10	6.10	6.40	6.40	6.40	6.71
4270048.00	6.10	6.10	6.10	6.10	6.40	6.40	6.40	6.40	6.71
4270033.00	6.10	6.10	6.10	6.10	6.40	6.40	6.40	7.01	7.01
4270018.00	6.10	6.10	6.10	6.10	6.40	6.40	6.40	7.01	7.32
4270003.00	6.10	6.10	6.10	6.10	6.40	6.40	7.01	7.01	7.32
4269988.00	6.10	6.10	6.10	6.10	6.40	6.40	7.01	7.01	7.62
4269973.00	6.10	6.10	6.10	6.10	6.40	6.40	7.01	7.01	7.62
4269958.00	6.10	6.10	6.10	6.10	6.40	6.40	7.01	7.01	7.92
4269943.00	6.10	6.10	6.10	6.10	6.40	6.40	7.01	7.32	7.92
4269928.00	6.10	6.10	6.10	6.10	6.40	6.40	7.32	7.32	7.92
4269913.00	6.10	6.10	6.10	6.10	6.40	6.71	7.32	8.84	8.84
4269898.00	6.10	6.10	6.10	6.10	6.71	6.71	8.84	8.84	8.84
4269883.00	6.40	6.10	6.10	6.10	6.71	7.01	8.84	8.84	8.84

**MODELOPTs:
CONC URBAN ELEV DEFAULT

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	633290.31	633305.31	X-COORD (METERS)
4270168.00	6.40	6.71	
4270153.00	6.40	6.71	
4270138.00	6.40	6.71	
4270123.00	6.40	6.40	
4270108.00	6.40	6.71	
4270093.00	6.71	6.71	
4270078.00	6.71	6.71	
4270063.00	6.71	6.71	
4270048.00	6.71	7.01	
4270033.00	7.32	7.32	
4270018.00	7.32	7.62	
4270003.00	7.62	7.62	
4269988.00	7.62	7.62	
4269973.00	7.92	7.92	
4269958.00	7.92	7.92	
4269943.00	7.92	7.92	
4269928.00	7.92	7.92	
4269913.00	7.92	7.92	
4269898.00	8.84	7.62	
4269883.00	8.84	7.62	

**MODELOPTs: URBAN ELEV DEFAULT
CONC

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(633265.5, 4269980.5,	7.6,	0.0);	(633242.4, 4269988.5,	7.0,	0.0);
(633235.8, 4269963.0,	7.0,	0.0);	(633239.6, 4269912.0,	7.3,	0.0);
(633224.1, 4269917.5,	6.4,	0.0);	(633230.2, 4269940.5,	6.4,	0.0);
(633196.3, 4269951.5,	6.1,	0.0);	(633130.3, 4269957.5,	6.1,	0.0);
(633137.3, 4269976.5,	6.1,	0.0);	(633120.4, 4270004.5,	6.1,	0.0);
(633132.1, 4270046.0,	6.1,	0.0);	(633135.4, 4270064.0,	6.1,	0.0);
(633151.5, 4270105.0,	6.1,	0.0);	(633182.8, 4269999.0,	6.1,	0.0);
(633178.9, 4269988.0,	6.1,	0.0);			

**MODELOPTs:
CONC

URBAN ELEV DFAULT

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
LESS THAN 1.0 METER OR 3*ZL3 IN DISTANCE, OR WITHIN OPEN PIT SOURCE

SOURCE ID	- - RECEPTOR LOCATION - - XR (METERS) YR (METERS)	DISTANCE (METERS)
STCK1	633215.3 4270003.0	21.11
STCK1	633230.3 4270003.0	11.01
STCK1	633245.3 4270003.0	15.71
STCK1	633230.3 4270018.0	5.59
STCK1	633245.3 4270018.0	12.52
STCK1	633260.3 4270018.0	27.06
STCK1	633230.3 4270033.0	19.78
STCK1	633245.3 4270033.0	22.73

**MODELOPTs: URBAN ELEV DFAULT
 CONC

*** THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

FILE: MnM\SACOAK~1.ASC
 FORMAT: (4I2,2F9.4,F6.1,12,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)
 SURFACE STATION NO.: 23232 UPPER AIR STATION NO.: 23230
 NAME: SACRAMENTO/EXECUTIVE_ARPT NAME: OAKLAND/WSO_AP
 YEAR: 1985 YEAR: 1985

YR	MN	DY	HR	FLOW VECTOR	SPEED (M/S)	TEMP (K)	STAB CLASS	MIXING HEIGHT (M)	RURAL	URBAN	JSTAR (M/S)	M-O LENGTH (M)	Z-0 (M)	IPCODE	PRATE (mm/HR)
85	01	01	01	271.C	1.54	274.3	7	380.8	190.0	0.0000	0.0	0.0000	0	0.00	
85	01	01	02	268.C	0.00	274.3	7	352.8	190.0	0.0000	0.0	0.0000	0	0.00	
85	01	01	03	274.C	0.00	273.1	7	324.7	190.0	0.0000	0.0	0.0000	0	0.00	
85	01	01	04	273.C	0.00	273.7	7	296.7	190.0	0.0000	0.0	0.0000	0	0.00	
85	01	01	05	273.C	0.00	273.1	7	268.6	190.0	0.0000	0.0	0.0000	0	0.00	
85	01	01	06	272.C	0.00	272.6	7	240.5	190.0	0.0000	0.0	0.0000	0	0.00	
85	01	01	07	275.C	0.00	272.6	7	212.5	190.0	0.0000	0.0	0.0000	0	0.00	
85	01	01	08	273.C	0.00	271.5	6	1.3	176.1	0.0000	0.0	0.0000	0	0.00	
85	01	01	09	267.C	0.00	274.3	5	3.7	149.4	0.0000	0.0	0.0000	0	0.00	
85	01	01	10	271.C	0.00	277.6	4	6.2	122.7	0.0000	0.0	0.0000	0	0.00	
85	01	01	11	274.C	0.00	280.4	3	8.6	96.0	0.0000	0.0	0.0000	0	0.00	
85	01	01	12	316.C	1.54	280.9	2	11.1	69.4	0.0000	0.0	0.0000	0	0.00	
85	01	01	13	323.C	0.00	282.0	2	13.5	42.7	0.0000	0.0	0.0000	0	0.00	
85	01	01	14	319.C	0.00	283.2	2	16.0	16.0	0.0000	0.0	0.0000	0	0.00	
85	01	01	15	322.C	0.00	283.2	2	16.0	16.0	0.0000	0.0	0.0000	0	0.00	
85	01	01	16	334.C	2.57	283.2	3	16.0	16.0	0.0000	0.0	0.0000	0	0.00	
85	01	01	17	321.C	2.06	280.9	4	19.3	19.3	0.0000	0.0	0.0000	0	0.00	
85	01	01	18	297.C	1.54	280.4	5	39.3	29.5	0.0000	0.0	0.0000	0	0.00	
85	01	01	19	304.C	0.00	278.7	6	59.4	41.1	0.0000	0.0	0.0000	0	0.00	
85	01	01	20	297.C	0.00	277.0	7	79.4	52.7	0.0000	0.0	0.0000	0	0.00	
85	01	01	21	300.C	0.00	277.0	7	99.4	64.2	0.0000	0.0	0.0000	0	0.00	
85	01	01	22	302.C	0.00	276.5	7	119.5	75.8	0.0000	0.0	0.0000	0	0.00	
85	01	01	23	300.C	0.00	275.9	7	139.5	87.4	0.0000	0.0	0.0000	0	0.00	
85	01	01	24	300.C	0.00	274.3	7	159.5	99.0	0.0000	0.0	0.0000	0	0.00	

*** NOTES: STABILITY CLASS 1=A, 2=B, 3=C, 4=D, 5=E AND 6=F.
 FLOW VECTOR IS DIRECTION TOWARD WHICH WIND IS BLOWING.

*MODELOPTs:
CONC

URBAN ELEV DEFAULT

*** THE ANNUAL (5 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): STCK1 ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS.M**3 **

Y-COORD (METERS)	X-COORD (METERS)								
	633020.31	633035.31	633050.31	633065.31	633080.31	633095.31	633110.31	633125.31	633140.31
4270168.00	7.76194	8.78085	9.95849	11.30410	12.80443	14.43597	16.16707	17.91562	19.51885
4270153.00	7.69424	8.80216	10.08541	11.57744	13.28699	15.19567	17.28899	19.54218	21.83159
4270138.00	7.40145	8.62711	10.04734	11.70392	13.64169	15.87947	18.38058	21.13605	24.16645
4270123.00	6.77234	8.09379	9.66692	11.52649	13.73305	16.34782	19.37988	22.76023	26.54478
4270108.00	5.85658	7.10221	8.72832	10.75652	13.25492	16.30306	19.98223	24.33591	29.15483
4270093.00	4.75217	5.83808	7.23035	9.17138	11.76286	15.16185	19.56681	25.14613	31.74220
4270078.00	3.73947	4.52455	5.60332	7.05215	9.22117	12.38486	17.04370	23.64141	32.65465
4270063.00	2.97563	3.48715	4.18006	5.15521	6.49589	8.66931	12.20879	18.08273	28.17268
4270048.00	2.54703	2.87772	3.29885	3.85589	4.62860	5.70001	7.52749	10.77056	17.21292
4270033.00	2.43123	2.70753	3.03676	3.43427	3.92593	4.50410	5.35815	6.67055	8.97001
4270018.00	2.40526	2.69508	3.04521	3.47317	4.00597	4.64662	5.53540	6.76946	8.54588
4270003.00	2.21090	2.46962	2.78139	3.16105	3.63096	4.23656	4.96915	6.01720	7.48194
4269988.00	1.83421	2.01336	2.22208	2.46716	2.75938	3.12493	3.58827	4.18864	5.13101
4269973.00	1.46363	1.59019	1.74140	1.92739	2.16465	2.48481	2.92791	3.52914	4.43614
4269958.00	1.22794	1.34644	1.49489	1.68460	1.93017	2.25254	2.67259	3.17348	3.79746
4269943.00	1.11059	1.23269	1.38338	1.56968	1.79815	2.07417	2.40176	2.74275	3.11838
4269928.00	1.04558	1.16332	1.30335	1.46854	1.65975	1.87393	2.10719	2.34817	2.68382
4269913.00	0.99235	1.09924	1.22209	1.36070	1.51284	1.67584	1.85643	2.09518	2.48168
4269898.00	0.94015	1.03436	1.13882	1.25201	1.37346	1.50916	1.68172	1.94590	2.39385
4269883.00	0.89153	0.97310	1.06086	1.15506	1.26025	1.39049	1.57048	1.86204	2.29003

**MODELOPTs:
CONC

URBAN ELEV DFAULT

*** THE ANNUAL (5 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL
INCLUDING SOURCE(S): STCK1 , ***

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS)								
	633155.31	633170.31	633185.31	633200.31	633215.31	633230.31	633245.31	633260.31	633275.31
4270168.00	21.31242	22.33454	23.91146	25.85888	27.71785	28.92809	29.42131	28.06550	24.50403
4270153.00	23.90125	25.88314	27.85956	30.32810	32.80949	34.50534	35.30074	33.10341	28.12984
4270138.00	27.28304	30.08683	32.95779	36.13250	39.51265	41.94909	43.22151	39.45507	32.81861
4270123.00	30.84652	35.25898	39.24856	43.89749	48.69049	52.33541	54.34675	47.53812	39.53719
4270108.00	34.52164	41.00924	47.73177	54.15746	61.17977	66.78886	70.48936	58.00454	50.48154
4270093.00	39.01926	47.26617	57.86161	68.96904	80.53555	90.42580	94.45372	72.96897	69.71476
4270078.00	43.92701	55.60212	69.47935	90.97285	112.67311	130.55626	135.89191	99.12039	97.80768
4270063.00	43.97117	65.77559	89.14580	114.90800	159.55777	197.29617	195.79013	156.33794	123.90696
4270048.00	30.76034	60.86850	113.52246	158.18506	221.01248	309.24213	290.48477	242.37370	120.53243
4270033.00	13.91584	27.36401	71.78413	208.89523	353.18817	0.00000	0.00000	242.50565	82.55203
4270018.00	11.44415	16.25373	25.69485	55.25309	65.79926	0.00000	0.00000	10.61668	59.22897
4270003.00	9.78418	13.27621	18.44495	28.61982	0.06333	0.00000	31.88273	156.81071	63.64426
4269988.00	6.76212	9.50457	13.16674	15.48050	28.36959	90.68275	259.54599	166.68408	87.11837
4269973.00	5.71143	7.14630	8.36132	12.92823	22.14281	60.14771	116.38235	123.15529	81.93880
4269958.00	4.44936	5.28937	7.48792	12.31232	16.42592	38.09313	63.66044	74.52748	67.68706
4269943.00	3.62159	4.74131	7.22576	9.08960	13.10219	25.30403	38.40804	47.19876	47.74448
4269928.00	3.32061	4.59149	6.01374	6.85550	10.58465	17.83879	25.57082	31.36629	33.84372
4269913.00	3.20474	4.17765	4.79009	5.64453	8.70847	13.50776	18.28258	25.64169	27.72468
4269898.00	3.32425	3.58406	3.90881	4.88379	7.33099	10.53591	16.12539	19.15446	21.37108
4269883.00	2.74743	3.01686	3.34040	4.32028	6.21587	8.54891	12.64931	14.70767	16.58925

**MODELOPTS: URBAN ELEV DEFAULT
 CONC

*** THE ANNUAL (5 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): STCK1 ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	633290.31	633305.31	X-COORD (METERS)
4270168.00	21.80178	21.44698	
4270153.00	25.60971	25.67849	
4270138.00	31.16711	30.97480	
4270123.00	39.21117	36.66991	
4270108.00	49.91665	42.10930	
4270093.00	61.75690	45.23118	
4270078.00	70.51795	44.70225	
4270063.00	70.22377	40.22825	
4270048.00	57.92767	30.91321	
4270033.00	38.48723	23.16176	
4270018.00	35.03463	23.23223	
4270003.00	35.24893	22.40980	
4269988.00	46.69943	26.89937	
4269973.00	49.89710	32.38862	
4269958.00	46.31226	31.47437	
4269943.00	40.61553	29.93729	
4269928.00	32.28835	27.27306	
4269913.00	24.86396	23.12510	
4269898.00	22.53478	18.83212	
4269883.00	17.54336	15.31363	

*** ISCST3 - VERSION 02035 *** *** C:\AERMOD\SRT Projects\Admin Center\AdminCtr.isc *** 08/29/12
 *** *** *** 09:44:27
 MODELOPTs: URBAN ELEV DEFAULT * PAGE 16

*** THE ANNUAL (5 YRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): STCK1 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
633265.50	4269980.50	127.13652	633242.44	4269988.50	252.17172
633235.81	4269963.00	58.39565	633239.62	4269912.00	16.30872
633224.06	4269917.50	12.21182	633230.19	4269940.50	23.68740
633196.25	4269951.50	10.23189	633130.25	4269957.50	3.35193
633137.31	4269976.50	4.34196	633120.38	4270004.50	5.80009
633132.12	4270046.00	12.08067	633135.44	4270064.00	24.87449
633151.50	4270105.00	33.80442	633182.75	4269999.00	15.30425
633178.94	4269988.00	11.58256			

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): STCK1

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS M**3 **

Y-COORD (METERS)	633020.31	633035.31	X-COORD (METERS) 633050.31	633065.31	633080.31
4270168.0	63.54877c(86022624)	65.14085c(85092124)	78.54153c(87041324)	90.22454c(87041324)	87.21312c(87041324)
4270153.0	71.73466c(85012724)	73.95584c(86022624)	74.36860c(85092124)	87.44739c(87041324)	104.24507c(87041324)
4270138.0	84.14510c(85012724)	86.18877c(85012724)	86.86230c(88020724)	88.62858c(86022624)	97.69868c(86011524)
4270123.0	84.46461c(85012724)	95.89249c(85012724)	102.95413c(85012724)	103.31419c(88020724)	107.91859c(86022624)
4270108.0	70.71645c(85012724)	87.51047c(85012724)	105.60846c(85012724)	120.69930c(85012724)	127.60336c(85012724)
4270093.0	71.91089c(87120424)	73.09784c(87120424)	84.42412c(85012724)	109.52666c(85012724)	135.74214c(85012724)
4270078.0	78.33641c(87120424)	86.36703c(87120424)	93.09399c(87120424)	96.52475c(87120424)	102.67686c(85012724)
4270063.0	65.90588c(87120424)	77.74760c(87120424)	91.44003c(87120424)	106.74137c(87120424)	119.86620c(87120424)
4270048.0	56.96249c(87112824)	60.19784c(87112824)	63.17622c(87112824)	77.52795c(87120424)	97.16387c(87120424)
4270033.0	59.53782c(87112824)	65.38850c(87112824)	71.77371c(87112824)	78.58016c(87112824)	85.85258c(87112024)
4270018.0	64.16323c(87112024)	72.27122c(87112024)	82.10064c(87112024)	94.18397c(87112024)	109.42647c(87112024)
4270003.0	64.51600c(86102624)	71.40132c(86102624)	79.40331c(86102624)	88.73067c(86102624)	99.61134c(86102624)
4269988.0	48.45071c(86102624)	54.94632c(89122524)	63.57478c(89122524)	74.93317c(89122524)	89.95682c(89122524)
4269973.0	52.28448c(89122524)	57.93856c(89122524)	64.79905c(89122524)	73.02425c(89122524)	82.56671c(89122524)
4269958.0	48.21279c(89122524)	51.15601c(89122524)	54.19749c(89122524)	57.06848c(89122524)	67.70267c(88101624)
4269943.0	39.02529c(89122524)	45.49309c(88101624)	54.92447c(88101624)	62.87073c(88101624)	66.09235c(88101624)
4269928.0	44.45182c(88101624)	48.63316c(88101624)	49.75718c(88101624)	46.51643c(85012524)	54.92867c(85012524)
4269913.0	38.90035c(88101624)	36.32933c(88101624)	39.16920c(85012524)	48.35631c(88042624)	58.09775c(88042624)
4269898.0	29.35351c(85012524)	35.91953c(88042624)	43.66267c(88042624)	48.40441c(88042624)	52.17600c(86031924)
4269883.0	33.76532c(88042624)	38.51566c(88042624)	40.21198c(88042624)	47.74870c(86031924)	52.87806c(86031924)

**MODELOPTS:
 CONC

URBAN ELEV DEFAULT

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): STCK1 ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM₁₀ IN MICROGRAMS/M**3 **

Y-COORD (METERS)	633095.31	633110.31	X-COORD (METERS) 633125.31	633140.31	633155.31
4270168.0	89.95608c(88022324)	95.02193c(87010524)	107.43096c(87010524)	108.36025c(87010524)	104.42566c(89123024)
4270153.0	101.25992c(87041324)	102.87323c(88022324)	114.50945c(87010524)	126.69877c(87010524)	122.72136c(87010524)
4270138.0	121.64757c(87041324)	119.40292c(86011524)	118.46444c(88022324)	139.78688c(87010524)	149.92468c(87010524)
4270123.0	116.27754c(86011524)	143.37103c(87041324)	148.15121c(86011524)	142.28911c(88102524)	173.10283c(87010524)
4270108.0	133.77620c(88020724)	140.59518c(86011524)	173.34613c(86011524)	189.10701c(86011524)	181.7179c(87010524)
4270093.0	155.53539c(85012724)	167.11949c(88020724)	173.98346c(88020724)	224.25688c(86011524)	251.42966c(86011524)
4270078.0	140.60027c(85012724)	180.32315c(85012724)	208.13928c(88020724)	250.48392c(88020724)	306.71912c(86011524)
4270063.0	134.03827c(87120424)	144.02937c(87120424)	185.87427c(85012724)	261.24133c(85012724)	365.91040c(88020724)
4270048.0	121.89619c(87120424)	155.37836c(87120424)	196.65430c(87120424)	246.47472c(87120424)	297.59567c(87020224)
4270033.0	97.25891c(87112024)	111.99446c(87112024)	130.83063c(87112024)	187.59085c(87120424)	311.31091c(87120424)
4270018.0	128.36232c(87112024)	154.19476c(87112024)	188.77885c(87112024)	236.42046c(87112024)	313.13611c(87112024)
4270003.0	112.26160c(86102624)	124.85926c(86102624)	152.42560c(89122524)	211.05333c(89122524)	306.20996c(89122524)
4269988.0	109.78870c(89122524)	135.69354c(89122524)	167.83391c(89122524)	206.61224c(89122524)	244.61969c(89122524)
4269973.0	92.91740c(89122524)	102.70486c(89122524)	110.17758c(88101624)	135.02269c(85012524)	202.4130c(85012524)
4269958.0	83.47251c(88101624)	92.20771c(88101624)	108.91503c(85012524)	136.06683c(85012524)	158.96075c(88042624)
4269943.0	68.06605c(85012524)	82.48029c(85012524)	99.30550c(88042624)	102.24057c(88042624)	100.34836c(86031924)
4269928.0	67.99106c(88042624)	78.37401c(88042624)	80.13393c(86031924)	82.02670c(86031924)	68.95216c(87112924)
4269913.0	60.57865c(88042624)	70.68641c(86031924)	68.92396c(86031924)	55.67785c(87112924)	67.84138c(86022524)
4269898.0	60.77456c(86031924)	57.38802c(86031924)	46.30981c(87112924)	53.82113c(86022524)	67.86807c(86101524)
4269883.0	48.95868c(86031924)	38.99035c(87112924)	43.15523c(86022524)	49.55122c(86022524)	73.35454c(86101524)

**MODELOPTS:
 CONC

URBAN ELEV DFAULT

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): STCK1

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM₁₀ IN MICROGRAMS.M**3 **

Y-COORD (METERS)	633170.31	633185.31	X-COORD (METERS) 633200.31	633215.31	633230.31
4270168.0	107.29546c(88040424)	133.05028c(89090424)	129.00540c(88072924)	148.33238c(88072924)	169.88620c(87042724)
4270153.0	120.94900c(89123024)	147.17409c(89090424)	138.96115c(88072924)	172.29791c(88072924)	195.55246c(87042724)
4270138.0	145.73868c(89123024)	153.96384c(89090424)	168.18747c(89090424)	201.33157c(88072924)	227.50841c(87042724)
4270123.0	178.26796c(87010524)	175.14876c(89123024)	204.78647c(89090424)	239.93938c(88072924)	267.90564c(87042724)
4270108.0	218.22713c(87010524)	223.15152c(89123024)	230.27982c(89090424)	286.38480c(88072924)	313.46500c(87042724)
4270093.0	243.27280c(87010524)	283.76144c(87010524)	290.28391c(89123024)	352.17041c(88072924)	398.76712c(87042724)
4270078.0	355.33987c(86011524)	342.72638c(87010524)	404.93488c(89123024)	422.42203c(88072924)	543.39764c(87042724)
4270063.0	452.50854c(86011524)	569.52216c(86011524)	524.28619c(87010524)	604.18121 (88011024)	837.65326c(88072924)
4270048.0	494.19891c(87020224)	744.25439c(86011524)	988.04956c(86011524)	901.26703c(87090724)	1393.53577c(88072924)
4270033.0	519.01715c(87120424)	761.31891c(87120424)	1427.25964c(87121424)	1985.23901c(86011524)	0.00000 (00000000)
4270018.0	426.79202c(87112024)	584.32812c(87112024)	951.79865c(89043024)	2713.93750c(87120424)	0.00054c(89052324)
4270003.0	467.58972c(89122524)	671.83527c(89122524)	890.90594c(89122524)	3.71818c(85053024)	0.00000 (00000000)
4269988.0	265.13113c(85012524)	455.19113c(85012524)	590.94952c(88042624)	574.83154c(88042524)	1519.70398c(87111824)
4269973.0	257.17639c(85012524)	237.43788c(88042624)	229.08081c(86120124)	422.73230c(88010324)	956.34558c(87111824)
4269958.0	122.61932c(87112924)	132.93376c(86120124)	264.79657c(86101524)	349.90894c(85011824)	607.29119c(87111824)
4269943.0	88.62312c(87112924)	142.00513c(86101524)	199.68484c(88010324)	277.96628c(85011824)	405.53207c(87111824)
4269928.0	88.02354c(86022524)	142.02094c(86101524)	156.05235c(85011824)	205.95302c(85011824)	286.75470c(85122924)
4269913.0	99.75899c(86101524)	113.20691c(86101524)	134.01227c(85011824)	151.01231c(86110224)	223.40576c(87111824)
4269898.0	93.97826c(86101524)	88.75742c(88010324)	111.98540c(85011824)	133.09813c(85021124)	178.27702c(87111824)
4269883.0	78.43178c(86101524)	77.52388c(85011824)	92.93137c(85011824)	119.61026c(85021124)	149.86760c(87111824)

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): STCK1 ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDGART ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	633245.31	633260.31	X-COORD (METERS) 633275.31	633290.31	633305.31
4270168.0	159.41150c(87042724)	131.80872c(88102824)	127.86229c(87080424)	108.07601c(87080424)	95.33446c(88090724)
4270153.0	182.34810c(87042724)	152.07068c(88102824)	147.37410c(87080424)	110.89189c(87080424)	115.17477c(87081624)
4270138.0	210.54561c(87042724)	176.57979c(86101024)	165.20863c(87080424)	131.38170c(88090724)	162.35944c(87081624)
4270123.0	245.64561c(87042724)	219.86954c(87080424)	177.68149c(87080424)	171.36649c(87081624)	193.90614c(87081624)
4270108.0	303.63327c(88090124)	280.16547c(87080424)	198.39113c(88090724)	254.26096c(87081624)	192.75703c(89022324)
4270093.0	406.43341c(88090124)	340.36182c(87080424)	298.98059c(87081624)	283.90881c(87081624)	230.71599c(85080224)
4270078.0	578.67761c(88090124)	373.73578c(87080424)	476.85004c(87081624)	330.52524 (89060424)	277.69400c(85100724)
4270063.0	787.49689c(86101024)	680.85535c(87081624)	536.41528 (89060424)	418.37161c(85100724)	344.15109c(88022324)
4270048.0	1137.57178c(87080424)	961.74426c(89022324)	669.68231c(85100724)	493.37939c(88022324)	289.59845c(89091424)
4270033.0	C.00000 (00000000)	1597.59155c(88022324)	680.16797c(86110824)	361.00452c(89111324)	257.34183c(88020224)
4270018.0	C.00000 (00000000)	203.82811c(85040824)	835.06860c(88030224)	512.31476c(88030224)	349.57251c(88020924)
4270003.0	660.17346c(86112224)	1548.05859c(86012024)	737.22949c(85121924)	549.80731c(85121924)	391.44705c(85121924)
4269988.0	2218.32837c(86010624)	1556.84070c(88021524)	793.40698c(86111724)	543.42230c(86112224)	328.43607c(86112224)
4269973.0	1181.90247c(85111624)	1176.73706c(87020324)	782.80444c(88021524)	460.73581c(86020624)	324.70029c(88011124)
4269958.0	800.90686c(85122924)	677.58734c(86010624)	722.98871c(88032524)	443.86374c(88021524)	284.90387c(86020624)
4269943.0	536.32336c(85122924)	413.38846c(85111624)	461.11908c(88111824)	453.76086c(88032524)	290.19443c(88021524)
4269928.0	379.32233c(85122924)	313.01373c(85111624)	323.31210c(86010624)	301.42166c(88032524)	326.19537c(88032524)
4269913.0	278.46329c(85122924)	263.92401c(85122924)	243.94197c(86010624)	251.19333c(88111824)	249.33154c(88032524)
4269898.0	247.87750c(89112824)	216.42693c(85122924)	180.85313c(85022724)	211.69096c(86010624)	185.57881c(88111824)
4269883.0	202.35912c(89112824)	199.11589c(89112824)	157.78960c(85022724)	162.62819c(86010624)	157.23610c(88111824)

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): STCK1 , ***

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM₁₀ IN MICROGRAMS/M³ **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
633265.50	4269980.50	1294.32056c	(88021524)	633242.44	4269988.50	2156.24121c	(8511:624)
633235.81	4269963.00	958.71552c	(85122924)	633239.62	4269912.00	265.33755c	(85122924)
633224.06	4269917.50	214.36316c	(85021124)	633230.19	4269940.50	379.95529c	(8711:824)
633196.25	4269951.50	223.21037c	(86101524)	633130.25	4269957.50	118.27142c	(85012524)
633137.31	4269976.50	129.99933c	(88101624)	633120.38	4270004.50	142.82549c	(86102624)
633132.12	4270046.00	221.11958c	(87120424)	633135.44	4270064.00	239.44542c	(85012724)
633151.50	4270105.00	192.92987c	(86011524)	633182.75	4269999.00	558.16992c	(89122524)
633178.94	4269988.00	375.80209c	(85012524)				

*** THE SUMMARY OF MAXIMUM ANNUAL (5 YRS) RESULTS ***

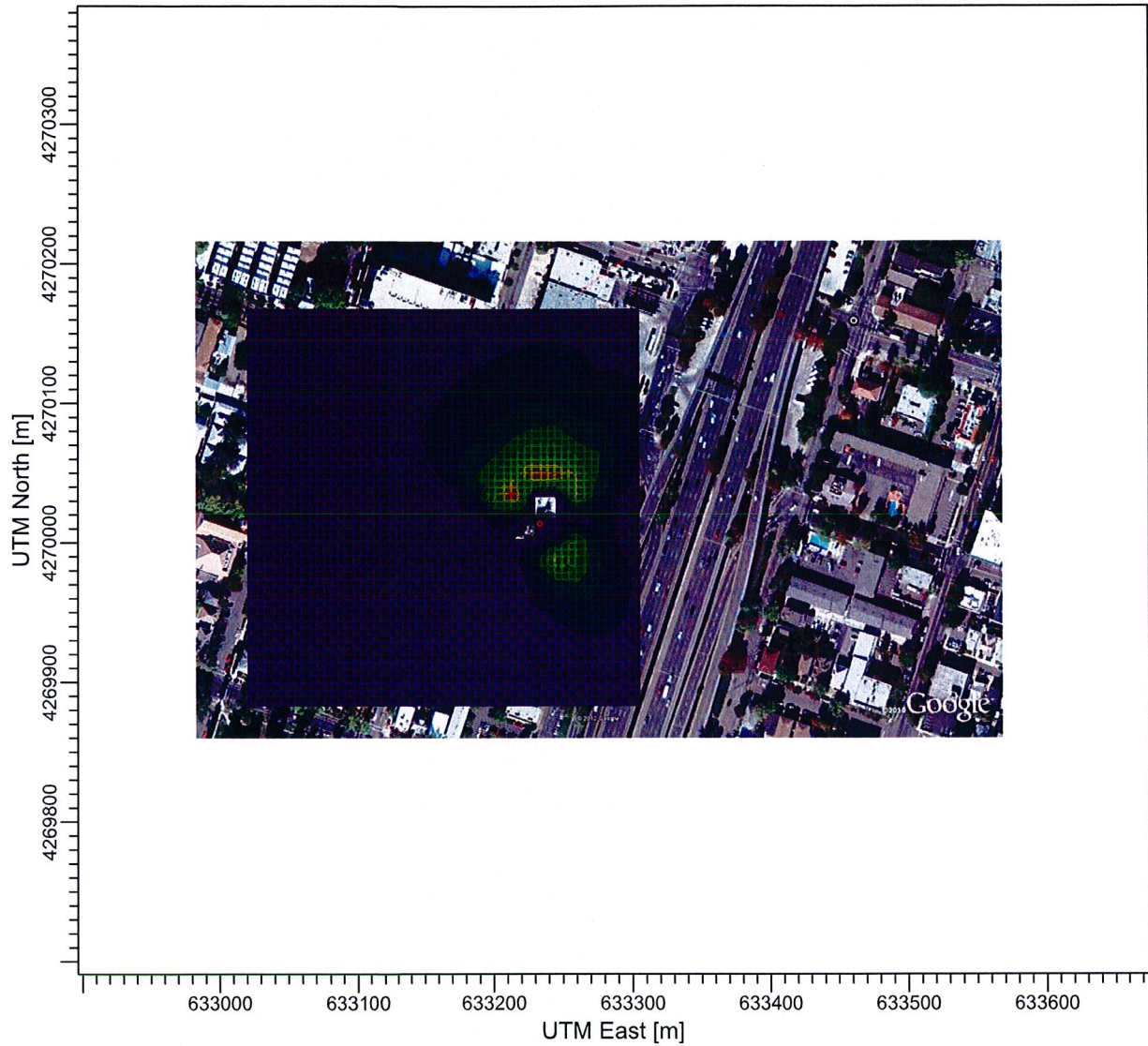
** CONC OF PM_10 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS 353.18817 AT (633215.31, 4270033.00, 6.40, 0.00)	GC	UCART1	
	2ND HIGHEST VALUE IS 309.24213 AT (633230.31, 4270048.00, 6.40, 0.00)	GC	UCART1	
	3RD HIGHEST VALUE IS 290.48477 AT (633245.31, 4270048.00, 6.40, 0.00)	GC	UCART1	
	4TH HIGHEST VALUE IS 259.54599 AT (633245.31, 4269988.00, 7.01, 0.00)	GC	UCART1	
	5TH HIGHEST VALUE IS 252.17172 AT (633242.44, 4269988.50, 7.01, 0.00)	DC	NA	
	6TH HIGHEST VALUE IS 242.50565 AT (633260.31, 4270033.00, 7.01, 0.00)	GC	UCART1	
	7TH HIGHEST VALUE IS 242.37370 AT (633260.31, 4270048.00, 6.40, 0.00)	GC	UCART1	
	8TH HIGHEST VALUE IS 221.01248 AT (633215.31, 4270048.00, 6.40, 0.00)	GC	UCART1	
	9TH HIGHEST VALUE IS 208.89523 AT (633200.31, 4270033.00, 6.10, 0.00)	GC	UCART1	
	10TH HIGHEST VALUE IS 197.29617 AT (633230.31, 4270063.00, 6.40, 0.00)	GC	UCART1	

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR
 BD = BOUNDARY

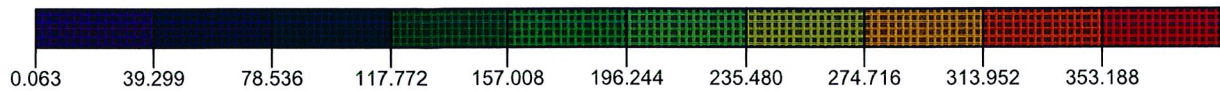
PROJECT TITLE:

**SRT Admin Downtown Generator
PM emissions**



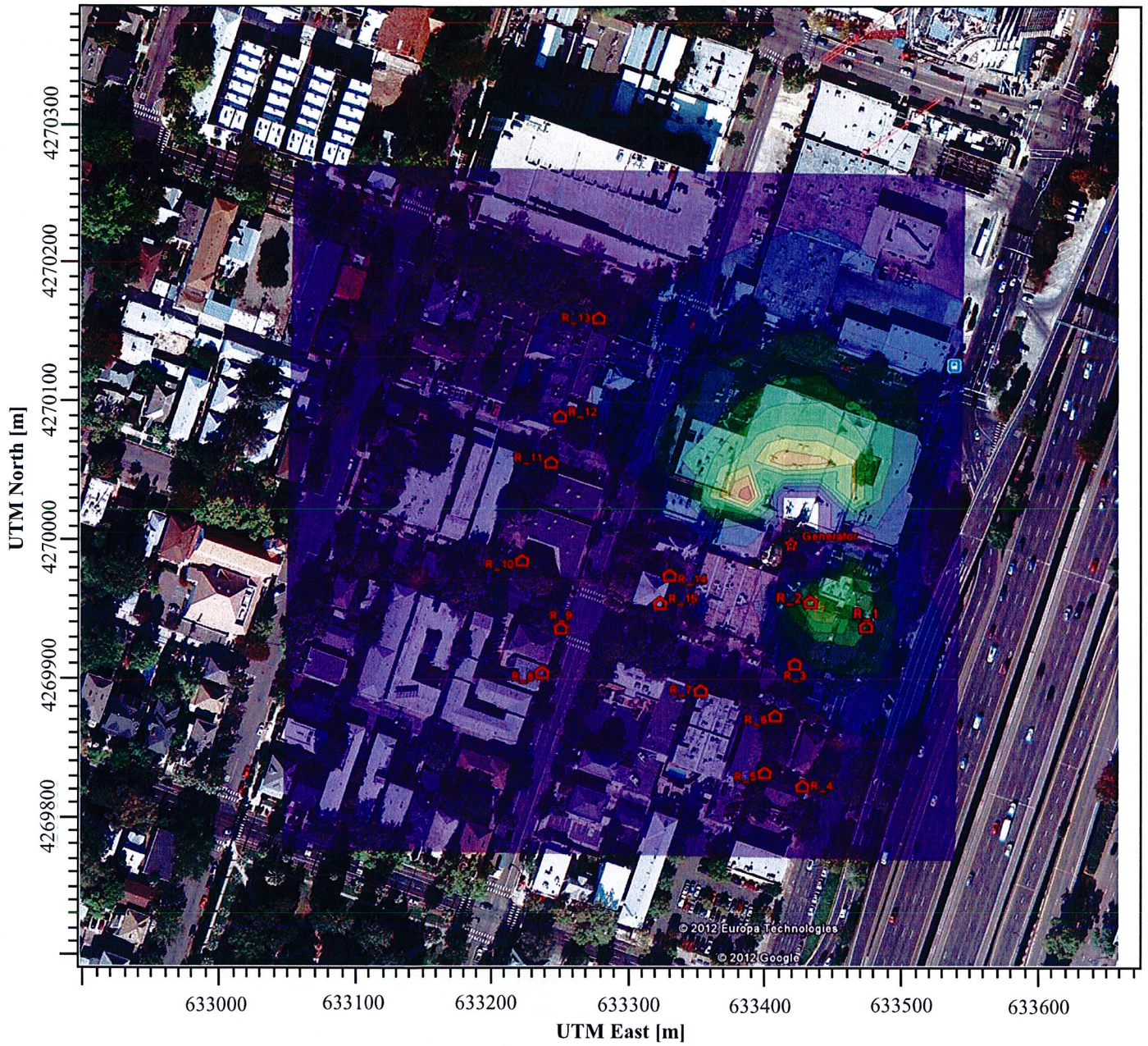
PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: ALL

ug/m³



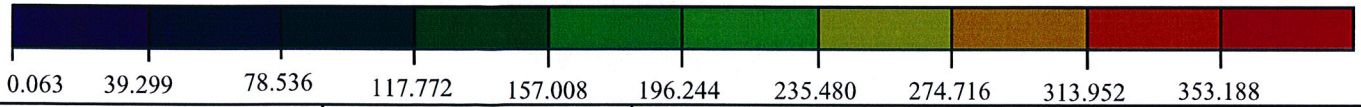
COMMENTS:	SOURCES:	COMPANY NAME:	
	RECEPTORS:	MODELER:	
	OUTPUT TYPE:	SCALE:	1:4,890
	MAX:	DATE:	
	1		
	415	0 0.1 km	
	Concentration		PROJECT NO.:
	353.18817 ug/m ³	8/29/2012	

Project Title:
SRT Admin Downtown Generator
PM Emissions



PLOT FILE OF ANNUAL VALUES FOR SOURCE GROUP: ALL

$\mu\text{g}/\text{m}^3$



**SRT Admin Center Generator
Greenhouse Gas Summary**

8/24/2012

Table 1 Annual Greenhouse Gas Emissions [Metric Tons CO₂e]	
Construction	9.13
Amortized Construction	0.23
Energy Consumption	4.77
Total¹	5.00
Source: Atkins 2012.	
¹ Total Emissions equals amortized construction plus energy consumption.	

**SRT Admin Center Back-up Generator - Const
Sacramento County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Parking Lot	0.1	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Utility Company	Sacramento Municipal Utility District
Climate Zone	6	Precipitation Freq (Days)	58		

1.3 User Entered Comments

Project Characteristics - Project is set up for consturction to occur in 2013
 Land Use - Construction of 100 square foot pad for installation of generator.
 Construction Phase - Assumes less than a month building time.
 Grading - Based on total generator pad area and potential trenching area.
 Consumer Products - Not a building. Generator emissions calculated from data sheet provided.
 Area Coating - Not a building. Generator emissions calculated from data sheet provided.
 Landscape Equipment - Not a building. Generator emissions calculated from data sheet provided.

Energy Use -

Construction Off-road Equipment Mitigation -

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2013	:	:	:	:	:	:	:	:	:	:	:	9.11	9.11	0.00	0.00	9.13
Total												9.11	9.11	0.00	0.00	9.13

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2013	:	:	:	:	:	:	:	:	:	:	:	9.11	9.11	0.00	0.00	9.13
Total												9.11	9.11	0.00	0.00	9.13

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area												0.00	0.00	0.00	0.00	0.00
Energy												0.00	0.00	0.00	0.00	0.00
Mobile												0.00	0.00	0.00	0.00	0.00
Waste												0.00	0.00	0.00	0.00	0.00
Water												0.00	0.00	0.00	0.00	0.00
Total												0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust												0.00	0.00	0.00	0.00	0.00
Off-Road												1.27	1.27	0.00	0.00	1.28
Total												1.27	1.27	0.00	0.00	1.28

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling												0.00	0.00	0.00	0.00	0.00
Vendor												0.00	0.00	0.00	0.00	0.00
Worker												0.04	0.04	0.00	0.00	0.04
Total												0.04	0.04	0.00	0.00	0.04

3.2 Site Preparation - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust												0.00	0.00	0.00	0.00	0.00
Off-Road												1.27	1.27	0.00	0.00	1.28
Total												1.27	1.27	0.00	0.00	1.28

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling												0.00	0.00	0.00	0.00	0.00
Vendor												0.00	0.00	0.00	0.00	0.00
Worker												0.04	0.04	0.00	0.00	0.04
Total												0.04	0.04	0.00	0.00	0.04

3.3 Trenching - 2013

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling												0.00	0.00	0.00	0.00	0.00
Vendor												0.00	0.00	0.00	0.00	0.00
Worker												0.00	0.00	0.00	0.00	0.00
Total												0.00	0.00	0.00	0.00	0.00

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling												0.00	0.00	0.00	0.00	0.00
Vendor												0.00	0.00	0.00	0.00	0.00
Worker												0.00	0.00	0.00	0.00	0.00
Total												0.00	0.00	0.00	0.00	0.00

3.4 Grading - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust												0.00	0.00	0.00	0.00	0.00
Off-Road												2.68	2.68	0.00	0.00	2.68
Total												2.68	2.68	0.00	0.00	2.68

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling												0.00	0.00	0.00	0.00	0.00
Vendor												0.00	0.00	0.00	0.00	0.00
Worker												0.17	0.17	0.00	0.00	0.17
Total												0.17	0.17	0.00	0.00	0.17

3.4 Grading - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust												0.00	0.00	0.00	0.00	0.00
Off-Road												2.68	2.68	0.00	0.00	2.68
Total												2.68	2.68	0.00	0.00	2.68

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling												0.00	0.00	0.00	0.00	0.00
Vendor												0.00	0.00	0.00	0.00	0.00
Worker												0.17	0.17	0.00	0.00	0.17
Total												0.17	0.17	0.00	0.00	0.17

3.5 Paving - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road												1.28	1.28	0.00	0.00	1.28
Paving												0.00	0.00	0.00	0.00	0.00
Total												1.28	1.28	0.00	0.00	1.28

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling												0.00	0.00	0.00	0.00	0.00
Vendor												0.00	0.00	0.00	0.00	0.00
Worker												0.15	0.15	0.00	0.00	0.15
Total												0.15	0.15	0.00	0.00	0.15

3.5 Paving - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road												1.28	1.28	0.00	0.00	1.28
Paving												0.00	0.00	0.00	0.00	0.00
Total												1.28	1.28	0.00	0.00	1.28

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling												0.00	0.00	0.00	0.00	0.00
Vendor												0.00	0.00	0.00	0.00	0.00
Worker												0.15	0.15	0.00	0.00	0.15
Total												0.15	0.15	0.00	0.00	0.15

3.6 Building Construction - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road												3.53	3.53	0.00	0.00	3.54
Total												3.53	3.53	0.00	0.00	3.54

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling												0.00	0.00	0.00	0.00	0.00
Vendor												0.00	0.00	0.00	0.00	0.00
Worker												0.00	0.00	0.00	0.00	0.00
Total												0.00	0.00	0.00	0.00	0.00

3.6 Building Construction - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road												3.53	3.53	0.00	0.00	3.54
Total												3.53	3.53	0.00	0.00	3.54

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling												0.00	0.00	0.00	0.00	0.00
Vendor												0.00	0.00	0.00	0.00	0.00
Worker												0.00	0.00	0.00	0.00	0.00
Total												0.00	0.00	0.00	0.00	0.00

**SRT Admin Center Back-up Generator - Operation
Sacramento County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Parking Lot	0.1	1000sqft

1.2 Other Project Characteristics

Urbanization Urban **Wind Speed (m/s)** 3.5 **Utility Company** Sacramento Municipal Utility District
Climate Zone 6 **Precipitation Freq (Days)** 58

1.3 User Entered Comments

- Project Characteristics - Project operation in 2013 full year GHG emissions. Assumes 50 hours of operation for the year.
- Land Use - 100 square foot pad for installation of generator.
- Construction Phase - Building construction Generator only to determine GHG emissions.
- Grading -
- Consumer Products - Not a building. Generator emissions calculated from data sheet provided.
- Area Coating - Not a building. Generator emissions calculated from data sheet provided.
- Landscape Equipment - Not a building. Generator emissions calculated from data sheet provided.

Energy Use -

Construction Off-road Equipment Mitigation -

Off-road Equipment - Horse Power and Load Factor from spec sheet.

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2013												4.77	4.77	0.00	0.00	4.77
Total												4.77	4.77	0.00	0.00	4.77

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2013												4.77	4.77	0.00	0.00	4.77
Total												4.77	4.77	0.00	0.00	4.77

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area												0.00	0.00	0.00	0.00	0.00
Energy												0.00	0.00	0.00	0.00	0.00
Mobile												0.00	0.00	0.00	0.00	0.00
Waste												0.00	0.00	0.00	0.00	0.00
Water												0.00	0.00	0.00	0.00	0.00
Total												0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

3.1 Mitigation Measures Construction

- Use Cleaner Engines for Construction Equipment
- Use DPF for Construction Equipment
- Use Soil Stabilizer
- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads

3.2 Building Construction - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road												4.77	4.77	0.00	0.00	4.77
Total												4.77	4.77	0.00	0.00	4.77

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling												0.00	0.00	0.00	0.00	0.00
Vendor												0.00	0.00	0.00	0.00	0.00
Worker												0.00	0.00	0.00	0.00	0.00
Total												0.00	0.00	0.00	0.00	0.00

3.2 Building Construction - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road												4.77	4.77	0.00	0.00	4.77
Total												4.77	4.77	0.00	0.00	4.77

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling												0.00	0.00	0.00	0.00	0.00
Vendor												0.00	0.00	0.00	0.00	0.00
Worker												0.00	0.00	0.00	0.00	0.00
Total												0.00	0.00	0.00	0.00	0.00