Job Task Analysis

Employer: STANISLAUS COUNTY

Occupation: Senior Hazardous Materials Specialist

Company Contact: Risk Management

1010 10th Street

Modesto, California 95354

(209) 525-5710

Date: November 2004; June 2018

Analysis Provided By: Lyle Andersen, PT, CWCE

Andersen Physical Therapy, Inc.

1917 Coffee Road

Modesto, California 95355

(209) 549-4626

INTRODUCTION:

A complete job description is available through STANISLAUS COUNTY Human Resources. The environmental factors, physical and functional demands for this Job Task Analysis were documented by Andersen Physical Therapy, Inc. The methodology for documentation consisted of on-site visits, using various measuring devices such as dynamometers and scales, as well as observation and interviews with employees and managers. A detailed record was made of the physical and functional demands of the job in terms of force pounds, weight, frequency, height, distance, anthropometric measurements, stamina, and degrees of range of motion. The determination of the frequencies of functional activities is based on standards provided by the National Institute for Occupational Safety and Health (NIOSH) and the Work Practice Guide for Manual Lifting (U.S. Department of Commerce, National Technical Information Service).

The Job Task Analysis is organized as follows: General work description; safety requirements; equipment; environmental factors; and physical/functional demands.

GENERAL WORK DESCRIPTION:

The frequency of the following activities may vary according to the physical requirements of the specific job tasks that the employee may be required to perform at random intervals.

Under the general supervision of the department manager, the **Senior Hazardous Materials Specialist** does difficult and highly technical inspections, investigations, enforcement and remediation of hazardous waste/materials laws and regulations requiring specialized knowledge and training. Provides lead supervision to Hazardous Material Specialists.

SPECIFIC DUTIES: Available through the Human Resources Department.

https://www.governmentjobs.com/careers/stanislaus/classspecs

<u>Safety Requirements</u>: All employees are required to observe company safety procedures and standards to insure individual and collective safety, in addition to avoiding unnecessary risk to oneself, co-workers, customers, and property.

Equipment:

- 1. Absorbent material
- 2. Air compressor/pump
- 3. Barricades
- 4. Boxes Water cooler
- 5. Bung wrench
- 6. Can opener
- 7. Categorization kit
- 8. Computer
- 9. Cones
- 10. Doors/buildings/trailer
- 11. Drum dolv
- 12. Drum labels
- 13. Drumliners
- 14. Drums
- 15. Emergency shower and eye wash
- 16. F.I.D.
- 17. Forklift
- 18. G.G.I.
- 19. Gasmet
- 20. Gates
- 21. Generator
- 22. Hammer/mallet
- 23. Hand-held radio
- 24. Hazardous
- 25. IR detector
- 26. Lift gate
- 27. Litmus paper
- 28. Marking pens
- 29. Oil/filter crusher
- 30. P.I.D

- 31. Paint bins w/and w/o rollers
- 32. Painter stirrers
- 33. Pallets
- 34. Phone
- 35. Plastic bags
- 36. Plastic liners
- 37. Plastic tubs
- 38. Pliers
- 39. Propane torch/tank
- 40. Putty knife/scraper
- 41. Radiation detector
- 42. Railer door
- 43. Ratchet/speed wrench
- 44. Rolls of plastic
- 45. SCBA
- 46. Screw driver
- 47. Shovel
- 48. Signs
- 49. Spatulas
- 50. Spray paint broom
- 51. Stencils/pencils
- 52. Switches
- 53. Tables
- 54. Tape
- 55. Temp./perm. Drum ring
- 56. Test tube holder
- 57. Test tubes
- 58. Trailer landing gear
- 59. Vehicle

All employees within the Senior Hazardous Materials Specialist position are required to provide physical assistance for all weight and frequency requirement needs of all job tasks in order to maintain a safe work environment. Employees must be physically capable of working in any of the job tasks within the Senior Hazardous Materials Specialist position.

ENVIRONMENTAL FACTORS



The following percentages are given in terms of an eight-hour workday:

 Seldom =
 1% - 2%
 Frequent =
 34% - 66%

 Occasional =
 3% - 33%
 Constant =
 67% - 100%

	ENVIRONMENTAL FACTORS	MAXIMUM FREQUENCY
1.	Unprotected heights: Ladder, roof tops	Seldom
2.	Being around moving machinery: Road traffic, fork lift, truck	Occasional
3.	Exposure to marked changes in temperature and humidity: outside temperatures may seasonally vary between 28-110 degrees.	Occasional
4.	Exposure to dust, fumes, smoke, gases, or other irritating substances (specify): Reclaimed or waste waste, smoke, sulfur dioxide, anhydrous ammonia, chlorine	Occasional
5.	Driving:	Occasional
6.	Exposure to excessive noise:	Seldom
7.	Exposure to radiant or electrical energy: Radiological isotopes	Seldom
8.	Exposure to solvents or chemicals: **Refer to MSDS document.** Reclaimed or waste waste, smoke, sulfur dioxide, anhydrous ammonia, chlorine	Frequent
9.	Exposure to slippery or uneven walking surfaces: Underdeveloped ground, water, ice, mud	Occasional
10.	Working below ground:	Not Required
11.	Unusual fatigue factors: Emergency response calls wearing protective clothing	Occasional
12.	Working with explosives:	Not Required
13.	Excessive vibration:	Not Required
14.	Working with hands in water or other substance: Hand protection is available	Not Required
15.	Working proximity:	Frequent Constant
16.	Working inside:	Constant
17.	Working outside:	Frequent

FUNCTIONAL ACTIVITIES



The frequency of the following activities may vary according to the physical requirements of the specific job tasks the employee may be required to perform at random intervals.

PHYSICAL AND FUNCTIONAL REQUIREMENTS

FREQUENCY DEFINITIONS	SELDOM	OCCASIONAL	FREQUENT	CONSTANT
Percent of the Day	1-2%	3-33%	34-66%	67-100%
Material Handling	1-4 Reps	5-32 Reps	33-250 Reps	251-2,000 Reps
Non Material Handling	1-4 Reps	5-32 Reps	33-250 Reps	251-2,000 Reps
Repetitive & Static Work	1-50 Reps	51-250 Reps	251-1,000 Reps	1,001-20,000 Reps

1.) PUSH: Pushing activities may require use of the back in conjunction with leg and arm musculature.

MAXIMUM REQUIREMENT

0-10 pounds: Occasional11-25 pounds: Seldom26-35 pounds: Seldom36-50 pounds: Seldom

51-100 pounds: Not Required Maximum Force: <u>50</u> Pounds

Assistive Devices: 4-Wheel Cart, Hand Truck. Additionally, one or more person(s) assistance is available with forces greater than 50 pounds.

Comments: Pushing is utilized with activities such as retrieving, returning, storing, adjusting, moving and/or transporting waste, equipment, and supplies (e.g. carts, doors, waste). The employee exerts up to 50 pounds of force in a horizontal plane between waist and shoulder height of a distance up to 50 feet when performing job tasks (e.g sweeping, shoveling; maintaining storage containers; shifting through hazardous waste site for investigation; open/close doors, drawers, gates).

2.) PULL: Pulling activities may require use of the back in conjunction with leg and arm musculature.

MAXIMUM REQUIREMENT

0-10 pounds: Occasional 11-25 pounds: Seldom 26-35 pounds: Seldom 36-50 pounds: Seldom

51-100 pounds: Not Required **Maximum Force: 50** Pounds

Assistive Devices: 4-Wheel Cart, Hand Truck. Additionally, one or more person(s) assistance is available with forces greater than 50 pounds.

Comments: Pulling is utilized with activities such as retrieving, returning, storing, adjusting, moving and/or transporting waste, equipment, and supplies (e.g. carts, doors, waste). The employee exerts up to 50 pounds of force in a horizontal plane between waist and shoulder height of a distance up to 50 feet when performing job tasks (e.g. sweeping, shoveling; maintaining storage containers; shifting through hazardous waste site for investigation; open/close doors, drawers, gates). *Pushing is the preferred method of moving carts*.

3.) STAND-UP LIFT: Lifting weighted objects between floor and waist height.

MAXIMUM REQUIREMENT

0-10 pounds: Occasional 11-25 pounds: Seldom 26-35 pounds: Seldom 36-50 pounds: Seldom

51-100 pounds: Not Required Maximum Force: 50 Pounds

Assistive Devices: One or more person(s) assistance is available with weights greater than 50 pounds.

Comments: A stand-up lift is utilized with activities such as retrieving, returning, storing, adjusting, moving and/or transporting waste, equipment, and supplies (e.g. containers, bags, waste, contaminate). The employee lifts items weighing between <1 pounds and 50 pounds when performing job tasks (e.g. waste or contaminated sil, containers stored in buckets, drums, cylinders, plastic bags; drug paraphernalia; miscellaneous hazardous chemical spills; shovelfuls of soil or other contaminated waste). Lifting weighted objects up to 75 pounds may occur when employees participate in job functions including Household Hazard Waste Collection and/or Emergency Response due to seldom unavailability of another person. Safe lifting is performed by utilizing a posture of partial squatting and a straight back.

4.) <u>LEVEL LIFT</u>: Lifting weighted objects from between waist and chest height level for a maximum horizontal distance of up to four feet.

MAXIMUM REQUIREMENT

0-10 pounds: Occasional 11-25 pounds: Seldom 26-35 pounds: Seldom 36-50 pounds: Seldom

51-100 pounds: Not Required Maximum Force: 50 Pounds

Assistive Devices: Forklift, 4-Wheel Cart, Hand Truck. Additionally, one or more person(s) assistance is available with weights greater than 50 pounds.

Comments: A level lift is utilized with activities such as retrieving, returning, storing, adjusting, moving and/or transporting waste, equipment, and supplies (e.g. containers, bags, waste, contaminate). The employee lifts items weighing between <1 pounds and 50 pounds when performing job tasks (e.g. waste or contaminated soil, containers stored in buckets, drums, cylinders, plastic bags; drug paraphernalia; miscellaneous hazardous chemical spills; shovelfuls of soil or other contaminated waste). Lifting weighted objects up to 75 pounds may occur when employees participate in job functions including Household Hazard Waste Collection and/or Emergency Response due to seldom unavailability of another person.

5.) WEIGHT CARRY: Carrying weighted objects between waist and chest height beyond a distance of four feet.

MAXIMUM REQUIREMENT

0-10 pounds: Occasional11-25 pounds: Occasional26-35 pounds: Seldom36-50 pounds: Seldom

51-100 pounds: Not Required Maximum Force: <u>50</u> Pounds

Assistive Devices: Forklift, 4-Wheel Cart, Hand Truck. Additionally, one or more person(s) assistance is available with weights greater than 50 pounds.

Comments: Weight Carry is utilized with activities such as retrieving, returning, storing, adjusting, moving and/or transporting waste, equipment, and supplies (e.g. containers, bags, waste, contaminate). The employee carries items weighing between <1 pound and 50 pounds between 5 feet and 25 feet when performing job tasks (e.g. carry waste or contaminated soil, containers stored in buckets, drums, cylinders, plastic bags; drug paraphernalia; miscellaneous hazardous chemical spills; shovelfuls of soil or other contaminated waste; SCBA).

6.) OVERHEAD LIFT/PULL DOWN: Lifting weighted object from/to chest and overhead height level.

MAXIMUM REQUIREMENT

0-10 pounds: Seldom **11-25 pounds:** Seldom

26-100 pounds: Not Required **Maximum Force: 25** Pounds

Assistive Devices: A vertical ladder, step ladder or step stool is available to bring items to eye or shoulder level.

Additionally, one or more person(s) assistance is available with weights greater than 25 pounds.

Comments: Overhead lift/pull down is required to perform job tasks (e.g. miscellaneous overhead storage).

The employee lifts items weighing between <1 pound and 25 pounds to a maximum height of 72 inches when performing job tasks (e.g.

Variables to overhead reaching will be the employee's height and anthropometric reach.

7.) **OVERHEAD REACH:**

MAXIMUM FREQUENCY: Seldom

Comments: Overhead reach is performed to a maximum height of 72 inches when retrieving, returning, storing, stacking and/or transporting waste, equipment, and supplies (e.g. miscellaneous stored items). A ladder (appropriate height) or step stool may be utilized to bring items to eye or shoulder level. Variables to overhead reaching will be the employee's height and anthropometric reach.

8.) **FORWARD REACH:**

MAXIMUM FREQUENCY: Frequent

Comments: Forward reach is performed up to a distance of 28 inches when retrieving, returning, storing, adjusting, moving and/or transporting waste, equipment, and supplies (e.g. desktop work; lift, carry; open/close door, gates, file; hazardous waste response for observation and sorting through worksite; drive vehicle). The degree of elbow extension required for reaching will vary according to the employee's anthropometric reach.

9.) **STOOP**:

MAXIMUM FREQUENCY: Occasional

Comments: Stooping is performed when retrieving, returning, storing, adjusting, moving and/or transporting waste, equipment, and supplies (e.g. lift, carry; hazardous waste response for observation, sort, test and sampling). Variable to stooping will be the employee's height. Stooping of the head, trunk and knees can be minimized or avoided by substituting alternate positions of squatting, kneeling or bending when performing job tasks.

10.) SOUAT: (Unloaded)

MAXIMUM FREQUENCY: Seldom

Comments: Squatting is performed when retrieving, returning, storing, adjusting, moving and/or transporting waste, equipment, and supplies (e.g. hazardous waste response for observations, sorting, testing and sampling). Squatting may be minimized or avoided by substituting alternate positions of bending or kneeling. Partial squatting is a preferred lifting posture.

11.) **FORWARD BEND**:

MAXIMUM FREQUENCY: Frequent

Comments: Bending forward at the waist is performed when retrieving, returning, storing, adjusting, moving and/or transporting waste, equipment, and supplies (e.g. hazardous waste response for observation, sorting, testing and sampling). Maximum forward trunk flexion required is 60 degrees. Employee may minimize or avoid excessive forward bending of the trunk up to 80 degrees by using alternate positions of bending at the hips, kneeling, half kneeling, stooping, sitting or squatting.

12.) **TWIST**:

MAXIMUM FREQUENCY: Occasional

Comments: Twisting at the waist is performed when retrieving, returning, storing, adjusting, moving and/or transporting waste, equipment, and supplies (e.g. hazardous waste response for observation, sorting, testing and sampling; drive vehicle, forklift). Twisting at the waist may be minimized by turning the whole body, including the feet and working from a swivel office chair.

13.) **TURN**:

MAXIMUM FREQUENCY: Occasional

Comments: Turning is performed when retrieving, returning, storing, adjusting, moving and/or transporting waste, equipment, and supplies (e.g. hazardous waste response for observation, sorting testing and sampling).

14.) **KNEEL**:

MAXIMUM FREQUENCY: Seldom

Comments: Kneeling is performed when retrieving, returning, storing, and/or observing waste, substance, equipment, and supplies (e.g. waste and substance sampling, labeling containers, emergency response, clean-up). *Kneeling may be minimized or avoided by substituting alternate positions of bending, squatting, or half kneeling.*

15.) **CRAWL**:

MAXIMUM

FREQUENCY: Not Required

Comments: Crawling is not required when performing job tasks.

16.) **STAIR CLIMB**:

MAXIMUM

FREQUENCY: Seldom

Comments: Stair climb is required in order to go to/from the private businesses or industry where elevators are not available. Maximum number of 21 steps is climbed.

17.) **LADDER CLIMB**:

MAXIMUM

FREQUENCY: Seldom

Comments: Ladder climbing is performed onto/off of safety ladders or steps to access waste, equipment, merchandise and supplies (e.g. vertical safety ladder for inspection). *Variables to overhead climbing will vary according to the employee's height and anthropometric reach.*

18.) **WALK:**

MAXIMUM

FREQUENCY: Frequent

Comments: Walking is performed when retrieving, returning, storing, adjusting, moving and/or transporting waste, equipment, and supplies (e.g. walk to/from worksite, office, parking lot). Walking length varies between 3 feet and 600+ feet depending on job task.

19.) **SIT**:

MAXIMUM

FREQUENCY: Constant

Comments: Sitting is performed for a maximum of 120-minute intervals when performing job tasks (e.g. office work; driving vehicle; meetings)

20.) **STAND**: (Static)

MAXIMUM

FREQUENCY: Occasional

Comments: Static standing is performed for a maximum of 30-minute intervals when performing job tasks (e.g. hazardous waste response for observation, sorting, testing and sampling; operating business machines; meeting with the public, collaborating agency and/or colleague).

21.) **BALANCE**:

MAXIMUM

FREQUENCY: Frequent

Comments: Good balance is required for safe walking, standing, climbing, reaching and lifting.

22.) HAND/FOOT CONTROL:

MAXIMUM REQUIREMENT

HAND:

Right: Occasional
Left: Occasional
Both: Occasional
Either: Not Required

FOOT:

Right: Occasional
Left: Occasional
Both: Not Required
Either: Not Required

Comments: Hand controls are utilized to operate equipment (e.g. vehicle, fork lift) when retrieving, returning, storing, adjusting, moving and/or transporting waste, equipment, and supplies (e.g. drive vehicle; operate fork lift). Foot controls are utilized to operate equipment (e.g. vehicle, fork lift).

23.) UPPER AND LOWER EXTREMITY COORDINATION:

MAXIMUM REQUIREMENT

Simple Grasp: Frequent
 Firm Grasp: Occasional
 Fine Manipulation: Frequent
 Eye/Hand Coordination: Frequent
 Hand/Foot Coordination: Occasional

Comments: Grasping and coordination activities are performed when retrieving, returning, storing, adjusting, moving and/or transporting waste, equipment, and supplies (e.g. desktop work; inspection, hazardous waste response).

Simple grasping is utilized to perform job tasks (e.g. lift and manipulate objects weighing less than 5 pounds).

Firm grasping is utilized to perform job tasks (e.g. lift and handle objects weighing 5 pounds or greater).

Fine manipulation is utilized to perform job tasks (e.g. keyboard, mouse, handwriting, filing, laboratory testing, pouring, measuring).

Eye/hand coordination is utilized to perform job tasks (e.g. keyboard, mouse, handwriting, filing, laboratory testing, pouring, measuring; driving vehicle).

Hand/foot coordination is utilized to perform job tasks (e.g. drive vehicle; operate fork lift). *Depending on individual hand dominance, one hand may be used more frequently than the other when performing job tasks.*

24.) **CERVICAL (NECK) MOVEMENT:**

MAXIMUM REQUIREMENT

Static Neutral Position: Frequent

Flexing: Frequent
Rotating: Occasional
Extending: Seldom

Comments: Neck movement is required when performing job tasks (e.g. drive vehicle; operate fork lift; desktop work; field work site observation and analysis; inspection; emergency response). Participation in the observation of the work environment allows for safe working conditions. Full cervical range of motion is required to safely perform the job tasks.



STANISLAUS COUNTY

JOB TASK ANALYSIS SUMMARY

FREQUENCY DEFINITIONS	<u>SELDOM</u>	OCCASIONAL	FREQUENT	CONSTANT
Percent of the Day	1-2%	3-33%	34-66%	67-100%
Material Handling	1-4 Reps	5-32 Reps	33-250 Reps	251-2,000 Reps
Non Material Handling	1-4 Reps	5-32 Reps	33-250 Reps	251-2,000 Reps
Repetitive & Static Work	1-50 Reps	51-250 Reps	251-1,000 Reps	1,001-20,000 Reps

The following is a summary of the physical demands of the Job Task Analysis that were obtained for the position of:

SENIOR HAZARDOUS MATERIAL SPECIALIST

Functional Activities	Maximum Requirements	Functional Activities	Maximum Requirements
Push (Force) ¹	50 pounds	Stair Climb ¹	Seldom
Pull (Force) ¹	50 pounds	Ladder Climb ¹	Seldom
Stand Up Lift ¹	50 pounds	Walk ¹	Frequent
Level Lift ¹	50 pounds	Sit ¹	Constant
Weight Carry ¹	50 pounds	Stand (Static) 1	Occasional
Overhead Lift/Pull Down	25 pounds	Balance ¹	Frequent
Overhead Reach ¹	Seldom	Hand Control ¹	Occasional
Forward Reach ¹	Frequent	Foot Control ¹	Occasional
Stoop ¹	Occasional	Simple Grasp ¹	Frequent
Squat (Unloaded) 1	Seldom	Firm Grasp ¹	Occasional
Forward Bend ¹	Frequent	Fine Manipulation ¹	Frequent
Twist ¹	Occasional	Eye/Hand Coordination ¹	Frequent
Turn ¹	Occasional	Hand/Foot Coordination ¹	Occasional
Kneel ^t	Seldom	Cervical (neck) Movement ¹	Frequent
Crawl The critical demands of the job.	Not Required		

Lyle Andersen, PT, CWCE
Preparer Signature

Date:

Contact Person
Title

Date:

Contact Person
Title

Contact Person
Title

LA/gm

LA/gm