

# Job Analysis Form

Alternate Format Available



King County

## SHORT FORM FOR PRE-EMPLOYMENT PHYSICALS

Physical Required: General physical, Diabetes, BP, Vision, Back strength and lifting and Audiogram.

PATIENT NAME: \_\_\_\_\_

JOB TITLE: Wastewater Process Engineer II

DEPARTMENT: Natural Resources, Wastewater

WORK SCHEDULE: 40/week

JOB DESCRIPTION: Performs a variety of fully proficient professional engineering duties. Incumbents will develop, plan and direct engineering feasibility studies to improve unit process performance, to research new equipment and chemicals, and commission new equipment associated with a wastewater treatment facility. In addition, incumbents will develop specifications for wastewater treatment processes to assist design engineers in the development of plans and specifications for contract services.

WORK ENVIRONMENT: Wastewater treatment plant.

ESSENTIAL FUNCTIONS: This classification must perform the essential duties of the Wastewater Process Engineer I and the following additional duties; Develop and conduct engineering feasibility studies and projects to optimize plant processes to ensure maximum performance and cost effective operation. Research, evaluate and make recommendations on alternatives for purchases of new equipment, operating procedures and chemicals. Develop procedures for and implement the start up and commissioning of new equipment. Direct or assist in troubleshooting equipment and process problems. Develop specifications to assist design engineers in the development of plans and specifications for equipment purchases, new processes and process improvements. Serve as the client representative for the plant operations and maintenance which includes but is not limited to reviewing and making recommendations on engineering plans and specifications, proposed project scope of work and pre-design criteria to ensure compatibility and acceptable plant performance standards. Serve as contract administrator and engineer for assigned projects. Monitor consultants and contractors work, progress payments and change orders and assist in resolving conflicts. Train wastewater treatment facility staff or act as the technical subject matter expert for new or existing equipment, systems, or processes. Work with plant training and education staff involved in the development and implementation of training courses and materials regarding new or modifications to existing equipment, systems or processes. Work with technical publications staff involved in the preparation of operating manuals associated with equipment and processes. Monitor and project energy and chemical usage in plant, pump stations and treatment facilities processes and general wastewater treatment facility operations. Identify and notify supervisory and management staff of changes in energy and chemical usages to ensure that processes are operating at an optimal level in terms of work hours, equipment, chemicals and power costs. Prepare progress reports, project proposals and technical reports.

### Exposures:

- Outside weather
- Non-weather related temp below 55°
- Non-weather related temp above 75°
- Humidity/dampness
- Moving mechanical parts
- Exposed high places
- Vibration
- Toxic or caustic chemicals
- Confined spaces
- Wet
- Gasses
- Fumes
- Odors
- Dusts
- Mists
- Radiation
- Explosives
- Noise Level 80-100 DBL
- Other \_\_\_\_\_

### Special Requirements:

- CDL    Respirator use

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PHYSICAL DEMAND	HRS PER SHIFT
Standing	2 – 4 hours
Walking <input checked="" type="checkbox"/> uneven terrain	2 – 4 hours
Sitting	2 – 4 hours
Climbing stairs	0 – 15 minutes
Climbing <u>ladder</u>	0 – 15 minutes
Balancing	0 – 2 hours
Bending/Stooping	0 – 2 hours
Kneeling	0 – 1 hour
Crouching	0 – 1 hour
Crawling	0 – 1 hour
Foot controls	30 min – 2 hours
Reaching above shoulders	1 – 2 hours
Reaching waist-shoulder	2 – 4 hours

PHYSICAL DEMAND	HRS PER SHIFT
Reaching knee-waist	1 – 2 hours
Reaching floor-knee	1 – 2 hours
Lifting/Carrying 1-10#	2 – 6 hours
Lifting/Carrying 11-20#	1 – 3 hours
Lifting/Carrying 21-50#	30 min – 1.5 hour
Lifting/Carrying 51-100#	0
Lifting/Carrying 100+#	0
Handling	4 – 6 hours
Hand Controls	0 – 2 hours
Fingering <input checked="" type="checkbox"/> keyboarding	4 – 5 hours
Vision to assure safety of others	0 – 6 hours
Hearing to assure safety of others	0 – 6 hours
Other	

I have reviewed the following Job Analysis for the above-named candidate.

\_\_\_\_\_  
Physician's Signature

\_\_\_\_\_  
Date