STATEMENT OF INVESTMENT GUIDELINES

FOR

PHILADELPHIA GAS WORKS PENSION PLAN

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I. INTRODUCTION

This Statement of Investment Guidelines (Guidelines) defines the investment policies, objectives, and procedures applicable to the Philadelphia Gas Works Pension Plan (Fund). It was developed by Public Financial Management, LLC (Consultant), in conjunction with the Sinking Fund Commission (Commission) and the Fund.

Experience has shown that the most common and costly error of a fund sponsor is the failure to communicate return expectations, risk tolerances, time horizons, and liquidity needs to the investment managers.

Developing appropriate investment strategies and executing prudent decisions requires a thorough understanding of the Fund's investment objectives. Therefore, it is critical to document these investment preferences. Only through this exercise can the Commission adequately interpret investment activity and results.

The purpose of the Guidelines is threefold. First, it will constitute the program for investing the Fund's assets. Second, it will serve as a communication tool between the Commission and the investment managers. Third, it will provide a framework to measure the ongoing performance of the assets.

Within the constraints imposed by the Guidelines, the investment managers will have total discretion to manage the Fund's assets according to their professional judgment and fiduciary obligations. Their strategies should be communicated to the Commission at regularly scheduled review meetings. By assuming the management of any of the Fund's assets, an investment manager is obligated to manage the assets in accordance with the Guidelines and its contract with the City of Philadelphia acting through the Commission, which contract incorporates by reference the Guidelines.

A. Goals

The long-term goals of the Fund are to:

- 1. Manage the assets in a manner that is in the best interest of the participants and beneficiaries of the Fund;
- 2. Produce investment results which meet the Fund's actuarially assumed rate of return and protect the assets from any erosion of inflation-adjusted value. In addition, the investment managers should prudently invest the assets within the constraints imposed by the Guidelines to enhance value whenever possible; and
- 3. Produce consistent performance to protect against excessive volatility in the market value from year to year to be able to meet the liquidity needs of the Fund.

B. Liquidity Needs

The Fund should be managed in accordance with its cash flow requirements, as prescribed by applicable law and as discussed in Section II below. The appropriate PGW personnel should communicate the cash flow needs to the Commission's Executive Director and the Fund's Chief Investment Officer (CIO). The CIO, with the support of the Consultant, should then establish the actual distributions of the cash flows (consistent with the long-term asset allocation of the Fund) and communicate such to the investment managers. Furthermore, the distributions of cash flows should consider periodic rebalancing needs due to changes in market valuations of the asset classes.

C. Time Horizon

Progress toward stated goals will be measured regularly, however, the Commission recognizes that the investment managers may require a market cycle (at least three years) to fully implement their investment styles. Under certain circumstances, such as change or loss of key personnel, short-term poor performance history, change of investment style, or pursuant to the Commission's sole discretion, the Commission may choose to consider replacing an investment manager within a three-year time horizon.

D. <u>Investment Style</u>

Each investment manager is directed to implement an investment style consistent with the respective asset class for which they were retained. The Commission will periodically evaluate each manager's investment style to ensure consistency with their mandate. The Commission may consider replacing a manager if it is determined that its investment style is no longer appropriate for the Fund.

E. Investment Discretion

The Commission intends to control such matters as the long-term asset mix and the retention of professional investment managers. However, detailed investment strategies and the ultimate purchases and sales of securities are deemed to be within the expertise and discretion of the professional investment advisors. The Commission is aware that the decision to invest in a commingled account may relieve the investment manager from strict adherence to all elements of the policy. With the exception of investments classified as "alternative investments", the investment managers do not have the authority to invest in commingled funds without the prior express written permission of the Commission.

II. BACKGROUND

The Commission was initially established to handle all debt servicing of the City of Philadelphia. An ordinance passed by City Council in 1966 delegated management of the Fund to the Commission. The purpose of the Fund is to help meet pension liabilities for the employees of the Philadelphia Gas Works, which pays benefits from a combination of draws from the Fund and current gas revenues.

III. RECOMMENDED ASSET ALLOCATION POLICY

Historical performance results and future expectations suggest that common stocks will provide higher total investment returns than fixed-income securities over a long-term investment horizon. However, one can expect an increase in portfolio volatility as the allocation percentage to equities is increased.

Based on the investment goals and risk tolerances stated in this document, given a general 65% equity / 35% fixed income structure for the Fund, the following asset mix strategies are appropriate. Investments should not exceed the stated minimum and/or maximum levels (at market value) without written permission of the Commission.

		Range		
Asset Class	<u>Target</u>	Min.		Max.
Combined PGWPP Fund				
Domestic Equity	41.5%	35%	-	55%
International Equity	18.5%	10%	-	30%
Fixed Income	32.5%	25%	-	45%
Alternatives	7.5%	0%	-	10%
Cash Equivalents	0%	0%	-	10%
TOTAL	100%			

IV. INVESTMENT GUIDELINES AND DEFINITIONS

Deviations from this Section are prohibited unless specifically approved in advance in writing by the Commission. The Commission may instruct managers to liquidate prohibited investments. Managers shall be liable to the Fund for realized losses in prohibited investments.

A. Diversification

The following diversification requirements apply at the total portfolio level to minimize the impact of substantial loss in any specific sector or company.

1. Domestic and International Equity

No more than the greater of 5% or weighting in the relevant index (Russell 3000 Index for U.S. issues and MSCI ACWI ex-U.S. for non-U.S. issues) of the total equity portfolio valued at market may be invested in the common equity of any one corporation; ownership of the shares of one company shall not exceed 5% of those outstanding; and not more than 40% of equity valued at market may be held in any one sector, as defined by the Global Industry Classification Standard (GICS).

<u>Domestic Equities</u>. Other than the above constraints, there are no quantitative guidelines as to issues, industry or individual security diversification. However, prudent diversification

<u>International Equities</u>. The overall non-U.S. equity allocation should include a diverse global mix that is comprised of the equity of companies from multiple countries, regions and sectors.

2. Fixed Income

Each investment manager must diversify the investment of its allocation, within the quality guidelines in Section IV.B and the duration guidelines in Section IV.C, to minimize the adverse effects of interest rate fluctuations. Therefore, each manager's allocation is subject to the following limitations:

Fixed income securities of any one issuer shall not exceed 5% of the total bond portfolio at time of purchase. The 5% limitation does not apply to issues of the U.S. Treasury or other Federal Agencies. The overall rating of the fixed income assets as calculated by the Advisor shall be investment grade, based on the rating of one Nationally Recognized Statistical Rating Organization ("NRSRO").

3. Alternatives

Alternatives may consist of non-traditional asset classes such as hedge funds, private equity, real estate and commodities, when deemed appropriate. The total allocation to this category may not exceed 10% of the overall portfolio.

<u>Hedge Funds</u>: Primary objective shall be to enhance the risk-return profile of the overall portfolio. This can be accomplished by using a combination of hedge fund strategies that may enhance returns at a reasonable level of risk or reduce volatility while providing a reasonable level of return. These asset classes may differ from traditional public market asset classes due to the use of certain strategies including short-selling, leverage, and derivatives. Hedge funds may also invest across asset classes. The use of direct hedge funds and fund-of-hedge funds are allowed.

<u>Private Equity</u>: Private equity is less liquid than publicly traded equity securities and can provide returns that are greater than what is available in publicly traded markets. The private equity portfolio may include investments in a variety of commingled/partnership and direct investment vehicles including, but not limited to, venture capital, buyout, turnaround, mezzanine, distressed security, and special situation funds. The private equity portfolio is recognized to be long-term in nature and highly illiquid. Due to their higher risk, private equity investments are expected to provide higher returns than publicly traded equity securities.

<u>Real Estate</u>: Consists of publicly traded Real Estate Investment Trust ("REIT") securities and/or non-publicly traded private real estate and shall be diversified across a broad array of property types and geographic locations. Investments of this type are designed to provide a stable level of income combined with potential for price appreciation, particularly in periods of unexpected inflation. For private real estate, the illiquid, long-term nature should be considered.

<u>Private Debt</u>: Private debt is less liquid than publicly traded debt and can provide returns that are greater than what is available in publicly traded markets. The private debt portfolio may include investments in a variety of commingled/partnership and direct investment vehicles including, but not limited to, direct lending, distressed debt, multi-asset credit, structured credit, mezzanine debt, real estate debt, and special situations. Due to their higher risk, private debt investments are expected to provide higher long-term returns than publicly

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<u>Inflation Hedge</u>: Shall consist of pooled vehicles holding among other assets: Treasury Inflation Protected Securities ("TIPS"), commodities or commodity contracts, index-linked derivative contracts, certain real estate or real property funds and the equity of companies in businesses thought to hedge inflation.

B. Quality

- 1. <u>Equity Issues</u> There are no qualitative guidelines suggested with regard to equity ratings, rankings, etc., except that prudent standards should be utilized by the investment managers.
- 2. <u>Fixed-Income Securities</u> The overall rating of the fixed income assets as calculated by the Commission shall be investment grade, based on the rating of one Nationally Recognized Statistical Rating Organization ("NRSRO").
- 3. <u>Alternatives</u> There are no qualitative guidelines suggested with regard to alternative investment ratings, rankings, etc., except that prudent standards should be utilized by the investment managers.
- 4. <u>Cash Equivalent Vehicles</u> If commercial paper is used for short-term investments, it must be of high quality, rated at least A-1 by one Nationally Recognized Statistical Rating Organization ("NRSRO").

C. Duration

The maturities of the bonds held in each manager's allocation are at the discretion of the investment manager. However, overall effective duration for the total fixed income portfolio should be maintained within 80% - 120% of the applicable bond index (Barclays US Aggregate Bond Index).

D. Prohibited Investments

Investment in publicly traded U.S. companies engaged in business activities in Northern Ireland which have not implemented the MacBride Principles. Investment in the following categories of securities are prohibited without the prior express written approval of the Commission:

Except for purchase within authorized investments, securities having the following characteristics are not authorized and shall not be purchased: letter stock and other unregistered securities, direct commodities or commodity contracts, or private placements (with the exception of Rule 144A securities). Further, derivatives, options, or futures for the sole purpose of direct portfolio leveraging are prohibited. Direct ownership of real estate, natural resource properties such as oil, gas or timber and the purchase of collectibles is also prohibited.

Portfolio investments designed to hedge various risks including volatility risk, interest rate risk, etc. are allowed to the extent that the investments are not used for the sole purpose of leveraging Fund assets. One example of a hedge vehicle is an exchange traded fund ("ETF") which takes short positions.

V. OBJECTIVES

Investment objectives are intended to provide quantifiable benchmarks against which the progress toward long-range investment goals can be measured. The objectives are measured net of fees over a trailing three-year time horizon. In the case where three years of data does not exist, composite returns of an investment management organization will be used to determine compliance.

The PGWPP fund's objective relative to other professionally managed accounts is for performance to fall within the top 50% of an appropriate peer universe and for risk, as measured by standard deviation, to fall within the bottom 50% of the respective peer universe.

The Commission shall compare the investment results for investment managers on a quarterly basis to appropriate peer universe benchmarks, as well as market indices in both equity and fixed income markets. Examples of benchmarks and indexes that will be used include the Russell 3000 Index for broad U.S. equity strategies; S&P 500 Index for large cap U.S. equities, Russell 2000 Index for small cap U.S. equities, MSCI ACWI ex-U.S. Index for broad based non-U.S. equity strategies; MSCI Europe, Australasia, and Far East (EAFE) Index for developed markets international equities, Barclays Capital Aggregate Bond Index for fixed income securities, and the U.S. 91 Day T-bill for cash equivalents. Alternative investments will be benchmarked against appropriate indices depending on the specific characteristics of the strategies and funds used.

The Russell 3000 Index will be used to benchmark the U.S. equities portfolio; the MSCI ACWI ex-U.S. Index will be used to benchmark the non-U.S. equities portfolio; the Barclays U.S. Aggregate Bond Index will be used to benchmark the fixed income portfolio. The alternatives portfolio will be benchmarked against appropriate indices depending on the specific characteristics of the strategies and funds used.

Combined PGWPP Fund

Relative to appropriate indices:

Section	Index	Objective
Combined PGWPP Fund Combined PGWPP Fund	TMI (Target Market Index)* Actuarial Rate	Exceed by 0.60% Exceed
Combined PGWPP Fund	CPI (Consumer Price Index)	Exceed by 5.00%

^{* 45.00%} Domestic Equity / 20.00% International Equity / 35% Diversified Fixed Income

VI. COMMUNICATIONS AND RESPONSIBILITIES

The Commission considers the ongoing process of understanding and monitoring the Investment Managers' strategies and performance of primary importance. The following highlights the responsibilities of the Commission, Investment Managers, Custodian and Consultant. Each party should maintain complete, open and timely communications with the Commission at all times.

- A. The <u>Commission</u> should communicate any changes in the Guidelines to the Investment Managers, in consultation with the Consultant. Investment personnel, the Commission Executive Director and the Consultant should meet with the Commission quarterly to review the investment activity and performance of the Investment Managers.
- B. The <u>Investment Managers</u> are expected to acknowledge the acceptance of the Guidelines, submit any recommended changes; and attend Commission meetings at least annually or as requested by the Commission to review investment activity and performance. This evaluation should indicate the current portfolio strategy, as well as commentary on the outlook for the economy and capital markets. Investment Managers are given discretionary authority to manage assets of the Fund, however, each Investment Manager is obligated to be in compliance with the Guidelines and its contract with the City of Philadelphia acting through its the Commission.

Additionally, the Investment Managers are required to submit to the Commission and the Consultant monthly reports which should contain a listing of holdings at cost and market value, purchases, sales and monthly returns.

Quarterly reports, in addition to containing the above data, should contain as appropriate, the following:

- Equity portfolio characteristics such as number of issues, weighted average and median market capitalization, price/earnings and book ratios and dividend yield.
- Fixed-income portfolio characteristics such as yield-to-maturity, weighted average maturity and effective duration.
- Cash flow details for closed-end alternative investments.
- Sector weights compared to the appropriate index.
- Portfolio statistics such as beta, R-squared, standard deviation and Sharpe ratio.
- Investment summary explaining the factors contributing to, or detracting from performance.

Along with the quarterly reports submitted to the Commission, a report detailing proxy voting and trading using the Fund's directed brokers should be included.

- C. The <u>Custodian</u> of the Fund is expected to provide monthly and fiscal year end (June 30) statements of portfolio transactions and invested positions by cost and market to both the Commission and the Consultant. Safekeeping of assets will be provided by the Trustee/Custodian.
- D. The <u>Consultant</u> to the Fund is expected to provide quarterly reviews of investment activity and results presented in light of the appropriate standards set forth in the Guidelines, prepare and present an annual portfolio stress test, attend and present at quarterly meetings or as requested by the Commission and conduct manager searches as agreed on by the Commission and the Consultant.