



Water for Indonesia Now (WIN)

Project Narrative

Executive summary

Applicant: International Association of Plumbing and Mechanical Officials (IAPMO)
Ontario, California
IAPMO.org

ITA and other federal collaborators:

NIST/Office of the Director (Ajit Jillavenkatesa)
ITA/Office of Standards Liaison (Ryan Kane)
ITA/USFCS, US Embassy, Jakarta (David Gossack, Margaret Shu-Teasdale, and Kalung Riang)
ITA/MAC (Wallis Yu)
ITA/MAC, Office of Multilateral Affairs (Renee S. Hancher)
ITA/MAS, Office of Materials Industries (Gary Stanley, Joanne Littlefair & Salim Bhabhrawala)
ITA/MAS, Office of Energy & Environmental Industries (Maureen Hinman)

Federal share/match: \$296,062 / \$605,574

Project period: October 1, 2013 – June 30, 2015

Exports: Project period - \$3,083,298
4 years after project period - \$7,485,203

Foreign Market targeted: Indonesia
Size \$595,000,000
Current US share \$ 1,400,000

US Industry to be promoted Standards/building products

Project description:

1. Develop a Uniform Plumbing Code specific to Indonesia (UPC-ID) through an open consensus process.
2. Work with BSN (National Standardization Agency), the Ministry of Public Works, and the Ministry of Industry to have the code implemented and adopted nationally.
3. Create a personnel certification program to train installers and code enforcement officials on the UPC-ID
4. Develop a third party testing and certification laboratory for the testing and certification of plumbing products for the Indonesian market to ensure that they meet the standards set forth in the UPC-ID



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Background

1) Competitive position of U.S. Industry, including market potential

a. US Plumbing Industry

The purpose of IAPMO's Water for Indonesia Now (WIN) project is to assist officials in Indonesia in adopting, implementing and enforcing a plumbing code that enhances US plumbing manufacturers ability to compete in Indonesia's growing and important market. This project will facilitate trade through the adoption of standards friendly to U.S. plumbing manufacturers and by providing Indonesian officials with the technical assistance in implementing and enforcing that code to ensure market access. It will also promote trade by providing U.S. plumbing manufacturers the opportunity to showcase their products in front of plumbers being trained on the new code who will ultimately be the ones to actually install and often help to create the demand for these products among their customer base.

The plumbing sector in the United States is an \$86 billion industry.¹ Just as an important, it is a growing industry with demand for plumbing fixtures and fittings in the U.S. expected to rise to \$10.7 billion by 2016.² This growth can be attributed to the expected housing recovery, consumer's growing interest in high end products and more intense use of fittings (e.g. sinks with two faucets, potfillers, showers with multiple heads). According to the same report, shipments of plumbing products from the US are expected to increase 6.5% per year to \$8.6 billion in 2016. Five companies lead the U.S. plumbing product market: Kohler, Masco, American Standard, Moen, and Jacuzzi. Other notable manufacturers include Elkay, Sloan Valve Co., Mansfield Plumbing Products, and Rexnord. Additionally, the industry is comprised of a number of small to medium size enterprises. This project will be essential to helping each of these manufacturers compete in Indonesia in the years ahead.

b. IAPMO and U.S. developed standards and conformance

IAPMO has been protecting the public's health and safety for more than eighty-five years by working in concert with government and industry to implement comprehensive plumbing and mechanical systems around the world. As a membership-based association, IAPMO is proud to utilize an open consensus process in the development of our flagship Uniform Plumbing Code and Uniform Mechanical Code. These codes are established through scientific research, debate, and analysis, strengthening IAPMO's position at the forefront of the plumbing and mechanical industries. The IAPMO Group is a complete service organization, providing code development assistance, industry-leading education, plumbing and mechanical product testing and certification, building product evaluation and a manufacturer-preferred quality assurance program. Each component of the IAPMO Group works toward playing an integral part in protecting the health of people everywhere.

2) Target market economic conditions and the likelihood that potential buyers will purchase U.S. goods or services to be offered

¹ IBIS Research, *Plumbing in the US: Market Research Report*, November 2012

² Freedonia Group, *World Plumbing to 2016*, September 2012

² Freedonia Group, *World Plumbing to 2016*, September 2012



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a. Macroeconomic summary of Indonesia

The current and projected economic climate in Indonesia is creating a very favorable environment for US plumbing product manufacturers. Indonesia represents one of the largest markets in Asia with a population of 243 million and an abundance of natural resources. In spite of weathering serious regional and worldwide economic downturns over the last 15 years, it has experienced major economic advances. Indonesia began the new millennium recovering from the steep recession caused by the 1997 East Asian financial crisis. Real GDP finally surpassed the pre-crisis level by 2002, and the country posted economic growth through 2011. For the past decade, per capita output rose over four percent, helping to reduce the poverty rate. Both household consumption and capital investment spending increased during the expansion, although the latter component was somewhat volatile. Indonesia's economy continued to grow through the 2009 world recession; although it did experience a modest deceleration. It has been argued that the effect of the downturn was tempered by the country's relatively low dependence on exports. Domestic consumption remained on pace in 2009, supporting overall economic growth. Business spending and investment recovered in 2010 and 2011, and real GDP growth accelerated, accompanied by a rise in inflation.

The forecast continues to look very promising for Indonesia. Economic growth is expected to accelerate slightly from the 2006 to 2011 pace, supported by household consumption. Near term risks include changes in investor sentiment that would result in a reduction in capital inflows, thereby limiting growth in business investment. Despite progress in expanding Indonesia's infrastructure in recent years, infrastructure spending relative to GDP remains substantially below that of other Asian countries in similar stages of economic development. Further investment, including for electric power generation, water, and transportation infrastructure will be needed to support further economic advances.

b. Microeconomic considerations

i. Status of current infrastructure

Asian countries continue to be home to the world's largest number of people without basic or adequate access to water. Like many middle-income nations, Indonesia is plagued by serious problems, including inadequate infrastructure and poor system maintenance.³

Currently, the plumbing sector in Indonesia is completely unregulated. Owing to the lack of an enforced plumbing code, large portions of the population have no alternative but to use sub-standard plumbing products and plumbing systems in both residential and commercial buildings. As a result, poor plumbing materials and practices significantly increase the risk that potable water systems in buildings become contaminated. Additionally, leaks and system inefficiencies in this region is responsible for the loss of a sizable portion of the water supply before reaching the consumer.⁴ Among other challenges this has presented, the unreliability of the plumbing system has led to many Indonesians installing deep well pumps. However, this is overexploitation of

³ Georgetown University Press, *Water: Asia's New Battleground*, 2011.

⁴ Alliance to Save Energy, *Watergy: Energy and Water Efficiency in Water Supply and Wastewater Treatment*, 2007.



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groundwater has led to critical problems, including salt-water intrusion.³ It is another reason why Indonesia is anxious to develop and enforce a comprehensive plumbing code, as officials are keenly aware of the critical health, safety, environmental, and economic benefits that will result for their citizenry.

c. Projected demand for plumbing fixtures and fittings

Plumbing fixtures demand in Indonesia is anticipated to reach \$420 million by 2016 – an increase of 7% per year. The fastest growth is anticipated in the toilet, bathtub and shower segments which collectively accounted for \$170 million in products in 2011.⁵ Growth in construction expenditures will drive the demand. Initiatives that help to expand the country's water delivery and sanitation networks, such as IAPMO's proposed project to establish a well-enforced plumbing code, will create new customers and also expand demand. Just as important for US manufacturers, rising disposable incomes in Indonesia will allow consumers to replaced outdated fixtures with more luxurious models.

In terms of plumbing fittings, demand in Indonesia is expected increase to \$400 million by 2016 – an increase of 6.2% annually. The fastest growth is expected to come from the kitchen and other sink segment. This segment accounted for \$28 million in products in 2001, \$54 million in 2011 and is projected to grow to \$75 million by 2016.⁵ Here again, rising disposable incomes will allow for increasing numbers of renovations, and kitchens are one of the most frequently renovated rooms in the home. Given the need for improved water infrastructure and the growth of the economy, it is easy to understand the growing importance of this market to US plumbing product manufacturers.

3) U.S. industry's ability to meet potential market demand

In the course of IAPMO's discussions with officials at BSN and the Ministry of Public Works, it is apparent that they intend to address the lack of regulation in the plumbing industry within the next year. This could be problematic as one major impediment to international trade is the development of so-called "home grown" market access requirements by individual nations. These unique standards, regulations, testing and certification requirements can create a complex and sometimes contradictory web of requirements for companies doing business internationally, driving up the financial and time costs associated with exports and trade. Unfortunately, this scenario is all too common and it is has lead WTO Director-General Pascal Lamy's to frequently comment that "a standard you can't meet is like a 1,000% tariff."

However, international voluntary consensus standards can help to address these problems by giving countries a common base for such requirements. Industry in the U.S. is very interested in seeing that major emerging economies like China and India, as well as smaller markets like Peru and Vietnam – use international standards to help align their market access requirements with those of the world at large, reducing trade-based costs for companies doing business internationally. As Indonesian officials move to create and adopt regulations, IAPMO's involvement in the adoption of these codes and the development of a certification program from the ground up is critical to ensuring that a level playing field is maintained which will allow U.S. manufacturers to compete in this market moving forward as well as protect the current level of U.S. exports.

⁵ Freedonia Group, *World Plumbing to 2016*, September 2012



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U.S. based construction codes, such as the Uniform Plumbing Code, contain hundreds of internationally recognized technical standards. By simply adopting one U.S. friendly construction code, hundreds of material and product standards that pertain to U.S. manufactured plumbing goods immediately go into effect everywhere the code is enforced. Simply put, the adoption of one construction code provides for incredible leverage and opportunity for U.S. manufacturers. Clearly the most compelling benefit of this project will be the establishment of U.S. industry friendly provisions contained in an important construction code in Indonesia. The adoption of the UPC-ID will ensure that all technical requirements are scientifically based and free from discriminatory regulations. It is important to state, however, that some local content requirements may be necessary and appropriate to accommodate local construction practices. However, such local content would not be incorporated into the code for discriminatory purposes.

The benefits resulting from this effort can best be defined in long-term goals for U.S. based business interests. Currently, U.S. based plumbing manufacturers export approximately \$1.4 million in products to Indonesia – an incredibly small amount given the size of the market. However, the prospects for this to change is nonexistent without an effort to codify the Indonesian plumbing marketplace being lead by a U.S. based plumbing code developer, such as IAPMO. The establishment of a comprehensive plumbing code mirroring, to the greatest extent possible, code provisions established and enforced in the United States, will provide for a long term opportunity for U.S. based manufacturers to compete in a market that is well regulated and necessitates the installation of compliant, well designed and well manufactured plumbing components and products.

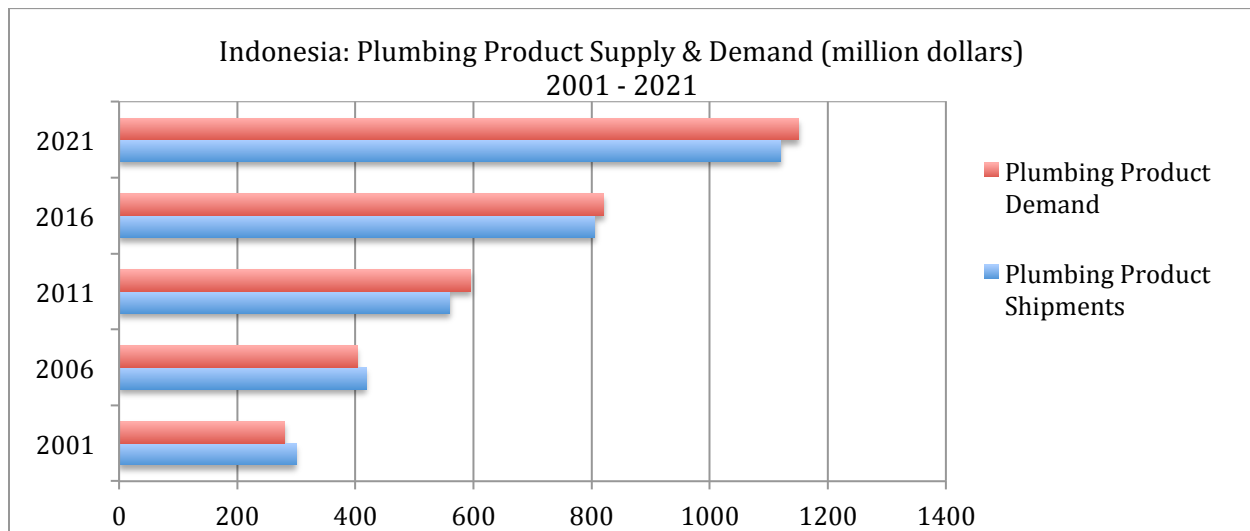
While it is difficult to predict the speed in which U.S. based manufacturers will embrace this emerging market, IAPMO's experience in cooperative code development projects of this nature suggests a conservative but steady market transformation as Indonesia goes through the process of acceptance, implementation and enforcement of the new code. However, the opportunity for U.S. businesses to compete in this market will become increasingly apparent as this process takes root.

4) Local and third-country competitors in the target market

IAPMO's project is coming at an opportune time in the evolution of Indonesia's economy where a growing trade deficit in the plumbing products sector has developed over the last several years. Shipments of plumbing products from facilities in Indonesia are projected to increase 7.5% per year and reach \$805 million by 2016.⁵ Domestic manufacturers will benefit from increased local demand and additional export opportunities in foreign markets. However, competition from other countries, will also limit the growth of domestic manufacturers and a trade deficit is projected through at least 2021.



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Manufacturers of plumbing products based in Indonesia include Greenleaf Plasticwares, Natko Pacific, and Papalif Stone. Foreign companies with facilities in Indonesia include TOTO and the LIXIL. Many of the reputable manufacturers in Indonesia have historically dealt with importers bringing in plumbing products of inferior quality. There have even been reports of injuries and property damage due to the lack of any sort of regulation on these products. Local manufacturers have also approached the Indonesian government for product regulation and certification.

5) U.S. industry resources that can be brought to bear on developing target market

a. The only ANSI certified plumbing code in existence

It is important to note the Uniform Plumbing Code (UPC), after which the new plumbing code in Indonesia will be based, is the only plumbing code in existence designated as an American National Standard governing the installation and inspection of plumbing systems to promote the public's health, safety and welfare. The UPC is developed using the American National Standard Institute's consensus development procedures. This process, which ensures due process, openness and balance, brings together stakeholders representing a variety of viewpoints and interests to achieve true consensus on plumbing practices. U.S. plumbing manufacturers are very interested in seeing Indonesia's new code based off of a U.S. plumbing code and product standards.

b. Adopting vs. implementing and enforcing a code that favors US manufacturing

A critical distinction made in this proposal is that IAPMO will not only work with officials in Indonesia to adopt a code that provides a level playing field for U.S. manufacturing and ultimately protects jobs in the United States, but will also provide the necessary capacity building and technical assistance so that the Indonesian government can enforce it. Unfortunately, it has been IAPMO's experience that great effort and expense is undertaken to help international bodies adopt codes that could be favorable to U.S. based manufacturers but fail to put into place any sort of enforcement structure which results in a net-zero benefit for companies looking to export.

Recognizing that a new code is only as good as the knowledge of those installing the products and those inspecting the work, IAPMO will undertake two significant project activities to address code



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compliance issues outside of its code adoption efforts. First, IAPMO will develop personnel certification programs to provide technical assistance and training to officials from the Ministry of Public Works who will ultimately oversee inspections in local communities. We will also partner with local universities to develop curriculum and establish a Plumbing Education to Employment Program (PEEP) that will become the foundation of a plumbing trade certification program. Second, IAPMO will establish an independent 3rd party testing laboratory and certification agency in Indonesia to ensure that only quality products are installed that meet the stringent standards contained in the code. These two project activities will ensure the proper implementation and enforcement of the plumbing code in every facet of the industry.

6) After sales service capability in target market

IAPMO brings the knowledge, experience and know-how to make this project a success. Over the years, IAPMO has refined the process by which it engages with the institutional framework of partner nations. An intriguing example is IAPMO's recent involvement with officials in India. The initial scope of IAPMO's work was similar to this WIN proposal for Indonesia. However, after seeing the successful adoption of the Uniform Plumbing Code – India, it quickly expanded to include the development and adoption of other IAPMO based codes such as the Uniform Mechanical Code – India, Green Plumbing Code Supplement – India, Uniform Solar Energy Code- India, and Uniform Swimming Pool and Spa Code. Once the baseline code had been implemented, there was the opportunity to push for the adoption of greener standards that mandated newer and more advanced technologies. With the adoption of these other codes, other U.S. based manufacturers are beginning to take advantage of a regulatory climate in India that benefits their products as well. IAPMO anticipates a similar expansion of work with officials in Indonesia especially working in collaboration with the U.S. Department of Commerce and the myriad of resources it can bring to bear.

It is also relevant to note that IAPMO India continues to make end roads with major government, state, and institutional partnerships to enforce the adoption of Uniform codes and implement educational programs throughout the country to train the 85% of personnel working in the plumbing field that require proper organized technical training. IAPMO India is working to add to the 30+ institutions who currently offer IAPMO's educational programs. In 2013, the College of Engineering at Pune will offer a Plumbing Diploma based on IAPMO's PEEP curriculum. Also, the Government of Kerala is slated to adopt UPC standards and form a dedicated Public Health Engineering Inspectorate to regulate and monitor use of water, plumber certification, and water efficient plumbing product certification. These proven elements of code implementation and enforcement are critical components to increasing U.S. exports to the Indonesian market.

Finally, Indonesia represents an important and strategic regional hub. The successful adoption of U.S. developed standards in this country will provide an excellent springboard to begin working on these issues in neighboring countries. There is an opportunity to impact U.S. exports to Indonesia beginning in the next year and exports to surrounding countries in the near future.

Project Description

A chart summarizing the staging of the project plan is provided in Part 3, Budget Narrative.



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1) Development of a Uniform Plumbing Code specific to Indonesia (UPC-ID) through an open consensus process.

BSN and IAPMO will collaborate to develop and adopt the Uniform Plumbing Code for Indonesia (UPC-ID.) This code will be based on IAPMO's flagship document, the Uniform Plumbing Code. The adoption of this standard will ensure a level playing field for U.S. plumbing manufacturers in Indonesia. It also addresses a critical infrastructure need of the Indonesian people, contributes to future economic growth and becomes the foundation for the development of Indonesian standards improving health, safety and the environment.

Pre-project work surrounding this initiative began in late 2012 when officials from IAPMO and BSN met to agree begin discussing the concept of WIN and action items that BSN wanted to fast track. Support the U.S. Department of Commerce through MDCP is critical to bringing WIN to fruition and setting it up for future sustainability. Deliverables in this project area include:

- a. IAPMO leadership to attend signing ceremony and press event with BSN, Ministry of Public Works, and Ministry of Industry in Jakarta to strengthen collaboration scheduled to be held on March 28, 2013
- b. BSN to add the development and adoption of UPC-ID to its 2013 Official Agenda. BSN to assist IAPMO and Ministry of Public Works in the implementation efforts of UPC-ID following the adoption of UPC-ID.
- c. BSN to appoint a Technical Committee to work on revising the UPC for Indonesia
- d. IAPMO to appoint a technical expert to serve as a liaison and to promote the inclusion of related US standards into the code adoption.
- e. Standards Adoption process
 - i. BSN a to review and catalog the current standards being used in Indonesia
 - ii. IAPMO will outline available US standards for the Indonesia market.
 - iii. IAPMO will work with US manufacturers to create necessary standards.
- f. The BSN Technical Committee will review and revise the code and work with the IAPMO team to draft a publication for public review and comment.
- g. The UPC-ID will be published and available in public domain, facilitating trade of US manufacturers with a code referencing US and international standards.

2) Work with BSN, the Ministry of Public Works, and the Ministry of Industry to have the code implemented and adopted nationally.

IAPMO will continue to foster relationships and partnerships with the regulatory bodies that will adopt, implement, and mandate the use of this code to assist in the protection of Indonesian citizens through the safe delivery of water through proper codes and standards. Deliverables in this project area include:

- a. IAPMO will work specifically with the Ministry of Public Works and Ministry of Industry to develop an implementation plan and actions for national adoption.

3) Create a personnel certification program to train installers and code enforcement officials on the UPC-ID.



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The goal of the educational program is to prepare multiple levels of professional groups in Indonesia to read, understand, interpret, engage, and apply the provisions of the UPC-ID to plumbing designs, initial installations and to maintain plumbing systems. Deliverables in this project area include:

- a. IAPMO will develop a curriculum for a Plumbing Education to Employment Program to provide a framework for plumbing education and training.
 - b. IAPMO will develop a training program for inspection officials on the provisions of the new code.
 - c. IAPMO will work with U.S. manufacturers to develop a format where they can highlight their products at the launch of PEEP related training sessions.
 - d. IAPMO will identify and establish formal relationships education institutions throughout Indonesia. Partners will include organizations such as; universities, colleges, polytechnics, vocational institutions, government departments, large construction departments, consultants, contractors, managers, developers, builders, and associations.
- 4) Develop a third party testing laboratory and certification for the testing and certification of plumbing products for the Indonesia market to ensure that they meet the standards set forth in the UPC-ID

Deliverables in this project area include:

- a. Research needs and demands for testing lab in Indonesia to test plumbing products including lead free product testing.
 - b. Respond to demand of US manufacturers looking for third party alternative within Indonesia for plumbing product testing and certification services to appropriate health and safety standards referenced in UPC-ID .
 - c. Build globally recognized testing laboratory for plumbing product testing from the ground up, including facility, construction, equipment, and staff.
- 5) Ongoing Development of Supporting Codes, Educational Programs, and Third Party Testing and Certification and development of relevant standards.

Deliverables in this project area include:

- a. Develop supporting codes and supplements on par with the global community, referencing US standards for all accompanying products and systems including Uniform Mechanical Code, Solar Energy Code, Green Plumbing Code Supplement, Water Efficient Rating Scheme, and other applicable Codes.
- b. Ongoing regulation and development of personnel certification through developed plumbing curriculum to ensure trained workforce to implement and to enforce UPC-ID.

Performance Measures

- 1) ITA performance measures



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IAPMO's WIN project is critical to preserving the current level of U.S. exports of plumbing products to Indonesia as well as to expanding it. In 2011, U.S. plumbing manufacturers exported approximately \$1.4 million⁶ in products into an Indonesian plumbing product market valued at \$595 million.² The U.S. market share was approximately 0.23%. Manufacturers in the U.S. recognize that this level of participation is extremely low and they have conveyed to IAPMO that there is tremendous room for growth in this market where strong economic growth is projected over the next decade. Separately, during the course of IAPMO's discussion with officials from BSN and the Ministry of Public Works it has become clear that the government of Indonesia intends to adopt and implement a new regulatory framework governing these products. Given the completely unregulated nature of the industry, it is just as likely that officials will develop a code that incorporates British, Australian, other International Standards or "home grown" standards that will make it extremely difficult for U.S. based manufacturers to compete in Indonesia.

IAPMO's WIN project is vital in helping Indonesian officials adopt a code referencing U.S. and U.S./Canadian harmonized standards favorable to U.S. companies. For example, the Uniform Plumbing Code, as written, published and enforced in the U.S.A., contains references to over 500 standards developed by standards developing organizations including: The American Society of Mechanical Engineers (ASME), ASTM International (ASTM), Underwriters Laboratories (UL), IAPMO and NSF International, to name a few. By working with Indonesian officials to incorporate standards into the new plumbing code from these U.S. based organizations, the WIN project will not only preserve the current level of U.S. exports but also allow U.S. companies to expand their sales and better compete for the 6.6% annual growth projected in this sector.²

It is important to note that while IAPMO will make every effort to incorporate U.S. standards to the greatest extent possible, construction norms in Indonesia may necessitate that other internationally standards such as those developed by ISO may need to be referenced for certain products. This will be determined through discussions with Indonesian stakeholders in the consensus code development process. However, throughout this consensus process IAPMO will prioritize incorporation of specific standards that would be most beneficial to U.S. manufacturers if they were to appear in a new Indonesian plumbing code that is adopted and enforced. These standards include:

- ASME A112.18.1-2005/CSA B125.1-2005 – Plumbing Supply Fittings (benefits manufacturers of faucets, bath/shower valves, showerheads, supply stops)
- ASME A112.19.2-2012/CSA B45.1-2012 – Ceramic Plumbing Fixtures (benefits manufacturers of toilets, bathroom sinks, urinal, bidets)
- ASME A112.19.1- 2008/CSA B45.2-2008 – Enameled Cast Iron Plumbing Fixtures and Enameled Steel Plumbing Fixtures (benefits manufacturers of enameled bathtubs and sinks)
- ASTM B 42 - 2010 – Seamless Copper Pipe, Standard Sizes (benefits manufacturers of copper pipe and fittings)
- ASTM F 877-2007 - Crosslinked Polyethylene (PEX) Plastic Hot- and Cold-Water Distribution Systems (benefits manufacturers of PEX water pipe and tubing)
- ASTM D 1785-2006 - Poly (Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120 (benefits manufacturers of PVC plastic pipe and fittings)

⁶ Based on a review of HS codes likely to represent plumbing products conducted by U.S. Commerce officials.



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- AWWA C511-2007- Reduced-Pressure Principle Backflow Prevention Assembly (benefits manufacturers of certain backflow prevention valves)
- IAPMO Z124.1.2-2005 – Plastic Bathtub and Shower Units (benefits manufacturers of plastic plumbing fixtures such as fiberglass units and acrylic bathtubs)
- NSF 61-2010a - Drinking Water System Components– Health Effects (benefits US faucet manufacturers)
- UL 430-2009 - Waste Disposers (benefits manufacturers of commercial and domestic grade food grinders)

| Measure (ITA #) | | Goal | | Explanation | Reporting Method |
|-----------------------------|--|------|-----------|---|--|
| | | # | \$ Value | | |
| Export Class | NTM NTE ITM | | | IAPMO is a trade association that develops codes and standards. It is not able to link company-specific exports to standards activity | IAPMO is currently in discussions with several U.S. manufacturers regarding the anecdotal export data that they would be willing share with IAPMO and/or ITA regarding their Indonesian export activity. |
| Export transactions | | | | | |
| Export related developments | OISE: Overseas investment supporting exports | 1 | \$605,574 | Development of UPC-ID, development of PEEP curriculum, establishment of product testing and certification lab. | |
| | RMAB: Removal of market access barrier | 10 | | Adoption of US based or other internationally developed standards into the new UPC-ID: 1. ASME A112.18.1-2005/CSA B125.1-2005 2. ASME A112.19.2-2012/CSA B45.1-2012 3. ASME A112.19.1-2008/CSA B45.2-2008 4. ASTM B 42 – 2010 5. ASTM F 877 - 2007 6. ASTM D 1785 - 2006 7. AWWA C511-2007 8. IAPMO Z124.1.2-2005 9. NSF 61-2010a 10. UL 430-2009 | |
| Firm, city, state, email | | | | Not relevant to this project | |
| CS Facilitators | | | | | |



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|---|---|--|---------------|--|--|
| Target Market | U.S. Share | | \$1,400,000 | The U.S. share is based on a review of HS Codes related to plumbing products. The total market share is from a 2012 market research report. | |
| | Total | | \$595,000,000 | | |
| Exports attributable to MDCP project activity | STDS: Exports due to standards activity | | \$3,083,298 | Assuming a 6.6% increased demand in plumbing products as projected in the 2012 market research report, the WIN project will save \$3,083,298 in exports during the project period years and save an additional \$7,485,203 in the 4 years immediately following. 2013=\$1,492,400 (\$373,100/per quarter) 2014=\$1,590,898 (\$397,724/per quarter) 2015=\$1,695,898 2016=\$1,807,827 2017=\$1,927,144 2018=\$2,054,335 | Determined based on compilation of data related to HS codes representing likely plumbing products. IAPMO will work with ITA and other industry partners in refining these codes. |

2) Applicant designed performance measures

| Measure (IAPMO) | Instances (goal) | Explanation | Reporting method |
|---|------------------|---|---|
| Provinces where UPC-ID has been adopted | 30 | Number of provinces in which the UPC-ID has been officially adopted | Official report from BSN and Ministry of Public Works |
| Educational Institution Partnerships | 28 | Number of educational institutions IAPMO has partnered with to provide PEEP trainings (2013=2, 2014=6, 2015=8, 2016=12) | MOUs |
| PEEP graduates | 1800 | Number of students successfully completing PEEP training (2013=0, 2014=400, 2015=600, 2016=800) | Registration forms |
| Products certified | 130 | Total number of products certified through the certification lab (2013=0, 2014=10, 2015=40, 2016=80) | IAPMO R&T reports |
| US products certified | 108 | Total number of US products | IAPMO R&T reports |



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|--|--|---|--|
| | | certified through the certification lab which can be an important indication of the success of US products in the market. (2013=0, 2014=8, 2015=30, 2016=70) | |
|--|--|---|--|

Partnership with ITA and other entities

1) National Institute of Standards and Technology

IAPMO has sought input from NIST on the development of WIN. IAPMO maintains a close relationship with NIST and will seek their input regarding strategies for advancing the use of U.S. based codes and standards within Indonesia.

2) ITA's Office of Standards Liaison

The Office of Standards Liaison has vast experience in addressing conformity of standards related issued in developing markets. IAPMO has met with OSL to discuss WIN and look forward to working with them throughout the code development and adoption cycle in troubleshooting issues as they arise.

3) Manufacturing and Services' Office of Materials Industries

IAPMO has spoken with officials from the Office of Materials Industries regarding the WIN concept. We believe that there is unique opportunity for this office to participate in the promotion elements that will be integrated into the educational components of the work plan. Additionally, IAPMO looks forward to collaborating with this office on refining the HS codes that best represent the exports related to the U.S. plumbing industry. IAPMO also looks forward to working with this office in providing assurances of confidentiality and encouragement to U.S. plumbing manufacturers to release proprietary data regarding the impact WIN has on their exports to Indonesia.

4) U.S. Foreign and Commercial Services

IAPMO has been in touch with USFCS officials based in the embassy in Jakarta. IAPMO is looking forward to collaborating with them on recruiting members of the press to attend the MOU signing event with officials at BSN this spring. In addition, USFCS staff has expressed a willingness to meet with officials at BSN and the Ministry of Public Works to help facilitate this process. We look forward to their continued.

5) Market Access and Compliance's Office of Multilateral Affairs

IAPMO has met with representatives from ITA's Market Access and Compliance division. IAPMO has greatly appreciated their insights into this WIN and look forward to exploring ways we can collaborate moving forward.

6) Manufacturing and Services' Office of Energy & Environmental Industries



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IAPMO has met with the Office of Energy and Environmental Industries to discuss areas of intersection between OEEI and the WIN project. This office has incredible experience with water-related technologies and IAPMO looks forward to collaborating with OEEI's team in refining aspects of the project to appeal to a broader audience of manufacturers, particularly those of greener or higher efficiency technologies.

Credentials

With offices in eleven states and twelve countries, IAPMO has assisted in code development related issues in such diverse places as Saudi Arabia, China, India, Jordan, Egypt, Israel, Philippines, Columbia and Abu Dhabi of the United Arab and Emirates. IAPMO has also worked with the World Health Organization and the Water Institute at the University of North Carolina to address safe, efficient plumbing systems and practices in developing nations. IAPMO currently serves as the chair of the World Plumbing Council based out of Geneva, Switzerland.

Founded in 1926, IAPMO has grown to be recognized the world over for the development of its Uniform Codes, including the Uniform Plumbing Code and Uniform Mechanical Code. Additionally, one of IAPMO's business divisions, IAPMO R&T, is the world's premier plumbing and mechanical product certification agency adhering to established international codes and standards. IAPMO's product certification program is accredited by the American National Standards Institute (ANSI) and the Standards Council of Canada (SCC). IAPMO's test lab is accredited by Assured Calibration and Laboratory Accreditation Select Services (ACLASS). Comprised of ten separate divisions, the IAPMO group is truly the one-stop shop for all plumbing and mechanical code and product compliance. IAPMO currently maintain 29 offices (15 domestically, 14 internationally).

IAPMO has more than 8,500 members. The membership of IAPMO is comprised mostly of manufacturers of plumbing, mechanical, and building products, labor representatives, plumbing/mechanical inspectors, engineers and code officials, plumbing and mechanical contractors, water and energy efficiency experts. IAPMO members come from every aspect of the plumbing industry.

1) Resumes of Key Personnel

a. IAPMO Director of Business Development, India and Oceania Operations, Megan Lehtonen

Megan is the Director of Business Development for The IAPMO Group, currently overseeing the India and Oceania operations. Prior to joining IAPMO, Megan served as President of management company, Onni, Inc., for ten years including the formation of GreenPlumbers USA in 2007. Megan was instrumental in establishing GreenPlumbers as the "green" standard for the plumbing industry in the US, by training over 5,500 plumbers in 42 states in the first full year of operation. Megan was presented with an outstanding achievement award by the Environmental Protection Agency (EPA) in March 2009 for GreenPlumbers' contribution to environmental education. She is also featured in the September/October 2009 issue of Natural Home magazine, as well as on the cover of the December 2009 issue of Indian Plumbing Today (IPT.)



Water for Indonesia Now (WIN)

b. IAPMO R&T Director of Quality Assurance, Shirley Dewi

Shirley Dewi serves as the Director of Quality Assurance for IAPMO R&T and IAPMO Uniform ES. In this capacity, Dewi works to maintain and gain accreditation and recognition for these IAPMO's business units with accreditation bodies, such as ANSI, SCC, KAN, ANAB, and EMA, and government agencies, such as the U.S. EPA WaterSense®, the U.S. EPA ENERGY STAR®, and other local jurisdictions.

Dewi currently serves as a voting member for ANSI's Accreditation Committee Council (ACC) and the International Conformity Assessment Committee (ICAC). Dewi has nearly 10 years direct manufacturing experience prior to joining the IAPMO Group. Dewi's experience includes serving as Quality Analyst at Tatung Company of America, Inc., for which she was actively involved in the implementation of the ISO 9001 program at four facilities on behalf of more than 3,000 employees. Later, as an Operations Analyst for Lockheed Martin IMS, Dewi played key role in the development and implementation of the Fleet Operator and Rental Agency Program, a program administered by the City of Los Angeles to manage parking citations for rental agencies and operator companies. As a Quality Assurance Manager at Accu-Sembly, Inc. and Bericap North America, Dewi was responsible to implement, maintain and streamline the Quality Management System program, HACCP program, GMP program, and Food Security program.

c. IAPMO Manager of Government Relations, Christopher Lindsay

Christopher Lindsay serves as Manager, Government Relations for IAPMO. In this capacity, Lindsay works directly on IAPMO's legislative and regulatory agenda as well as coordinates IAPMO's activities with Federal agencies.

Lindsay's experience includes serving in the lead White House office for nonprofit policy issues. While there he played a pivotal role analyzing data and reporting trends on more than 25,000 nonprofits who partnered with the government in providing social services – representing billions of dollars. Later as director of programs at Electrical Safety Foundation International, he worked with government and corporate partners to establish program goals and benchmarks demonstrating value on investment that culminated in the foundation's record-breaking fundraising. He also established a research arm that published statistics on occupational electrically-related injuries and fatalities as well as on the magnitude of copper theft nationally. As Director of Charity Assessment & Impact at the Operation Kids Foundation, Lindsay researched fields of interest on behalf of donors and provided expertise to clients in regards to nonprofit governance, financial management, communications and program design/evaluation. He also worked with the nonprofit governing boards in addressing issues such as program related investments, fiscal sponsorships, equivalency determinations, capital campaign structures and nonprofit mergers. Most recently, Lindsay directed a \$6.5 million capital campaign to build a new 10-acre campus for educating children with autism.

Evidence of support from U.S. firms interested in participating

IAPMO is pleased to include a number of manufacturers among its members base and as clients of its product testing and certification services. This plumbing product manufacturing market includes a broad range of small to medium sized companies, in addition to the name brands that the general



Water for Indonesia Now (WIN)

public recognizes. These plumbing manufacturers produce a host of products, including: potable water supply system components, fixture fittings, waste fixture fittings, fixtures, flushing devices, sanitary drainage system components, and plumbing appliances. Companies comprising the US plumbing-manufacturing sector include:

- American Standard
- Amerikam Inc.
- Bradley Corporation
- BrassCraft Manufacturing Company
- Delta Faucet Company
- Dornbracht USA
- Duravit USA, Inc.
- Elkay Manufacturing Co.
- Fisher Manufacturing Company
- Fluidmaster, Inc.
- Hansgrohe, Inc.
- InSinkErator
- Kohler Company
- KWC America
- Lavelle Industries
- LSP Products
- Moen Incorporated
- NEOPERL, Inc.
- Pfister
- Sloan Valve Company
- Speakman Company
- Symmons Industries Inc.
- T & S Brass & Bronze Works Inc.
- TOTO USA
- Vitra USA
- Water Pik, Inc.
- WCM Industries, Inc.
- Chase Brass & Copper Company
- Mueller Brass Company

IAPMO has reached out to a number of these manufacturers to discuss the WIN project. Every corporation we have spoken to has been supportive. In speaking with officials from US plumbing manufacturers such as Kohler, American Standard, Zurn, and others, it is apparent that they recognize that the adoption of US Standards in markets like Indonesia is extremely helpful to increasing overall exports to these markets. One major U.S. manufacturer responded with the following to IAPMO's WIN proposal:

Thanks for sharing IAPMO's consideration of assisting Indonesia in developing their plumbing code based on UPC or adopting UPC. We would welcome this initiative and hope that Indonesia would be amenable to it. This would make it easier for manufacturers to offer the same product that we provide here in US and Canada. We do sell products in Indonesia and we would urge you to advocate the adoption of harmonized US/Canadian and US standards

Use of the ITA Emblem

The ITA emblem will be utilized throughout this project on marketing materials, publications, training materials, and pertinent websites as developed. Attached is a mock up of the proposed content page for the Uniform Plumbing Code- Indonesia (UPC-ID) showing both the Commerce logo, along with the logo of the Bureau of National Standards, Indonesia (BSN.) Also attached is a mock up of the proposed cover of the Plumbing Education to Employment (PEEP) prospectus, with both the Commerce and BSN logo present.

IPA MEMBERS *continued***Nitish Phansalkar**

Chairman - IPA Pune Chapter
Area Manager (Indian Sub-continent)
DP Pumps
Pune

K. D. Deodhar

Vice President – M & E
Chalet Hotels Ltd.
Mumbai

Chintan Daiya

Director
D'Plumbing Consultants
Mumbai

K. Venugopal

(Alternate to Ms. Brunhild Schmidtke)
Chairman - IPA Bengaluru Chapter
Managing Director
ACO Systems Pvt Ltd
Bengaluru

Michael Allenbach

(Alternate to René Mächler)
Senior Technical Manager
Geberit Plumbing Technology India Pvt Ltd
Bengaluru

We acknowledge the contributions of Dr. K.B. Sood, MD, NOUS Hospital Consultants, New Delhi on Chapter 13.

IAPMO India Staff

Allen Inlow, Senior Director of IAPMO Business and
Product Development

Ms. Megan Lehtonen, Director of Business Development

Sree Kumar, Director General
Bengaluru

Subhash Deshpande, Director, Plumbing
Pune

IAPMO USA Staff

Russ Chaney, Chief Executive Officer

David Viola, Director of Special Services

Dan Cole, Technical Services Supervisor

Bob Shepherd, Code and Technical Support Manager

Maria Bazan, Business Unit Services Supervisor



PLUMBING EDUCATION TO EMPLOYMENT PROGRAM (PEEP)

PROSPECTUS
INDONESIA



BSN
Badan Standardisasi Nasional



Water for Indonesia Now (WIN)

Budget Narrative

1) Budget for Project Award Period & Associated Worksheets

These budget documents are attached to this Budget narrative.

2) Financial Systems

IAPMO's consolidated financials include the accounts of the International Association of Plumbing and Mechanical Officials (IAPMO) and its wholly owned subsidiaries, IAPMO Research & Testing, Inc. (IAPMO R&T), IAPMO Testing and Services, LLC (IAPMO R&T Lab), IAPMO Evaluation Service, LLC (IAPMO ES), IAPMO Australia, IAPMO India, and IAPMO China. The Association maintains the books on the accrual basis of accounting, consequently, revenues are recognized when earned and expenses are recognized when incurred.

According to IAPMO's most recent audited financial statements included with this Budget Narrative, total income for IAPMO in 2011 was \$34, 489,464. IAPMO intends to fund its portion of the WIN project as line item within the Association's general operating budget.

3) Other Financial System Awards

In 2009, IAPMO was a subcontractor on an USAID project based out of Jordan. The program was Instituting Water Demand Management in Jordan (IDARA) Contract No. 278-C-00-06-00329-00 and DAI was the primary vendor. IAPMO was contracted for \$125,797 from November 15, 2009 until September 30, 2010. IAPMO partnered with USAID-IDARA to establish a "Master Plumber" training program at the Vocational Training Corporation (VTC) including curriculum development and a Train-the-Trainer program for instructional training personnel. The "Master Plumber" program provided master plumber candidates access to the modified Jordanian plumbing code and water conservation practices.

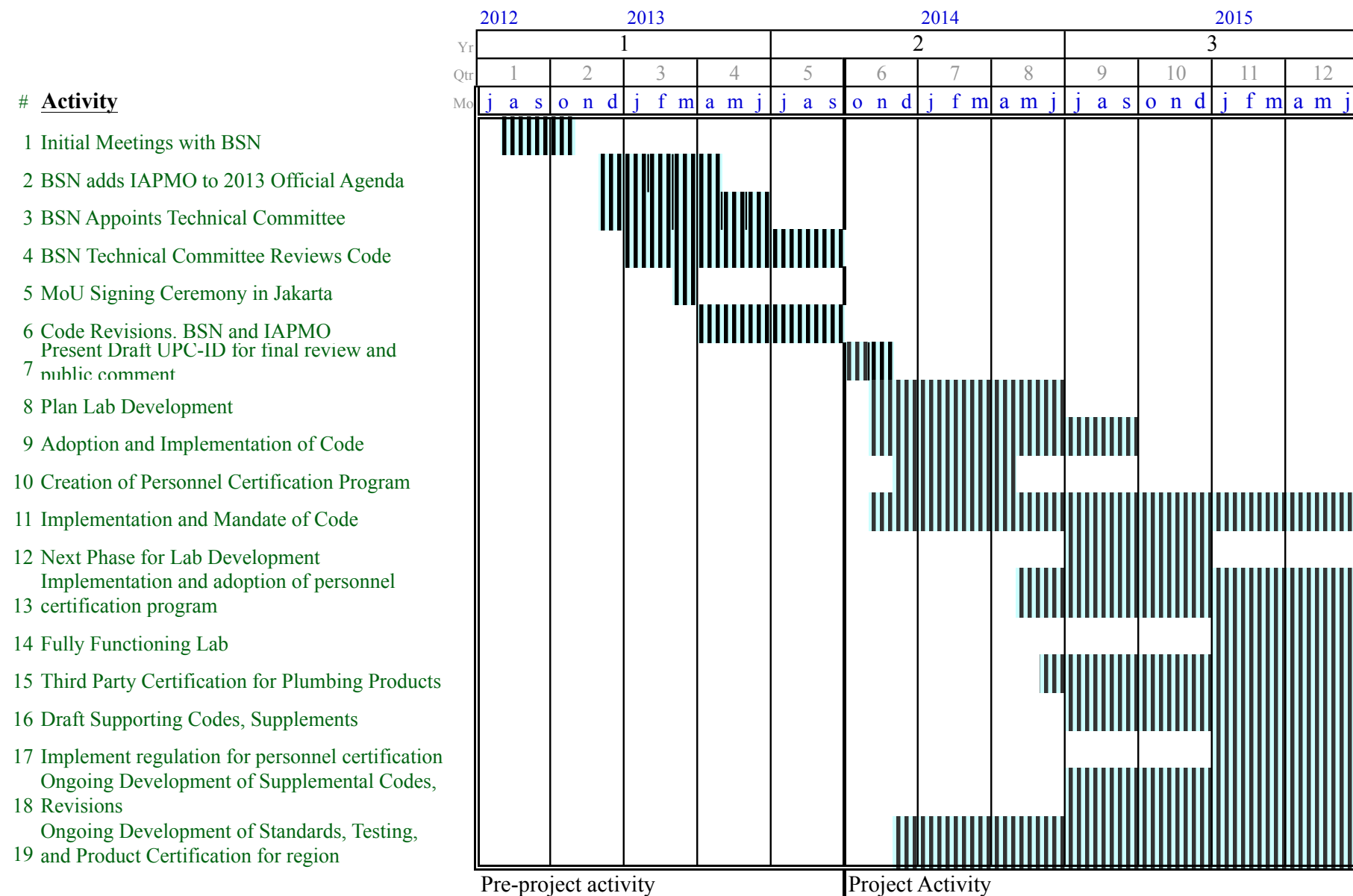
DAI SUBCONTRACTS ADMINISTRATOR:
Samuel L. Williams
7600 Wisconsin Ave., Suite 200
Phone: (301) 771-7921
Fax: (301) 771-7777
Email: Sam_Williams@dai.com

PLACE OF DELIVERY/ACCEPTANCE:
DAI / Instituting Water Demand
Management in Jordan (IDARA) Project
Shmeisani, Mahdi Ben Barakah st. Bldg# 4
Amman 11194 Jordan
Phone:00962-6-5654974
Fax:00962-6-5655073

4) Audited Financial Statements

The audited financial statements are attached to this Budget narrative. Unfortunately, the complete report is 23 pages long. Due to size restrictions on this narrative, only the first portion of the audited financials is included. IAPMO has previously submitted the full report as part of its eligibility determination process. The Association is very willing to submit the full statement again at ITA's request.

IAPMO Water for Indonesia Now (WIN): WORK FLOW CHART



Pre-project activity is included for informational purposes only. It includes critical foundational steps that IAPMO has undertaket to make the WIN project a success. However, without MDCP funding, IAPMO will not be able to undertake the project activity.

IAPMO - MDCP Budget for Project Award Period

With Breakdown of Projected Funding Sources

| Categories | | | | Total Expenses for All Years | | | | 1st Year (10/1/13 - 9/30/14) 12 Months | | | | 2nd Year (10/1/14 - 6/30/15) 9 Months | | | | |
|---------------------|----------------------------|--------|--|--|---------------|---------|---------|---|---------------|---------|---------|--|---------------|---------|---------|---|
| | | | | Fed Share | Non-Fed Share | | | Fed Share | Non-Fed Share | | | Fed Share | Non-Fed Share | | | |
| | | | | | Cash | | In-Kind | | Cash | | In-Kind | | Cash | | In-Kind | |
| | | | | | Pgm Income | Other | | | Pgm Income | Other | | | Pgm Income | Other | | |
| DIRECT EXPENSES | | | | a | b | c | d | e | f | g | h | i | j | k | l | |
| 1 | PERSONNEL | | | | | | | | | | | | | | | |
| 2 | Domestic | | | 142,656 | 0 | 174,357 | 0 | 81,518 | 0 | 99,633 | 0 | 61,138 | 0 | 74,724 | 0 | |
| 3 | International | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | TOTAL | | | 142,656 | 0 | 174,357 | 0 | 81,518 | 0 | 99,633 | 0 | 61,138 | 0 | 74,724 | 0 | |
| 5 | FRINGE BENEFITS | | | | | | | | | | | | | | | |
| 6 | Dom. (Rate=) | 24.50% | | 34,951 | 0 | 42,717 | 0 | 19,972 | 0 | 24,410 | 0 | 14,979 | 0 | 18,307 | 0 | |
| 7 | Int'l. (Rate=) | 24.50% | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 | TOTAL | | | 34,951 | 0 | 42,717 | 0 | 19,972 | 0 | 24,410 | 0 | 14,979 | 0 | 18,307 | 0 | |
| 9 | TRAVEL | | | | | | | | | | | | | | | |
| 10 | Domestic | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | International | | | 27,500 | 0 | 27,500 | 0 | 17,500 | | 17,500 | | 10,000 | | 10,000 | | |
| 12 | TOTAL | | | 27,500 | 0 | 27,500 | 0 | 17,500 | 0 | 17,500 | 0 | 10,000 | 0 | 10,000 | 0 | |
| 13 | EQUIPMENT | | | 88,039 | 0 | 139,456 | 0 | 55,539 | 0 | 74,456 | 0 | 32,500 | 0 | 65,000 | 0 | |
| 14 | SUPPLIES, MISC | | | 2,917 | 0 | 5,833 | 0 | 1,667 | 0 | 3,333 | 0 | 1,250 | 0 | 2,500 | 0 | |
| 15 | OTHER (Lab Facility Dev.) | | | 0 | 0 | 65,000 | 0 | 0 | 0 | 35,000 | 0 | 0 | 0 | 30,000 | 0 | |
| 16 | OTHER | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17 | TOTAL DIRECT | | | | | | | | | | | | | | | |
| 18 | Sum from above | | | 296,062 | 0 | 454,863 | 0 | 176,196 | 0 | 254,332 | 0 | 119,867 | 0 | 200,531 | 0 | |
| 19 | Sum of all direct columns | | | Sum line 16 columns a, b, c, d 750,926 | | | | Sum line 16 columns e, f, g, h 430,527 | | | | Sum line 16 columns i, j, k, l 320,398 | | | | |
| INDIRECT EXPENSES | | | | a | b | c | d | e | f | g | h | i | j | k | l | |
| 20 | Indirect (Rate=) | | | | | 150,711 | | | | 86,407 | | | | 64,304 | | |
| 21 | Percent of Total (line 20) | | | | | 16.7% | | | | 16.7% | | | | 16.7% | | |
| TOTAL | | | | a | b | c | d | e | f | g | h | i | j | k | l | |
| 22 | Dir.+Indir. | | | 296,062 | 0 | 605,574 | 0 | 176,196 | 0 | 340,739 | 0 | 119,867 | 0 | 264,835 | 0 | |
| 23 | Percent of Total (line 20) | | | 32.8% | 0.0% | 67.2% | 0.0% | | | | | | | | | |
| All Expense Columns | | | | | | | | | | | | | | | | |
| 24 | Total | | | Sum line 16 columns a, b, c, d 901,636 | | | | Sum line 16 columns e, f, g, h 516,934 | | | | Sum line 16 columns i, j, k, l 384,702 | | | | |

Note: See budget summary, personnel expense, and fringe indirect worksheets for explanations of the calculations used.

This page or the original MDCP application contained budget detail that was completely revised per the instructions of the International Trade Administration prior to receipt of the MDCP award. Given that the information on this page from the original application does not represent the revised budget detail, to avoid confusion, it is not reproduced here.

IAPMO Water for Indonesia Now (WIN)
Fringe Indirect
Project Period 10/1/2013 - 6/30/2015

| | | 2013 | 2014 | 2015 | Total | | |
|----------|-----------------------|------------|-------------|------------|---------|----------|---------|
| | | (3 Months) | (12 Months) | (6 Months) | | | |
| Expenses | | | | | | Indirect | Direct |
| | Construction | 17,500 | 70,000 | 35,000 | 122,500 | | 122,500 |
| | Salaries | 45,000 | 180,000 | 90,000 | 315,000 | | 315,000 |
| | Fringe benefits | 11,025 | 44,100 | 22,050 | 77,175 | | 77,175 |
| | Equipement Purchase | 32,500 | 130,000 | 65,000 | 227,500 | | 227,500 |
| | Supplies, Misc | 1,250 | 5,000 | 2,500 | 8,750 | | 8,750 |
| | Rent, utilities, etc. | 7,500 | 30,000 | 15,000 | 52,500 | 52,500 | |
| | Legal Fees/Insurance | 7,500 | 30,000 | 15,000 | 52,500 | 52,500 | |
| | Depreciation | 1,307 | 26,131 | 18,292 | 45,729 | 45,729 | |
| | | 123,582 | 515,231 | 262,842 | 901,654 | 150,729 | 750,925 |

Notes:

| | | | | |
|---|-----------------|---------|---|--------|
| Fringe Benefits Rate Calculation Domestic | Fringe benefits | 77,175 | = | 24.50% |
| | Salaries | 315,000 | | |

| | | | | |
|---------------|---|---------|--------|--------|
| International | IAPMO International employees receive similar fringe benefits to our domestic employees | 100.00% | | |
| | | a | b | c=a*b |
| | | 100.00% | 24.50% | 24.50% |

| | | | | |
|--------------------------------|----------------|---------|---|--------|
| Indirect Cost Rate Calculation | Indirect Costs | 150,729 | = | 20.07% |
| | Direct Costs | 750,925 | | |

IAPMO Water for Indonesia Now (WIN)**Depreciation Schedule****Project Period 10/1/2013 - 6/30/2015**

| | Additions | | | Estimated Life | Depreciation Expense | | | Total Expense |
|---------------------|-----------|---------|---------|-------------------|----------------------|--------|--------|------------------|
| | 2013 | 2014 | 2015 | | 2013 | 2014 | 2015 | |
| Construction | 17,500 | 70,000 | 35,000 | 30 | 146 | 2,917 | 2,042 | |
| Equipment Purchases | 32,500 | 130,000 | 65,000 | 7 | 1,161 | 23,214 | 16,250 | |
| | 50,000 | 200,000 | 100,000 | | 1,307 | 26,131 | 18,292 | 45,729 |

**INTERNATIONAL ASSOCIATION OF PLUMBING
AND MECHANICAL OFFICIALS AND SUBSIDIARIES**

**CONSOLIDATED FINANCIAL STATEMENTS
AND CONSOLIDATING INFORMATION**

Year Ended December 31, 2011

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915 W. Imperial Hwy., Suite 110
Brea, California 92821-3815
(714) 494-2200
(714) 494-2199 FAX

INDEPENDENT AUDITOR'S REPORT

To the Board of Directors
International Association of Plumbing
and Mechanical Officials and Subsidiaries
Ontario, California

We have audited the accompanying consolidated statement of financial position of International Association of Plumbing and Mechanical Officials and Subsidiaries (a nonprofit corporation) as of December 31, 2011, and the related consolidated statements of activities and cash flows for the year then ended. These consolidated financial statements are the responsibility of the Association's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of International Association of Plumbing and Mechanical Officials and Subsidiaries as of December 31, 2011, and the changes in its net assets and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.



June 15, 2012

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INTERNATIONAL ASSOCIATION OF PLUMBING
AND MECHANICAL OFFICIALS AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of organization

International Association of Plumbing and Mechanical Officials and subsidiaries (the Association) was formed for the purposes of promoting the interest of the science of plumbing and plumbing officials, and for the purpose of promoting the interests of all persons whose responsibility it is to interpret plumbing laws and practices to the public.

The Association provides the Uniform Plumbing Code as well as other related codes, interpretations and educational materials to various parties located primarily in the United States.

The Association provides listing, plant inspection and testing services of plumbing products manufactured in accordance with acceptable standards. The listing service is intended solely to assist public entities in the enforcement of the Uniform Plumbing Code.

Principles of consolidation

The consolidated financial statements include the accounts of International Association of Plumbing and Mechanical Officials (IAPMO) and its wholly owned subsidiaries, IAPMO Research and Testing, Inc. (IAPMO R&T), IAPMO Testing and Services, LLC (IAPMO R&T Lab), IAPMO Evaluation Service, LLC (IAPMO ES), IAPMO Australia, IAPMO India, and IAPMO China. All material inter-company transactions have been eliminated.

Method of accounting

The Association maintains the books on the accrual basis of accounting, consequently, revenues are recognized when earned and expenses are recognized when incurred.

Product listings revenues

Revenues for product listings are deferred and are recognized as revenue on the straight-line basis over the listing agreement period of one year. Unpaid product listings are removed from the listing service and from deferred revenues.

Membership dues

Membership dues are determined by various classes as stated in the Association's bylaws. Membership dues are recognized as revenue based on the membership period covered by the individual member's dues.

Use of estimates

The preparation of consolidated financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and cash equivalents

For purposes of the statement of cash flows, the Association considers all unrestricted highly liquid investments with an initial maturity of three months or less to be cash equivalents.

Allowance for doubtful accounts

The Association uses the allowance method to account for doubtful accounts receivable. The allowance is based upon prior experience and management's analysis of possible bad debts.

INTERNATIONAL ASSOCIATION OF PLUMBING
AND MECHANICAL OFFICIALS AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Inventories

Inventories are valued at the lower of cost or market with cost being determined on the first-in, first-out method (FIFO). Inventories primarily consist of printed editions of the Uniform Plumbing Code and other related codes.

Property and equipment

Property and equipment are stated at cost. Depreciation is computed using primarily the straight-line method over the estimated useful lives of the individual assets. Construction in progress represents capital projects underway but not completed as of year-end. Construction in progress is not depreciated until the asset is completed and placed into service.

It is the general practice of the Association to charge maintenance and repairs to expense. Costs and related accumulated depreciation of assets sold or otherwise retired are eliminated from the accounts and the resulting gains or losses on dispositions are included in the financial statements.

The estimated useful lives used to compute depreciation for financial statement presentation are as follows:

| | |
|----------------------------|----------------|
| Buildings and improvements | 15 to 40 years |
| Furniture and fixtures | 5 to 10 years |
| Machinery and equipment | 5 to 10 years |
| Computer equipment | 5 years |
| Vehicles | 5 years |

Income taxes

The Association is exempt from federal and state income taxes under the provision of Section 501(c)(6) of the Internal Revenue Code and applicable state law. The exemption letter is dated October 25, 1949. The Association incurs income taxes for political contributions made. IAPMO R&T Lab and IAPMO ES are subject to California's gross receipts tax.

The accounting standard on accounting for uncertainty in income taxes addresses the determination of whether tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements. Under that guidance, the Association may recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by taxing authorities based on the technical merits of the position. Examples of tax positions includes the tax-exempt status of the Association and various positions related to the potential sources of unrelated business taxable income (UBIT). The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. There were no unrecognized tax benefits identified or recorded as liabilities for the year ended December 31, 2011. Should any penalties and interest be incurred, the Association's policy would be to recognize them as general and administrative expenses.

The Association is generally no longer subject to U.S. federal and state examinations by tax authorities for years 2006 and prior.

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Application for Federal Assistance SF-424

* 1. Type of Submission:

- ☐ Preapplication
☒ Application
☐ Changed/Corrected Application

* 2. Type of Application:

- ☒ New
☐ Continuation
☐ Revision

* If Revision, select appropriate letter(s):

* Other (Specify):

* 3. Date Received:

02/28/2013

4. Applicant Identifier:

5a. Federal Entity Identifier:

5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name:

International Association of Plumbing and Mechanical Officia

* b. Employer/Taxpayer Identification Number (EIN/TIN):

951603192

* c. Organizational DUNS:

9699669230000

d. Address:

* Street1:

4755 E Philadelphia St

Street2:

* City:

Ontario

County/Parish:

* State:

CA: California

Province:

* Country:

USA: UNITED STATES

* Zip / Postal Code:

91761-2810

e. Organizational Unit:

Department Name:

Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix:

Mr .

* First Name:

Christopher

Middle Name:

* Last Name:

Lindsay

Suffix:

Title: Manager, Government Relations

Organizational Affiliation:

* Telephone Number:

202-414-6176

Fax Number:

* Email:

christopher.lindsay@iapmo.org

Application for Federal Assistance SF-424

* 9. Type of Applicant 1: Select Applicant Type:

M: Nonprofit with 501C3 IRS Status (Other than Institution of Higher Education)

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

* 10. Name of Federal Agency:

Department of Commerce

11. Catalog of Federal Domestic Assistance Number:

11.112

CFDA Title:

Market Development Cooperator Program

* 12. Funding Opportunity Number:

ITA-MAS-OPCM-2013-2003266

* Title:

Market Development Cooperator Program 2013

13. Competition Identification Number:

2266232

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment

Delete Attachment

View Attachment

* 15. Descriptive Title of Applicant's Project:

IAPMO Water for Indonesia Now (WIN)

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments

Application for Federal Assistance SF-424**16. Congressional Districts Of:*** a. Applicant b. Program/Project

Attach an additional list of Program/Project Congressional Districts if needed.

17. Proposed Project:* a. Start Date: * b. End Date: **18. Estimated Funding (\$):**

| | |
|---------------------|---|
| * a. Federal | <input type="text" value="296,062.00"/> |
| * b. Applicant | <input type="text" value="605,574.00"/> |
| * c. State | <input type="text" value="0.00"/> |
| * d. Local | <input type="text" value="0.00"/> |
| * e. Other | <input type="text" value="0.00"/> |
| * f. Program Income | <input type="text" value="0.00"/> |
| * g. TOTAL | <input type="text" value="901,636.00"/> |

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

- ☐ a. This application was made available to the State under the Executive Order 12372 Process for review on .
- ☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- ☒ c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**☐ Yes ☒ No

If "Yes", provide explanation and attach

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: * First Name:

Middle Name:

* Last Name:

Suffix:

* Title: * Telephone Number: Fax Number: * Email: * Signature of Authorized Representative: * Date Signed:

BUDGET INFORMATION - Non-Construction Programs

OMB Number: 4040-0006
Expiration Date: 06/30/2014

SECTION A - BUDGET SUMMARY

| Grant Program Function or Activity (a) | Catalog of Federal Domestic Assistance Number (b) | Estimated Unobligated Funds | | New or Revised Budget | | |
|---|--|-----------------------------|--------------------|-----------------------|--------------------|---------------|
| | | Federal (c) | Non-Federal (d) | Federal (e) | Non-Federal (f) | Total (g) |
| 1. MDCP (Federal & Non-Federal) | 11.112 | \$ | \$ | \$ 296,062.00 | \$ 605,574.00 | \$ 901,636.00 |
| 2. | | | | | | |
| 3. | | | | | | |
| 4. | | | | | | |
| 5. Totals | | \$ | \$ | \$ 296,062.00 | \$ 605,574.00 | \$ 901,636.00 |

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SECTION B - BUDGET CATEGORIES

| 6. Object Class Categories | GRANT PROGRAM, FUNCTION OR ACTIVITY | | | | Total (5) |
|---|---|---|---|---|--|
| | (1) <div style="border: 1px solid black; padding: 2px; font-size: 0.8em;">MDCP (Federal & Non-Federal)</div> | (2) | (3) | (4) | |
| a. Personnel | \$ <div style="border: 1px solid black; text-align: right;">317,013.00</div> | \$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | \$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | \$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | \$ <div style="border: 1px solid black; text-align: right;">317,013.00</div> |
| b. Fringe Benefits | <div style="border: 1px solid black; text-align: right;">77,668.00</div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; text-align: right;">77,668.00</div> |
| c. Travel | <div style="border: 1px solid black; text-align: right;">55,000.00</div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; text-align: right;">55,000.00</div> |
| d. Equipment | <div style="border: 1px solid black; text-align: right;">227,494.00</div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; text-align: right;">227,494.00</div> |
| e. Supplies | <div style="border: 1px solid black; text-align: right;">8,750.00</div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; text-align: right;">8,750.00</div> |
| f. Contractual | <div style="border: 1px solid black; text-align: right;">0.00</div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> |
| g. Construction | <div style="border: 1px solid black; text-align: right;">0.00</div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> |
| h. Other | <div style="border: 1px solid black; text-align: right;">65,000.00</div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; text-align: right;">65,000.00</div> |
| i. Total Direct Charges (sum of 6a-6h) | <div style="border: 1px solid black; text-align: right;">750,925.00</div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | \$ <div style="border: 1px solid black; text-align: right;">750,925.00</div> |
| j. Indirect Charges | <div style="border: 1px solid black; text-align: right;">150,711.00</div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | \$ <div style="border: 1px solid black; text-align: right;">150,711.00</div> |
| k. TOTALS (sum of 6i and 6j) | \$ <div style="border: 1px solid black; text-align: right;">901,636.00</div> | \$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | \$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | \$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | \$ <div style="border: 1px solid black; text-align: right;">901,636.00</div> |
| | | | | | |
| 7. Program Income | \$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | \$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | \$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | \$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div> | \$ <div style="border: 1px solid black; width: 100px; height: 20px;"></div> |

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| SECTION C - NON-FEDERAL RESOURCES | | | | |
|-----------------------------------|---------------|-----------|-------------------|---------------|
| (a) Grant Program | (b) Applicant | (c) State | (d) Other Sources | (e) TOTALS |
| 8. MDCP | \$ 605,574.00 | \$ | \$ | \$ 605,574.00 |
| 9. | | | | |
| 10. | | | | |
| 11. | | | | |
| 12. TOTAL (sum of lines 8-11) | \$ 605,574.00 | \$ | \$ | \$ 605,574.00 |

| SECTION D - FORECASTED CASH NEEDS | | | | | |
|------------------------------------|--------------------|-------------|-------------|-------------|-------------|
| | Total for 1st Year | 1st Quarter | 2nd Quarter | 3rd Quarter | 4th Quarter |
| 13. Federal | \$ | \$ | \$ | \$ | \$ |
| 14. Non-Federal | \$ | | | | |
| 15. TOTAL (sum of lines 13 and 14) | \$ | \$ | \$ | \$ | \$ |

| SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT | | | | |
|---|--------------------------------|------------|-----------|------------|
| (a) Grant Program | FUTURE FUNDING PERIODS (YEARS) | | | |
| | (b) First | (c) Second | (d) Third | (e) Fourth |
| 16. | \$ | \$ | \$ | \$ |
| 17. | | | | |
| 18. | | | | |
| 19. | | | | |
| 20. TOTAL (sum of lines 16 - 19) | \$ | \$ | \$ | \$ |

| SECTION F - OTHER BUDGET INFORMATION | |
|---|---|
| 21. Direct Charges: Dom fringe benefits: 24.50% | 22. Indirect Charges: Applied to total direct charges: 20.07% |
| 23. Remarks: For fringe benefits 24.50% | |