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Year of report	Room/Bay		Activity	notes
1957	OA413		Vibration testing equipment	Moved from Bldg 294, Squier
	OA334	1958	High temperature firing - lead and cadmium oxides	Ceramics Laboratory canopy hood
			Spraying glazes and etching with hydrogen fluoride and ceramic mists	spray booth
			Ceramics heating furnace-zirconium oxide	canopy hood
	OA334-330	1969		Electronic Parts and Materials; 1 hood
	OA338	1958	Cleaning rubber mills with toluene Inner Room:	Expoloratory Research
			Shaping pyrophllite test samples	Ultra High Pressure and Temperature laboratory
		1969	Mixing, molding, and curing epoxy, polyester, and polyurethane compounds including toluene diisocyanate and numerous solvents	Plastics Shop, Fabrications Branch
			Power sanding of cured epoxy and polyester resins and wood 1-2 hrs per day	
			Wrapping fiberglass material coated with uncured resins on molds in a lathe	Canopy hood
1955	1st floor		Ozalid reproduction ammonia vapors	Reproduction Branch Machines exhaust ventilated
		1957	Developing blueprints, photostats	Local exhaust ventilation
	1B108A	1958	Carpenter Shop; woodworking	
1955	1B114		Spray painting and cleaning of typewriters machining	Exhaust ventilated spray booth
			arc and acetylene welding	Local exhaust ventilation to be installed for welding ops
		1958	Carpenter Shop; woodworking	
	1B136	1958	Repair of small equipment used in reproduction area; use of oils and Stoddard solvent	Reproduction Department
			Ozalid reproduction using ammonia; 3 large and 1 small machine	

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		Carbon-arc photography exposure in isolated darkroom generating nitrogen oxides	
	1B138	1958	Preparing chemicals for developing, printing, and enlarging film using standard photographic chemicals
		Developing and printing film	
		Xerography using diethyl ether and acetone	
		Carbon arc sensitizing generating nitrogen oxides	
	1B140	1958	Developing, printing, and drying film using standard photographic chemicals
	1B142	1958	Developing, printing, and drying film using standard photographic chemicals
	1B205	1958	Spray painting
		1969	Spray painting small items 6-8 hrs per day
			with 1B208/series of 3 spray booths Paint Shops, Fabrication Branch
	1B207	1958	Sandblasting
			Enclosed cabinet
	1B208	1958	Spray painting
		1969	Spray painting small items 6-8 hrs per day
			Paint Shops, Fabrication Branch
	1B211	1958	Making plastic casts from epoxy resins and isocyanate foam in fume hood
			Laying up laminates
			Spraying plastic fibers on form
			Curing oven
		1969	Plasma flame spraying of metal and ceramic materials up to 8 hrs per day
			Fabrications Branch, Technical Spt. Activity, Welding shop
	1B302	1958	Sheetmetal shop
			Grinding welds and sanding
			Acetylene, arc, and heliarc welding
			Oxyacetylene brazing and soldering
			Forging metal
			2 canopy hoods Enclosed hood
	1B308	1958	Machining using oils and greases
			Arc, heliarc, and acetylene welding on steel

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		and aluminum	
		Acetylene soldering and brazing	
	1B312	1969	Integrated Electronics; 2 hoods
	1B316	Industrial X-Ray equipment	
		1958	Reproduction of engineering prints ammonia and photographic chemicals
	2C127A	1958	Preparing magnetic materials and growing crystals using iron oxide, yttrium dust
			Exploratory Research "E" fume hood
	2C127B	1958	High vacuum evaporating metals Cleaning parts and equipment using acetone
			Exploratory Research "E"
	2C129	1972	2 electron microscopes (RAD)
		1958	preparing screens for electron microscopes using ethylene chloride, methyl alcohol, dioxane, ethyl bromide
			Exploratory Research "E"
	2C131	1972	5 X-Ray diffraction units (RAD)
		1958	Grinding powder samples for X-Ray diffraction using magnetic oxides dusts, ethyl acetate,
			Exploratory Research "E"
1955	2C133		standard laboratory chemicals
		1957	Misc lab operations
			Carbon arc spectrograph operation using silicon and germanium
		1958	Darkroom development of arc spectrograph films using standard photographic chemicals
			Exploratory Research "E"
1955	2C135		Standard laboratory chemicals
			hydrofluoric and other acids
		1957	Misc lab operations
		1958	Preparing phase microscope slides using laboratory reagents
			Component department hood
1955	2C143		Standard lab chemicals
			Power Source Branch 3 hoods
		1958	Charging batteries
			Special Purpose battery branch

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Year of report	Room/Bay		Activity	notes
				3 hoods
	2C201		R&D - ammonia and chlorine	Special Purpose battery branch, R&D of gas activated batteries
		1969	Electroplating lead oxides on nickel;	
				Power Sources; 1 hood
1955	2C203		Machining	oils
1955	2C205	1969		Power Sources Branch
				1 hood not in operation; 1 hood in operation
1955	2C207		Battery development of all types	Power Sources Branch
			Standard lab chemical reagents	
		1958	Developing and testing electrical systems	Special Purpose Battery Branch
			Testing solar batteries by infrared lamps	
		1969		Power Sources; 1 hood not in operation
	2C211	1969	Helium-neon laser	Electronic Components Laboratory
	2C311	1958	Finish lapping; gold, silver, and aluminum plating; sealing of crystals in helium filled containers; soldering	Piezo Electric Crystal Branch vacuum coating process
	2C313	1969	Helium-neon laser in support of X-Ray diffraction studies	Electronic Components Laboratory
	2C313B	1969	2 helium-neon lasers; in-house constructed ruby laser and mercury ion laser - in storage; CO2 laser just arrived	Electronic Components Laboratory
	2C315	1958	Frequency testing of crystals	Piezo Electric Crystal Branch
	2D125	1958	Crystal growing with boron Glass blowing and heating using an acetylene torch	Glass Blowing Shop
	2D127	1972	X-Ray diffraction unit	
		1958	Growing single crystals of semiconductors using silica, boron, and germanium	Enclosed vacuum system
	2D128A	1972	1 Electron microscope	
1955	2D129A			1 hood

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		1957	Misc lab operations	Component department
1955	2D129B			1 hood
		1957	Misc lab operations	Component department
		1958	Gas etch semiconductors using hydrogen, fluorine, and laboratory reagents	fume hood with gas handling system enclosed
	2D130	1958	Darkroom developing using standard photographic chemicals	
	2D133A	1958	Machining metals using cutting and coolant oils Acetylene welding	
	2D133B	1957	Misc lab operations	Component department
		1958	Cutting, grinding, and polishing wafers using ferrites and other dusts	Hoods
	2D134	1972	2 X-Ray diffraction units	
1955	2D135A	1955	Standard laboratory chemicals	
		1957	Misc lab operations	Component department
		1958	Surface area measurements of particles using nitrogen, sulfur dioxide, hydrogen bromide, krypton, helium, and mercury	Closed system handling of gases
1955	2D135B		Cutting, grinding, and polishing metal and artificial abrasive dusts	Crystal Chemistry and Physics Branch exhaust ventilation to be connected to equipment
		1957	Misc lab operations	Component department
		1958	Surface area measurements of particles using nitrogen, sulfur dioxide, hydrogen bromide, krypton, helium, and mercury	Closed system handling of gases
1955	2D137		Standard laboratory chemicals mercury	1 hood
		1957	Misc lab operations	Component department
		1958	Growing crystals using potassium-cobalt cyanide	Closed system handling of gases
			Chemical reactions using laboratory reagents and potassium-cobalt cyanide	fume hood
	2D139	1958	Preparing semiconductors using cadmium sulfide and selenides	Enclosed system for handling materials
			Use of laboratory reagents to prepare chemicals	Fume hood

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Year of report	Room/Bay		Activity	notes
1955	2D140		Battery development of all types	Power Sources Branch
			Standard lab chemical reagents	
		1969		Power Sources; 1 hood
	2D200	1969		Power Sources; 1 hood
	2D207	1969		Power Sources; 1 hood
1957	2D210		Misc lab operations	Power Sources Division
	2D215	1958	Making quartz tubes Glass Blowing shop	Component Research Dept
	2D301	1969	Neodymium-YAG -operational and not in use 2 in-house erbium lasers; 1 inoperable erbium laser	Electronic Components Laboratory
	2D303	1969	5 laboratory constructed CO2 lasers; inoperable krypton laser; active helium-neon laser	Electronic Components Laboratory
	2D304	1969	hydrogen, nitrogen, methane laser	Electronic Components Laboratory
	2D306	1969	helium-neon laser	Piezoelectric crystal and circuitry Branch Electronic Components Laboratory
	2D307	1969	2 erbium lasers; neodymium laser; ruby pulsed laser; helium-neon laser	Electronic Components Laboratory
	2D309	1972	3 X-Ray diffraction units	
		1958	Single sawing of quartz crystals Making quartz disks Lapping disks Solvent containing equipment- perchloroethylene and Stoddard's solvent	Piezo - Electric Crystal Branch
	2D310	1972	1 X-Ray diffraction unit	
		1969	erbium laser	Electronic Components Laboratory
	2D312	1958	Finish lapping; gold, silver, and aluminum plating; sealing of crystals in helium filled containers; soldering	Piezo Electric Crystal Branch vacuum coating process
	2D313A	1969	CO2 laser; helium-neon laser	Electronic Components Laboratory

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Year of report	Room/Bay		Activity	notes
	2D314	1958	Frequency testing of crystals	Piezo Electric Crystal Branch
	3C141	1957	Misc lab operations	Power Sources Division
		1969		Power Sources; 1 hood
	3C143	1958	Cell design and testing	Commercial battery Branch
			Compounding inorganic electrolytes and sealing cells; investigating components of cells	Hoods
			Spot welding	
			Light machining of metal	
1955	3C201		Misc lab operations	Power Source Branch
		1958	Cell design and testing	Commercial battery Branch
			Compounding inorganic electrolytes and sealing cells; investigating components of cells	Hoods
			Spot welding	
			Light machining of metal	
1955	3C203		Misc lab operations	Power Source Branch
				1 hood
		1958	Cell design and testing	Commercial battery Branch
			Compounding inorganic electrolytes and sealing cells; investigating components of cells	Hoods
			Spot welding	
			Light machining of metal	
	3C205	1969		Power Sources ; 2 hoods
	3D140	1958	Chemical analyses using standard chemicals	Power Services Division, Commercial Battery Branch
			Mixing, handling, and storing chemicals	4 booths
			manganese, ammonium, and zinc chloride	
			Ball milling chemicals	
		1969	Refractive index studies of electrolytes; argon laser	Power Sources System Branch
1955	3D141		Miscellaneous lab operations	Power Sources Branch
			Standard laboratory chemicals	Exhaust ventilated fume hoods; air conditioned room

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	3D200	1969		Power Sources; 2 hoods
1955	3D202		Sampling area	Power Sources Branch
		1957	Misc lab operations	
		1969		Power Sources; 1 hood
	3D203	1969		Power Sources; 1 hood
	3D303	1969	Carbon dioxide laser	Electronic components Laboratory
	3D414	1969	gallium-arsenide laser in laser obstacle avoidance techniques helium-neon laser for optical alignment and demonstration	Avionics Laboratory
1955	4C109A		Standard lab chemicals	Photographic Branch 2 hoods
1955	4C109B			Photographic Branch 1 hood
		1958	Vacuum coating plates using selenium metal Chemical analysis	vacuum coating machine /fume hood Fume hood
	4C110			
	4C111	1958	Testing ion exchange resins	
	4C115	1958	Darkrooms for experimental development and printing using standard photographic chemicals	Applied Physics Division, Photographic Branch
	4C117	1958	Darkrooms for experimental development and printing using standard photographic chemicals	Applied Physics Division, Photographic Branch
	4C119	1958	Darkrooms for experimental development and printing using standard photographic chemicals	Applied Physics Division, Photographic Branch
	4C120	1958	Darkrooms for experimental development and printing using standard photographic	Applied Physics Division, Photographic Branch

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			chemicals	
1955	4C129A		Ferric chloride etching solution	Components and Materials Branch
			Organic solvents; standard lab chemicals	2 hoods
		1957	Carbon-arc sensitizing	
	4C129/4D130	1991	Class 10 Clean Room	Electronic Technology Devices Laboratory
			see main report section 2.2.2.2.9	
1955	4C131		Standard lab chemicals; fungi; fungicide	1 hood
		1958	Transferring cultures including nonpathogenic fungi	Mycology laboratory, materials branch
		1969		Integrated electronics; 1 hood
1955	4C143		Mixing magnetic powders	Components and Materials Branch Metal dusts; small quantities; mechanical general ventilation
1955	4C201		Standard lab chemicals	Components and Materials Branch 7 hoods
		1958	Ultrasonic cleaning of parts Chemical distillation, evaporation, and reflux using acids, alkali solvents, ammonia	Chemical Research Unit, Materials Branch, Elastomer section 5 fume hoods
			Storage of corrosive chemicals	fume hood
		1969		Electronic Parts and Materials; 3 hoods
1957	4C203		Misc lab chemicals	hood
		1969		Electronic Parts and Materials; 3 hoods
	4C317	1969	Gallium-arsenide pulsed laser and several smaller gallium-arsenide lasers	Electronic components laboratory
	4C319	1969	Helium-neon laser	Display Techniques Team; Information Acquisition Technical Area
	4C327	1969	Krypton laser; argon laser; helium-neon laser argon laser being installed Xeonon arc lamp used to study response of film to high intensity light; produced ozone	Display Techniques Team; Information Acquisition Technical Area
1955	4D13		Paint Spray Booth	Spray paint booth exhaust ventilated through water curtain
	4D107	1958	Light machining of metal	
1955	4D108		miscellaneous operations	Photographic Branch

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				Standard laboratory chemicals
				Exhaust ventilated laboratory fume hoods
1955	4D110		Standard laboratory chemicals	Photographic Branch
			Hydrofluoric acid and other acids	1 hood
		1958	Chemical analysis	
1955	4D114		Standard lab chemicals	Photographic Branch
			mercury compounds	1 hood
	4D114-4	1958	Chemical analysis	Fume hood
	4D114-5	1958	Chemical analysis	Fume hood
	4D116/4D120	1991	Class 1000 Cleanroom	Electronic Technology Devices Laboratory
			see section 2.2.2.2.9 of main report	
	4D130	1958	Treating metal for adhesion and corrosion resistance using chromate and phosphate solutions and their mists	Electrocoating unit Fume hood
		1958	Electroplating test pieces	Fume hood
1955	4D132	1955	Coatings and adhesives laboratory	Components and Materials Branch
			Experimental plating metal parts	Variety of plating solutions and mists
			Drying parts	Enclosed ventilated oven; thinner vapors
				Exhaust ventilated fume hoods
		1957	Spray application of laquers and resins	Spray paint booth
			Degreasing parts in portable degreaser using perchloroethylene	Natural ventilation
		1958	Spray painting of test panels	Spray booth
			Paint mixing	
			Paint roller mill	
			Degreasing parts using perchloroethylene	
			Dip Cleaning of glassware using xylene, ethyl acetate, toluene, naptha, and mineral spirits	Electrocoating Unit, Materials Branch
	4D134	1958	Paint drying and baking	Electrocoating Unit, Materials Branch

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1955				
1955	4D201			Components and Materials Branch
	4D202		Misc Lab chemicals	Components and Materials Branch
		1969		Electronic Parts and Materials; 4 hood
		1991	Printed Circuit Board Facility	Electronic Technology and Devices Laboratory
			21 open surface tanks; 3 hoods	see Tabel E-2, AEHA IH Study No. 55-61-0268-91
	4D213	1969		Electronic Parts and Materials; 1 hood
	4D214A	1972	2 X-Ray diffraction units	
		1969		Electronic Parts and Materials; 1 hood
	4D312A	1969	2 cyanide lasers	Electronic components laboratory
	4D327	1969	helium-neon laser	Information Acquisition Technical Area, Display Techniques Team
	4D404A	1969	6 helium-neon lasers	Communications and Automatic Data Processing Laboratory
			Experimental communications link to Coles Lab using helium-neon laser	
	Sub-Station	1958	Testing 150KW diesel engine auxiliary power generating unit	