

**San Joaquin Valley  
Unified Air Pollution Control District  
Best Performance Standard (BPS) x.x.x**

<b>Class</b>	<b>Steam Generators</b>
<b>Category</b>	<b>New Industrial Steam Generators Fired Exclusively on Natural Gas or LPG</b>
<b>Best Performance Standard</b>	<p><i>Applicability Note: Steam generators fired with gaseous fuels other than natural gas or LPG (either exclusively or mixed with natural gas or LPG) and which meet the following standards shall be considered to meet BPS for their respective category.</i></p>
	<p>Steam generators meeting this Best Performance Standard must comply with both elements of this BPS (items 1 and 2 listed below) where applicable:</p> <p>1. The steam generator shall be either equipped with an economizer system meeting the following design criteria <b>or</b> shall be equipped with an approved alternate heat recovery system which will collectively provide heat recovery from the boiler flue gas which is equivalent. Equivalent heat recovery systems may utilize recovered heat for purposes other than steam generation provided such uses offset other fuel usage which would otherwise be required.</p> <p>A. Except for steam generators subject to the requirements of item B below, the economizer system shall be designed at maximum steam generator firing rate to either 1) reduce the temperature of the economizer flue gas outlet to a value no greater than 90 °F above the temperature of the boiler feed water or 2) heat the boiler feed water to a temperature which is no less than the saturation temperature of the steam at the pressure of the steam separator, or 3) reduce the final temperature of the boiler's flue gas to a temperature no greater than 300°F .</p> <p><i>Note: For purposes of this BPS, feedwater temperature is defined as the temperature of the water stream delivered to the steam generator from the deaerator or feedwater tank.</i></p> <p>B. For steam generators with rated capacity in excess of 20 MMBtu/hr which have a average water supply temperature which is equal to or less than 150°F, the steam generator shall equipped with an economizer designed to reduce the temperature of the flue gas outlet to a value no greater than 90°F above the water supply temperature when the boiler is operating at maximum firing rate.</p> <p><i>Note: For purposes of this BPS, water supply temperature is defined as the weighted average temperature of the combined makeup water and the recovered condensate delivered to the steam generator upstream of any deaerator or other feedwater preheater.</i></p> <p><b>AND</b></p> <p>2. Electric motors driving combustion air fans or induced draft fans shall have an efficiency meeting the standards of the National Electrical Manufacturer's Association (NEMA) for "premium efficiency" motors and shall each be operated with a variable speed control or equivalent for control of flow through the fan.</p>

<b>Percentage Achieved GHG Emission Reduction Relative to Baseline Emissions</b>	<b>4.2%</b>
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<b>District Project Number</b>	C-1100388
<b>Evaluating Engineer</b>	Dennis Roberts, P.E.
<b>Lead Engineer</b>	Martin Keast
<b>Public Notice of Intent Date</b>	April 1, 2012
<b>Public Notice: Start Date</b>	August 20, 2012
<b>Public Notice: End Date</b>	September 20, 2012
<b>Determination Effective Date</b>	TBD