



ARRA REPORTING FORM: OEQ

1. Name: David Jacobs
2. NAICS or NTEE – NPC code(s) for activities performed this reporting period:
C01, C02, C03, C05.02, C06.06, C06.02, C06.03, C06.07, J01, L03, L03.4 L06, S02.03, S02.03, S03.03, T03, T04, V03.02, W03, W08, W09.05

(A searchable code list is at: <http://nccsdataweb.urban.org/PubApps/nteeSearch.php?qQry=all-core&codeType=NPC>)

3. Reporting Period (check the appropriate one)

1st Quarter (October – December) 2nd Quarter (January – March)
3rd Quarter (April – June) 4th Quarter (July – September)

4. Total Hours Worked: 251 ARRA Hours Worked: 125.51

5. A) Impact Metrics: **Renewal Energy meetings:** 18 meetings with waste to energy companies during quarter.
(Cost savings, GHG reduction, etc.)

B) Optional Metrics: **Committee meetings attended:** 9 during quarter.
(Grants, market development, policy, workshops, standards, procurement)

6. Description of work/grant activities completed during this quarter.

During 1st Quarter 2012 a total of 76 meeting were attended. Besides weekly staff meeting with the City Manager/Deputy CM other meeting included:

RENEWABLE ENERGY

ASHA

- ASHA has not presented offer sheet yet for the city's review.

Powerstream

- Powerstream met again with TCEQ during quarter and continues to discuss plans with city to develop a project that will convert treated water to electricity and producing a higher grade purified water as well as an output.

GRANTS

- OEQ had several discussions with SS2 for partnering on Water Smart grant during 1st quarter and hopes to complete an application in 2nd quarter. The application is due in mid January 2012.



- OEQ had discussions with the Texas Railroad Commission for funding a propane project. OEQ should receive word back by end of January 2012.
- OEQ successfully submitted and received a second grant from Ecotality Inc, for installation of electric supply equipment know as EVSE. The grant will allow installations in 20 locations across the city and began with a phase 1 installation in 1st quarter and will end in 2nd quarter 2012.
- SCR project – All 3 vehicles had an evaluation completed by Emisstar toward identifying results of installations in 4th quarter. Results confirmed NOx reductions in excess of 80% per vehicle. About 3 pounds of NOx per vehicle per 8 hour day has been eliminated due to installed device.
- Received notification during 1st quarter that the city did not received the 50K renewable energy technology demonstrations from SECO.
- ONCOR grant application for 50K match funding toward making energy efficiency improvements to city facilities served by Reliant Energy began in 4th quarter continues into 1st quarter with additional data collection.
- Discussions with NCTCOG began in 1st quarter toward making application for a solid waste grant that is due in 2nd quarter 2012. If funded plans are to deploy Big Belly trash compactors and recycling containers.
- Vendor selected during quarter for the acquisition of a Level 3 rapid charge EVSE (480V) that was partially funded through a NCTCOG Round 2 grant. AeroVironment's EV50FS unit was selected and acquired with delivery on 12/22/11.
- RFP for contractor install of EV50FS, EVSE unit completed and contractor will be chosen in the 2nd quarter for installing unit at one of the city's fleet centers.

PROJECTS

- Printer cartridge recycling project began city wide in 3rd quarter continues to receive recyclable goods. The goal is to coordinate the delivery of these used cartridges to one central location and auction the units at various times during the year.
- Installations were completed this quarter on EVSE stations in the city. EV reserved parking signage was installed by city crews. Additional installations are planned for 2nd quarter.
- OEQ completed 3 monthly status reports for NCTCOG during 1st quarter.
- OEQ completed a pilot project with a local distributor of Big Belly Trash compactors. Results generated from the pilot demonstrate fewer trips by city staff are related reductions to fuel use. City will continue discussions during 2nd quarter for possible deployments if funds can be located.
- Discussions underway in 1st quarter toward a possible wind demonstrations project partnering with our local school district and a wind technology vendor for the installation of a 3kw system at a local high school. Meeting is scheduled in early 2nd quarter for additional project planning.
- Discussions underway with a solar vendor toward developing a solar array at our local closed landfill. The landfill was closed several years ago and is capped. Early discussions are to create a floating solar field across several acres for possible generation of 1 to 5 megawatts of power. Discussions continue into 2nd quarter.
- Water conservation project proposal received from Niagara and an RFP was developed in 1st quarter toward developing a turnkey toilet, showerhead and aerators replacement program for a minimum of 250 high flow units to ultra low flow .8 gallon per flush units. Ongoing activities will be reported in 2nd quarter.



- Discussions were held between OEQ and 2 LED vendors during quarter to discuss possible LED street light replacement pilot project in ONCOR service area.

RESEARCH

- Secondary Cementitious Materials (SCM) Research Project is ongoing and locating funding sources remains the primary activity.
- Texas A& M has begun a feasibility study in determining viability of porcelain/clay mix as cement additive.

COMMITTEES UPDATE

A) Alternative Fuels/Vehicles

- No activity this period

B) Green Team

- Printer cartridge recycling project continues.

C) PIO Committee

- A meeting was held of committee members.

D) Healthy Living Expo committee

- No activity this period

E) Energy Audit

- No activity this period

F) Greenhouse Gas Inventory

- See ARRA Sustainability Plan 1Q Report

G) Sustainability Plan (Healthy Workplace Plan)

- See ARRA Sustainability Plan 1Q Report

7. Dollar mount of work/grant activities completed during this quarter.

- \$4123.39 (per Finance)

8. Description of public awareness / marketing / training activities completed during this quarter. Attached one hard copy and one electronic copy of any materials produced (# people attending/workshop, # workshops held).

- OEQ Program Manager participated in 6 webinar training sessions.
- Test drives coordinated through OEQ for GM Volt drive and charging demonstrations, 20 city employees participated during 1st quarter.
- OEQ Program Manager attended GreenFleet conference in October 2011.
- OEQ Program Manager participated in a green event in Cedar Hill Texas in October 2011. Over 500 local residents attended. Program Manager passed out brochures and provided information on electric vehicles and clean air initiatives.
- OEQ Program Manager arranged a drive event for city departments to test the Ford Transit Connect electric version. Four departments participated with about 10 city staff evaluations.



9. Products produced or technology transfer activities accomplished during the reporting period.

- Ongoing refinement and development of OEQ's Intrasite (internal city communications process) to assist all in getting updates on activities underway in the Office of Environmental Quality.
- Developed article for City Press that will be published in 2nd quarter 2012. Article describes deployment of EVSE's.
- Ongoing development of city Internet website using Garland Goes Green as a branded page.

10. Lessons Learned

- None this period.

11. Discussion of work/ grant activities to be completed next quarter

- Continuing Waste to Energy discussions to further talks toward a possible proof of concept agreements signed between the city and one party featuring wastewater to energy.
- Re-execution of the Texas Railroad Commission propane grant for up to 10 vehicle conversions and propane infrastructure development at our Forest Lane Refueling complex.
- Installation of up to 20 additional EVSE's through an Ecotality grant in connection with the recent GM Volt acquisitions.
- Installation of a Level 3 EVSE as part of a North Central Texas Council of Governments NCTCOG grant funded electric charging stations project. The DC rapid charger was purchased from AeroViroment and delivered to the city 12/22/11 and will be deployed at the Gasoline Alley Refueling complex.
- Consideration toward signing a lease for new office space for OEQ in downtown Garland.
- Consideration toward developing a pilot project for LED street light testing (GreenStar and Garland Power/Light)
- Three monthly NCTCOG status reports.
- Completion of the Healthy Workplace Internal Plan, an internal city planning document.
- Installation of propane fueling facilities at 2 city facilities (Forest Lane and Gasoline Alley). The facilities will feature 2,000 gallon tanks at both locations, wireless automatic refill notification, connection to city's fleet master reporting system and refill infrastructure for small canister bottles servicing Parks department mowers and Warehouse department forklifts.
- Selection of a vendor for a water conservation project that is expected to save over 1M gallons of water per year.
- Selection of a contractor and then the installation of a Level 3 rapid charge EVSE.