Reviewed by:

Date: #/////

DATE:

April 14, 2017

TO:

General Manager

FROM:

Safety & Risk Manager

SUBJECT:

Employee Injuries and Property Loss Incidents for Calendar Year 2016

RECOMMENDATION: Accept report on Employee Injuries and Property Loss Incidents for Calendar Year 2016.

Employee Injuries

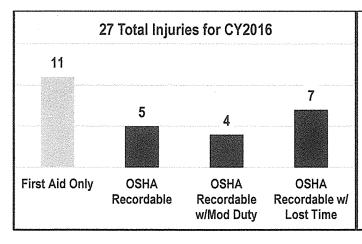
The chart below illustrates the Cal OSHA reportable incidents for the last four calendar years.

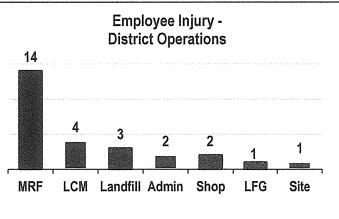
	2016	2015	2014	2013
Total Recordable Incidents	16	15	20	13
Total Lost Work days	168	88	208	102
Total Modified Duty Work Days / Job Transfers	115	210	303	217

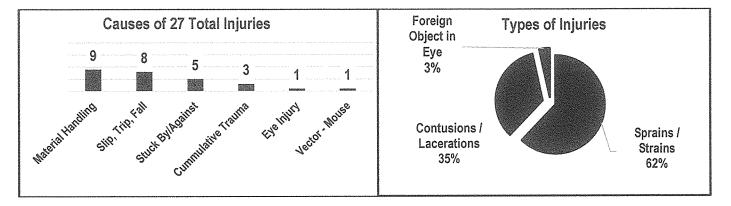
Throughout the year staff reviews Cal OSHA recordable incidents by injury type, District operation, and the injury cause to determine ways to mitigate the risk of recurring incidents.

Beginning in October of 2016, staff initiated an on-going review of first aid injuries as well as other minor incidents. First aid and minor/near miss incidents are often an indicator of where more serious injuries may occur in future.

The charts below indicate that during CY2016 most injuries occurred in the Material Recovery Facility (MRF) and the leading causes of injuries were <u>Material Handling</u> and <u>Slips, Trips, and Fall</u> incidents. Bear in mind that the greatest population of District employees is found within the MRF.







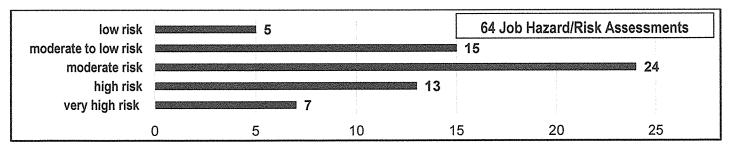
<u>Sprains & Strains</u> remain the leading type of injury for 2016 as they have been for the last several years whether caused by a <u>Material Handling</u> incident resulting in an acute or chronic ergonomic strain injury such as a muscle pull from improper lifting/body mechanics/repetitive motion, or due to a <u>Slip/Trip/Fall</u> incident.

The high number of <u>Slip/Trip/Fall</u> incidents is a key concern of District staff as these types of incidents can potentially result in serious injury or even death. The same is true of a <u>Struck By/Struck Against</u> incident.

Beginning in September 2016, District staff conducted job hazard assessment of 64 job tasks. The main purpose of a job hazard analysis (JHA) is to inform employees of the hazards of their work and the controls in place to mitigate their risk of injury. These 64 JHA's included a risk assessment scoring feature. A risk assessment evaluates a work task based upon: the frequency of exposure to a hazard; the controls in place to mitigate an injury; and the severity of a potential injury. The table below lists the risk assessment scoring values utilized by the District.

Risk Assessment Value	Potential for Serious Injury	
<20	Low Risk	
21 - 25	Moderate to Low Risk	
26 - 35	Moderate Risk	
36 - 40	High Risk	
41 - 50	Very High Risk	

The chart below indicates that 31% of District job tasks analyzed to date are have either a high risk or very high risk potential for a serious injury to occur as they do not have effective administrative or engineering controls in place to mitigate the risk of an injury.



To provide administrative controls designed to reduce the some of the risk potential of many of these very high risk tasks and other hazardous tasks, specialty training was conducted during the last two months of 2016 and continues into 2017 as noted in the table below.

Month	Training Course	
November 2016	Fall Protection for Affected Employees	
December 2016	Aerial Man Lift Certification	
December 2016	Cranes & Hoists Certification	
February 2017	Fire Extinguisher Use for Fire Brigade Team Members	
May 2017	Traffic Flagger Training	
May 2017	Arc Flash Training for Affected Employees	

A key risk reduction initiative planned for 2017 is the change of District uniforms to ANSI Class II high visibility shirts to be worn in lieu of high visibility vests. This uniform change will provide the following safety benefits:

- Reduced potential of clothing entanglement (tucked-in shirt vs. vest) on the Sort Lines of the new Materials Recovery Facility (MRF).
- Enhanced visibility of hourly employees on Landfill Face, MRF Tipping Floor, Last Chance Mercantile Yard, along Roadways, and in Parking Lots where vehicle and heavy equipment traffic is a concern for <u>Stuck By/Struck</u> Against injuries.

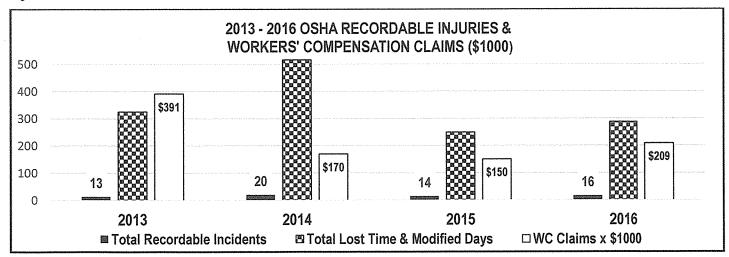
Worker's Compensation

The table below illustrates the workers' compensation data from the last four calendar years. In CY16 there were a total of twenty claims resulting in a total cost of \$208,533. These costs include expenses paid and reserves for future costs. During this time, two carpal tunnel repetitive motion injuries and one lifting strain injury resulted in a total cost of \$134,467 representing 64% of total cost of claims.

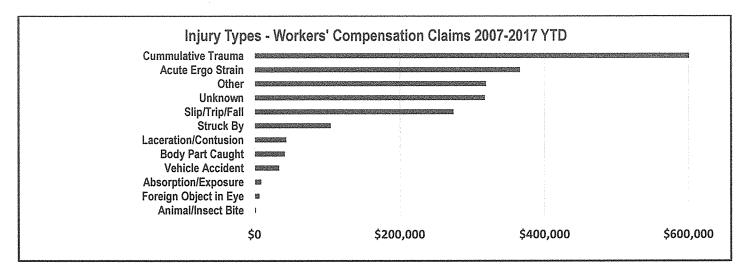
CALENDAR	TOTAL WORKERS'	
YEAR	COMPENSATION CLAIMS	
2013	\$391,125	
2014	\$169,580	
2015	\$150,373	
2016	\$208,533	

To address ergonomic injuries, two new Standard Safe Practices (SSPs) were generated in 2016, <u>SSP 1-04, Prevention</u> and Care of Ergonomic Injuries and SSP #2-15 Computer Work Station Self-Evaluation.

The chart below illustrates the comparison of workers' compensation claims over the last four years. The annual cost of claims doesn't necessarily increase with the number of recordable injuries but mainly due to the severity of the injuries.



The chart below provides a ten-year perspective on the types of injuries resulting in workers' compensation claims. Over the last ten years, ergonomic injuries either from repetitive motion or improper material handling techniques have been the number 1 & 2 leading cause of injury at the District.

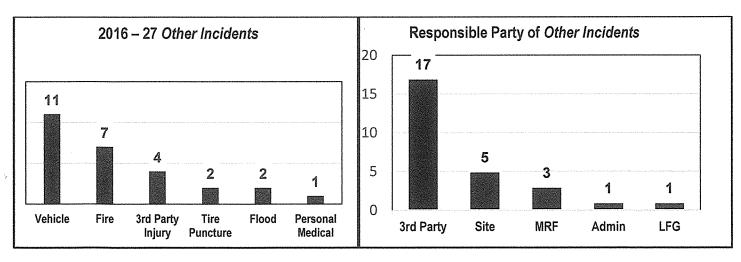


The chart above indicates that the number 3 & 4 claims were identified as <u>Other or Unknown</u>. Going forward, we will make a concentrated effort to improve our worker compensation claims reporting to reduce the number of <u>Unknown & Other</u> types of injuries.

Property Loss & Other Incidents

In September of 2016, staff began conducting detailed reviews of other incidents and initiated the D.I.V.E. (Define, Investigate, Verify, and Ensure) Process for conducting a systematic incident investigation and corrective action review of significant injuries and incidents. The D.I.V.E. process was demonstrated for the MRWMD Board of Directors during the December 2016 board meeting.

The charts below illustrate the types of the 27 *other incidents* of CY 2016 and the responsible parties of those incidents. To address the high number of incidents attributed to members of the Public, staff is currently finalizing a *Facility Use Guidelines* handout that will translated into Spanish and made available on the District's webpage. The handout will provide basic safety guidelines for the Public when visiting the District site.



There were three significant property loss claims in calendar year 2016 as shown in the table below:

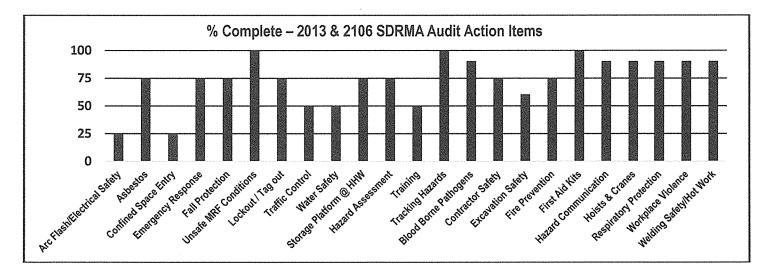
Date	Description of Property Loss Incident	Repair Claims Submitted to Insurance
9/9/16	Waste Handler Dozer fire on Landfill face (\$10,000 deductible)	\$176.221.33
10/14/16	Roll over of 627G Scraper on Landfill face (\$10,000 deductible)	\$220,000.00 (estimated)
11/4/16	Landfill Gas Facility Fire & Engine Loss (\$200,000 deductible)	\$750,000.00 (estimated)

It is important to note that the deductible for construction-type heavy equipment such as the dozer and scraper listed above has been increased from \$10,000 to \$50,000.

Conclusion

Significant progress has been made in 2016 to the District's Safety Program of risk identification and mitigation. There remains a large volume of work to be accomplished in the Safety Program as part of a continuous improvement process to the building and maintenance of the high-performance safety-orientated culture supporting the District's <u>Pillars of Sustainability</u>.

Priority #1 is completion of the 2013 & 2016 SDRMA audit action items with the assistance of the entire District staff. The chart below illustrates the progress made to date on completing the SDRMA 2013 & 2016 audit action items by main program category.



The completion of these SDRMA audit action items typically involves the following:

- generating a written program,
- purchasing safety equipment,
- developing & conducting training and
- verification that the program & training are effective.

Kagey L. Christie