2018 MS4 Summary For ARDSA

Costs Incurred:

| | | | Force Account | | | |
|--|---------------------|------------|---------------|----------------------|--------------|----------------------|
| | | | | GBA Costs | | |
| | (| Contracted | Labor | Equipment | / Mt'l Costs | Total |
| Sweeping Spring | 3/15/2016 6/1/2016 | \$83,374 | \$487,963 | \$114,154 | | \$685,491 |
| Summer | 6/15/2016 8/1/2016 | | \$47,313 | \$15,662 | | \$62,975 |
| Fall | 9/1/2016 10/15/2016 | \$85,492 | \$147,991 | \$41,568 | | \$275,051 |
| | | ¢14 702 | 000 59 | ¢1 600 | | ¢10 202 |
| Sweepings Hauling Disposal AWWU water costs | | \$14,792 | \$2,000 | \$1,600 | \$36,064 | \$18,392 \$36,064 |
| Total Street Sweeping | | \$183,658 | \$685,267 | \$172,984 | \$36,064 | \$1,077,973 |
| | Concepting | φ100,000 | φ000,207 | ψ172,00 4 | φ00,004 | φ1,077,070 |
| Storm Drainage/ | | | | | | |
| Control Structure Syste | em Maintenance | \$240,586 | \$118,626 | \$10,726 | | \$369,938 |
| | | | | | | |
| OGS Maintenance | | | \$147,974 | \$11,666 | | \$159,640 |
| Winter Sand used | 8000 Ton | | \$155,866 | \$30,635 | \$127,520 | \$314,021 |
| | 10000 Ton | | φ135,000 | φ30,033 | φ127,520 | ψ314,021 |
| Cana On nana | | | | | | |
| Salt used | 100 Ton | | | | \$20,900 | \$20,900 |
| Salt on hand | 200 Ton | | | | | |
| | | | | | | |
| Sand Storage Facility | | | | | | |
| (Utility Costs) | | | | | \$2,500 | \$2,500 |
| Magnesium Chloride | 17500 Gal Used | | ¢26 450 | \$5,333 | ¢51 075 | ¢02 050 |
| | 10000 Gal | | \$26,450 | φ0,000 | \$51,275 | \$83,058 |
| On hand | 10000 Gai | | | | | |
| | | | | | | |
| Lucity - Asset Management | | | | | | |
| Labor costs for Mapping | | | | | \$25,000 | \$25,000 |
| | - | | | | | |
| Storm Water Pollution Prevention Plans | | | | | | |
| & Inspections (Maintenance Projects) | | | | | \$40,921 | \$40,921 |
| Facility SWPPP and Inspections | | | | | \$62,309 | \$62,309 |
| | | | | | ψυ2,309 | ψ02,309 |
| Total | | \$424,244 | \$1,134,183 | \$231,344 | \$366,489 | \$2,156,260 |

Materials Quantity

| Sweeping Quantities | CuYds |
|---------------------------|-------|
| Spring Residential | 2215 |
| Spring Arterial/Collector | 1926 |
| Summer Arterial/Collector | 35 |
| Fall Residential | 702 |
| Fall Arterial/Collector | 52 |

| Catch Basin Quantity | 604 |
|----------------------|-----|
| OGS Quantity | 336 |

Part 2.0: Storm Water Management Program (SWMP) Requirements

Pg. 10, 2.2. General Requirements, 2.2.1 - 2.2.4.

It is the opinion of the Maintenance and Operations Department, Street Maintenance Division, (SM) that Anchorage (ARDSA) has met the requirements of this section. Working in concert with WMS and other co-permitee(s) to meet these requirements.

Part 3.0: Minimum Control Measures

Pg. 14, 3.0: Minimum Control Measures, 3.1: Construction Site Runoff Control Program

ARDSA, SM activities have met the requirements of this section for all Street Maintenance projects within the service area (ARDSA). All construction SWPPP's are current, or closed, at the time of this report.

Pg. 19, 3.2:Storm Water Management Areas of New Development and Redevelopment

ARDSA, SM continues to support WMS in the implementation of this section and the subsections.

<u>Pg. 23, 3.2.5: Operation and Maintenance (O & M) of Permanent Storm Water</u> <u>Management Controls, 3.2.5.1: Inventory and Tracking</u>

ARDSA, SM continues to develop and maintain a computer maintenance management system (CMMS). This system includes geographical Information system (GIS) information that will be directly related to the maintenance of these assets. The database is continually updated as new assets are acquired.

Pg. 23, 3.2.6: Inspection and Enforcement of Permanent Storm Water Management

ARDSA SM continues to work closely with Private Development, Planning and (WMS) to attain the requirements of this Section.

Pg. 24, 3.2.7: Education and Training on Permanent Storm Water Controls

Training is viewed as an ongoing effort within our organization. ARDSA SM will continue to train staff on SOP's and Best Management Practices within the organization.

Pg. 24, 3.3: Industrial and Commercial Storm Water Discharge Management

ARDSA SM continues to work directly with the administrator (WMS) of the current permit to meet the requirements of this Section.

<u>Pg. 26, 3.4: Storm Water Infrastructure and Street Management,</u> <u>3.4.1: Storm Sewer System Inventory and Mapping</u>

SM, in coordination with WMS, continues to meet the requirements of this Section, and will update the CMMS on a timely, as needed, basis when new assets are introduced.

Pg. 26, 3.4.2: Catch Basin and Inlet Cleaning

ARDSA SM successfully completed these permit requirements. All 272 OGS units were inspected and cleaned. All 9770 control structures were inspected and those that required cleaning, were cleaned. ARDSA SM cleaned 1145 CB & CBMH, out of the total inventory of 9770 units. MOA SM Contractor cleaned 3085. Total cleaned - 4230. SM has implemented procedures to collect fill rate data by making adjustments to cleaning activities. Maintenance schedules will be adjusted further after analysis of data collected.

SOP's are being developed for treatment and disposal of catch basin and OGS waste.

Pg. 27, 3.4.5: Street and Road Sweeping

In coordination with WMS, SM has met these requirements, by developing a qualitative and quantitative, "visually clean standard" as outlined in the Sweeping Management Plan.

Pg. 29, 3.4.7: Develop and Implement Storm Water Pollution Prevention Plans

SM is currently contracted with Professional and Technical Services, Inc. (PTS) to write, inspect, and maintain the SWPPP's for all SM operated facilities and maintenance projects. SM maintains the BMP's at all facilities.

Pg. 29, 3.4.8: Training

Training has been conducted for Sweeping Practices/Protocol, project BMP's, SOP's and Spill Prevention/Response. This training will continue to meet the permits intent. SM currently has 18 trained/certified Alaska Certified Erosion & Sediment Control Leads (AK-CESCL)on staff. 48 other SM employees have also received formal AK-CESCL (non-certified) "awareness" training. Street Maintenance has coordinated with our SWPPP contractor, Professional Technical Services (PTS), to train all staff on construction specific and facility SWPPP requirements. SM will continue this effort in the years to follow.

Pg. 32, 3.5.6: Prevent and respond to Spills to the MS4

SM notes from spill response on 10/14/2018 - "On Sunday October 14th 2018, Street Maintenance received a call on our after-hours hot line around 1630 from ADEC about an oil sheen on Chester creek near the Sullivan Arena. Chris Moffitt, John Beesley, and myself responded to the scene. Gay Harpole and another ADEC staff member were already on scene and had erected an oil absorbent boom in Chester creek at the Outfall just south of Manhole 119 in grid 1431. They let us know that they had gotten the report around 1200. We then begin working our way upstream placing booms in Manhole #s 119, 107,105, 179 80,109, 118, and 83 all of these structures had a smell of what we all thought was diesel fuel. We checked up stream to the OGS # 144 where there was an odor of Diesel fuel as well, all other structures upstream in this system had no smell or sign of fuel. The OGS is owned By ADOT and we have no info about when it was cleaned last. Around 1930 the ADEC staff decided we had done enough to mitigate the sheen and could not find an active source. Today we are going check the absorbent booms and replace as needed. I spoke with John Snelson with ROW enforcement this morning and he has no reports of spilled fuel from this area either."

SM notes from spill response on 11/30/2018 - On November 30th, 2018 Anchorage received a 7.0 Earthquake. Upon a post inspection of the Kloep Station facility, it was discovered that two out of the four 10,000 Magnesium Chloride storage tanks had shifted causing the plumbing/valves to break which lead to the spillage of approxiamtely 20,000 gallons of Magnesium Chloride. The material ran out of the tanks, crossed the parking lot, and drained into the adjoining snow disposal sight, within a matter of minutes. No evidence of MagCl remained in the general area, making spill containment impossible. The material immediatley had soaked into the ground. ADEC was contacted on 12/1/2018 and visited the sight and concurred that containment of spilled material was not possible. Street Maintenance, in conjunction with Capital Projects, is developing a plan to secure all tanks in place, as well as provide a flexible plumbing system.