



## Greenhouse Gas Emissions Reduction Mitigation Grant Program Final Construction Report

Note to Grant Recipients: This report will supply the Port with information about the completion of your GHG Grant project. We are interested to know about project successes, problems, and measures that you will take to ensure the project meets or exceeds the useful life described in your grant application. Now that your project is finished, we want to know what kind of metrics you will use, and the frequency of those measurements, to determine the effectiveness of your project in reducing greenhouse gas emissions. Use as much space as you need for each field; there is no page limit. For more information, please contact the Port's GHG Grant program manager at (562) 283-7100.

General Information	
<b>Grant Recipient Organization Name</b>	St Mary Medical Center Foundation
<b>POLB Contract Number</b>	HD-8305
<b>Grant Project Title</b>	Green House Gas Emissions Reduction Program: Boiler Retrofit Project

Expenditures	
<b>Total Grant Award</b>	\$500,000
<b>Total POLB Grant Funds Expended</b>	\$500,000
<b>Total POLB Grant Funds Invoiced to Date</b>	\$267,328.82
<b>Total Project Cost</b>	\$542,920.40
<b>Will you be applying for a rebate?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No    If yes, amount:

Project Completion Evaluation	
<b>What was the project completion date?</b>	March 2015
<b>On a scale of 1 to 10, how satisfied were you with the project implementation?</b>	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input checked="" type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10
<b>Were the project costs the same as what you expected?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No, they were less <input checked="" type="checkbox"/> No, they were more
<b>Would you recommend this type of project to an agency or organization similar to yours?</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No



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<p><b>Describe any significant problems you had in implementing this project. What were the notable successes?</b></p>	<p>We encountered a delay, which was actually the result of an opportunity for the hospital. Our facility’s boiler #3 (which is not included in this grant project and not covered by these grant funds) required some repairs unexpectedly, and so we moved to retrofit boiler #3 ahead of boiler #1. Because we had saved so much money – through this grant – on the retrofit of boilers #1 and #2, we were able to get additional funding from our Parent Company, Dignity Health, to pay for the retrofit of our 3<sup>rd</sup> and final boiler, which serves as a back-up for boilers #1 and #2. Now all three boilers have been retrofitted instead of just two.</p> <p>Overall, the retrofitted boilers are running very efficiently, and significant decreases in GHGs emissions have been observed. For example, Boiler #2’s NOx emissions post-retrofit decreased to 32% of pre-retrofit levels, from 27.6445ppm before the retrofit to 8.7977ppm after the retrofit. The retrofitted boilers are quieter, but actually the boiler room is a higher temperature post-retrofit.</p>
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Metrics and Measurements	
<p><b>What metric will you use to determine the effectiveness of your project in reducing, capturing, or avoiding GHG emissions? How will it be calculated?</b></p>	<p>St Mary Medical Center employs stack monitoring quarterly, and a longer test annually. The test measures green-house gases that exit the boiler. The facility will monitor and record the quarterly and annual emissions continuously as long as the boilers are operational.</p> <p>We completed quarterly testing before the retrofit and will continue this practice for preventive maintenance and compliance reasons. We submit the quarterly report to SCAQMD. Please see two attached Emissions Reports for a sample of what the quarterly monitoring looks like: 1) before the retrofit, and 2) after the retrofit of just one boiler. These reports measure emissions of O<sub>2</sub>, CO, NO, NO<sub>2</sub>, and NO<sub>x</sub>. At the time of the last annual test, 11/18/14, only one boiler had been retrofitted. These reports show the difference in emissions from that one boiler that was retrofitted, named “Sellers 2.”</p>
<p><b>How frequently will you be collecting these measurements?</b></p>	<p><input type="checkbox"/> Weekly    <input type="checkbox"/> Monthly    <input checked="" type="checkbox"/> Yearly    <input checked="" type="checkbox"/> Other: Quarterly</p>
<p><b>If your project has an educational aspect, what type of data will you collect to determine its effectiveness?</b></p>	<p>N/A</p>

### Project Maintenance



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<b>What type of maintenance will you conduct to ensure that your project produces GHG emission reduction benefits throughout or beyond the warranted or predicted life of the equipment/materials?</b>	We monitor daily as our boilers are online continuously. They provide heat and steam for the hospital and other buildings on campus. Our boilers are attended by Licensed Steam Engineers. We perform many monitoring tasks as well as mechanical tasks and periodic readings. The tasks are required per shift, daily, weekly, monthly, quarterly, and annually.
<b>How often will you need to perform maintenance on your project?</b>	<input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Yearly <input checked="" type="checkbox"/> Other: As needed.

*You may attach documentation relating to the completion of your project. This documentation may include receipts, invoices, meeting sign-in sheets, photographs, fliers, media coverage, educational materials, or presentations.*

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