X.9.4 - Example AHA

Activity Hazard Analysis (AHA)

Activity/Work Task: Concrete Place and Finish	Overa	II Risk Asses	sment Co	de (RAC) (U	lse highest	code)	М
Project Location: 10 th & O Street	Risk Assessment Code (RAC) Matrix						
Contractor: Hensel Phelps	Sovority			Probal	bility		
Date Prepared: 10/5/20	Seventy	Frequent	Likely	Occasional	Seldom	Unlikely	
Propared by (Name/Title): Tommy Hann/AS	Catastrophic	E	E	Н	Н	М	
	Critical	E	н	Н	М	L	
Reviewed by (Name/Title): Travis	Marginal H M M				L	L	
McKittrick/PS	Negligible	M	L	L	L	L	
Notes: (Field Notes, Review Comments)	Review each "Ha	azard" with ide	ntified safe	ty "Controls"	and determi	ne RAC (See abo	ove)
	" Probability " is the likelihood to cause an incident, near miss, or accident and identified as: Frequent, Likely, Occasional, Seldom or Unlikely.				R	RAC Chart	
	"Severity" is the	outcome/degree	ee if an inci	dent,	E = Extremely High		
	near miss, or accident did occur and identified as: Catastrophic, Critical, Marginal, or Negligible			ied as: le H	H = High Risk		
	Step 2 : Identify the RAC (Probability/Severity) as E, M = Moder				= Moderate	Risk	
	overall highest R	AC at the top o	AHA. Anno f AHA.		= Low Risk		

Job Steps	Hazards	Controls and Regulatory Reference	RAC
General Construction			
Housekeeping	Slips, trips, and falls	 Keep your work area neat and orderly. Keep your tools and your work area clean as the job progresses. 	М
	Materials impacting employees	 Put garbage, scraps, and other waste in the appropriate container. 	
	Impacting other trades	 Do not allow items to protrude from the container that could injure someone walking by. 	
	Inhalation	 Keep cords and hoses elevated and out of access areas. Never run extension cords across driveways or through doors unless they are physically protected. 	
		 Work tables should only have the tools and materials required to perform the job. Keep the floor of the work area free and clear of debris to avoid trip bazards 	
		 Clean up grease and oil spills immediately using absorbent material. Place in appropriate container for disposal. 	
		 Material that could be blown over by the wind or accidentally shifted should be secured to prevent displacement. 	

COVID-19 Mitigation		 Place material on dunnage to make material handling easier. 2x4's and similar dunnage should be shorter than it is wide to prevent tipping. Do not store tools or material on girders, ducts, lighting fixtures, beam flanges, ceilings or other elevated locations. Do not block emergency egresses (stairs, ramps, doors), fire extinguishers, or emergency disconnect switches. To prevent the dispersal of silica dust, housekeeping practices will be implemented to reduce the buildup of silica dust. Do NOT leave dust piles on floor it could become combustible. Clean up as you go. Dry sweeping, use of blowers and the use of compressed air for the cleaning of floors and other surfaces is prohibited where crystalline silica is present. Floor sweep shall be used for any/all sweeping activities that merit its use. If vacuuming is used, the exhaust air shall be HEPA filter protected to prevent generation of airborne silica concentrations. Emphasis must be placed upon preventive maintenance and repair of equipment, proper storage of dust-producing materials and collection of dusts containing silica. Sanitation shall meet the requirements of 29 CFR 1910.141. 	
	Contraction & Spread of COVID-19	consuming foods	
		Maintaining 6' away from other workers when possible	
		 Avoid snaking hands, high-fives, and physical contact with other workers 	
		Limit group sizes to no more than 10 people	
		Contact HP onsite health advisor if feeling any of the COVID	
		Temperature checks are mandatory upon arriving at the office	
	CONTENT HID	DEN	

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Electrical Safety	Electrical Shock	•	Inspect your cords before each use. If you find a damaged cord, remove the cord from service, red tag the cord, and	М
	Slips, trips, and falls	•	report it to your supervisor immediately. Do not use the cord. Electrical extension cords must be inspected before each	
	Endangering other craft trades		use. Verify that they are construction grade, have the necessary 3 prongs in place, and are free from cuts and damage.	
		•	 Verify that extension cords are a minimum of 12 gauge and rated for hard duty or extra hard duty. Examples of acceptable markings that are embossed on the cord include S, ST, SO, STO, SJ, SJO, SJTO, SJTW. 	
		•	All extension cords must have a ground prong. Do not repair cords with tape. Only qualified personnel may make field repairs. Follow manufacturer instructions.	
		•	Route cords along walls or suspend them with nonconductive material like zip ties. Keep cords out of access areas where they are a trip hazard or will be damaged by equipment.	
		•	If a cord must pass through a door or other pinch point, protect the cord so it does not become damaged. GFCI Protection	
		•	Ground fault circuit interrupters (GFCI) must be used at the source for all activities requiring power on a jobsite, including plugging into permanent power.	
		•	Test the GFCI before each use by pressing the "test" button and then the "reset" button.	

Powered Industrial Equipment Improper operation • Only qualified and authorized employees may operate equipment. M Unsafe ground conditions • Stay away from moving equipment and out of pinch points. • Stay away from moving equipment and out of pinch points. • Stay away from moving equipment and out of pinch points. • Tag and take defective equipment out of service immediately. • Tag and take defective equipment out of service immediately. • Backup atams must be operational and able to be heard above surrounding noise. • Never allow riders on the machine. • Never allow riders on the equipment. • Waar your personal protective equipment within the cab unless all doors and windows are closed and the cab is fully enclosed. • Never allow riders on the equipment. • Defecting Practices • If supplied, wear the seatbelt at all times. • Or the doking, look behind you. Do not rely on the backup allow to the ground utilities. • If supplied, wear the seatbelt at all times. • If supplied, wear the seatbelt at all times. • Use a spotter in tight or congested areas. • When diving, keep the boom, blade, or bucket low to the ground utilities. • Use a spotter in tight or avaid hitting or void hitting or void hitting or void hitting. • Use a spotter in tight or congested areas. • When diving, keep the backup allow avay from traches to keep the machine area and sole to avaid hitting or void is avaid hitting or void			
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Formwork

Formwork Installation & Misc. Rough Carpentry	Cuts from working with tools Trips and falls	•	Make sure that all tools are in good working order. Inspect each tool prior to use and take out of service if not working properly. Make sure blades are sharp so that material cuts clean without binding. Replace blades when they become dull. Practice good housekeeping. Clean up daily. More often if material scraps are creating a hazard. Make sure you have a clear path to your work.	М
	Impalement	•	restraint/arrest system as applies when exposed to a fall of 6' or greater. Inspect fall protection system prior to usage. When driving stakes with a sledge hammer keep hands clear of the impact area. Do not use a damaged hammer. Remove damaged hammer from service.	
	Fuel and ignition	•	Install rebar caps on form stakes to prevent impalement. Make sure power cords are not damaged and ground lugs are intact. Take out of service if found defective. Fill generator with fuel in the morning before starting work. Do not fuel generator while it is running or while it is hot. Keep fuel storage cans away from running generator. Make sure there is a fire extinguisher within 25' of the generator and fuel. Use approved gas cans only. Make sure that fuel cap fits tight when closed and screen is in place. Replace if	

			defective	
		•	Wear proper PPE including gloves while performing	
			formwork installation.	
Setting Formwork		•	Use signage to indicate usage of laser levels. Set laser so	
Setting Formwork	Strains and aprains		that is not at eye level for all workers in area.	
		•	Only lift what you are comfortable to handle	
		•	Use two people to move larger forms and in windy conditions to avoid twisting/turning.	
		•	Use proper lifting techniques for lifting and placing formwork. Avoid awkward body positions. Consult silver code of safe	
			practices book for proper lifting techniques. This book is to be on you at all times.	
		•	Ensure area is clear of loose debris prior to setting forms. Watch for tripping hazards. Keep materials organized throughout formwork operation.	
		•	Operate all roto-hammers and drills per the manufacturer's recommendations with two hands to avoid sprains caused by	
Fabrication Cuts			mishandled torque. Ensure dustless system is being used with roto-hammer. Do not use hammer if dustless system is	
	Scrapes		not in use.	
			Wear gloves at all times. When cutting with razor blades,	
			always cut away from yourself. Change blade frequently to	
	Cute and Corenae		Perce formula non have destanting and reasoning and reason	
Stripping Formwork	Cuts and Scrapes	•	Some formwork may be under tension and may spring when released. When using a stripping bar apply the force to the	L
	Cline tripe and falle		formwork away from the face or body. Do not strike two	
	Slips trips and fails		hammers together using one as a pry bar.	
	Soft tioque injuries	•	Use a proper concrete stake puller when pulling stakes. Do	
			not bend over and grasp stakes by hand to try to pull stakes	
			out.	
		•	Wear leather gloves when stripping formwork to reduce exposure to slivers, cuts, and punctures from nails.	
		•	Remove nails from formwork that will be reused. Pull out all nails on formwork that will be discarded.	
		•	Stack formwork in an organized manner and band the stack	
			to prevent the formwork from falling or shifting especially during transport.	
		•	Clean up the work area after stripping, more often if accumulating debris creates slip, trip, and fall hazards.	
		•	Use clean sweep or vacuum with HEPA filter when cleaning	
			up after stripping to reduce exposure to concrete dust.	
		•	Reducing concrete dust is especially important if stripping	

		 formwork in interior areas. Use clean sweep or HEPA vacuum equipment. If this is not adequate talk to your foreman about proper respiratory protection. Remember you must be fit tested before using a respirator. If it is determined that conditions indicate that a respirator will be used, the area must be isolated and signage must be employed to keep other trades from being affected. Review of the respiratory program and AHA must be done if using respirator. Do not use fans to blow away concrete dust into another area. This will affect the work of other trades. 	
Power tools	Power tool cords	 Ensure there are no nicks or burrs in your electrical cords to prevent electrical shock with your gloves on. If there are and cords with damage take them out of service immediately, and report them to your supervisor. All damaged tools are to be red tagged. Keep all cords off of ground when exposed to wet weather. No lose clothing around any moving power tools. Use 2 hands on any tools that have been manufactured as such. 	L
Skill saw	Cutting or ripping material Wood dust control Kickbacks	 Ensure skill saw blade is set to proper depth when ripping or cutting material. Keep hands and other body parts away from moving blades. Use 2 hands on any tools that have been manufactured as such. Set up saw cut station using saw horses or stacks of plywood, form material. Never support lumber to be cut over a body part such as a foot or leg. Do NOT leave dust piles on floor it could become combustible. Clean up as you go. Use a dust mask when applicable. Use proper body position when cutting. Keep hands and extremities well away from saw blade when making cuts. Secure lumber to work bench as necessary. For example, if you are cutting shims or ripping small pieces of wood. Never position your hand in front of the saw blade and keep two hands on saw at all times. Do not modify blade cover. Consult owner's manual or supervisor with any questions. Unplug or disconnect power to saw when changing out blade. Do not reach underneath the workpiece. The guard cannot protect you from the blade below the workpiece. Less than a full tooth of the blade teeth should be visible below the 	Μ

		workpiece.	
Concrete Related A	ctivities		
Concrete Placing	Chemical burns	 Wear PPE including proper gloves and boots to reduce contact with wet concrete. If concrete gets on skin rinse off with plenty of water 	Concr ete Placin
	Eye injuries	 Concrete in boots and gloves shall be addressed immediately. Remove gloves or boots and rinse with plenty of water before putting them back on to return to work. Gloves and boots need to be taped shut to keep concrete 	g
	Sprains and strains	 from getting into them. All tools and equipment need to be inspected prior to use and be familiar and trained with the proper use of the equipment or power tools. 	
	Slips, trips, and falls	 Ensure vibrator is in good working condition and that cord is good. Have a backup vibrator in area. Use proper refueling cans for backpack vibrator. Wear face shield with safety 	
	Struck by/Caught between Electrical shock	glasses while using vibrator to prevent splatters to the face.If using hoses, hoseman must wear face shield.Use signage to indicate usage of laser levels. Set laser so	
		 that it is not at eye level for all workers. Do not over reach while working concrete or while vibrating concrete. Avoid long term back bent posture while vibrating concrete. Wet concrete is heavy. Position yourself correctly while working concrete to avoid soft tissue injuries. Perform stretch and flex prior to starting and after rest periods. If shovel or come alongs will be used, don't put yourself in awkward positioning while using hand tools. 	
		 All Cords and tools will be protected with Ground Fault Circuit Interrupter (GFCI). Eye wash station to be located within 10 seconds of travel time in the work area. 	
		 When working with wet concrete, protect your skin by wearing long pants that are free of holes and excessive wear. Wear Tyvek pants or rain gear over your pants if needed. 	
		Wear rubber boots when you need to walk through concrete. Tuck your pants inside the boots and be sure to tape your	

		 pants at the top of the rubber boot with impermeable tape. Be sure the boots are high enough to keep concrete away from your skin. Use chemical resistant gloves when handling concrete. Wear a long sleeved shirt with impervious gloves taped at the cuff. Inspect rubber boots and gloves for holes. Don't use if holes are found in them. Be careful while walking on or over reinforcing to place concrete. Do not rush. Be sure of your footing. Be careful while placing concrete. Watch position of truck and chute. Do not get caught between moving truck and edge of excavation. Watch position of other workers When using a wheelbarrow to place concrete ensure a stable and clear path is available and do not fill the wheelbarrow more than half full or no more than can be safely maneuvered by the individual whichever is less. Consumption of food, beverages, tobacco products, nonfood chewing products, and application of cosmetics shall be discouraged in work areas. Hensel Phelps will provide adequate washing facilities to include water and soap. 	
Patching Concrete	Elevated Patching of Concrete	 Mix Patching Material to its specified limit for reduced slump Use materials and work methods that are less labor intensive and allow for shorter periods of reaching overhead Install/ pin nails into the elevated structure as needed to hold/ stabilize the patching material. Ensure stretch and flex for the neck and arms is performed on a frequent basis to avoid stains of working overhead Use a mechanical lift or ladder to raise and position yourself closer to the work. Ensure tight fitting collar and eye protection to ensure falling patching material does not contact skin or eyes Clean up any fallen patching materials immediately especially if it is located on the ladder rungs or floor of mechanical lift to prevent slipping hazards. 	Patchi ng Concr ete
Placing Concrete Using Hand Held Buckets	Slips, Trips, Falls Soft Tissue Injuries (Sprains, Strains) Back Injuries	 When using hand held buckets to place concrete the crew will conduct an additional stretch and flex just prior to beginning the placement. When an extension ladder must be used to access work area, employees will raise buckets using a rope rather than hand carry them up the ladder. An assembly line style of bucket carriers will be set up to 	Placin g Concr ete Using Hand Held

		 minimize the distance each worker will carry each bucket. Each bucket will only be filled up half way so that the buckets are not too heavy. 	Bucke ts
Concrete Placement with Pump	Ground Conditions Working with Pump System	 If using a pump make sure the pump has a clear path of travel to the placement location. Check the ground conditions with the pump operator to determine if additional support besides the pads standard outrigger pads will be required. Provide support as indicated by the pump operator. When available and applicable provide trench plates for each of the outriggers facing the placement and/or transferring the most load to the substrate Do not operate the pump within 20' of overhead power lines. Do not operate the pump boom. Watch overhead when repositioning the boom. Make sure the pump is set up on level, stable ground. The pump operator shall perform a daily inspection of the pump prior to starting pumping operations. Only one person will signal the pump during placement. Review proper pump signals with the operator prior to placement. Check to make sure the proper mix is delivered. The wrong mix may not be pumpable and may burst the system. If using system check to make sure it is not clogged or excessively dirty from previous pumping operations. Make sure the clamps, gaskets, and joints are tight. Avoid tight bends in system. Make sure the area is clear around the placement location and there is room to move the system around. Use lanyards and hooks to move system while pumping. Make sure there are enough workers to move the system while placing to avoid soft tissue injuries. Maintain solid footing and a firm hold on the end of the pump line while depositing concrete. Workers working at the point of deposit as well as workers vibrating concrete should wear a face shield to prevent concrete spatters form getting on the face and in the eyes. 	Concr ete Place ment with Pump
Working with flying concrete Camlever Concrete Container	Struck By, Caught between, Pinching and soft tissue injury, eye injury	 Always plan path of placement in combination with aerial lift positioning if used. Never be in a position where you could be caught between flying equipment and placement area Pay extra attention to hand and arm positioning in relationship to equipment 	Μ

		Never use in high wind conditions	
Finishing Concrete	Slips and Trips Falls Chemical burns	 Know your footing before stepping in or on wet concrete Keep impervious boots and gloves on when handling wet concrete. Tape open ends of boots and gloves. Stretch and flex before beginning finishing by hand. Avoid awkward positions while finishing. Use knee pads when finishing by hand to avoid knee fatigue. When cleaning tools, do not get the wet concrete on your skin. Wear impervious gloves. If "twirly bird" motorized trowel machines are used, equipment must be inspected prior to use. Review manufacturer's operators manual before using machines. 	M
Drilling / Cutting / Coring Concrete	Chemical burns Silica exposure Slips, trips, and falls	 Do not drill into concrete or demo concrete without any dust control measures established such as HEPA vacuum and water. Reference Silica Table attached to this AHA Drills must have a dust collection system approved by the manufacturer. Do not drill into concrete without the dustless system attached. Review manufacturer's instructions prior to using dustless system and drill. When using the manufacturer dust collection system, the Assigned Protection Factor equals none. In order to use a respirator, you must be trained and fit tested. Talk to your foreman/supervisor about using a respirator. Position yourself properly when drilling. Use supplied handles with the tool. Soft tissue injuries can happen when using drill for extended periods of time. Do not grind/chip material without confirming the material type before work starts during the AHA/STA review and while the work is ongoing if conditions change. The confirmation should include but not be limited to material type, potential coatings, and associated preventative measures. If the demolition procedure causes concrete dust to become airborne employees shall: Utilize engineering controls (wet methods, or vacuum methods) to reduce the exposure to permissible levels. 	Μ

Pump Truck	Certified Operator	TBD by pump company

Activities Requiring a Competent or Q	alified Person – Attach Proof of Competen	су
Activity	Designated Compete	ent or Qualified Person
Fall Protection (Competent Persons)	Gabe Vasquez, Francisco Gomez, and	l Luis Davalos
Qualified Rigging (Qualified Persons)	Gabe Vasquez, Francisco Gomez	
Silica (Competent Persons)	Gabe Vasquez, Francisco Gomez, Luis	s Davalos
Trenching, Excavation, and Shoring (Competent Persons)	Juan Calderon	
Signatures /	erification of Review	
Name (Print)	Signature	

AHA Modified and Reviewed			
Name (Print)	Signature	Date	

Specific Exposure Control Methods Table 1

Equipment / Task		Engineering and Work Practice Control Methods	Required Respiratory Protection and Minimum Assigned Protection Factor (APF)	
			≤ 4 hours /shift	> 4 hours /shift
i.	Stationary masonry	Use saw equipped with integrated water delivery system that continuously feeds water to the blade.	None	None
	50005	Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.		
ii.	Handheld power saws	Use saw equipped with integrated water delivery system that continuously feeds water to the blade.		
		Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.		
		- When used outdoors.		
		- When used indoors or in an enclosed area.	None	APF 10
			APF 10	APF 10
iii.	Handheld power saws	For tasks performed outdoors only:		
	board (with blade diameter of 8 inches or	Use saw equipped with commercially available dust collection system.	None	None
	less)	Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.		
		Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency.		

iv.	Walk-behind saws	Use saw equipped with integrated water delivery system that continuously feeds water to the blade.		
		Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.		
		- When used outdoors.		
		- When used indoors or in an enclosed area.		
			None	None
			APF 10	APF 10
۷.	Drivable saws	For tasks performed outdoors only:		
		Use saw equipped with integrated water delivery system that continuously feeds water to the blade.	None	None
		Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.		
vi.	Rig-mounted core saws	Use tool equipped with integrated water delivery system that supplies water to cutting surface.	None	None
		Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.		
vii.	Handheld and stand- mounted drills	Use drill equipped with commercially available shroud or cowling with dust collection system.	None	None
	(including impact and rotary hammer drills)	Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.		
		Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism.		
		Use a HEPA-filtered vacuum when cleaning holes.		
viii.	Dowel drilling rigs for	For tasks performed outdoors only:		
	concrete	Use shroud around drill bit with a dust collection system. Dust collector must have a filter with 99% or greater efficiency and a filter-cleaning mechanism.	APF 10	APF 10
		Use a HEPA-filtered vacuum when cleaning holes.		

ix.	Vehicle-mounted drilling rigs for rock and concrete	Use dust collection system with close capture hood or shroud around drill bit with a low-flow water spray to wet the dust at the discharge point from the dust collector. OR Operate from within an enclosed cab and use water for dust suppression on drill bit.	None	None
			None	None
x.	Jackhammers and handheld powered chipping tools	Use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact.		
		– When used outdoors.	None	APF 10
		- When used indoors or in an enclosed area.	APF 10	APF 10
		OR		
		Use tool equipped with commercially available shroud and dust collection system.		
		Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	APF 10
		Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism.	APF 10	APF 10
		– When used outdoors.		
		- When used indoors or in an enclosed area.		
xi.	Handheld grinders for mortar removal (<u>i.e</u> ., tuckpointing)	Use grinder equipped with commercially available shroud and dust collection system. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	APF 10	APF 25
		diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter- cleaning mechanism.		

xii.	Handheld grinders for	For tasks performed outdoors only:		
	mortar removal	Use grinder equipped with integrated water delivery system that continuously feeds water to the grinding surface.	None	None
		Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.		
		OR		
		Use grinder equipped with commercially available shroud and dust collection system.		
		Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.		
		Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism:		
		greater enciency and a cyclonic pre-separator or niter-cleaning mechanism.		
		– When used outdoors.	None	None
		- When used indoors or in an enclosed area.	None	APF 10
xiii.	Walk-behind milling machines and floor	Use machine equipped with integrated water delivery system that continuously feeds water to the cutting surface.	None	None
	grinders	Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.		
		OR		
		Use machine equipped with dust collection system recommended by the manufacturer. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	None	None
		Dust collector must provide the air flow recommended by the manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism.		
		When used indoors or in an enclosed area, use a HEPA-filtered vacuum to remove loose dust in between passes.		

xiv.	Small drivable milling machines (less than half-lane)	Use a machine equipped with supplemental water sprays designed to suppress dust. Water must be combined with a surfactant. Operate and maintain machine to minimize dust emissions.	None	None
XV.	Large drivable milling machines (half-lane and larger)	For cuts of any depth on asphalt only: Use machine equipped with exhaust ventilation on drum enclosure and supplemental water sprays designed to suppress dust. Operate and maintain machine to minimize dust emissions.	None	None
		For cuts of four inches in depth or less on any substrate:		
		designed to suppress dust. Operate and maintain machine to minimize dust emissions.		
		OR	None	None
		Combined with a surfactant. Operate and maintain machine to minimize dust emissions.	None	None
xvi.	Crushing machines	Use equipment designed to deliver water spray or mist for dust suppression at crusher and other points where dust is generated (<u>e.g.</u> , hoppers, conveyers, sieves/sizing or vibrating components, and discharge points).	None	None
		Operate and maintain machine in accordance with manufacturer's instructions to minimize dust emissions.		
		Use a ventilated booth that provides fresh, climate-controlled air to the operator, or a remote control station.		

xvii. Heavy equipment	Operate equipment from within an enclosed cab.	None	None
used to abrade or fracture silica containing materials (<u>e.g.</u> , hoe-ramming, rock ripping) or used during demolition activities involving silica- containing materials	When employees outside of the cab are engaged in the task, apply water and/or dust suppressants as necessary to minimize dust emissions.	None	None
xviii. Heavy equipment and utility vehicles for tasks such as grading and excavating but not including: demolishing, abrading, or fracturing silica containing materials	Apply water and/or dust suppressants as necessary to minimize dust emissions. OR When the equipment operator is the only employee engaged in the task, operate equipment from within an enclosed cab.	None	None

Hensel Phelps Clinic: Mercy Medical Group – 3000 Q St. (916.733.3333)



• Hensel Phelps Hospital: Sutter General Hospital – 2801 L St (916.454.2222)

