

EMPLOYEE:

CLAIM #



## Job Analysis Form

ALTERNATE FORMAT AVAILABLE

**JOB TITLE:** Operations Engineer III

**NOTE:** This job, Operations Engineer, in reality incorporates five jobs in one. They include Heating and Air Conditioning Mechanic, pool sanitation service (Pool Servicer), pool mechanical systems maintenance (Maintenance Repairer), computer & network equipment set up & repair and swim meet event set up, the latter of which has not Dictionary of Occupational Titles category.

**GOE JOB CLASSIFICATION** (1) 05.05.09 (2) 05.10.04 (3) 05.05.09 (04) 11.01.01

**DOT TITLE/S:** (1) Heating and A/C Mechanic (2) Pool Servicer (3) Maintenance Repairer (Ind.)` (4) Technical Support Specialist (5) Swim Race/Event Set-Up

**DOT #'s:** (1) 637-261-014 (2) 891.684-018 (3) 899.261-014  
(4) 033..162-018 (5) N/A

**DOT Phys/SVP:** (1) M/7 (2) M/4 (3) H/8 (4) L/7 (5) N/A

**DEPARTMENT** Parks **DIVISION** Division of Natural Resources and Parks

**# OF POSITIONS IN THE DEPARTMENT WITH THIS JOB TITLE** 1 each

**CONTACT'S NAME & TITLE:** Mike Dunwiddie, Supervisor

**CONTACT'S PHONE:** 206-296-4547

**ADDRESS OF WORKSITE** 650 Southwest Campus Dr., Federal Way, WA 98023

**VRC NAME:** Thomas S. Sproger, MS, CRC, CEAS II **DATE COMPLETED** 6/25/10

**WORK HOURS** **DATE REVISED**

**OVERTIME** (Note: Overtime requirements may change at the employer's discretion)  
Required, between and hours per year

**JOB DESCRIPTION:** Job exists to maintain buildings and pools that constitute the Weyerhaeuser/King County Aquatic Ctr. And to support swim events that occur there.

- Plan and develop a preventive maintenance program,
- Coordinate, schedule and perform preventive/regular maintenance activities
- Perform preventive maintenance to building systems, pool systems, computing, LAN control and timing systems and system components
- Troubleshoot, repair, and overhaul all systems within the building
  - HVAC
  - Pool filtration, sanitation and heat
  - Plumbing, electrical, computing & electronic controls,
  - Automated controls, and other (eg. Timing) systems

Perform all set-up activities for weekly and more frequent swimming events

## **ESSENTIAL ABILITIES FOR ALL KING COUNTY JOB CLASSIFICATIONS**

1. Ability to demonstrate predictable, reliable, and timely attendance.
2. Ability to follow written and verbal directions and to complete assigned tasks on schedule.
3. Ability to read, write & communicate in English and understand basic math.
4. Ability to learn from directions, observations, and mistakes, and apply procedures using good judgment.
5. Ability to work independently or part of a team; ability to interact appropriately with others.
6. Ability to work with supervision, receiving instructions/feedback, coaching/counseling and/or action/discipline.

## **JOB SPECIFIC REQUIREMENTS**

### **ESSENTIAL FUNCTIONS OE II AND OE III**

- \* Prepares preventive maintenance plan and develops schedule to check and maintain equipment
- \* Performs preventative maintenance, site surveys, repair, replacement, and modifications of applied mechanical/equipment systems, HVAC systems, mechanical room controls including actuators, sequencers, switches in electric, pneumatic, and DDC systems, fans, gas/electric boilers, computers, timers, flue gas and vibration analyses, water and air
- \* Diagnoses and repairs.: HVAC, Pool filtration, sanitation & heating systems,
- \* Sets up, tests, troubleshoots and repairs computers, timers and other electronic systems
- \* Provides equipment life projections to assist management in preparing capital expense budgets \* \* \*
- \* Prepares for on-site installation and repairs by examining building layout, anticipating difficulties, gathering materials and coordinating on-site work, as necessary.
- \* Maintains equipment (lift trucks) by keeping records of service manuals, scheduling, and complete repairs and maintenance service
- \* Maintains equipment by inspecting for signs of wear.
- \* Determines parts to order for repairs and timeliness of need
- \* Documents work by completing paperwork on each job, including daily time, progress, and duration; and maintaining files. Turns in all required paperwork and reports in a timely manner.
- \* Records parts, material, labor, subs and other cost data per assignment and returns unused resources.
- \* Keeps current on all HVAC and pool maintenance products concerning installation, operation, maintenance, service and repair
- \* Read and interpret product specifications, building specifications, drawings and designs
- \* Provides technical support to pool and event staff
- \* Flexibility to work overtime/, late nights and weekends as necessary
- \* Regular travel requirements in maintaining other pools

### **ESSENTIAL FUNCTIONS OF OE III ONLY**

- \* Performs higher computing system and timing systems electronic troubleshooting & repairs.
- \* Works with event organizers to determine and meet event needs

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- \* Plans for events by assessing equipment and building modifications needed along with labor & materials needed to make those modifications
- \* Obtains authorizations and funding approvals as needed,
- \* Orders materials and makes drawings and plans to perform the modifications
- \* Designs and fabricates platforms, stands, towers, bleachers and other equipment as needed to make for successful event
- \*Serve as "mentor" to lower level Technicians. Trains and demonstrates Leadership.

### **NON-ESSENTIAL FUNCTIONS**

- 1 Drives to vendor for parts not on hand
2. May provide information to event attendees

### **PERSONAL PROTECTIVE EQUIPMENT USE**

Steel toed boots      Vision protection  
Hearing protection      Breathing protection

### **OTHER TOOLS & EQUIPMENT USED**

Hand tools                      Hand held power tools  
Electric tests equip.          Electronic test equipment  
Forklift                          Pallet jack

### **PHYSICAL DEMANDS AS JOB IS TYPICALLY PERFORMED**

Continuously = occurs 66-100% of the time      (>6 hours per shift)  
Frequently = occurs 33-66% of the time          (>3 hours-6 hours per shift)  
Occasionally = occurs 1-33% of the time          (>1 hour to 3 hours per shift)  
Rarely = may occur less than 1% of the time      (up to 1 hour per shift)  
Never = does not ever occur (such demands are not listed)

Highly Repetitive = Repeating the same motion every few seconds with little or no variation for more than two hours total per day.

### **This job is classified as**

Sedentary—exerting up to ten pounds of force occasionally and/or a negligible amount of force frequently. A sedentary job involves sitting most of the time.

Light—exerting up to 20 pounds of force occasionally, and/or up to 10 pounds of force frequently and/or a negligible amount of force constantly. A job is light if involves less than or up to the indicated pounds of force and one or more of the following apply; walking and standing to a significant degree, sitting and pushing/pulling of arm or leg controls, or constant pushing and pulling to maintain a production rate even when weight is negligible.

Medium—exerting 20 to 50 pounds of force occasionally, and/or 10-25 pounds of force frequently, and/or up to 10 pounds of force constantly.

**HEAVY—exerting 50-100 pounds of force occasionally, and/or 25-50 pounds of force frequently, and/or 10-20 pounds of force constantly to move objects.**

Very Heavy—exerting in excess of 100 pounds of force occasionally, and/or in excess of 50 pounds of force frequently, and/or in excess of 20 pounds of force constantly to move objects.

**Standing in one place**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously **Frequently** Occasionally Rarely

on concrete surfaces for 1-2 hours at a time for up to 4 hours total in a work shift. Most commonly occurs while repairing equipment.

**Walking**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously **Frequently** Occasionally Rarely & **Highly Repetitive**

on concrete surfaces for distances of up to 200 yards for 1-2 hours at a time for up to 6 hours total in a work shift. Most commonly occurs while

**Sitting**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously Frequently **Occasionally** Rarely

on for at a time for up to total in a work shift. Most commonly occurs while

**Climbing stairs**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously Frequently **Occasionally** Rarely **& Highly Repetitive**

for 5 minutes at a time while climbing stairs to and from bottom floor to main floor or mezzanine level for up to 2.5 hours total in a work shift. Most commonly occurs while going from lower level/basement to to upper levels to make repairs or perform maintenance tasks.

**Climbing**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously Frequently **Occasionally** Rarely **& Highly Repetitive**

on ladders to heights of 10-12 feet for 1 hour at a time for up to 2.5 hours total in a work shift. Most commonly occurs while repairing scoreboard

**Balancing**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously Frequently **Occasionally** Rarely **& Highly Repetitive**

on scaffold or at heights of 50 feet for 1 hour at a time for up to 2 hours total in a work shift. Most commonly occurs while

**Bending neck up**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously **Frequently** Occasionally Rarely **& Highly Repetitive**

for 30 min. at a time for up to 3 hours total in a work shift. Most commonly occurs while working on poolpacks.

**Bending neck down**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously **Frequently** Occasionally Rarely **& Highly Repetitive**

for up to 1 hour at a time for up to 3 hours total in a work shift. Most commonly occurs while looking down while brazing and doing mechanical work on pool packs and HVAC equipment.

**Bending/Stooping**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously **Frequently** Occasionally Rarely & Highly Repetitive  
on concrete surfaces for 1 hour at a time for up to 5-6 hours total in a work shift. Most commonly occurs while while brazing and doing mechanical work on pool packs and HVAC equipment.

**Kneeling**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously **Frequently** Occasionally Rarely & Highly Repetitive  
on concrete surfaces for 1 hr. at a time for up to 5-6 hrs. total in a work shift. Most commonly occurs while while brazing and doing mechanical work on pool packs and HVAC equipment

**Squatting**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously **Frequently** Occasionally Rarely & Highly Repetitive  
on concrete surfaces for 1 hr. at a time for up to 5-6 hrs. total in a work shift. Most commonly occurs while while brazing and doing mechanical work on pool packs and HVAC equipment

**Crawling**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously Frequently **Occasionally** Rarely & Highly Repetitive  
on concrete surfaces for 1 hr. at a time for up to 5-6 hrs. total in a work shift. Most commonly occurs while while brazing and doing mechanical work on pool packs .

**Operating Controls with Feet**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously Frequently Occasionally **Rarely** & Highly Repetitive  
of for 5-10 at a time for up to 1 hr. total in a work shift while operating forklift or pallet jack

**Reaching above shoulder height**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously **Frequently** Occasionally Rarely **& Highly Repetitive**  
for 1 hr. at a time for up to 4 hrs. total in a work shift while repairing HVAC and PoolPacks

**Reaching at waist to shoulder height**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously **Frequently** Occasionally Rarely **& Highly Repetitive**  
for 1 hr. at a time for up to 4 hrs. total in a work shift while repairing HVAC and PoolPacks

**Reaching at knee to waist height**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously **Frequently** Occasionally Rarely & Highly Repetitive  
for 1 hr. at a time for up to 4 hrs. total in a work shift while repairing HVAC and PoolPacks

**Reaching at floor to knee height**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously **Frequently** Occasionally Rarely & Highly Repetitive  
for 1 hr. at a time for up to 4 hrs. total in a work shift while repairing HVAC and PoolPacks

**Lifting 1-10 pounds**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously Frequently **Occasionally** Rarely & Highly Repetitive  
of 1-10# for 30 minutes at a time for up to 2.5 hours total in a work shift. Most commonly occurs  
with weights of 1-10 pounds at waist height while lifting hand tools and small parts.

**Carrying 1-10- pounds**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously Frequently **Occasionally** Rarely & Highly Repetitive  
of @1-10# for distances of 10' to 300 yards w/weights of 1-10# for 30 minutes at a time for up to  
2.5 hours total in a work shift. Most commonly occurs with weights of 1-10 pounds at waist height while  
lifting hand tools and small parts.

**Lifting 11-20 pounds**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously Frequently **Occasionally** Rarely & Highly Repetitive  
of for at a time for up to total in a work shift. Most commonly occurs with weights of at to  
height while

**Carrying 11-20 pounds**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously Frequently **Occasionally** Rarely & Highly Repetitive  
of 1-10# for 30 minutes at a time for up to 2.5 hours total in a work shift. Most commonly occurs  
with weights of 1-10 pounds at waist height while lifting hand tools and small parts.

**Lifting 21-50 pounds**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously Frequently **Occasionally** Rarely & Highly Repetitive  
of 21-50# for 30 minutes at a time for up to 2.5 hours total in a work shift. Most commonly occurs  
with weights of 21-50 pounds at waist height while lifting/carrying HVAC and Poolpack parts.

**Carrying 21-50 pounds**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously Frequently **Occasionally** Rarely & Highly Repetitive  
of 21-50# for distances of 8-10 feet for 30 minutes at a time for up to 2.5 hours total in a work shift.  
Most commonly occurs with weights of 21-50 pounds at waist height while lifting/carrying HVAC and  
Poolpack parts.

**Lifting 51-100 pounds**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously Frequently **Occasionally** Rarely & Highly Repetitive  
of 51-100# for 10 minutes at a time for up to 1.5 hours total in a work shift. Most commonly occurs  
at waist height while lifting/carrying HVAC and Poolpack parts from equipment to cart.

**Carrying 51-100 pounds**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously Frequently **Occasionally** Rarely & Highly Repetitive  
of 51-100# 4-10 feet for 10 minutes at a time for up to 1.5 hours total in a work shift. Most commonly  
occurs at waist height while lifting/carrying HVAC & Poolpack parts from equipment to cart.

**Lifting 100+ pounds**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously Frequently Occasionally **Rarely** & Highly Repetitive  
of 120# for 5 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs with  
weights of 120# at waist height while moving motor from compressor to cart.

**Carrying 100+ pounds**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously Frequently Occasionally **Rarely** & Highly Repetitive  
of 120# for 5 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs with  
weights of 120# at waist height while moving motor from compressor to cart.

**Pushing and Pulling**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously Frequently **Occasionally** Rarely & Highly Repetitive  
of cart for distances of 10' to 500 yards at a time with a force of 30-50# for 10 minutes at a time for  
up to 1.5 hours total in a work shift while

**Handling**

Health Care Provider initials if restricted\_\_\_\_\_

**Continuously** Frequently Occasionally Rarely & Highly Repetitive  
while with for at a time for up to total in a work shift while

**Operating Controls with Hands**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously **Frequently** Occasionally Rarely & Highly Repetitive  
of electronic controls and timing equipment for up to 1 hour at a time for up to 4 hours total in a work  
shift while setting up or repairing LAN, timing and other electronic equipment.

**Fingering**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously **Frequently** Occasionally Rarely & Highly Repetitive  
of electronic controls and timing equipment for up to 1 hour at a time for up to 4 hours total in a work  
shift while setting up or repairing LAN, timing and other electronic equipment.

**Feeling**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously **Frequently** Occasionally Rarely & Highly Repetitive  
of tools and parts for 20-120 minutes at a time for up to 4 hours total in a work shift while

**Talking**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously **Frequently** Occasionally Rarely & Highly Repetitive  
with event staff, co worker, vendors, for up to 2 hours at a and up to 6 hours total in a work shift while  
helping run swim meet and similar events.

**Hearing**

Health Care Provider initials if restricted\_\_\_\_\_

Continuously **Frequently** Occasionally Rarely & Highly Repetitive  
with event staff, co worker, vendors, for up to 2 hours at a and up to 6 hours total in a work shift while  
helping run swim meet and similar events.

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## Seeing

Health Care Provider initials if restricted

**Continuously** Frequently Occasionally Rarely

for 2 hours at a time for 10 hours total in a work shift while performing varied essential functions.

## Working with Heightened Awareness

Health Care Provider initials if restricted

Continuously Frequently **Occasionally** Rarely

For 5-10 minutes at a time for up to 3 hours total total in a work shift while

## ENVIRONMENTAL FACTORS

Work is performed in a setting

**The noise level is**

Approximately 80 decibels. The noise is caused by machinery.

HCP Initials if Restricted

**Work environment may include the following exposure(s):**

## Outside weather

## Non-weather related temperatures above 75 degrees

Wet

Humidity/dampness

## Fumes

## Odors

## Dusts

## Mists

## Gases

### Moving mechanical parts

## Vibration

## Working in high, exposed places

Toxic or caustic chemicals

## Confined spaces

Other:

HCP Initials if Restricted

### POTENTIAL MODIFICATIONS TO JOB:

1. There are many situations in which employees are required to lift more than 100 pounds, even when there are two or more available. In some cases the limited available space does not lend itself to either lift equipment or additional bodies. But in some cases workers may benefit from compact lift device such as the Alumalift (see: <http://www.alum-a-lift.com/>). Costs vary depending on equipment and accessories selected but start at @ \$3500.00
2. Given lifting and confined space entry requirements, efforts should be made to have two employees on hand for those events.
3. NIOSH findings indicate that even for healthy male workers, there is no safe lift of over 90# if the load is 15" or more from the person, as is often the case when removing motors from PoolPacks, fans.



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and other pieces of equipment. For that reason it would be best if there were two persons to perform that lift

4. Also, if there is only one worker on duty, a mobile emergency "panic" system would be highly recommended (cost \$27/month) along with identifying other pool staff as "safety" persons to receive panic calls. There are many such systems on the market including "Life Station" ([www.lifestation.com](http://www.lifestation.com)), Voice Shot-Urgent Alert ([www.voiceshot.com](http://www.voiceshot.com)) and others.

## SIGNATURES

Signatures on this page are obtained before the document becomes available for use and are not required each time the document is reused. Obtained signatures are kept on file at King County Safety & Claims. The Health Care Provider signature section is separate and appears on the following page.

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Printed name & title of VRC evaluator

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Signature of VRC evaluator

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Date

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Printed name & title of contact

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Signature of contact

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Date

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Printed name & title of employee

---

Signature of employee

---

Date

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### HEALTH CARE PROVIDER SECTION

Check all that apply

- ☐ The employee is released to perform the described duties without restrictions on performance or work hours as of \_\_\_\_\_.
- ☐ The employee is released to perform the described duties on a reduced schedule as of \_\_\_\_\_. The recommended schedule is: \_\_\_\_\_  
☐ Temporary until \_\_\_\_\_ ☐ Permanent as of \_\_\_\_\_
- ☐ The employee is released to perform the described job with the following modifications: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
☐ Temporary until \_\_\_\_\_ ☐ Permanent as of \_\_\_\_\_
- ☐ The employee is not released to perform the described duties due to the following job functions: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
☐ Temporary until \_\_\_\_\_ ☐ Permanent effective \_\_\_\_\_
- ☐ The employee is unable to work in any capacity.  
A release to work is: ☐ anticipated by \_\_\_\_\_ ☐ Not expected

The limitations are due to the following objective medical findings:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Printed or typed name and phone number of Health Care Provider

Signature of Health Care Provider

Date