



Republic of the Philippines
SAN FRANCISCO WATER DISTRICT
San Francisco, Agusandel Sur

RESOLUTION NO.04

Series of 2015

RESOLUTION ADOPTING ANNUAL REPORT CY 2014 FOR SAN FRANCISCO WATER DISTRICT

Whereas, Annual report is a comprehensive report that contains accomplishments in narrative and numeric form attained by the District throughout the calendar year which also includes recommendations for the improvement of its operation;

WHEREAS, all vital data and highlights of the Administrative, Finance Services and Commercial Division operation for CY 2014 was presented by DMC Ela F. Moreno;


WHEREAS, all vital data and highlights of the Water Facility Construction and Maintenance & Quality Water Production Division operation for CY 2014 was presented by DMC Mamry B. Paylangco;

NOW THEREFORE, upon motion of Dir. Domingo A. Ranario seconded by Dir. Wilmar L. Sabaña, be it—


RESOLVED, as it is hereby resolved to adopt Annual Report of San Francisco Water District for CY 2014;

APPROVED AND ADOPTED this 6th day of March 2015 at SFWD Office, Barangay 2, San Francisco, Agusandel Sur.

Certified true and correct:


WILMAR L. SABAÑA
Board Secretary

Attested by:


JOSE-MARI D. AMADOR
Board Chairperson



Water Facility Construction Maintenance & Quality Water Production Division

2014 ANNUAL REPORT

The year 2014 was a challenging year for the San Francisco Water District especially that it has faced both nature-driven calamities such as typhoon and flood during the first quarter of the year and prolonged drought towards the third and last quarter of the year and also man-made harassment that in some way hamper the normal operation and performance of the District. The SFWD has initiated efforts and solutions in countering the unfavourable effects of the aftermath of typhoon and prolonged drought plus bombardment from media and political individuals. It has achieved commendable efforts and accomplished more than its target in providing quality water service to its consumers.

The Water Facility Construction Maintenance and Quality Water Production Division (WFCM&WQPD) which is bound to perform its functions in the development and tapping of water sources, installation of pipelines from supply lines, transmission and distribution lines down to the service connections of the consumers, initiate strategies to ensure adequate and quality water supply, watershed monitoring and conduct maintenance and repair works, has attained and even surpassed its target for the year 2014. Presented hereunder are the highlights of its accomplishments.

A. WATER QUALITY

The Quality Water Production Section (QWPS) is the main section responsible for ensuring the quality of water supply. Manned by eight (8) regular employees, two (2) Job Orders assigned to watershed monitoring and four (4) care takers of the sources and intake structures, the QWPS was able to conduct its regular activities to guarantee the potability and safety of water supply and accomplished beyond its targets.

Through the Water Testing Laboratory which is awarded a Certificate of Proficiency with an excellent performance in the CY2014 Proficiency Testing Scheme for Water Microbiological Testing Laboratories by the Department of Health, the Laboratory personnel collected and conducted Bacteriological Testing to a total of 1,024 samples from service or household connections. All throughout the year the number of samples tested for Bacteriological testing has exceeded the LWUA standard which is one (1) sample per 5,000 population. The estimated population actually served by the District for year 2014 reached to an average of 41,359 monthly. This required the District to test a minimum of 8 samples per month. But it has tested an average of 85 samples per month which is 1062% to the minimum required. Based on the target set by the office which is to collect a total of 90 samples monthly both from household and water sources, the actual samples tested reach to an average of 99 samples per month. In terms of samples catered from outside clients, a total of 716 samples were tested which surpassed the target of 480 only at the end of the year. This added up revenue of around P286, 400.00 at year's end.

With regards to the regular Physical and Chemical Testing which is conducted quarterly, a total of 46 samples were tested which exceeded the target of 40 in a year. With the target of 60 samples from the outside client for the physical and chemical testing, a total of 195 samples were tested which exceeded by 225%. This added up revenue of around 195,000.

Aside from the Bacteriological, Physical and Chemical testing, a monthly monitoring of the other parameters was also conducted. These include chlorine free level testing, total dissolved solids (TDS), turbidity and pH testing for samples from reservoirs and households. For the chlorine free level testing on samples taken from the reservoirs, only January has the lowest passing rate and eight (8) months out of the twelve (12) months have perfect passing percentage. This implies that 94% of the total samples tested from the reservoirs passed the chlorine free level test. On samples from the household, out of 1,024 samples,



Republic of the Philippines
SAN FRANCISCO WATER DISTRICT
San Francisco, Agusan del Sur

Water Facility Construction Maintenance & Quality Water Production Division

806 passed and 218 failed. This means to say that 80% of the samples fall within the limits set by the PNSDW. In terms of the TDS level of samples taken from reservoirs, out of 112 samples, 76 passed and 36 failed, which yields a 68% passing rate. This result is affected by the TDS reading of the collected samples from Lapag Spring because of the additive effect of sulfate and chloride which is naturally present in Lapag Spring. In order to lower the TDS on water and attain the permissible level, the water coming from Lapag Spring is diluted with the water coming from the Uog Dam. This result is not alarming because the mineral contents such as sulfate and chlorine which contribute to the TDS level are under the maximum concentration limit set by PNSDW. Also, samples have undergone chemical and bacteriological testing to maintain its potability. This assurance can be supported by the TDS results from household samples which have 81% passing rate. Turbidity testing result showed a 100% passing rate to all samples from reservoirs and 99.6% to samples from households. The pH level on all samples from reservoirs and households has a 100% passing rate.

It is not only the QWPS that undertake measures to ensure quality of water. It is also being monitored by the Water Facility Construction & Maintenance Section (WFCMS) personnel who also conducted physical testing thru its digital testing kit for chlorine level, pH level and total dissolved solids (TDS) in every maintenance and repair they have executed. Through such monitoring, the physical parameters observed in the water can be verified and validated directly from the distribution lines and service lines of the consumers. This strategy also helps in the outright detection of possible pipe leaks, contamination or any entry of other elements that can alter the quality of water supply.

Furthermore, apart from testing, cleaning of transmission and distribution lines through flushing and chlorination round the clock is also regularly conducted. Flushing is done from all reservoirs by releasing water from strategic blow offs and hydrants. For this year, it is only during the first quarter that a higher volume of water is flushed at 1,166 cubic meters. The second to fourth quarters have decreasing trend of water flushed. A total of 518 cu.m, 192 cu.m and 80 cu.m are flushed during the second, third and fourth quarter, respectively. The decreasing trend is understandable because the flushing is also dependent on the availability of water supply. It is during the last two quarters of the year that our water supply is decreasing in effect of the prolonged drought. On the other hand, chlorination is done 24/7 in all reservoirs. Gas chlorine is being used in Alegria, Karaos and Ormaca water systems. Chlorine granules are being mix at Ormaca and Mate water system. The total gas chlorine used is 2,391.70 kilos which is equivalent to 35 cylinder tanks. While the chlorine granules is 187 kilos which is equivalent to 4 drums. The chlorine dosage or setting is based on the water level in the reservoirs. Compared from last year the District was able to save 2 cylinder of gas chlorine and 2 drums of granules this year. This is a result of close monitoring and base lining of chlorine setting per reservoir during low and high water level.

B. WATERSHED MANAGEMENT AND WATER SUPPLY PROTECTION

Watershed management has always been the SFWD's priority and this is part of the targets set for the QWPS personnel. Various protection efforts and strategies have employed to safeguard Mt. Magdiwata Watershed being the sole source of the District's water supply.

Out of the 1,658 hectares of Mt. Magdiwata Forest Reserve, the monitoring personnel composed of three (3) regular employees and two (2) job orders were able to monitor 1,401 hectares or 85% of the watershed area. They have apprehended seven (7) cases of illegal activities for this year and all are reported to the CENRO, San Francisco. Six (6) cases of

"Beyond Providing Water"

00



Republic of the Philippines
SAN FRANCISCO WATER DISTRICT
San Francisco, Agusan del Sur

Water Facility Construction Maintenance & Quality Water Production Division

these involve illegal cutting of trees and one (1) illegal kaingin activity within the watershed. Of the seven (7) cases, four (4) illegal activities were done by Mr. Titing Pintado, all at Sumogbong area. The illegally cut logs of Mr. Pintado which were hauled by a 10-wheeler truck were confiscated by CENRO-DENR with MENRO and PNP personnel. No case filed against Mr. Pintado, only a seized order was released by the CENRO-DENR.

Another effort undertaken for the preservation of the watershed is the slope protection program and protection maintenance conducted by the District. The slope protection project in three different locations which was devastated by Typhoon Agaton was completed. One was in the Tinggangawan Creek, another in Manag-as and in Mate near Mate intake dam. As to the protection maintenance, for this year, about 68.95 hectares of the 70 hectares part of the SFWD reforestation project was maintained. Under the 160 hectares SFWD reforestation project, a total of 99.15 hectares was maintained. The financial equivalent of the protection maintenance conducted to a total of 168.1 hectares amounts to P168,100.00. Aside from monitoring and protection maintenance, payment for waived land rights is another strategy in the protection of the forest reserve. A total of 16.44 hectares were waived from three (3) occupants which has a financial equivalent of P406,509.00.

The "Imong Yuta Ugmar Kay Bayaran Ka Program" is another strategy implemented in preserving the watershed. The program has continued to provide the beneficiaries financial assistance in cultivating their land at the buffer zone of the proclaimed watershed. For this year, a total of 17 farmers have benefitted from the program. Among these beneficiaries, eleven (11) are from Barangay Alegria, three (3) from Barangay Mate and three (3) from Barangay Ormaca. In order to help the farmers alleviate more their economic status and to improve their income management, the SFWD conducted a seminar on Financial Management and Stability last September 17, 2015. The "Imong Yuta Ugmar Kay Bayaran Ka Program" is mutually beneficial because it does not only give financial aid to the beneficiaries but it also combat against financial interest of illegal loggers and kaingeros through the beneficiaries who became the social fence in the protected area. Through their use of the natural fertilization method such as compose pits and vermiculture, they also have contributed in the preservation of the natural mineral of the soil and promote the balance of the ecosystem in the watershed. As part of the promotion and advocacy program, the SFWD has participated in the Celebration of Araw ng San Francisco and joined the LGU Magdiwata Booth Exhibit wherein the products of the beneficiaries were displayed in the booth. It was done for the community to be informed of the existence of the program, to promote the organic products and to establish possible market for the farm products of the beneficiaries.

Furthermore, the 100 hectares commitment of the District for the National Greening Program in partnership with the DENR which started last 2013 was fully planted this year. Species like bagras, lauan and mahogany were planted in the area. To ensure 100% survival rate of the planted trees, weeding maintenance was consistently done and monitored. Linkages to other agencies and organizations for the protection and preservation of the lone source of water supply have been unceasingly initiated. Some of these activities are the tree planting activity of the DPWH Regional Office personnel of which over 500 mahogany seedlings were planted at Sumogbong, Alegria, facilitated tree planting with Kapisanan ng mga Broadcasters ng Pilipinas (KBP) at Durian Creek, Alegria of over 700 seedlings planted and attended joint evaluation and assessment with MENRO, LGU-SFADS Staff and MGB-DENR relative to the tension cracks and landslides at Tinggangawan Creek, Alegria.



"Beyond Providing Water"



Water Facility Construction Maintenance & Quality Water Production Division

C. WATER SUPPLY AND DISTRIBUTION MANAGEMENT

The water supply for the year 2014 has a decreasing trend at the start of the third and last quarter. This starts to recover only on the last two weeks of December. The highest water production recorded is on the month of May having 164,489 cubic meters and water billed is proportionally higher also on the said month. The lowest water production is on the month of November having 128,851 cubic meters. This is a manifestation of prolonged drought in the last quarter compared to the summer season. The lower rainfall readings on different stations and the water level at Tingngawan on the 3 consecutive months before November (that is from August, September and October) is a clear indication of prolonged period of dry weather. These data supports the drought phenomenon which caused shortage of supply as experienced by the District.

In response to the low and shortage of water supply during the prolonged drought, this Division has accomplished the following strategies to maintain the distribution of water to a majority if not all of the consumers. First, additional three (3) sources which are tributary to the main sources were tapped in order to augment the water production in various reservoirs. The Tuwa-tuwa Creek at Alegria with a distance from source to the tapping point of approximately 800 meters, Lapag Creek at Karaos (90 meters) and Anagasian Creek at Ormaca (180 meters) were tapped. An additional of 3 lps for Alegria, 3 lps for Karaos and 4 lps at Ormaca were added to the water yield. The second strategy conducted was the looping of 3" and 4" diameter pipelines at Barangay Pisaan in front of St. Peter Memorial Chapel. This enables to boost the pressure and reach the upper portion of Pisaan.

The second initiative being undertaken to counter the shortage of supply is by intensifying the leak detection program. Search and survey operation for leaks was not only done during regular office hours but even in the evening since the pressure of water is higher at night time. Immediate repair has been conducted on all leaking detected and found. This initiative contributed to the reduction of the None Revenue Water (NRW) of the District. The percentage of NRW is also low in the months of low water production. The District has attained a lowest None Revenue Water (NRW) of 10.97% for the month of August and recorded the highest NRW of 24.64% on the month of July. But at year's end, it has recorded 19.13% which surpass the LWUA's standard of 20% NRW.

Aside from the strategies to respond the lack of water, water distribution management was also employed. One is the implementation of inventory, replacement and installation of new gate valves necessary to effect gate valve adjustments for water distribution or rationing. There were a total of four (4) new gate valves installed in strategic location. Two (2) new gate valves were installed at Barangay Pasta, one 2" diameter gate valve with valve box cover in front of Ceballos Residence and another one (1) of the same size at national road junction going to Alang-Alang to regulate the water distribution in Barangay Pasta and Buenasuerte. Replacement of two (2) new mechanical gate valves of 3" diameter was also done at road junction in front of Motor Save Shop, near Emcor, Barangay 5 and at road junction in front of Requintosa/across NGPI Building at Barangay 5 in order to isolate or control water distribution going Barangay Karaos and Alegria.

Another water distribution management effort is the installation of saddle clamps and standardization of meter stand based on the new approved design. From the target of 120 saddle clamps to be installed for this year, a total of 197 saddle clamps were properly installed. With the installation of saddle clamps, meter stand with more than four (4) water meters in a cluster were also standardized and rehabilitated. As a result of this, a considerable increase on the consumption was observed to those service connections whose meter stands are rehabilitated or standardized in accordance with the approved design. Furthermore, in responding to the higher maintenance cost on the galvanized iron

"Beyond Providing Water"



Republic of the Philippines
SAN FRANCISCO WATER DISTRICT
San Francisco, Agusan del Sur

Water Facility Construction Maintenance & Quality Water Production Division

(GI) meter stands and its accessories that are installed in Barangay Karaos and Barangay 5 which water supply comes from the Lapag, Karaos Water System that has a higher content of sulfate, the WFCM has installed a Chlorinated polyvinyl chloride (cPVC) on identified areas which possible cause of corrosion or decay of the GI meter stand and other iron made valves and other accessories is high. The cPVC is a thermoplastic produced by chlorination of polyvinyl chloride (PVC) resin. This is used both in hot and cold water pipe, and industrial liquid handling. This type of pipes can withstand corrosive water at temperatures greater than PVC, typically 40°C to 50°C or higher, contributing to its popularity as a material for water piping systems in residential as well as commercial construction. The mechanical strength of cPVC makes it a viable candidate to replace many types of metal pipe in conditions where metal's susceptibility to corrosion limits its use. However, this is expensive compared to the GI pipes. But for comparison and study, the WFCM installed 2 party line connections. One is of Leopoldo Balsimo and Judith Estubio at Barangay 5 last July 27, 2014. Another party line connection of Mildred Lambid and Jennifer Tagud at Barangay Karaos was installed last August 6, 2014. After the installation, there was no complaint as to the quality of water observed or noted from said connections. After five (5) months from the installation, it was observed that the meter stand is still free from corrosion. However, in order to make a sound evaluation or cost analysis and draw a conclusion whether the use of the cPVC will be more advantageous to the District, thorough evaluation shall be conducted after 6 to 8 months from the date of its installation which is the customary period of time that GI meter stand starts to corrode based on experience.

D. WATER FACILITY CONSTRUCTION AND MAINTENANCE

The Water Facility Construction and Maintenance Section (WFCMS) is the responsible section in the improvement and construction of water facilities, the conduct of repairs, maintenance and rehabilitation works from the transmission and distribution lines to the service connection lines. For the year 2014, this is manned by 10 regular employees, but only 7 of these are maintenance personnel. This implies that only 6 employees perform the maintenance and repair service requests and only 1 in-charge of the re-open and change meter service requests. Towards the second semester of the year, the 4 regular field men were assigned to the Water System Improvement Project, however, they are being replaced by 3 hired job-orders to do the maintenance and repair works. With this arrangement, the WFCM still was able to perform its regular functions and accomplished some of its targets.

In terms of installation of new service connection (NSC), with the target of 15 NSC installed monthly, an average of 21 NSC installation was accomplished. A total of 254 New Service Connections was installed as of November 2014 despite the postponement of NSC application effective last week of November 2014. This exceeded the target by 41% without pending at the end of the year. For the change meter requests, the accomplishment reach to 638 service requests which exceeded the target of 576 in a year by 10.76%.

Repairs on all leaking of various sizes of pipelines, from minor leaking occurred within the meter stand, service line, source line to major leaking happened within the transmission and distribution line, a total of 678 service requests were executed 100% with no pending at year's end. The unmetered billed water which is the water wasted during leaking or damages on pipes which is caused by other companies or agencies has reached to 652 cubic meters. These companies include the DPWH-Giovanni Construction and Gaisano Grand of San Francisco. However, this unmetered water is billed to concerned company or agency and are yet to be collected from them. The unmetered unbilled water which is the water wasted during leaking caused by wear and tear has reached to 12,973 cubic meters.

"Beyond Providing Water"



Water Facility Construction Maintenance & Quality Water Production Division

Other maintenance requests such as transfer tapping, relocation of water meter, replacement of gate valves, and installation of consumer gate valves are 100% accomplished. Also the rehabilitation requests such as rehab party line, cluster and relocation of service lines, tilting meter stand and the like are 100% accomplished. Relocation of fire hydrants & blow offs which are affected by road widening was also accomplished. However, maintenance activities of all the gate valves, blow offs and hydrants like gate valve exercise, cleaning of gate valves and hydrants and replacement of damaged valve box cover and non-operational valves were not 100% accomplished. These activities were left behind after pull out of regular employees who are assigned to the project. The three (3) teams of two regular maintenance personnel per team who are experienced already with the rotation of the gate valves and familiar with the exercise of the said valves were regrouped into two teams and replaced by a job order employee. This set up has affected the performance on these activities considering the limited skills and experience of the new hired job order personnel. Added to that is the bulk of the work which is on the repair of leaking as this has always been the top priority of all the requests that the WFCM needs to address first and foremost.

With regards to the construction of facilities, the perimeter fencing at Lapag reservoir site was substantially completed. It was implemented by phase because the construction is dependent on the availability of the budget. Aside from the perimeter fencing, a data logger house at the same time guard house was also built within the Lapag reservoir site. The construction of steel pipe support parallel to Hubang bridge was also completed. The steel pipe support at the right side of Hubang bridge going to Pisan was 100% accomplished using the allocation from the general fund of the District. However, the steel pipe support at the left side going to Pisan was 100% accomplished using the allocation of the project as the same is part of the Bridge pipe crossing work items of the WSIP of the District. The re-routing or relocation of the pipelines to its new steel pipe support was also 100% done.

E. IMPLEMENTATION OF WATER SYSTEM IMPROVEMENT PROJECT

The Water System Improvement Project (WSIP) has officially started after the signing of loan agreement with the DBP-San Francisco Branch on April 11, 2014. However, the construction has commenced starting September 1, 2014. Although the prolonged drought leads to shortage of water supply and boils down to a considerable decrease on the District's revenue, the District particularly this Division took advantage of the dry weather condition to fast track the source development and construction of water structure components of the project. At the end of year 2014, we are able to substantially complete the construction of two (2) intake boxes, one (1) in Bangkayaw and one (1) in Sumogbong. Installation of gate valves in the two (2) intake dams were also 100% completed. Despite the obstructions and hindrances encountered such as the perimeter fences installed by Mr. Judito Pintado, heavy rains and flood which caused delay on the hauling of materials because the access road going to the source site became slippery and difficult, the construction of Sumogbong-Bangkayaw Collection Box 1 & 2 (SBC) has proceeded. At year's end the riprap and rebar works of the funnel portion of the SBC boxes was already completed and fabrication of stainless ladder was already started, this made up the 82.61% accomplishment for the SBC collection boxes at the end of December 2014.

Another accomplished work items of the project is the installation of steel supply lines from the two (2) sources namely Sumogbong and Bangkayaw sources until Sumogbong reservoir site. A total of 177 lengths of 6" diameter steel pipes were installed from the two (2) sources going to the SBC boxes and a total of 216 lengths of 8" diameter were installed

"Beyond Providing Water"



Republic of the Philippines
SAN FRANCISCO WATER DISTRICT
San Francisco, Agusan del Sur

Water Facility Construction Maintenance & Quality Water Production Division

and fully welded from the SBC boxes to the Sumogbong reservoir site. This total to a length of 2.358 kilometres completely installed and welded steel supply lines. Pipe laying of uPVC pipes size 12" diameter from the Sumogbong reservoir site to the national road junction at Alegria was also started. Pipe laying of transmission and distribution lines in identified Barangays was also done. In Barangay 4 (Bongtod area) to Barangay 1 a total of 352 lengths of 6" diameter uPVC pipes or 2.11 kilometers long were completed. In Barangay 4 (Relocation area) 103 lengths or 618 meters of uPVC pipes were also accomplished. Pipe laying of 10" diameter pipes along Barangay Alegria National highway was also started on the last week of December and as of December 31, 2014 a total of 36 lengths or 216 meters of uPVC was laid.

As to the storage facilities component of the WSIP, the 500 cubic meter reservoir works in Sumogbong were already started. Clearing, site preparation and establishment of boundaries and placement of cornerstone of the entire reservoir site were done. At the end of 2014, excavation for the reservoir and its drain or daylight was already undertaken. In order to have an easy access to the work site, graveling of Barangay road going to Sumogbong reservoir was initiated after the District has entered into a MOA with the Barangay Council of Alegria.

The implementation of the project is not all smooth sailing. The District has faced and fought the obstructions encountered in the course of its construction. From the disputes and legal battles relative to the acquisition of land and rights over the proposed site, harassment experienced by the project engineers and laborers on the site and even the unpredictable weather condition that affects the schedule of activities. But nevertheless, the project has accomplished an average of 7 to 8% of physical accomplishment monthly. Having this performance, a total of 21.71% accomplishment was attained ending December 31, 2014. With this flow of implementation and performance, it can be expected that the two (2) year duration of the project can be attained and realized.

CONCLUSION AND RECOMMENDATIONS

In general, this Division has very satisfactorily accomplished its targets. However, there are some functions of each of the section that were not satisfactorily done because of some important factors. To be specific, in the QWPS, one of the duties and functions of the Water Facility Operator A which is to monitor all the water sources including the structures and water facilities installed thereto have not been fully carried out as scheduled. Based on the target set for this function, the regular monitoring for each water subsystem namely Alegria and Lapag should be done daily and for the Ormaca and Mate systems should be once a week. But the actual accomplishment is not satisfactory because only the reservoirs of Alegria and Lapag are daily monitored while the sources, dams and intake dams were not monitored daily. Likewise the Ormaca and Mate subsystems were not regularly monitored once a week. Most of the time, monitoring was done once or twice only in a month especially if there are repairs or maintenance to be made on the filter machine, gas feeder and other treatment and filtration equipment. The vital factor in this inadequacy is the multiple functions given to the assigned personnel. Multitasking is good and it is a good management strategy to save cost and exhausts the capacity of the personnel. However, it will only be advantageous and will only yield a positive outcome when the multiple tasks given are just right, enough and workable base on the skills and capacity of the assigned person. With this observation, the regular monitoring and reporting of any damage or maintenance needs of the water facilities can be satisfactorily addressed should there be additional facilities operator that will be augmented especially that the location of the

"Beyond Providing Water"



Republic of the Philippines
SAN FRANCISCO WATER DISTRICT
San Francisco, Agusan del Sur

Water Facility Construction Maintenance & Quality Water Production Division

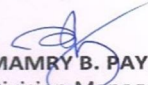
water sources are far-off in which distance of manoeuvring will consume the time of the personnel.

Another manpower concern also is in the WFCM section. The increasing trend of new service installations which will proportionately leads to an increasing service maintenance requests and repairs from consumers necessitates additional team to perform the requests and respond immediately on consumers' complaints. With the total active connections for CY 2014 of 5,980 and the number of field personnel of 6, it appears that the ratio of 1:996 is no longer ideal. If considering that not all of the consumers will have complaints or service requests, say only 50% of the 996, that is 498, the ratio of 1:498 is quite a struggle taking into account the other maintenance and construction functions that the personnel is also bound to perform. The additional team of two also calls for additional 4-wheeled vehicle to mobilize the maintenance personnel who presently are using only 1 unit 4-wheeled vehicle and 1 tricycle good only for the two (2) teams.

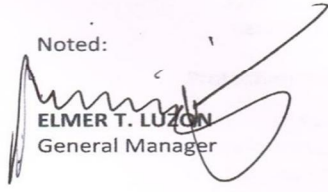
Furthermore, aside from the needed manpower, the computer aided system that will address the speedy location of the pipelines, gate valves, service connections and other water facilities, which will aid the personnel for analysis of water pressure, water loss and auditing of structures and planning for future improvement of the water system is deemed urgent. Hence, it is best that the Geographical Information System (GIS) should be put in place and operational by next year 2015.

Finally, with regards to the Water Testing Laboratory of the District, having awarded an excellent performance for CY 2014 by the DOH, it is deemed important to maintain such rating every year to uphold the confidence of the consumers to the SFWD's water quality and sustain the trust and reliance of the outside clients to the laboratory services offered by the District. Thus, in order to maintain the excellent performance of the laboratory, it is recommended to improve more some aspects of its operation particularly on the proper collection and handling of water samples. In order to safeguard the integrity of the samples, preserve and prevent it from possible contamination during collection, it is recommended that a close and refrigerated van shall be used. With this van type vehicle, the cost and time spent in the collection using the motorcycle will be lessened and number of samples to be collected will be increased.

Prepared by:


MAMRY B. PAYLANGCO
Division Manager C

Noted:


ELMER T. LUZON
General Manager

"Beyond Providing Water"