

Industries, Segments, Application Areas, Major Contaminants, Potential Health Effects & Diseases & RPD suggested

SEGMENTS	APPLICATION AREA	MAJOR CONTAMINANTS	POTENTIAL HEALTH EFFECTS / DISEASES	RPD
AGRICULTURE				
Food & Beverages Sugar Mills Fertilizer & Pesticides	Bakeries Crushing Chicken feathers Fertilizers Manufacturers	Grain Dust	Shortness of breath, dry cough, fever, wheezing	P1/P2
		Grain Mold	Farmers lung (Tightness of chest, wheezing) aggravation of allergies	P1/P2
		Field Dust (Nuisance Dust)	Bothersome deposits in nose, mouth and through	P1/P2
		Animal Dander	Coughing, sneezing, aggravation of allergies.	P1/P2
		Animal Odors	Discomfort, reduced productivity	P1/P2
		Chicken Feathers	Nuisance effect, aggravation of allergies	P1/P2
		Fertilizers (Dry powders, granules)	Irritation of nose, throat	P1/P2
		Pesticides (Powders, Granules)	Nosebleed, discolored urine, abdominal pain	P3
ABRASIVE BLASTING (Supplied Air Respirators only)				
		Silica	Silicosis (Coughing, wheezing, impaired lung function, shortness of breath)	P3
BATTERY				
Battery / Cable	Battery Manufacturers Cable Aluminum Melting	Lead (Dust-Fume)	Lead poisoning (damage to blood/kidneys, nervous system)	P1 / P2
		Cadmium (Dust-Fume)	Lung congestion, nausea, kidney damage, yellow teeth	P1 / P2
		Nickel (Dust-Fume)	Asthma, lung congestion, lung damage, kidney damage, lung cancer (certain compounds)	P1 / P2
		Sulfuric Acid (Mist)	Severe irritation of nose, throat, lung, corrosion of teeth	E1 / P1
		Sulfur Dioxide	Nose & throat irritation, lung damage	E1
BRICK AND TILE				
		Clay	Irritation/unpleasant deposits in nose, throat, lungs	P1 / P2
		Silica (Amorphous)	Bothersome deposits in nose, mouth, throat	P3
		Dirt (Diatomaceous earth)	Bothersome deposits in nose, mouth and throat	P1 / P2
CEMENT				
Cements	Cement Producing Industries Crushing Bagging Handling	Asbestos (Various type)	Lung cancer, asbestosis	P3
		Silica (Amorphous)	Bothersome deposits in nose, mouth, throat	P3
		Limestone (Calcium carbonate)	Bothersome deposits in nose, mouth, throat	P1 / P2
UTILITIES				
		Asbestos - various type	Lung cancer, asbestosis	P1 / P2
		Carbon Black	Bothersome deposits in nose, mouth, throat, lungs	P1 / P2
		Fly Ash	Irritation, bothersome deposits in nose, mouth and throat	P1 / P2
		Lead (Dust & Fume)	Lead poisoning (damage to blood/kidneys, nervous system)	P1 / P2

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CERAMICS				
Ceramics	Ceramic Tiles Manufacturers Mixing & Smelting	Silica (Amorphous)	Bothersome deposits in nose, mouth, throat	P1 / P2
		Clay	Irritation/unpleasant deposits in nose, throat, lungs	P1 / P2
		Lead (Dust-Fume)	Lead poisoning (damage to blood/kidneys, nervous system)	P1 / P2
		Fluoride Dust	Nosebleed, sinus trouble, injury to bones, joints, muscles	P1 / P2
		Hydrogen Fluoride	Lung, liver, kidney damage, lung congestion	E1
CHEMICAL				
Chemical	Bulk Drug & Chemical Manufacturers	Fertilizers (Dry & Liquid)	Irritation of nose, throat	P1 / P2
		Pesticides (Dry & Liquid)	Nosebleed, discolored urine, abdominal pain	P1 / P2
		Degreasers	Anesthetic, headaches, dizziness	P1 / P2
		Acids	Severe irritation, bronchitis, Lung, Liver, Kidney damage, lung congestion	E1
		Paint Pigments	Lead poisoning (damage to blood/kidneys, nervous system), Bothersome deposits in nose, mouth, throat	P1 / P2
		Lead Industrial Gases	Lead poisoning (damage to blood/kidneys, nervous system)	P1 / P2
		Sanding/Grinding - Silica - Lead - Metal Oxides	Bothersome deposits in nose, mouth, throat Lead poisoning (damage to blood/kidneys, nervous system) Bothersome deposits in nose, mouth, throat, X-ray shadows Nasal irritation/perforation, kidney damage, lung cancer (certain chromates)	P3
		Cleaning - Solvents - Degreasers - Acids	Anesthetic, headaches, dizziness Severe irritation, bronchitis, Lung, Liver, Kidney damage, lung congestion	P1 odour
Painting Paints Mist & Solvent Vapour	Headaches, nausea, dizziness, irritation	P1 odour		
WOOD-WORKING				
		Wood dust – hard & soft	Lung congestion, asthma, allergic reactions, dry throat, coughing	P1 / P2
		Adhesive solvents	Headaches, dizziness, nausea, liver / kidney damage	OV
		Paint Mist & Solvent Vapor lead (Paint pigments)	Headaches, nausea, dizziness, irritation	OV

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CONSTRUCTION & MAINTENANCE				
Construction & Contractors	Shut down Construction Sites Piping Contraction Sand Blasting Insulating	Asbestos (various type)	Lung cancer, asbestosis	P3
		Fiberglass	Scratchy throats, nasal irritation	P3
		Silica (Amorphous)	Bothersome deposits in nose, mouth, throat	P3
		Wood Dust (Hard & Soft Wood)	Lung congestion, asthma, allergic reactions, dry throat, coughing	P1 / P2
		Cement Dust	Bothersome deposits in nose, mouth, throat, lungs	P1 / P2
		Plaster Dust	Bothersome deposits in nose, mouth, throat, lungs	P1 / P2
		Lead (Dust & Fume)	Lead poisoning (damage to blood/kidneys, nervous system)	P1 / P2
		Paint Mist & Solvent Vapor	Headaches, nausea, dizziness, irritation	P3 odor filter
		Insulation/General Repair - Asbestos - Fiberglass - Cement Dust	Lung cancer, asbestosis Scratchy throats, nasal irritation Bothersome deposits in nose, mouth, throat, lungs	P1 / P2
		Plumbing/Cutting - Asbestos - Lead - Oil Mist	Lung cancer, asbestosis Lead poisoning (damage to blood/kidneys, nervous system) Congestion, lung changes	P1 / P2
		Welding - Lead Fume - Metal Oxides (Dust Fume) - Chromium - Nickel (Stainless Steel) - Zinc (Galvanized)	lead poisoning (damage to blood/kidneys, nervous system) Bothersome deposits in nose, mouth, throat, X-ray shadows Nasal irritation/perforation, kidney damage, lung cancer (certain chromates) Asthma, lung congestion, lung damage, kidney damage, lung cancer (certain compounds) Bothersome deposits in nose, mouth, throat, Flu-like symptoms (chills, fever, nausea, vomiting)	P1 / P2 Odour
		Nickel dust Fumes	Asthma, lung congestion, lung damage, kidney damage, lung cancer (certain compounds)	P1 / P2
		Zinc	Bothersome deposits in nose, mouth, throat, Flu-like symptoms (chills, fever, nausea, vomiting)	P1 / P2
Hydrogen Fluoride	Lung, liver, kidney damage, lung congestion	E1		
Sulfur Dioxide	Nose & throat irritation, lung damage	E1		

SEGMENTS	APPLICATION AREA	MAJOR CON-TAMINANTS	POTENTIAL HEALTH EFFECTS / DISEASES	RPD
METAL				
Engineering	Switch gears Compressors Boilers Vessels Engines Generators Welding Sand Blasting Painting Chrome Plating Powder Coating Buffing Diamond Polishing	Lead (Dust & Mist)	Lead poisoning (damage to blood/kidneys, nervous system)	P1/ P2
		Silica	Bothersome deposits in nose, mouth, throat	P3
		Aluminium	Bothersome deposits in nose, mouth, throat, lungs	P3
		Coal	Block lung	P3
		Cadmium	Lung congestion, nausea, kidney damage, yellow teeth	P1/ P2
		Chromium	Nasal irritation/perforation, kidney damage, lung cancer (certain chromates)	P1/ P2
		Carbon Black	Bothersome deposits in nose, mouth, throat, lungs	P1/ P2
		Coke oven Emission	Lung cancer, kidney cancer	P1/ P2
		Fly Ash	Irritation, bothersome deposits in nose, mouth & throat	P1
		Magnesium oxide (dust- fume)	Stomach upset, flu-like symptoms	P1/ P2
MINING				
Mines – Coal	Open cast / underground mining Industries of Coal : Drilling & Handling	Silica	Bothersome deposits in nose, mouth, throat	P3
		Asbestos	Severe irritation, bronchitis, Lung, Liver, Kidney damage, lung congestion	P3
		Coal	Block lung	P1/ P2
		Iron Ore	Bothersome deposits in nose, mouth, throat, X-ray shadows	P1/ P2
		Lead	Lead poisoning (damage to blood/kidneys, nervous system)	P1/ P2
		Limestone	Bothersome deposits in nose, mouth, throat	P1
		Bauxite	Nasal irritation/perforation, kidney damage, lung cancer (certain chromates), Bothersome deposits in nose, mouth, throat	P3
		Magnesium	Stomach upset, flu-like symptoms	P1/ P2
		Manganese	Dry throat, cough, flu-like symptoms, weakness	P1
		Cadmium	Lung congestion, nausea, kidney damage, yellow teeth	P1/ P2
		Chromium	Nasal irritation/perforation, kidney damage, lung cancer (certain chromates)	P1/ P2
		Gold	Shortness of breath, dry cough, fever, wheezing	P1
		Silver	Blue-gray coloration of eyes (argyria)	P3
		Copper –dust-fume	Irritation, nausea, metal fume, fever, diarrhea	P1/ P2
		Nickel – dust -fume	Asthma, lung congestion, lung damage, kidney damage, lung cancer (certain compounds)	P1/ P2
Zinc – dust - fume	Bothersome deposits in nose, mouth, throat Flu-like symptoms (chills, fever, nausea, vomiting)	P1/ P2		

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PAINTING				
Paints	Paints Manufacturers, Emulsner Paint Fillers & Mixing	Paint Mist & Solvent Vapor lead (Paint pigments)	Headaches, nausea, dizziness, irritation	P1 Odour
TEXTILE				
Textiles	Textile Industries in Synthetic Spinning & Weaving	Cotton dust	Byssinosis (brown lung)	P1 / P2
		Synthetic fiber Dust	Bothersome deposits in nose, mouth, throat	P1 / P2
TRANSPORTATION				
		Asbestos –various type	Lung cancer, asbestosis	P1 / P2
		Lead (Dust & fume)	Lead poisoning (damage to blood/ kidneys, nervous system)	P1
		Metal Oxides (iron oxide)	-Dust bothersome deposits in nose, mouth, throat -Fume X-ray shadows	P1 / P2
		Fiberglass	Scratchy throats, nasal irritation	P1 / P2
		Wood Dust – hard & soft	Lung congestion, asthma, allergic reactions, dry throat, coughing	P1 / P2
		Paint Mist & Solvent vapor	Headaches, nausea, dizziness, irritation	OV
		Solvents		OV
		Acids	Severe irritation, bronchitis, Lung, Liver, Kidney damage, lung congestion	E1
		Degreasers	Anesthetic, headaches, dizziness	OV
		Styrene (fiberglass)	Nausea, headaches, fatigue, drowsiness	OV
TYRE				
Tyre / Carbon Black	Tyre Manufacturers & Carbon Black	Carbon black	Bothersome deposits in nose, mouth, throat, lungs	OV
		Zinc oxide –dust -fume	Bothersome deposits in nose, mouth, throat Flu-like symptoms (chills, fever, nausea, vomiting)	B1
		Talc	Pneumoconiosis (coughing, wheezing, impaired lung function)	P1
		Synthetic Dusts (Misc.)	Bothersome deposits in nose, mouth, throat	P1
		Solvents		A1