Hearing Conservation Program

October 2016

San Bernardino Valley College

701 South Mount Vernon Avenue

San Bernardino, California 92410

&

Crafton Hills College

11711 Sand Canyon Road

Yucaipa, California 92399

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Policy Statement

It is the policy of the San Bernardino Community College District to protect the hearing of all workers whose noise exposures equal or exceed an action level of 85 decibels (dB) for an 8-hour day. In accordance with this policy, this organization has established a Hearing Conservation Program. This program applies to all persons working in areas or with equipment that have noise levels of 85 decibels, A weighting (dBA) or higher. This program applies to all operations and work areas where employees and other personnel may be exposed to hazardous noise levels.

Responsibilities

HCP Coordinator

The College Vice President Administration is the program administrator and has the authority and responsibility for implementing and maintaining this Hearing Conservation Program (HCP) for their respective campuses.

Assigned campus designees are as follows:

Vice President of Administrative Services/SBVC, Site Safety Officer
San Bernardino Valley College
Tel: (909) 384-8958
&
Vice President of Administrative Services/CHC, Site Safety Officer
Crafton Hills College
Tel: (909) 389-3210

The HCP Administrators may be assisted in their duties by the District Safety & Risk Management. District Safety & Risk Management can be reached at (909) 382-4030 during regular business hours.

The Program Administrator is responsible for administering the Hearing Conservation Program. Duties of the program administrator include:

- Conduct and document noise surveys areas/activities where potential noise exposures may equal or exceed an 8-hour time-weighted average (TWA) of 85 dBA;
- When notified by employee or employee supervisor, perform a sound-level survey in areas where a change in activity, process, equipment, or controls may have resulted in either an increase or a decrease in employee exposure;
- Notify supervisors and affected employees when monitoring indicates an exposure at or above action level, and participate in the Hearing Conservation Program when it becomes mandatory;
- Identify noise hazard areas and post appropriate signs;
- Organize hearing test (audiometry) program;
- Purchase and select hearing protection devices (HPDs) and recommend appropriate engineering and/or administrative noise controls;
- Develop a training program and ensure annual training of employees enrolled in the HCP in hearing conservation issues and practices; and
- Maintain records of all noise monitoring, training, and instrument calibration.

Supervisors

Duties of the Supervisors include:

- Notify employees of potential noise hazard areas.
- Evaluate the feasibility of engineering and/or administrative noise controls.
- Identify employees exposed to sound levels equaling or exceeding the action level, and report such information to District Safety & Risk Management.

Employees

Duties of all SBCCD employees include:

- Wearing HPDs when entering or working in identified noise hazard areas in accordance with the posted warning;
- Reporting potential noise hazard exposures to the supervisor.
- Complying with the SBCCD HCP requirements when identified as being exposed to sound levels equaling or exceeding the action level.

Employees who do not comply with the provisions of this program will be disciplined in accordance with the SBCCD policy.

Definitions

- Action Level—A sound level equaling an 8-hour TWA of 85 decibels on an A-weighted level (dBA), or equivalently a noise dose of 50 percent, as specified in the OSHA regulation at 29 CFR 1910.95.
- Audiogram—A chart, graph, or table that results from an audiometric test. An audiogram shows an individual's hearing threshold level as a function of frequency (hertz).
- Audiologist—A professional specializing in the study and rehabilitation of hearing who is certified by the American Speech-Language-Hearing Association or licensed by a state board of examiners.
- Baseline Audiogram—Reference audiogram against which future audiograms are compared.
- Decibel (dB)—Unit of measurement of sound level.
- dBA (decibels on an A-weighted level)—A measurement of noise intensity obtained using a sound-measuring instrument commonly used to define degrees of auditory risk. The A-weighting is a measurement that closely parallels the auditory characteristics of normal human hearing.
- Dosimetry—A technique of sound measurement that integrates cumulative noise exposure over time and directly indicates a noise dose.
- Hearing Conservation Program (HCP)—An annual audiometric testing and hearing conservation training program for employees exposed to sound levels equaling or exceeding the action level.
- Hearing Protection Device (HPD)—Personal protective equipment worn by an individual for the purpose of reducing noise exposure, including reusable and disposable earplugs, ear muffs, and similar noise attenuating devices.
- Noise dose—A measure of the noise exposure to which a person is subjected in the workplace.

- Standard Threshold Shift (STS)—A change in hearing threshold, relative to the baseline audiogram, of an average of 10 dB or more at 2000, 3000, and 4000 Hz in either ear, taking into account any changes due to presbycusis (age-related hearing loss).
- Time-Weighted Average (TWA)—Noise exposure averaged over a designated period of time (example: 8-hour TWA).

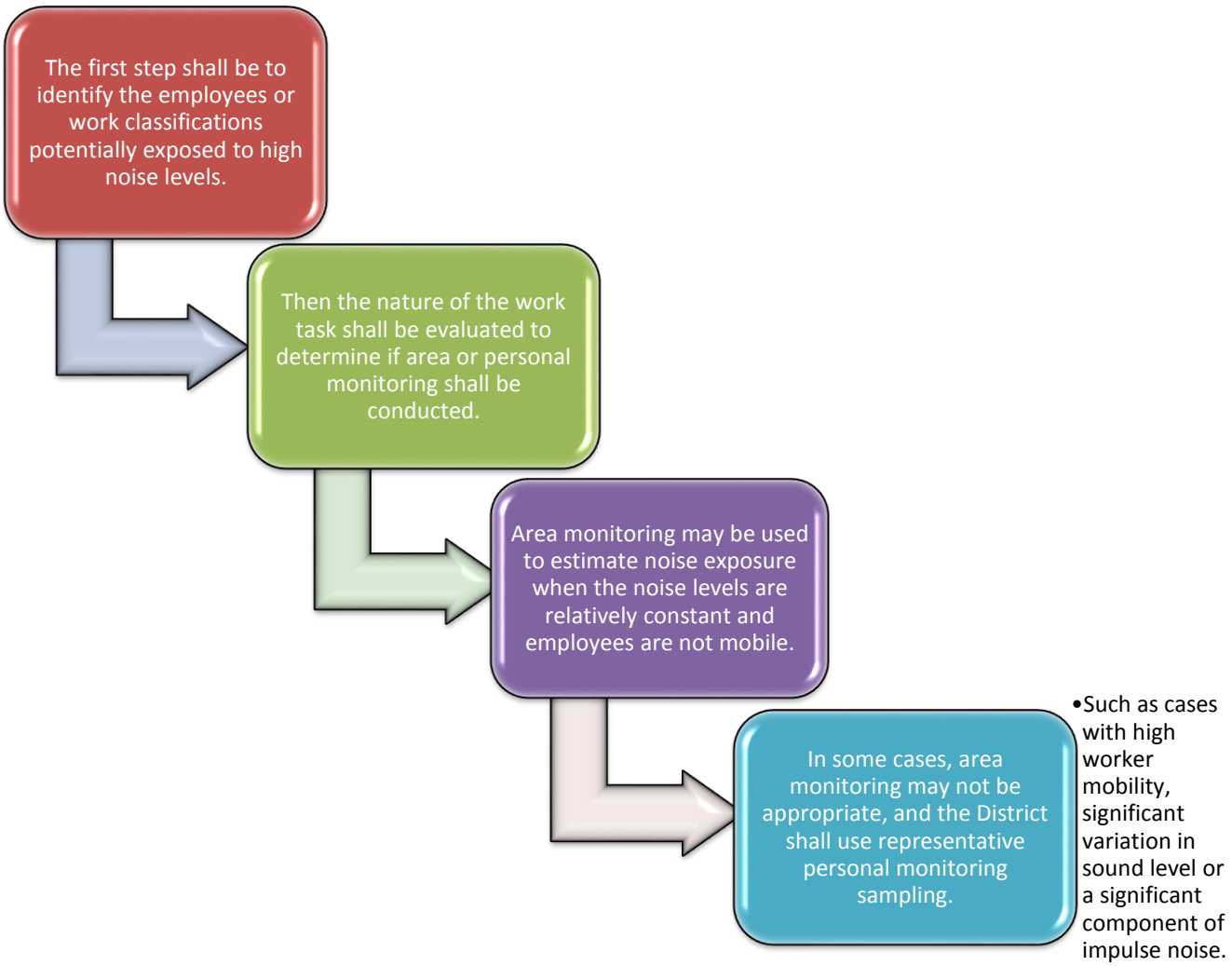
Compliance

Noise Surveys and Monitoring

A noise survey will be conducted to identify the areas where employee noise exposure may exceed an 85 dBA 8-hour TWA. Workers will be monitored in questionable areas with a calibrated audio dosimeter that will measure all continuous, intermittent, and impulsive sound levels between 80–130 decibels on the "A-weighted" scale (slow response). Each employee will be notified of the monitoring results if exposed at or above the 85 dBA TWA. Additional monitoring will be conducted if changes in production, equipment, processes, or controls suggest that noise exposures may have increased.

When information indicates that any employee's exposure may equal or exceed an 8-hour time-weighted average of 85 dBA, the District shall obtain measurements for employees who may be exposed at or above that level. The monitoring may be either area monitoring or personal monitoring that is representative of the employee's exposure.

Noise Monitoring Program



- Such as cases with high worker mobility, significant variation in sound level or a significant component of impulse noise.

Engineering and Administrative Controls

When noise exposure levels exceed the permissible limits, the respective campus will implement engineering controls as the primary mechanism to attenuate noise emissions. The following are examples of engineering controls which may be implemented:

- Install controls on vibrating surfaces.
- Enclose machinery.
- Install barriers or insulation between noise sources and operators.

The following are examples of administrative controls which may be implemented in conjunction with engineering controls to limit the amount of time that an employee works in areas where the 8-hour TWA equals or exceeds 90 dBA:

- Employee rotation
- Scheduling equipment operation

NOTE- Administrative controls will neither be used as a substitute for nor replace applicable requirements for a Hearing Conservation Program.

Audiometry (Hearing Tests)

A mobile test van will be used to conduct baseline audiometric test within one year of the first exposure at or above the Action Level (85 dbA TWA), and at least annually thereafter.

- Baseline audiometric tests will be performed by a licensed or certified audiologist, otolaryngologist, qualified physician, or qualified technician responsible to the audiologist or physician. A baseline audiogram (i.e., hearing test) will be obtained for all employees with noise exposures equal to or greater than an 85 dBA TWA. The baseline audiogram will be obtained within six months of an employee's first exposure to noise above the action level. In the case that a mobile van is used for testing, the audiogram will be obtained within 1 year. Employees will use hearing protection six months after their first exposure until a baseline audiogram is obtained.
    - Both a pre-employment and termination audiogram will be obtained for all employees. Workers will be informed that baseline audiometric testing must be preceded by at least 14 hours without exposure to noise levels above 80 dBA. Workers may use hearing protection to meet this requirement.
    - All audiometric testing and evaluation will be provided free of charge to our employees.
- Annual audiograms are required for all workers with noise exposures equal to or greater than an 85 dBA TWA. An annual audiogram may be substituted for the baseline audiogram when the audiologist or physician evaluating the program declares:
    - A Standard Threshold Shift (STS) is persistent, or
    - The hearing threshold in the annual audiogram indicates a significant improvement over the baseline audiogram.
- If a comparison of the annual audiogram with the baseline audiogram indicates that a STS has occurred, a retest within 30 days will be conducted, and the second test may be considered the annual audiogram. If a STS is confirmed, the employee will be:
    - Informed in writing within 21 days of the determination,

- Referred to an audiologist, otolaryngologist, or qualified physician for further evaluation,
- Provided with both the baseline and the most recent audiogram of the employee and the required records on the audiometer and the audiometric test room, and
- Fitted or refitted with adequate hearing protectors, shown how to use them, and required to wear them.

- Unless the audiologist or physician determines that the STS is not work-related or aggravated by noise exposures in the workplace, the worker will be required to use suitable hearing protection. For workers exposed to noise levels below 90 dBA TWA, the use of hearing protection will continue until subsequent audiometric testing indicates that the STS is not permanent.

HEARING PROTECTION DEVICES (HPDS) AND THEIR USE

The District will make hearing protectors available at no cost to all employees who are exposed to an 8-hour TWA of 85 dBA or greater, required to wear hearing protectors because baseline audiograms have not been established yet, or have experienced a standard threshold shift.

- The District shall provide the employees the opportunity to select their hearing protectors from a variety of suitable hearing protectors.
- All HPDs provided by the District will provide a noise reduction rating (NRR) equal to or greater than 30 db.
- The employees will be trained in the proper use and care of all hearing protectors provided.
- The District will ensure proper initial fitting of hearing protectors.
- Supervisors will be responsible for issuing HPDs and enforcing their use. Failure on the part of the employee to comply with the requirement to correctly wear hearing protection may result in disciplinary action.

Training

Training will be conducted when hearing protection devices are first issued, and annually thereafter. Training will be conducted by District Safety and Risk Management.

Recordkeeping

Records for the HCP will be kept in SBCCD Human Resources office and will include:

- A record of training received by each employee, dated and signed, will be kept on file until next training takes place)
- Sound level meter surveys/noise dosimetry surveys (retained for at least 5 years); and
- Audiometric tests (retained for duration of worker's employment).

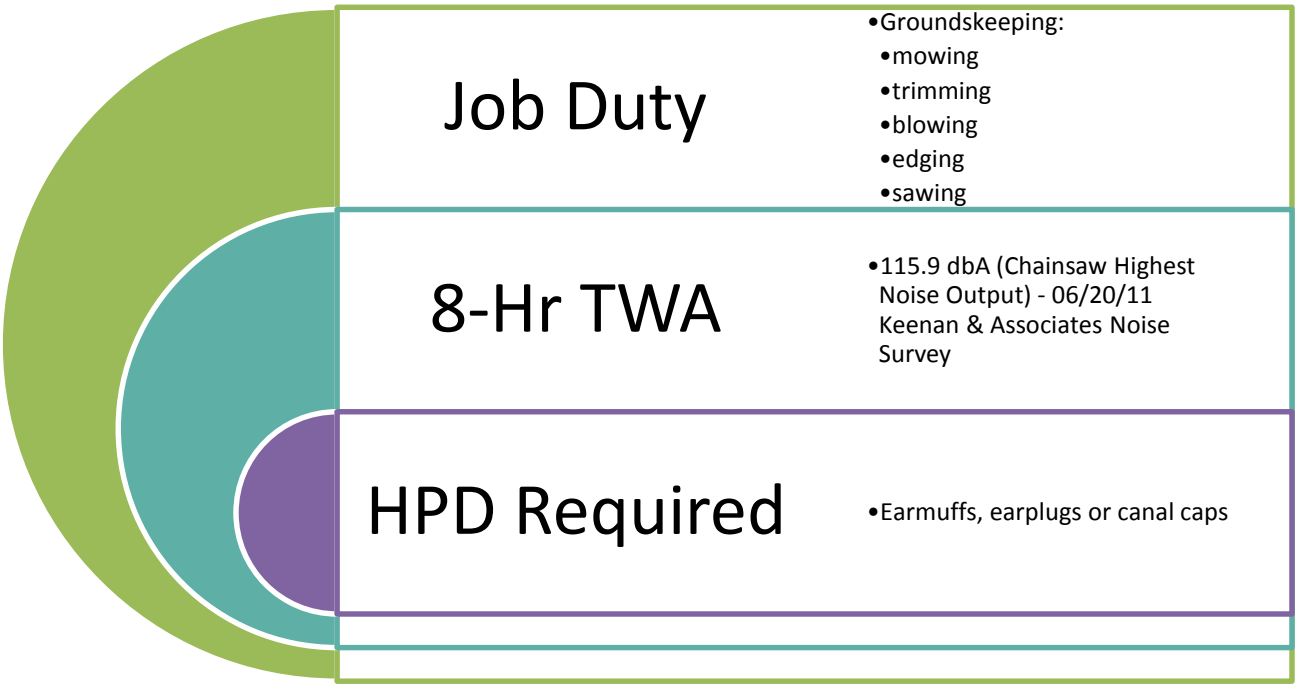
Appendix A-1: SBVC Site Specific Information

College President	• (909) 384-8298
VP Adminsitrative Services	• (909) 384-8958
Adminstrative Services	• (909) 384-8965
SBCCD Safety & Risk Management	• (909) 382-4070
Web Links	• **https://sbccd.org/safetyrisk**

HPDs Will Be Available During All Shifts In The Following Locations:

- Maintenance and Operations Office

Appendix A-2: SBVC Site Specific Information



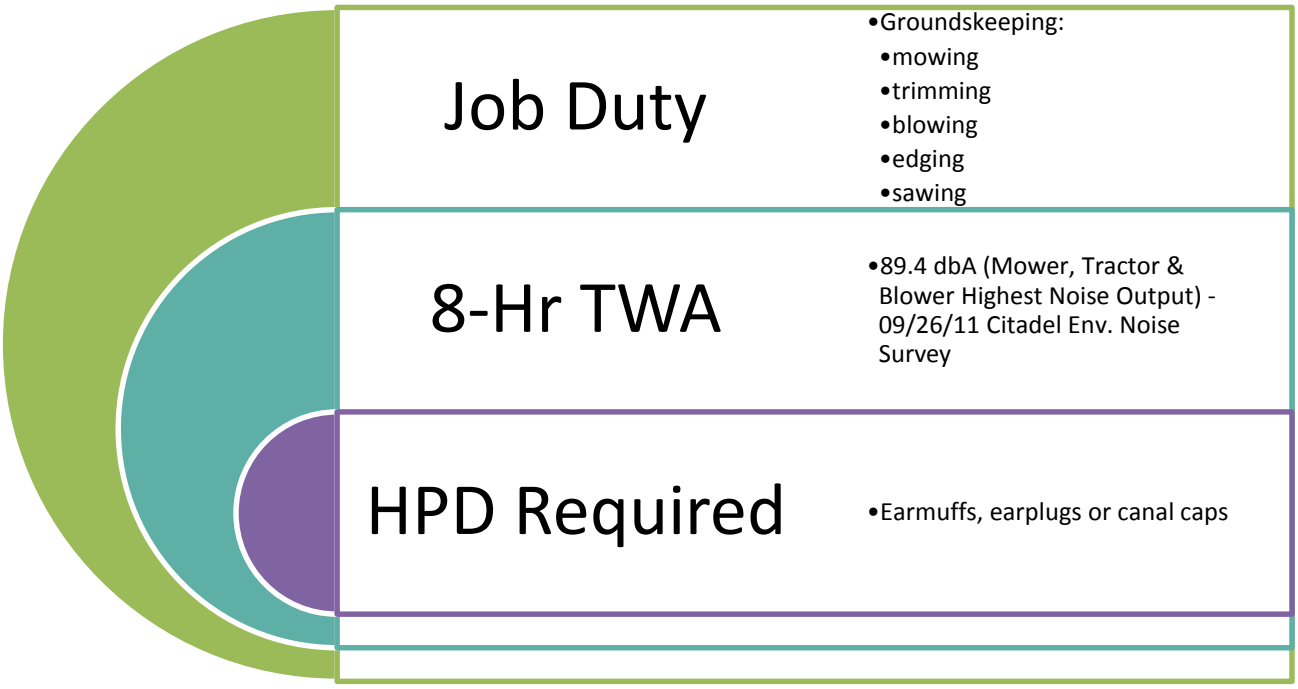
Appendix B-1: CHC Site Specific Information

College President	• (909) 389-3202
VP Adminsitrative Services	• (909) 389-3210
Adminstrative Services	• (909) 389-3211
SBCCD Safety & Risk Management	• (909) 382-4070
Web Links	• **https://sbccd.org/safetyrisk**

HPDs Will Be Available During All Shifts In The Following Locations:

- Maintenance and Operations Office

Appendix B-2: CHC Site Specific Information



Appendix B-3: CHC Site Specific Information

WRITTEN HEARING CONSERVATION PROGRAM

District:	San Bernardino Community College District	**Location:**	Crafton Hills College
Program Effective Date:	Created: December 15, 2011 Revised: October 2016		

Hearing Conservation Program (HCP) Coordinator	CHC, Vice President of Administrative Services
Program Coordinator's Responsibilities:	• Administer HCP • Ensure noise monitoring is conducted • Organize hearing test (audiometry) program • Purchase and select hearing protection devices (HPDs) • Organize employee training • Keep records

NOISE MONITORING

When information indicates that any employee's exposure may equal or exceed an 8-hour time-weighted average of 85 decibels, the District shall obtain measurements for employees who may be exposed at or above that level. The monitoring may be either area monitoring or personal monitoring that is representative of the employee's exposure.

The first step of the monitoring program shall be to identify the employees or work classifications potentially exposed to high noise levels. Then the nature of the employee's work task shall be evaluated to determine if area or personal monitoring shall be conducted. Area monitoring may be used to estimate noise exposure when the noise levels are relatively constant and employees are not mobile. Where circumstances such as high worker mobility, significant variation in sound level or a significant component of impulse noise make area monitoring generally inappropriate, the District shall use representative personal monitoring sampling, unless area sampling produces equivalent results. All continuous, intermittent and impulsive sound levels from 80 dB to 130 dB shall be integrated into the computation. *See Appendix A & E*

AUDIOMETRY (HEARING TESTS)

Mobile test van will conduct baseline audiometric test within one year of the first exposure at or above the Action Level (85dbA time-weighted average) and at least annually thereafter. *See Appendix B*

SUPERVISORS WILL BE RESPONSIBLE FOR ISSUING HPDs AND ENFORCING THEIR USE

The District will make hearing protectors available at no cost to all employees who are exposed to an 8-hour TWA of 85 decibels or greater, required to wear hearing protectors because baseline audiograms have not been established yet, or have experienced a standard threshold shift. The District shall provide the employees the opportunity to select their hearing protectors from a variety of suitable hearing protectors. The employees will be trained in the proper use and care of all hearing protectors provided. The District will ensure proper initial fitting of hearing protectors. Supervisors and management personnel shall supervise and enforce the correct use of all hearing protectors. Failure on the part of the employee to comply with the requirement to correctly wear hearing protection may result in disciplinary action. *See Appendix C*

JOB DUTY	8-HR TWA	HPD REQUIRED
Grounds keeping: mowing, trimming, blowing, edging, sawing	89.4 dbA	Earmuffs, earplugs or canal caps

HPDs WILL BE AVAILABLE DURING ALL SHIFTS IN THE FOLLOWING LOCATIONS
Maintenance and Operations
ALL HPDs WILL HAVE A NOISE REDUCTION RATING (NRR) OF:
Equal or greater than 30 dB

TRAINING WILL BE CONDUCTED WHEN HPDs ARE FIRST ISSUED AND ANNUALLY THEREAFTER	
Training will be conducted by:	District Safety & Risk Management or designee
Using the following aids	Live Training Sessions, Power Point, Visual Aids, Handouts & Videos or Online web-based, safety training
Training will cover	• District HCP • Cal/OSHA Occupational Noise Regulations • Worksite noise monitoring results • Effects of noise on hearing • Purpose and an explanation of audiometric testing • The purpose of hearing protectors; the advantages, disadvantages, and attenuation of various types; and instructions on selection, fitting, use, and care. Other _____

A record of training received by each employee, dated and signed, will be kept on file.

Program effectiveness will be evaluated through regular inspections of each area where hearing protection is used and stored.	
Vice President of Administration *(Person/position)*	will be responsible for evaluation of the program.
Records for the HCP will be kept in	Human Resources/Safety & Risk Management
by	Director, Human Resources/Director, Safety & Risk Mgmt.
The records will include (see Appendix D)	Sound level meter surveys/noise dosimetry surveys (retained for at least 2 years) Audiometric tests (retained for duration of worker's employment) Training records (until next training takes place – one year)

NOISE MONITORING COMPLIANCE CHECKLIST

Designated Responsible Person:	Vice President, Administration – Crafton Hills College

ACTION ITEM	TARGET DATE	DATE COMPLETED/INITIAL
1. Determine whether a sound level meter survey is needed.	7/20/2011	7/20/2011
2. Determine whether a noise dosimetry survey is needed.	9/26/2011	9/26/2011
3 Using noise dosimetry results, determine which jobs, departments, and/or areas need a hearing conservation program (HCP), engineering and administrative noise controls, and hearing protection devices. List below.	10/19/11	10/19/11
4. Notify each employee exposed at or above 85 dBA 8-hr TWA of the results of the monitoring.	11/14/11	11/14/11

	JOB/DEPT./AREA	SOUND LEVEL 8-HOUR TWA	
		Before controls	After controls
Jobs/Departments/Areas with noise levels greater than 90 dBA	NA	NA	
Implement feasible engineering and administrative controls (See Sections 6 & 7 of the kit).			
Implement interim hearing protection and HCP.			
If jobs are still above 90dBA after controls are in place:			
Require hearing protection.			
Implement a HCP.			

	JOB/DEPT./AREA	SOUND LEVEL 8-HOUR TWA
Jobs/Departments/Areas with noise levels equal to or greater than 85 dBA and less than or equal to 90 dBA.	Grounds/M&O	89.4dbA
Implement a HCP.		
Require hearing protection for employees who have incurred a Standard Threshold Shift or who have not had a baseline audiogram.		

AUDIOMETRY COMPLIANCE CHECKLIST

Designated Responsible Person:	Vice President, Administration – Crafton Hills College

ACTION ITEM	TARGET DATE	DATE COMPLETED/INITIAL
1. Establish procedures* to ensure that baseline and annual audiometry is conducted on all employees who are part of the HCP.	1/9/2012	
2. Develop procedures* to review audiometry records periodically to evaluate the effectiveness of the HCP.	2/2012	
3. Obtain relevant licenses, certifications, calibration records, and test booth background sound pressure levels records from the audiometry services provider.	2/2012	

EVALUATION QUESTIONS		
	Yes	No
Has the Audiometry Program Evaluation Checklist form been used to determine the adequacy of your program?	X	

**Describe procedures here*

1. A PO and a contract will be established in August of each year
2. HCP training will be conducted during January of each year. In conjunction with the training, Audiograms will be performed the same day as the training.
3. Obtain documents required in item #3 above from the service provider.
4. Following the audiograms in January and upon receipt of the results, review of the testing records will be completed within one month.

HEARING PROTECTION COMPLIANCE CHECKLIST

Designated Responsible Person:	Director of Facilities (Vice President, Administration)

ACTION ITEM	TARGET DATE	DATE COMPLETED/INITIAL
1. Based on noise exposure levels in each job, department, or area, determine the NRR level(s) necessary to ensure adequate hearing protection.	10/19/2011	10/19/2011
2. Develop procedures* for issuing hearing protection devices (HPDs) and ensuring their use.	1/2012	

	TYPE (EARMUFF, EARPLUG, CANAL CAP)	BRAND/MODEL	NRR	FOR USE IN (JOBS, DEPTS., OR AREAS)
HPD List:	Earplug	Aero TaperFit 2 Model # 300	32db	Blowing, mowing, trimming, tractor
	Earplug	3M E-A-Rsoft # 312-1252	33db	Blowing, mowing, trimming, tractor
	Earmuff	3M #1440	30db	Blowing, mowing, trimming, tractor

**Describe procedures here*

See body of the CHC Conservation Plan for procedures

Locations HPDs are to be made available to employees

CHC M&O Grounds Office

RECORDKEEPING COMPLIANCE CHECKLIST

Designated Responsible Person:	Director of Facilities (Vice President, Administration)

ACTION ITEM	TARGET DATE	DATE COMPLETED/INITIAL
1. Set up a Sound Level Meter Survey/Noise Dosimetry Survey file. (Keep all records of noise monitoring.)	7/2011	8/5/2011
2. Set up an Audiometry Services file. Keep all records pertaining to Audiometry Provider (e.g., licenses, certificates, calibration records, background sound pressure levels).	8/5/2011	8/5/2011
3. Set up an Audiometric Test Results file. (Keep all audiograms here and copies in individual employee files.)	10/19/11	10/19/11
4. Set up an Employee Training Records file.	9/12/11	9/12/11
5. Establish procedures* to keep all files for the appropriate length of time: Sound level meter surveys/noise dosimetry surveys for at least 2 years. Audiometric tests for duration of worker's employment. Training records until next training takes place (one year).	1/31/2012	

Location(s) files are to be kept

Surveys: Safety & Risk Management
Audiometric Testing: HR
Training: SRM, HR, M&O

**Describe procedures here*

Surveys: to be coordinated by the Vice President of Administration
Once Survey is complete, surveyor will send copy to the Vice President of Administration
Director of Facilities will survey send to SRM
Sound Level meter surveys/noise dosimetry surveys shall be retained for at least 2 years (CCR, Title 8, 5100)
Annual audiometric tests shall be coordinated by the Director of Facilities
Test results shall be sent to the Director of Facilities from the testing agency
Director of Facilities shall forward test results to HR
Training records shall be created by the Director of Facilities and forwarded to SRM, HR, and M&O file

NOISE DOSIMETRY SURVERY RECORD

College/District:	Crafton Hills College/SBCCD	Address:	11711 Sand Canyon Rd Yucaipa, CA 92399

Survey Date	Performed by
10/19/2011	Citadel Environmental Services, Occupational Noise Monitoring Report (see attached report for survey information)

Dosimeter Serial Number	Calibration		Representative Employee Last Name, First Name*	Department/Work Area/ Job Title* (provide diagram on back of form)	Time		8-hour Time-Weighted Average (dBA)**	Include in Hearing Conservation Program?	
	Pre-	Post-			Start	Finish		Yes	No

** This information should be fully filled out for record keeping purposes.*
*** Measurements must be made with A-scale, slow-response settings. Monitor for a full shift. All employees with exposure levels at or above the "Action Level" of 85 dBA over an 8-hour time-weighted average (TWA) must be in a "Hearing Conservation Program" and must be informed of their exposure results.*

New dosimetry measurements should be taken whenever changes in production are made (e.g. new production methods, increased production rate, new equipment, etc.
All employee exposure measurement records must be kept for at least two years.