### COUNTY OF SONOMA - JOB DEMANDS ANALYSIS

JOB CLASSIFICATION: Heavy Equipment Fleet Maintenance Supervisor DEPARTMENT: General Services DOT OCCUPATION CODE: 620.261-022; 638.131-022

## DATE COMPLETED: May 2018 DIVISION: Fleet PHYSICAL DEMAND STRENGTH RATING: Heavy per job analysis

#### INSTRUCTIONS TO MEDICAL PROVIDERS COMPLETING THIS FORM:

Please use the "Medical Provider Use Only" columns to the right of each section and the "Medical Provider's Comments & Signature" Section on the signature page to provide work restrictions by indicating whether there is some portion of each function that the employee can perform; designating whether each restriction is temporary or permanent; and, if restriction is temporary, stipulating the expected duration of work restriction(s). To finalize the form, please provide the name of the employee evaluated and additional comments, as appropriate, then sign and date where indicated.

#### FREQUENCY RATING:

Frequency	Percentage of time per shift	Repetition (# times per shift)	8 Hr Shift	9 Hr Shift	10 Hr Shift	12 Hr Shift
Never (N)	n/a	n/a	n/a	n/a	n/a	n/a
Occasionally (O)	1 - 33%	1 - 100	0 - 2.5	0 - 3	0 - 3.5	0-4
Frequently (F)	34 - 66%	100 - 500	2.5 - 5.5	3 - 6	3.5 - 7	4 - 8
Continuously (C)	67 - 100%	500+	5.5 – 8	6 - 9	7 - 10	8 - 12

#### PART 1 - JOB DUTIES/FUNCTIONS:

A. Job Duty/Function	Rating	tools used to perform (Describe)	Expertise, License,	position	or Non- Essential	Medical Provider Use Only: For each job duty/function, indicate in this column "Can Perform", is "Temporarily Restricted" from performing, or is "Permanently Restricted" from performing.
While performing the following duties, employees in this position work in a busy, noisy maintenance facility, with vehicles and equipment moving in and out continuously, and in the field under varying conditions, including in all weather conditions, with prolonged exposure to direct sun, rain, fog, or other severe weather conditions; works on wet, muddy, and uneven surfaces, and in both daylight and dark/dim conditions.						
Directly supervises staff engaged in conducting work assignments: plans, organizes, and assigns work; orients and trains staff; monitors and facilitates staff required continuing education requirements and other training; evaluates, reviews, and monitors activity of staff, both formally and informally, in writing and in person; takes appropriate disciplinary action in conjunction with Human Resources staff; participates in hiring interviews and decisions; utilizes appropriate discretion in matters of employee relations, EEO, and ADA circumstances.	С	Computer		Y	E	

A. Job Duty/Function		-	tools used to perform (Describe)	Expertise, License,	position	or Non- Essential	Medical Provider Use Only: For each job duty/function, indicate in this column "Can Perform", is "Temporarily Restricted" from performing, or is "Permanently Restricted" from performing.
Works independently and uses good judgment while directing, performing, or assisting staff in diagnosing routine and complex electronic and mechanical problems or failures, either visually or using automotive diagnostic equipment; determines service or repairs required; stands on concrete floor with arms overhead; crawls under vehicles; bends over vehicle fenders and engines in confined spaces; works in a busy, noisy shop environment with vehicles and equipment moving in and out continuously.	2	F	equipment, Small and large hand tools; power tools.	ASE-(National Institute of Automotive Service Excellence);M aster Truck Technician		E	
Works independently and uses good judgment while directing, performing, or assisting staff in repairing and re-building heavy construction equipment and trucks: disassembles and reassembles equipment; installs replacements parts and components; repairs engines, transmissions, clutch and brake systems, alternator and starter systems, pump, steering systems, and other major automobile components; uses tools of various size and weights; moves parts weighing 75+ pounds, using carts, hand trucks, or other lifting devices; stands on concrete floor with arms overhead; crawls under vehicles; bends over vehicle fenders and engines in confined spaces; awkward reaching, bending, kneeling and lifting as required by repair; works in a busy, noisy shop environment with vehicles and equipment moving in and out continuously.		F	hand tools; power tools	ASE-(National Institute of Automotive Service Excellence); Master Truck Technician	N	E	
Understands, interprets, and applies County and department policies and procedures; makes recommendations for changes to policies and procedures.	4	0			Y	E	
Conducts regular safety meetings and continuously enforces safety practices and procedures; observes work being performed for compliance with safety practices and procedures and corrects unsafe behavior; actively utilizes and implements established safety practices; proposes and implements new safety practices as needed.		0			N	E	

A. Job Duty/Function		Rating	tools used to	Expertise,	position	or Non-	Medical Provider Use Only: For each job duty/function,
	#		perform (Describe)	License, Certification Required? (Describe)	exists? (Y/N)		indicate in this column "Can Perform", is "Temporarily Restricted" from performing, or is "Permanently Restricted" from performing.
Communicates effectively and continuously by phone, email, or in person with staff, co-workers, supervisors, and clients to coordinate repairs, advise on technical issues, answer questions, and provide information on status of repairs; trains staff on repair and installations.		F	Phone, Computer		Y	E	
Enters data into Fleet computer databases; maintains accurate electronic and paper records and files; orders parts.	9	F	Computer, phone		N	E	
Participates in continuous training, research, study, and reading, both on and off-site, to keep current on vehicle repair standards, and best practices, and to maintain applicable working knowledge.	10	0	Computer		N	E	
Responds to emergency requests in the field; drives to off-site locations; determines feasibility of performing repairs on site; drives vehicles and equipment in a busy, noisy shop environment; test drives vehicles and equipment to ensure repairs are completed.	8	0	Service truck; heavy construction vehicles	California Drivers' License, California Class A Commercial Drivers' License	N	N	
Performs routine servicing of heavy construction equipment and trucks, such as checking and changing oil and filters, lubing and greasing specified areas, checking fluid, and replacing parts according to maintenance schedule; stands on concrete floor with arms overhead; crawls under vehicles; bends over vehicle fenders and engines in confined spaces; awkward reaching, bending, kneeling and lifting as required by repair.; works in a busy, noisy shop environment with vehicles and equipment moving in and out continuously.	N		hand tools; power tools	ASE-(National Institute of Automotive Service Excellence); Master Truck Technician	N	Ν	

# PART 2: PHYSICAL DEMANDS

ART 2: PHISICAL DEIVIAINDS	1		1	1	
Activity	Examples of Duties/Functions Requiring Activity	FREQUENCY RATING Never, Occasional; Frequent, or Constant	<b>MEDICAL</b> Can Perform	PROVIDER Temporarily Restricted	USE ONLY: Permanently Restricted
Sitting (i.e., when using computer or phone; driving)	1,4,5,7,8,9,10	F			
Walking (i.e., supervising staff; diagnosing electronic/mechanical problems of vehicles and equipment; performing service and repairs of vehicles and equipment; working at off-site locations)	1,2,3,5,6,7,8	0			
	N/A	N			
Running Standing (i.e., supervising staff; diagnosing	N/A	IN			
electronic/mechanical problems of vehicles and equipment; performing service and repairs of vehicles and equipment; installing and maintaining equipment that goes in or on county vehicles/equipment)	1,2,3,5,6,7	ο			
<b>Bending-Neck</b> (i.e., using computer or phone; driving; diagnosing electronic/mechanical problems of vehicles and equipment; performing service and repairs of vehicles and equipment; installing and maintain equipment that goes in or on county vehicles/equipment)	1,2,3,4,5,6,7,8, 9	F			
<b>Bending-Waist</b> (i.e., diagnosing electronic/mechanical problems of vehicles and equipment; performing service and repairs of vehicles and equipment; installing and maintaining equipment that goes in or on county vehicles/equipment)	2,3,6,8	Ο			
<b>Squatting</b> (i.e., diagnosing electronic/mechanical problems of vehicles and equipment; performing service and repairs of vehicles and equipment; installing and maintaining equipment that goes in or on county vehicles/equipment)	2,3,6,8	Ο			
<b>Climbing</b> (i.e., diagnosing electronic/mechanical problems of vehicles and equipment; performing service and repairs of vehicles and equipment; installing and maintaining equipment that goes in or on county vehicles/equipment)	2,3,6,8	Ο			
<b>Kneeling</b> (i.e., diagnosing electronic/mechanical problems of vehicles and equipment; performing service and repairs of vehicles and equipment; installing and maintaining equipment that goes in or on county vehicles/equipment)	2,3,6,8	Ο			
<b>Crawling</b> (i.e., diagnosing electronic/mechanical problems of vehicles and equipment; performing service and repairs of vehicles and equipment; installing and maintaining equipment that goes in or on county vehicles/equipment)	2,3,6,8	0			
<b>Twisting-Neck</b> (i.e., using computer or phone; driving; diagnosing electronic/mechanical problems, performing service and repairs of vehicles and equipment; installing and maintaining equipment that goes in or on county vehicles/equipment)	1,2,3,4,5,6,7,8, 9	F			

	Examples of	FREQUENCY RATING	MEDICAL	PROVIDER	USE ONLY:
Activity	Duties/Functions		Can	Temporarily	Permanently
	Requiring Activity	Frequent, or Constant	Perform	Restricted	Restricted
Twisting-Waist (i.e., diagnosing electronic/mechanical					
problems, performing service and repairs of vehicles and	2,3,6,8	0			
equipment; installing and maintaining equipment in or	/ - / - / -	-			
on county vehicles/equipment)					
Repetitive Hand Use	1,2,3,4,6,7,8,9	F			
Simple Grasping-Right Hand (i.e., holding tools;	1,2,3,4,6,7,8,9	F			
driving vehicles/equipment; holding documents)	, , -, , -, , -, -				
Simple Grasping-Left Hand (i.e., holding tools; driving	1,2,3,4,6,7,8,9	F			
vehicles/equipment; holding documents)		•			
Power Grasping-Right Hand (i.e., perform service or					
repair on vehicles/equipment; installing/ maintaining	2,3,6	0			
equipment in or on county vehicles/equipment;	2,0,0	Ū.			
moving parts weighing more than 75+ pounds)					
Power Grasping-Left Hand (i.e., using to perform					
service or repair on vehicles/equipment; installing and					
maintaining equipment in or on county	2,3,6	0			
vehicles/equipment; moving parts weighing more than					
75+ pounds)					
Fine Manipulation-Right Hand (i.e., diagnosing					
electronic/mechanical problems; disassembling and					
reassembling equipment; installing and maintaining	1,2,3,5,6,9	0			
equipment that goes in or on county					
vehicles/equipment)					
Fine Manipulation-Left Hand (i.e., diagnosing					
electronic/mechanical problems; disassembling and	1,2,3,5,6,9	0			
reassembling equipment; installing and maintaining	1,2,3,3,0,5	0			
equipment in or on county vehicles/equipment)					
Pushing and Pulling-Right Hand (i.e., 55 gallon oil					
drums; jacks; mechanical lift assist equipment;	2,3,6,8	0			
removing and replacing parts and equipment)					
Pushing and Pulling-Left Hand (i.e., 55 gallon oil					
drums; jacks; mechanical lift assist equipment;	2,3,6,8	0			
removing and replacing parts and equipment)					
Reaching-above shoulder level (i.e., to access areas					
needing repair or replacement: changing oil and filters;					
lubing and greasing specified areas; in awkward	2260	0			
positions under vehicle/equipment/dashboards;	2,3,6,8	0			
installing/maintaining specialized equipment in or on					
county vehicles/equipment)					
Reaching-below shoulder level (i.e., diagnosing					
electrical/mechanical problems; checking oil and fluids;	2260	-			
installing and maintaining specialized equipment that	2,3,6,8	F			
goes in or on county vehicles/equipment)					
Lifting-up to 10 lbs. (i.e., small hand tools)	1,2,3,5,6,7,8	F			
<b>Lifting-11-25 lbs.</b> (i.e., ¾" drive truck tire impact		-			
wrench; small and medium jack stands)	2,3,6	0			
Lifting-26-50 lbs. (i.e., 1" drive truck tire impact					
wrench; large jack stands; dump bed safety support;	2,3,6	0			
light duty truck batteries; empty propane tank)	,-,-	-			

	Examples of	FREQUENCY RATING	MEDICAL	PROVIDER	USE ONLY:
Activity	Duties/Functions	Never, Occasional;	Can	Temporarily	Permanently
	<b>Requiring Activity</b>	Frequent, or Constant	Perform	Restricted	Restricted
Lifting 51-75 lbs. (i.e., brake rotor hub assembly;	3	0			
auxiliary pump; full propane tank)	5	0			
Lifting 76-100 lbs. (i.e., truck/heavy equipment	2	0			
battery)	3	0			
Lifting 100 + lbs. (i.e., water pump from fire truck;	2	0			
truck tire and rim)	3	0			
Carrying 0-10 lbs. (i.e., small hand tools)	1,2,3,5,6,7,8	F			
<b>Carrying 11-25 lbs.</b> (i.e., ¾" drive truck tire impact	226	0			
wrench; small and medium jack stands)	2,3,6	0			
Carrying 26-50 lbs. (i.e., 1" drive truck tire impact					
wrench; large jack stands; dump bed safety support;	2,3,6	0			
light duty truck batteries; empty propane tank)					
Carrying 51-75 lbs. (i.e., brake rotor hub assembly;	2	0			
auxiliary pump; full propane tank)	3	0			
Carrying 76-100 lbs. (i.e., truck/heavy equipment	2	0			
battery)	3	0			

	Examples of	FREQUENCY RATING	MEDICAL	PROVIDER	USE ONLY
	Duties/Functions	Never, Occasional;	Can	. ,	Permanently
Activity	Requiring Activity	Frequent, or Constant	Perform	Restricted	Restricted
Functional vision, normal or corrected (i.e., diagnosing electrical/mechanical problems; performing service and repairs on vehicles/equipment; driving)	1,2,3,4,5,6,7,8, 9	С			
<b>Functional color vision, normal or corrected</b> (i.e., diagnosing electrical/mechanical problems; checking/identifying fluids; differentiate color coded wires for specialty equipment on vehicles; Class A Driver's License, differentiate between red, amber, green)	2,3,5,6,8	0			
Functional night vision, normal or corrected (i.e., working before or after day light hours; working in dark spaces under vehicles, hoods or dashboards)	8	0			
Functional hearing, normal or corrected (i.e., diagnosing mechanical problems; test driving vehicles/equipment; communicating with co- workers, customers, and vendors in person or over the phone)	1,2,3,4,5,6,7,8, 9	F			
A sense of smell or taste (i.e., diagnosing electrical/mechanical problems, servicing vehicles and equipment; test driving vehicles/equipment; distinguishing types of fluid)	2,3,6,8	0			

## PART 4: COMPREHENSION LEVEL

	FREQUENCY RATING	MEDICAL	PROVIDER	USE ONLY
	Never, Occasional;	Can	Temporarily	Permanently
Activity	Frequent, or Constant	Perform	Restricted	Restricted
Follow Oral Instructions	F			
Follow Written Instructions	F			
Required to sustain concentration	F			

## PART 5: NATURE OF TASKS

	FREQUENCY RATING	MEDICAL	PROVIDER	USE ONLY
	Never, Occasional;	Can	Temporarily	Permanently
Activity	Frequent, or Constant	Perform	Restricted	Restricted
Follow set procedures	С			
Organize own work	F			
Able to ask questions or request assistance when needed	F			
Required to make decisions independently	F			
Required to train and/or lead others	0			
Required to direct others (e.g. planning, goal setting, performance)	0			

#### PART 6: WORK PACE

	FREQUENCY RATING	MEDICAL	PROVIDER	USE ONLY
	Never, Occasional;	Can	Temporarily	Permanently
Activity	Frequent, or Constant	Perform	Restricted	Restricted
Tightly scheduled and rapid pace of work activities at high volume	0			
Meet time sensitive deadlines	F			
Long and/or irregular hours	0			
Limited/unpredictable opportunity for breaks	N			
Required to perform on-call or emergency work	0			

## PART 7: COMPLEXITY/VARIABILITY

	FREQUENCY RATING	MEDICAL	PROVIDER	USE ONLY
	Never, Occasional;	Can	Temporarily	Permanently
Activity	Frequent, or Constant	Perform	Restricted	Restricted
Variable and unpredictable workflow	0			
Attention divided by issues requiring multi-tasking	F			
Work requires precise attention to detail	F			
Use of judgment in routine matters	F			
Requires use of judgment in adapting procedures from one	0	0		
task to another				
Possible legal ramifications associated with work activities or	6	6		
work product				

# **PART 8: INTERACTIONS WITH OTHERS**

	FREQUENCY RATING	MEDICAL	PROVIDER	USE ONLY
	Never, Occasional;	Can	Temporarily	Permanently
Activity	Frequent, or Constant	Perform	Restricted	Restricted
Works with others (e.g., co-workers, other departments/agencies, public)	F			
Interactions limited to giving/receiving information	F			
Interactions exceed giving/receiving information (e.g., advises, persuades, justifies)	F			
Interactions occur under circumstances of emotional stress	0			
Risk of confrontation with violent or assaultive clients or customers	N			

# PART 9: ENVIRONMENTAL FACTORS/WORKING CONDITIONS:

ART 5. ENVIRONMENTAL FACTORS/ WORKING CONDITIONS.	FREQUENCY RATING	MEDICAL	PROVIDER	USE ONLY
	Never, Occasional;	Can	Temporarily	Permanently
Activity	Frequent, or Constant	Perform	Restricted	Restricted
Work Inside (i.e., working in shop/garage or office)	С			
Work Outside (i.e., responding to an emergency repair call)	0			
Extreme Heat (above 100 degrees)	N			
Extreme Cold (below 32 degrees)	N			
Excessive Noise (must raise voice to be heard) (i.e., using	F			
impact wrench to remove lug nuts on wheels)	1			
Vibration (e.g., jack hammer, hammer drill, chainsaw, etc.)	О			
(i.e., using impact wrench or power drill)	0			
Dust, Vapors, Fumes, Smoke	0			
Silica, asbestos, etc.	N			
Solvents (e.g., gas, turpentine, etc.)	0			
Grease, oils	0			
Acidic, Caustic Solutions (i.e., truck and heavy equipment batteries)	0			
Pesticides	0			
Explosives (e.g., dynamite, bomb, etc.)	Ν			
Cleaning supplies, abrasives	0			
Other Chemicals (e.g. drugs and other contraband)	N			
Human Blood, Body Tissues, or Fluids	N			
Human Wastes	N			
Animal Blood, Body Tissues, or Fluids	N			
Animal Wastes	N			
Biological Toxins (e.g., poison ivy, poison oak, anthrax, etc.)	0			
Insect Bites (e.g., ticks, mosquitos, spiders, etc.)	0			
Biomedical Waste	N			
Ionizing Radiation	N			
Non-Ionizing Radiation	N			
Electrical Energy (i.e., making hybrid or electric vehicles/equipment)				
Walking on uneven, slippery, or rough terrain (e.g., gravel, rocks,	0			
hills, etc.)	0			
Proximity to moving mechanical parts (e.g., equipment,				
machinery)	F			
Proximity to moving vehicles or objects	F			
Heights (e.g., rooftop, ladders, scaffolding, etc.)	0			
Contact with water, other liquids, humid conditions - not weather	0			
related	0			
	N			
Work Below Ground: (e.g., excavation, trench, etc.)	N			
Potential exposure to airborne infectious diseases (e.g. clinics,	N			
labs, corrections)				
Operates non-commercial motor vehicles (cars, trucks) (i.e.,	0			
drives off-site for emergency repairs; test driving vehicles) Operates commercial vehicles – CDL				
Class A Endorsements N/A	0			
Operates passenger van to transport clients, inmates, etc.	N			
Pulls non-commercial trailers or equipment	N			
Operates heavy equipment (i.e., test driving equipment)	0			
Other: Forklift (propane, electric, gas, diesel) Certification Required	0			

# PART 10: MEDICAL SCREENING, SURVEILLANCE AND VACCINATION REQUIREMENTS:

Please check each of the medical screening, surveillance, and vaccination requirements that apply to the position, and indicate if the requirement applies pre-employment/pre-placement only, or whether there are additional requirements after hire.

			Frequency (one time,
Medical Screening, Surveillance or Vaccination	Pre-Hire	Post-Hire	annual, etc.)
Audiometric Testing	Х	Х	Annual
DOT Drug and Alcohol Screening	Х	Х	Random
DOT Physical Exam	X*	Х	Bi-Annual
Respirator Physical Exam			
Respirator Questionnaire – Short			
Respirator Questionnaire – Standard			
Blood lead level			
Hazardous Waste/Emergency Worker physical			
Heavy metal screen (mercury, lead, arsenic)			
HINT Hearing Noise Sensitivity Testing			
Tuberculosis skin test			
Vaccine: MMR			
Vaccine: Hepatitis B			
Vaccine: Influenza			
Vaccine: Meningococcal			
Vaccine: Pneumococcal			
Vaccine: Rabies			
Vaccine: Tdap			
Vaccine: Chickenpox			
Drier to obtaining commercial licence			

\*Prior to obtaining commercial license.

PART 11: ADDITIONAL INFORMATION, PICTURES, ETC.



Fleet Operations Service Vehicle



Fleet Operations Vehicle- Steps at 17"/31"/38"/41"



Heavy Duty Jack- 31 lbs. Pull Force 20 lbs. Push Force



Small Jack Stand- 8 lbs.



Medium Jack Stand- 14 Lbs.



Med/Large Jack Stand- 17lbs.



Large Jack Stand- 34 lbs.



Dump Bed Safety Support- 39 lbs. Lifted 48" up & 36" out away from body



Brake Rotor Hub Assembly- 53 lbs.



Truck/Heavy Equipment Battery - 93 lbs. Stored on 3 inch shelf (can be difficult to manage in field)



Battery Storage - 44 lbs. to 93 lbs. 3"/17"/34" Shelves



Portable A-Frame Hoist 37.5 lbs. push force



Auxiliary Pump - 65lbs. Lifted 20" to 36" high surface



Auxiliary Pump Housing- 20" high



SEFAC- Mobile Column Lifts Pull Force – 66.5 lbs.



SEFAC- Mobile Column Lift Push Force – 61.5 lbs.



1" Drive Truck Tire Impact Wrench (blue)-27 lbs., as shown ¾" Drive Truck Tire Impact Wrench (silver)-12 lbs., as shown



Truck Tire and Rim- 260 lbs.



Water Pump from Fire Truck- 131 lbs. Lifted up 36" to mount under truck



Under carriage of Fire Truck- Water Pump Mount Circled

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Fire Truck- Tire Lug Nuts Water Pump and Pipes

Fire Truck- Water Pressure Guages Fire Truck- Water Pipes and Drive Shaft



Propane Tanks- 22" at handle 68 lbs. recently filled 37lbs. empty



Propane powered Forklift Tanks lifted to 45" high to change



Caterpillar 315B Hydraulic Excavator- requiring repair of Hydraulic Bucket Mechanism



Caterpillar 315B Hydraulic Excavator- Bucket



Example of Large Fleet Operations Service Vehicle

# JOB DEMANDS ANALYSIS Review and Signature Page

## PART 12 – FORM REVIEW AND SIGNATURES

OCCUPATIONAL HEALTH CONSULTANTS				
Name:	Title:			
Signature:	Date:			
SUPERVISOR/SECTION MANAGER				
Name:	Title:			
Signature:	Date:			
HUMAN RESOURCES RECRUITMENT AND CLASSIFICAT	ION			
Name:	Title:			
Signature:	Date:			
HUMAN RESOURCES SAFETY UNIT				
Name:	Title:			
Signature:	Date:			
HUMAN RESOURCES DISABILITY MANAGEMENT				
Name:	Title:			
Signature:	Date:			
PART 13 – MEDICAL PROVIDER REVIEW AND COMMENTS				
Employee Name:	Date of Evaluation:			
COMMENTS:				
Provider Signature:	Date:			