| **G** | **SI** | **Op Sys** | **SI** | **Sys** | **Builder Code, Notes, and Misc** |
| --- | --- | --- | --- | --- | --- |
|  | AAC | Actinide Analytical Chemistry |  |  | Not in Builder |
| P |  |  | HCE | Hot Cell Enclosure | TA 03-0029 Only |
|  |  |  | RMS | Radiation Monitoring System | Includes neutron and gamma detection system. |
| P |  |  | SD | BG Sphere | TA 03-0029 Only |
|  | ACHEM | Analytical Chemistry |  |  | Not in Builder |
| P |  |  | CSPEC | Plasma/Mass Spectrometry |  |
|  |  |  | R5 | Radiochemistry |  |
| P |  |  | SMPPRP | Sample Preparation |  |
| P |  |  | SOLA | Solids Analysis |  |
| P |  |  | SOLCHM | Solution Chemistry |  |
|  | AO | Assembly Operation |  |  | Not in Builder |
| P |  |  | BRUSH | Brushing |  |
| P |  |  | CLNOP | Cleaning Operations |  |
| P |  |  | CRIMP | Tube Crimping |  |
| P |  |  | DOWNDR | Downdraft Room Operations |  |
| P |  |  | ECM | Electro Chemical Marking |  |
| P |  |  | EVB | Evacuation and Bake Out |  |
| P |  |  | FDENSE | Final Density |  |
| P |  |  | FMASS | Final Mass, Volume Displacement System |  |
| P |  |  | GPE | Grinding/Polishing/Etching |  |
| P |  |  | INERT | Inert Storage |  |
| P |  |  | LAZSMP | Laser Sampling |  |
| P |  |  | LEAKS | Leak Testing System |  |
| P |  |  | PTEST | Pressure Proof |  |
| P |  |  | SBPREP | Sample Bottle Preparation System |  |
| P |  |  | SUBLT | Sub Assembly Leak Testing |  |
| P |  |  | ULTRAC | Utrasonic Cleaning |  |
|  | AQCL | Aqueous Chloride |  |  | Not in Builder |
| P |  |  | AMDO | Americium Oxide Dry Operations |  |
| P |  |  | AQCLTP | Aqueous Chloride Transfer Piping |  |
| P |  |  | CALCL | Calcination AQCL |  |
| P |  |  | CLEAR | Chloride liquid effluent actinide recovery line |  |
| P |  |  | CRUSH | Crushing |  |
| P |  |  | DISSCL | Dissolution AQCL |  |
| P |  |  | HYDCL | Hydroxide Precipitation -EXCEL |  |
| P |  |  | IXCL | Ion Exchange AQCL |  |
| P |  |  | OHCL | Hydroxide Precipitation -CLEAR |  |
|  |  |  | OXCL | Oxalate Precipitation AQCL |  |
| P |  |  | SX | Solvent Extraction |  |
|  | AQN | Aqueous Nitrate |  |  | Not in Builder |
| P |  |  | 400FRN | 400 Wing Forensics |  |
| P |  |  | ATDIS | Dissolution ATLAS |  |
| P |  |  | ATLIX | Ion Exchange ATLAS |  |
| P |  |  | CALAT | Calcination ATLAS |  |
|  |  |  | CASDIS | Cascade Dissolvers |  |
| P |  |  | CF | Cementation |  |
| P |  |  | EDDIS | Dissolution AQN |  |
| P |  |  | EV | Evaporation |  |
| P |  |  | HD | Nitrate Dissolution |  |
| P |  |  | HNO3P | Nitric Acid Process Solutions |  |
| P |  |  | NARS | Nitric Acid Recovery |  |
| P |  |  | PMO | Pu Metal Oxidation AQN |  |
| P |  |  | RESIN | IX Resins for Weapons Grade |  |
| P |  |  | RFXCAL | Calcination AQN |  |
| P |  |  | RFXIX | Ion Exchange RFX |  |
| P |  |  | RFXOXP | Oxalate Precipitation AQN |  |
|  | ARIES | Advanced Recovery and Integrated Extraction System |  |  | Not in Builder |
| P |  |  | ACONV | Aries Conveyor |  |
| P |  |  | APC | Aries Pit Cutter |  |
| P |  |  | CONCAN | Packaging: Convenience Can Welder |  |
| P |  |  | DMO2 | Direct Metal Oxidation 2 |  |
| P |  |  | DMO3 | Direct Metal Oxidation 3 |  |
| P |  |  | ELDE | Electrolytic Decontamination |  |
| P |  |  | HEUOPS | Electrolytic Decontamination, Uranium size reduction, Oxidation, and packaging |  |
| P |  |  | HYDHY | Hydride/Dehydride |  |
|  |  |  | ILMS | In-Line Material Storage |  |
| P |  |  | INCAN | Packaging: Inner Can Welder |  |
| P |  |  | NDAPDC | Non-Destructive Analysis |  |
| P |  |  | OUTCAN | Packaging: Outer Can Welder |  |
| P |  |  | PITD | PIT Disassembly |  |
| P |  |  | PSF | Parts Sanitization Furnace |  |
| P |  |  | RBLATH | Robotic Lathe |  |
| P |  |  | RIPS | Robotic Integrated Packaging System |  |
|  | ASR | Aqueous Scrap Recovery |  |  | Not in Builder |
| P |  |  | BLML | Ball Milling ASR |  |
| P |  |  | CALC | Calcination ASR |  |
| P |  |  | DISS | Dissolution ASR |  |
| P |  |  | HYDPRE | Hydroxide Precipitation ASR |  |
| P |  |  | IX | Ion Exchange ASR |  |
| P |  |  | OXPRE | Oxalate Precipitation ASR |  |
|  | BLDG | Building |  |  |  |
|  |  |  | BSMNT | Basement | A20 Basement Construction  A2020 Basement Walls  A202001 Basement Wall Construction  A202002 Moisture Protection  A202003 Basement Wall Insulation  A202090 Other Basement Walls  See FOUND for basement floor. |
|  |  |  | CEILNG | Ceilings | C30 Interior Finishes  C3030 Ceiling Finishes  C303001 Acoustical Ceiling Tiles & Panels  C303002 Gypsum Wallboard Ceiling Finishes  C303003 Plaster Ceiling Finishes  C303004 Wood Ceilings  C303005 Suspension Systems  C303006 Metal Strip Ceilings  C303090 Other Ceiling & Ceiling Finishes  C3040 Int Coatings / Special Finishes  C304004 Metal Finishes |
| R |  |  | CONF | Confinement | Confinement used only for radiological barrier and marine doors.  C10 Interior Construction  C1020 Interior Doors  C102090 Other Interior Specialty Doors (used for radiological and marine doors)  C1030 Specialties  C103090 Other Interior Specialties (use for radiological barriers other than doors) |
| R |  |  | COSTOR | Controlled Storage | C103001 Compartments, Cubicles & Toilet Partitions  Storage area for like ML1 parts. |
| R |  |  | EXTENC | Exterior Enclosure | B20 Exterior Enclosure (Use this when applicable to an entire building)  B2010 Exterior Walls  B201001 Exterior Closure (including siding)  B201002 Exterior Wall Backup Construction  B201003 Insulation & Vapor Retarder  B201004 Parapets  B201005 Exterior Louvers & Screens  B201006 Balcony Walls & Handrails  B201007 Exterior Soffits  B201008 Flashing  B201009 Exterior Painting and Special Coatings  B201010 Exterior Joint Sealant  B201011 Sun Control Devices  B201012 Screen Walls  B201090 Other Exterior Walls (includes gates)  B2030 Exterior Doors  B203001 Solid Doors  B203002 Glazed Doors  B203004 Overhead and Roll-Up Doors  B203005 Hangar Doors  B203006 Blast Resistant Doors  B203007 Gates  B203008 Exterior Door Hardware  B203090 Other Exterior Specialty Doors – Use this for security doors  B203091 Other Exterior Personnel Doors  F10 Special Construction  F1010 Special Structures  F101001 Metal Building Systems  F101002 Exterior Utility Buildings - Put security/guard towers under SEC/PIDAS  F101003 Air-Supported Structures  F101090 Other Special Construction  (Use CONF System when radiological barrier) |
| P |  |  | FIRING | Firing Lanes | Not in Builder  Fixed targets, moveable target mechanisms, berm bullet traps |
| R |  |  | FIXLDR | Affixed Ladders | B20 Exterior Enclosure  B2010 Exterior Walls  B201001 Exterior Closure (includes exterior ladders)  C10 Interior Construction  C1030 Specialties  C103090 Other Interior Specialties (includes interior ladders)  This Sys is for ladders permanently affixed to the building structure. |
| R |  |  | FLOORC | Floors, Construction | B10 Superstructure  B1010 Floor Construction  B101001 Structural Frame  B101003 Floor Decks and Slabs  B101004 Inclined and Stepped Floors  B101005 Balcony Construction  B101006 Ramps  B101007 Floor Raceway Systems  B101090 Other Floor Construction |
|  |  |  | FLORIN | Floors, Interior Finishes | C30 Interior Finishes  C3020 Floor Finishes  C302001 Tile Floor Finishes  C302002 Terrazzo Floor Finishes  C302003 Wood Flooring  C302004 Resilient Floor Finishes  C302005 Carpeting  C302006 Masonry & Stone Flooring  C302008 Stair Finishes  C302009 Floor Toppings and Traffic Membranes  C302010 Hardeners and Sealers  C302011 Raised Access Flooring  C302090 Other Flooring & Floor Finishes |
| R |  |  | FOUND | Foundations | A10 Foundations  A1010 Standard Foundations  A101001 Wall Foundations  A101002 Column Foundations & Pile Caps  A101090 Other Standard Foundations  A1020 Special Foundations  A102001 Pile Foundations  A102090 Other Special Foundations  A1030 Slab On Grade  A103001 Standard Slab on Grade  A103003 Trenches  A103004 Pits and Bases  A103090 Other Slab on Grade  A20 Basement Construction  A2010 Basement Excavation  A201001 Excavation For Basements Use this for basement floors |
| R |  |  | FURNSH | Furnishings | E20 Furnishings  E2010 Fixed Furnishings  E201001 Fixed Artwork  E201002 Window Treatments  E201003 Seating (Fixed)  E201004 Fixed Interior Landscaping  E201090 Other Fixed Interior Furnishings  E2020 Moveable Furnishings  E202001 Moveable Art Work  E202002 Modular Prefabricated Furniture  E202003 Freestanding Furniture  E202004 Rugs & Accessories  E202005 Moveable Multiple Seating  E202006 Moveable Interior Landscaping  E202090 Other Moveable Furnishings |
| R |  |  | INTCON | Interior Construction | B10 Superstructure  B1030 Wall Construction  B103002 Structural Interior Walls  C10 Interior Construction Use when Entire Building Interior  C1010 Partitions  C101001 Fixed Partitions  C101002 Demountable Partitions  C101003 Retractable Partitions  C101004 Interior Guardrails & Screens  C101006 Glazed Partitions & Storefronts  C1020 Interior Doors  C102001 Standard Interior Doors  C102002 Glazed Interior Doors  C102004 Sliding & Folding Doors  C102005 Interior Overhead Doors  C102006 Interior Gates – Use this for security doors  C102007 Interior Door Hardware  C102090 Other Interior Specialty Doors (used for radiological and marine doors under CONF System)  C102091 Other Interior Personnel Doors – Use for door hardware, cipher lockset, with key pad, and Door Frame, Hardware, Motor, Signage, Surface, Window Glass.  C30 Interior Finishes  C3010 Wall Finishes  C301001 Concrete Wall Finishes  C301003 Gypsum Wallboard Finishes  C301004 Tile & Terrazzo Wall Finishes  C301005 Wall Coverings  C301006 Acoustical Panels Adhered To Walls  C301090 Other Wall Finishes  (Use CONF System when radiological barrier)  (Fire doors under FP/FBP) |
| R |  |  | INTFIN | Interior Finishes | C30 Interior Finishes  C3040 Int Coatings / Special Finishes  C304001 General Requirements  C304002 Concrete Finishes  C304003 Concrete Masonry Finishes  C304004 Metal Finishes  C304005 Interior Wood Finishes  C304006 Gypsum Wallboard Finishes  C304007 Special Coatings On Walls  Wall finishes under Sys INTCON. |
| R |  |  | KITCHN | Kitchen Equipment | E10 Equipment  E1090 Other Equipment  E109002 Food Service Equipment  Examples: Walk-in freezer, commercial grills, large ice makers, dishwashers, etc. |
| P |  |  | LAB | Laboratory Equipment | E10 Equipment  E1020 Institutional Equipment  E102003 Laboratory Equipment (Calorimeter, fume hood, with countertop & base, complex, incl. fixtures, sterilizer, Mass Spectrometer, and ovens. Fume hood exhaust scrubbers will be assessed as part of the fume hood. Fume hood exhaust fans are under VNT/EXH.  E1090 Other Equipment  E109090 Other Specialized Fixed and Moveable Equipment  Examples: Incubators, Refrigerators for Specimens, radiation generating devices other than medical or security x-ray equipment. |
|  |  |  | LDRY | Laundry | E10 Equipment  E1010 Commercial Equipment  E101004 Laundry Equipment |
|  |  |  | MISC | Miscellaneous | E1020 Institutional Equipment  E102001 Miscellaneous Common Fixed & Moveable Equipment |
| R |  |  | NSB | Nuclear Support Building | F10 Special Construction  F1010 Special Structures  F101090 Other Special Construction  TA55 only |
| R |  |  | ROOF | Roofing | B30 Roofing  B3010 Roof Coverings  B301001 Steep Slope Roof Systems  B301002 Low Slope Roof Systems  B301003 Roof Insulation & Fill  B301004 Flashings & Trim  B301005 Gutters & Downspouts  B301006 Roof Openings and Supports  B301090 Other Roofing  D20 Plumbing  D2040 Rain Water Drainage  D204002 Roof Drains  D204003 Rainwater Drainage Equipment  D204090 Other Rain Water Drainage System |
| R |  |  | ROOFC | Roof Construction | B10 Superstructure  B1020 Roof Construction  B102001 Structural Frame  B102003 Roof Decks and Slabs  B102004 Canopies  B102090 Other Roof Construction |
| R |  |  | SPSTR | Special Structures | F10 Special Construction  F1010 Special Structures  F101001 Metal Building Systems  F101002 Exterior Utility Buildings - Put security/guard towers under SEC/PIDAS  Includes smoke stacks for steam plants, trash enclosure buildings.  F101003 Air-Supported Structures  F101090 Other Special Construction  Canopies, wood frame and steel roof, or canvas (framing not incl.), tension structures, steel frame, polyester vinyl fabric.  (Use these when applicable to an entire building) |
| R |  |  | STAIRS | Stairs | C20 Stairs  C2010 Stair Construction  C201001 Interior and Exterior Stairs  C201002 Fire Escape Stairs  C201090 Stair Handrails, Guardrails and Accessories  C30 Interior Finishes  C3020 Floor Finishes  C302008 Stair Finishes |
| R |  |  | WCFD | Laboratory Walls, Floors, Ceilings and Doors | Not in Builder  PF4 only |
|  | CGS | Compressed Gas Supply |  |  | D20 Plumbing  D2090 Other Plumbing Systems  Regardless of system, no safety or relief valves will be assessed by Builder. |
| R |  |  | AR | Argon Gas | D209090 Other Special Plumbing Systems |
| R |  |  | AR100 | Argon Gas (100 PSI) | D209090 Other Special Plumbing Systems |
| R |  |  | CA | Compressed Air | D209005 Compressed Air System – Non Breathing Air (Use this for large instrument air systems including dryers. Do not include moisture/oil separators or coolers. Do not include compressors for boilers burner systems. For systems supplying solely HVAC system as found in office or training buildings use the instrument air compressors found under HVAC System.) |
| R |  |  | CG | Calibration Gas | D209090 Other Special Plumbing Systems |
| R |  |  | CH4 | Methane Gas | D209090 Other Special Plumbing Systems |
| P |  |  | CL2 | Chlorine Gas | D209090 Other Special Plumbing Systems |
| P |  |  | CLDEL | Chlorine Gas Delivery | D209090 Other Special Plumbing Systems |
| P |  |  | CLDET | Chlorine Gas Detection | D209090 Other Special Plumbing Systems |
| R |  |  | CO2 | Carbon Dioxide Gas | D209090 Other Special Plumbing Systems |
| R |  |  | H2 | Hydrogen Gas | D209090 Other Special Plumbing Systems |
| R |  |  | HE | Helium Gas | D209090 Other Special Plumbing Systems |
| R |  |  | IAS | Instrument Air System | D209090 Other Special Plumbing Systems |
| R |  |  | LAR | Liquid Argon (cryogenic) | D209090 Other Special Plumbing Systems |
| R |  |  | LN2 | Liquid Nitrogen (cryogenic) | D209090 Other Special Plumbing Systems |
| R |  |  | MULTI | Gas Bottled System | D209090 Other Special Plumbing Systems |
| R |  |  | N2 | Nitrogen Gas | D209090 Other Special Plumbing Systems |
| R |  |  | N2100 | Nitrogen Gas (100 PSI +/-) | D209090 Other Special Plumbing Systems |
| R |  |  | N2H2 | Nitrogen/ 6% Hydrogen | D209090 Other Special Plumbing Systems |
| P  R |  |  | O2 | Oxygen Gas | D209090 Other Special Plumbing Systems |
| R |  |  | P10 | P10 Gas | D209090 Other Special Plumbing Systems |
| R |  |  | PCA | Process Air Supply | D209090 Other Special Plumbing Systems |
| R |  |  | REGEN | Argon/6% Hydrogen Regen Gas | D209090 Other Special Plumbing Systems |
| R |  |  | RL | Refrigerant Liquid | D209090 Other Special Plumbing Systems |
| P |  |  | XE | Xenon Gas | D209090 Other Special Plumbing Systems |
|  | COMM | Communications |  |  |  |
|  |  |  | CCTV | Closed Circuit Television | F10 Special Construction  F1050 Special Ctrls / Instrumentation  F105001 Recording Instrumentation  Security cameras are under SEC, Security. |
| R |  |  | LPS | Local Paging System | D50 Electrical  D5030 Communications & Security  D503002 Public Address Systems |
| R |  |  | PA | Public Address | D503002 Public Address Systems – Use this for intercome also. |
| R |  |  | RC | Radio Communications | G40 Site Electrical Utilities  G4030 Site Communication and Security  G403001 Telecommunications Systems |
| R |  |  | REDNET | Secure Network | D503090 Other Communications & Alarm Systems |
| R |  |  | SPAS | Emergency Paging System | D503002 Public Address Systems |
| R |  |  | TEL | Telecommunications | G403001 Telecommunications Systems |
|  | CONT | Containers |  |  | Not in Builder |
| P |  |  | CNTRC | Credited Containers |  |
| P |  |  | EHS | Encapsulated Heat Sources |  |
| P |  |  | MIS | MIS Containers |  |
|  |  |  | POC | Pipe Overpack Containers |  |
| P |  |  | SCNTR | Containers for Movement of SNM OS GBs | Includes Pipe Overpack Containers, 55 Gallon Drums (With Or Without Overpack), 85 Gallon Drums, Standard Waste Boxes, and Ten Drum Overpack containers. |
| P |  |  | SMPCNT | Non VSS Containers |  |
| P |  |  | TYPEA | Type A Containers |  |
| P |  |  | TYPEB | Type B Containers | Includes TRUPACT-II, HallfPACT, 10-160B, and RH TRU 72B – VSS (P) containers. |
| P |  |  | VWBC | Vault Water Bath Containers |  |
|  | COOLW | Cooling Water Systems |  |  |  |
| R |  |  | CCCW | Central Circulating Chilled Water | D303001 Chilled Water Systems – Use for chillers and condensers  D304006 Chilled Water Distribution Systems – Use for pump, and tanks (expansion, chem feed, etc.)  TA55 Only |
| R |  |  | LVCCW | Limited Volume Circulating Chilled Water | D303001 Chilled Water Systems  D304006 Chilled Water Distribution Systems – Use for pump, and tanks (expansion, chem feed, etc.)  PF4 only |
| R |  |  | NPCCW | Negative Pressure Circulating Chilled Water | D303001 Chilled Water Systems  D304006 Chilled Water Distribution Systems – Use for pump, and tanks (expansion, chem feed, etc.)  PF4 only |
| R |  |  | PPCCW | Positive Pressure Circulating Chilled Water | D303001 Chilled Water Systems  D304006 Chilled Water Distribution Systems – Use for pump, and tanks (expansion, chem feed, etc.)  PF4 only |
| R |  |  | TW | Tower Water | D30 HVAC  D3020 Heat Generating Systems  D302005 Equipment Thermal Insulation  D302090 Other Heat Generating Systems - Use this for heat trace and tank heaters  D3030 Cooling Generating Systems  D303001 Chilled Water Systems  D50 Electrical  D5090 Other Electrical Services  D509090 Other Special Systems and Devices (Use for VFD’s as well as lighting photo sensors) |
| P |  |  | VCCW | Vault Circulating Chilled Water |  |
|  | CRIT | Credited Criticality Safety |  |  | Not in Builder |
| P |  |  | CARTS | SNM Carts |  |
| P |  |  | CRITSP | Engineered Criticality Spacing |  |
|  | CRUC | Crucibles |  |  | Not in Builder |
| P |  |  | CRUCC | Credited Crucibles | (This is for containment of molten Pu metal) |
| P |  |  | CRUCNC | Non-Credited Crucible |  |
|  | CS | Chemical Supply |  |  | D20 Plumbing  D2090 Other Plumbing Systems  D209090 Other Special Plumbing Systems |
| R |  |  | ALNO3 | Aluminum Nitrate |  |
| R |  |  | Biocid | Biocide |  |
| R |  |  | CSC | Chemical Supply Caustic | 500230 Only  Caustic chemical supply, CST-1, CST-2, CST-3, etc. |
| R |  |  | CSP | Chemical Supply Process | 500001  500230 Only  Wet chemical feed, HCl, NaOH, lime, etc. |
| R |  |  | CSTBS | Nitric Acid Storage Tank and Berm |  |
| R |  |  | FeCl3 | Ferric Chloride |  |
| R |  |  | FeSul | Ferric Sulfate | Fe2O12S3 |
| R |  |  | H2O2 | Hydrogen Peroxide |  |
| R |  |  | H2SO4 | Sulfuric Acid |  |
| R |  |  | HCL | Hydrochloric Acid |  |
| R |  |  | HFA | Hydrofluoric Acid |  |
| R |  |  | HNO3 | Nitric Acid |  |
| R |  |  | KOH | Potassium Hydroxide |  |
| R |  |  | MgCl2 | Magnesium Chloride |  |
| R |  |  | MgSO4 | Magnesium Sulfate |  |
| R |  |  | NaCIT | Sodium Citrate |  |
| R |  |  | NaHSO3 | Sodium Bisulfite |  |
| R |  |  | NaOCl | Sodium Hypochlorite |  |
| R |  |  | NaOH | Sodium Hydroxide |  |
| R |  |  | SO2 | Sulfur Dioxide |  |
|  | CTRL | Control Systems |  |  |  |
| R |  |  | BAS | Building Automation System | F10 Special Construction  F1050 Special Ctrls / Instrumentation  F105002 Building Automation Systems (Use this when applicable to an entire building) |
| R |  |  | FCS | Facility Control System | F105002 Building Automation Systems |
| R |  |  | FMS | Facility Management System | F105002 Building Automation Systems  D50 Electrical  D5090 Other Electrical Services  D509006 Energy Management Control System |
| P  R |  |  | ICS | Instrument and Control System | F105090 Other Special Controls and Instrumentation |
| R |  |  | LCS | Local Control System | F105002 Building Automation Systems |
| R |  |  | SCADA | Supervisory Control & Data Acquisition | F105090 Other Special Controls and Instrumentation |
|  | DRYOPS | Material Preparation |  |  | Not in Builder |
| P |  |  | CALCDO | Calcination DRYOPS |  |
|  | DTO | Dynamic Testing Operations |  |  | PF4 Only  Not in Builder |
| P |  |  | 40MM | 40mm Launcher |  |
| P |  |  | 40MMTK | 40mm Launcher Catch Tank |  |
| P |  |  | IFIT | IFIT |  |
| P |  |  | IFITAT | IFIT Ceilng Armr/Catch Tub Sys |  |
| P |  |  | IFITRD | IFIT Relief Device |  |
| P |  |  | KBOP | Kolsky Bar Operations |  |
|  | ECS | Environmental Chamber System |  |  | Not in Builder |
| P |  |  | ECOPS | Environmental Chamber Over-temperature Protection System | WETF |
|  | ENCL | Enclosures |  |  | Not in Builder |
| P |  |  | COVER | Covers for Material at Risk |  |
| P |  |  | ENCLBE | Beryllium Lathe Enclosure |  |
| P |  |  | GB | Gloveboxes |  |
| P |  |  | OM | Oxygen Monitoring | Monitoring for specific oxygen levels within a glovebox or such. Not for personnel health and safety. |
| P |  |  | SPRTC | Credited Support Stands |  |
| P |  |  | SPRTNC | Support Stands, Non-Credited |  |
| P |  |  | TRLLY | Trolley Conveyer System |  |
| P |  |  | WCG | Waste Characterization Glovebox |  |
|  | ES | Electrical Supply |  |  | D50 Electrical |
| R |  |  | 130VDC | 130 Volts Direct Current System | D5090 Other Electrical Services  D509002 Emergency Lighting & Power – Backup and Standby Generators  PF4 Only |
| R |  |  | APS | Auxiliary Power System | D509002 Emergency Lighting & Power – Backup and Standby Generators (Include battery banks not specific to UPS or Emergency Lighting)  D30 HVAC  D3010 Energy Supply  D301001 Oil Supply System – Use for diesel fuel tanks |
| R  U |  |  | CP | Cathodic Protection | G40 Site Electrical Utilities  G4090 Other Site Electrical Utilities  G409001 Sacrificial Anode Cathodic Protection System  G409002 Induced Current Cathodic Protection System |
|  |  |  | EBP | Electric Balance of Plant | D501004 Panelboards [Includes ATS, MTS, Safety Switch (CDD), Switchgear, and Lighting Panels]  D501005 Enclosed Circuit Breakers  D501006 Motor Control Centers |
| R |  |  | EDS | Electrical Distribution System | D5010 Electrical Service & Distribution (Use this when applicable to an entire building)  D501001 Main Transformers – oil-filled, 15 kV with taps, 480 V secondary 3 phase, pad mounted  D501002 Service Entrance Equipment  D501003 Interior Distribution Transformers  D501004 Panelboards [Includes ATS, MTS, Safety Switch (CDD), Switchgear, PDU’s, and Lighting Panels]  D501005 Enclosed Circuit Breakers  D501006 Motor Control Centers  D501090 Other Service and Distribution – Includes bus ducts  D5020 Lighting & Branch Wiring  D502001 Branch Wiring |
| R |  |  | EP | Electrical Power | D501004 Panelboards [Includes ATS, MTS, Safety Switch (CDD), Switchgear, and Lighting Panels]  D501005 Enclosed Circuit Breakers  D501006 Motor Control Centers  500230 Only |
| R |  |  | FDG | Fire Diesel Generator | D509002 Emergency Lighting & Power – Backup and Standby Generators  PF4 only |
| R |  |  | GND | Grounding System | D5090 Other Electrical Services  D509003 Grounding Systems (Use this when applicable to an entire building) (This includes static grounding systems) |
| R |  |  | LPT | Lightning Protection | D5090 Other Electrical Services  D509004 Lightning Protection |
| R |  |  | LTGEXT | Lighting, Normal, Exterior | D502002 Lighting Equipment  Security Lighting under SEC Op Sys and PIDAS Sys  D5030 Communications & Security  D503090 Other Communications & Alarm Systems |
| R |  |  | LTGINT | Lighting, Normal, Interior | D502002 Lighting Equipment (Use this when applicable to an entire building) |
|  |  |  | OBP | Office Building Power | D501004 Panelboards [Includes ATS, MTS, Safety Switch (CDD), Switchgear, and Lighting Panels]  D501005 Enclosed Circuit Breakers  D501006 Motor Control Centers |
|  |  |  | PDS | Power Distribution System | D5010 Electrical Service & Distribution (Use this when applicable to an entire building)  D501001 Main Transformers – oil-filled, 15 kV with taps, 480 V secondary 3 phase, pad mounted  D501002 Service Entrance Equipment  D501003 Interior Distribution Transformers  D501004 Panelboards [Includes ATS, MTS, Safety Switch (CDD), Switchgear, PDU’s, and Lighting Panels]  D501005 Enclosed Circuit Breakers  D501006 Motor Control Centers  D501090 Other Service and Distribution – Includes bus ducts  D5020 Lighting & Branch Wiring  D502001 Branch Wiring |
|  |  |  | PV | Photovoltaic | D30 HVAC  D3010 Energy Supply  D301005 Solar Energy Systems |
| R |  |  | SES | Security Electrical Supply | D501004 Panelboards [Includes ATS, MTS, Safety Switch (CDD), Switchgear, and Lighting Panels]  D501005 Enclosed Circuit Breakers  D501006 Motor Control Centers  TA55 only |
| R |  |  | SPOS | Seismic Power Shut-Off System | D501004 Panelboards  Eng Std has for TA55, but is also at TWF..Eng Std has for TA55, but is also at TWF |
| R |  |  | UPS | Uninterruptible Power Supply | D5010 Electrical Service & Distribution  D501005 Enclosed Circuit Breakers  D5090 Other Electrical Services  D509002 Emergency Lighting & Power Includes battery and inverter |
| R |  |  | UPS391 | Credited Uninterruptible Power Supply | D5090 Other Electrical Services  D509002 Emergency Lighting & Power  PF4 only |
|  | FND | Foundry Operations |  |  | Not in Builder |
| P |  |  | CAST | Casting Operations |  |
| P |  |  | FRNOPS | Furnace Operations |  |
|  | FP | Fire Protection |  |  | D40 Fire Protection |
|  |  |  | FBP | Fire Barrier | B10 Superstructure  B1030 Wall Construction  B103002 Structural Interior Walls – Use for interior fire rated walls  B20 Exterior Enclosure  B2010 Exterior Walls  B201001 Exterior Closure – Use for exterior fire rated walls  B2030 Exterior Doors  B203090 Other Exterior Specialty Doors – Use for exterior fire doors  C10 Interior Construction  C1020 Interior Doors  C102003 Fire Doors – Use for interior fire doors  C10 Interior Construction  C1030 Specialties  C103012 Firestopping Penetrations  C103013 Sprayed Fire-Resistive Materials |
|  |  |  | FCA | Clean Agent Fire Suppression | D4090 Other Fire Protection Systems  D409003 Clean Agent Systems  PF4 only |
|  |  |  | FEXT | Fire Extinguishers | D4050 Fire Protection Specialties  D405001 Portable Extinguishers (special extinguishing agents, includes 200 lb FM200 and 75 lb carbon dioxide cylinder) |
|  |  |  | FP | Fire Protection | 500230 Only |
|  |  |  | FPD | Fire Detection and Alarm | D4010 Fire Alarm and Detection Systems  D401001 Fire Alarm Distribution (fire alarm control panel, batteries, addressable fire alarm, and addressable mass notification)  Detectors, pull stations, notification devices (bells, lights, strobes, horn, or siren) will not be assessed by Builder. |
|  |  |  | FPS | Fire Suppression | D4030 Standpipe Systems  D403001 Standpipe Equipment & Piping (includes risers and hoses)  D4040 Sprinklers  D404001 Sprinklers and Releasing Devices (Dry Pipe, Preaction, Deluge, and Wet Pipe) Includes nitrogen system or air compressors and dryers.  ~~D404002 Sprinkler Water Supply Equipment and Piping~~ – Do not use. Use D402001 instead.  D4090 Other Fire Protection Systems  D409001 Carbon Dioxide Systems (includes agent containers, distribution piping and controls)  D409002 Foam Generating Equipment  D409003 Clean Agent Systems  D409004 Hood & Duct Fire Protection |
|  |  |  | FPW | Fire Water Supply | D4020 Fire Water Supply / Equip  D402001 Fire Protection Water Piping and Equipment (includes storage tank, BFP, OS&Y, PIV, hydrants, and underground distribution main)  D402002 Fire Pump (includes controllers, relief valves, jockey pumps, test header, and flow meters)(includes day tank and battery chargers for diesel driven fire pumps)  D30 HVAC  D3020 Heat Generating Systems  D302005 Equipment Thermal Insulation  D302090 Other Heat Generating Systems - Use this for heat trace and tank heaters, including circulation pump. |
|  |  |  | FSHWI | Fire Suppression Hybrid Water/Inert | PF4 only |
|  |  |  | SPHS | Standpipe System |  |
|  | FS | Fuel Supply |  |  | D30 HVAC  D3010 Energy Supply |
| R |  |  | FO | Fuel Oil | D301001 Oil Supply System – Use for storage tanks, piping, pumps, etc. Day tanks belong to the supplied equipment. Dedicated equipment may be under own System such as FP for diesel fire pumps of ES for emergency diesel generators. Check equipment ID tags. LANL has no bulk storage tanks to supply other tanks or facilities. |
| R |  |  | NG | Natural Gas | D301002 Gas Supply System |
| R |  |  | LPG | Propane Gas | D301002 Gas Supply System |
|  | FSTF | Full Scale Test Facility |  |  | Not in Builder |
| P |  |  | FSTFH2 | Flammable Gas Control System |  |
| P |  |  | FSTFRC | Credited FSTF |  |
| P |  |  | FSTFU | Full-Scale Test Facility Uncredited |  |
| P |  |  | GASOPS | Gas Operations |  |
|  | HMP | Hazard Monitoring and Protection |  |  | F10 Special Construction |
| R |  |  | CAMS | Continuous Air Monitor System | F10 Special Construction  F1030 Special Construction Systems  F103003 Radiation Protection |
| R |  |  | CAS | Criticality Alarm System | F10 Special Construction  F1050 Special Ctrls / Instrumentation  F105090 Other Special Controls and Instrumentation |
| R |  |  | ESM | Exhaust Stack Radiation Monitoring | F105090 Other Special Controls and Instrumentation |
| R |  |  | FASS | Fixed Air Head Sampling System | F105090 Other Special Controls and Instrumentation |
|  |  |  | HAZD | Hazardous Gas Monitoring | F105090 Other Special Controls and Instrumentation  All types of atmospheric monitoring except oxygen, e.g. propane, refrigerant, hydrogen. |
| P  R |  |  | HEP | High Explosives Processing | F105090 Other Special Controls and Instrumentation |
| P |  |  | O2R | Oxygen Monitoring Room | F105090 Other Special Controls and Instrumentation  Monitoring for O2 levels sufficient for personnel safety in a room. |
| R |  |  | PCM | Personnel Contamination Monitors | F103003 Radiation Protection |
| R |  |  | PSS | Personnel Safety System | F105090 Other Special Controls and Instrumentation  Warning lights, interlocks, and trips to protect workers from radiation and explosive hazards  Initiates accelerator beam, trips Beamstop. Functionally, a combination of a LANSCE-like radiation safety system (RSS) and a high explosive safety system (HESS).  Use for TA18 interlocks. |
| P |  |  | BMSTP | Beam Stop | F103003 Radiation Protection |
| R |  |  | RADMON | Radiological Monitoring | F103003 Radiation Protection |
| R |  |  | RMS | Radiation Monitoring System | F103003 Radiation Protection |
| R |  |  | SHLD | Shielding | F103090 Other Special Construction Systems |
| R |  |  | SM | Exhaust Stack Monitoring (non-radiation) | F105090 Other Special Controls and Instrumentation |
|  | HSCHAR | HS-Pu Characterization |  |  | Not in Builder |
| P |  |  | ASPEC | Alpha Spectrometer |  |
| P |  |  | CALOR | Calorimetry |  |
| P |  |  | DCARC | Direct Current ARC |  |
| P |  |  | ELTEST | Electrical Tester |  |
| P |  |  | GASS | Gas Analysis & Samplying |  |
| P |  |  | GSPEC | Gamma Spectrometer |  |
| P |  |  | HAAS | HASS Lathe |  |
| P |  |  | HELKCK | Helium Leak Check |  |
| P |  |  | HSACHE | Heat Source Analytical Chemistry |  |
| P |  |  | HSCAN | Heat Source Can Processing |  |
| P |  |  | HSSEM | Heat Source Scanning Electronic Microscope |  |
| P |  |  | HSUT | Ultrasonic Testing |  |
| P |  |  | MET | Metallography |  |
| P |  |  | NER | Neutron Emission Rate |  |
| P |  |  | PARSA | Particle Size Analysis |  |
| P |  |  | UVVIS | UV Vis |  |
| P |  |  | WND | Weighing and Dimensioning |  |
|  | HSFF | HS-Pu Fuel Fabrication |  |  | Not in Builder |
| P |  |  | FGPREP | Fired Granulation Prep |  |
| P |  |  | GRAN | Granular Formation |  |
| P |  |  | HSFURN | Heat Source Furnace |  |
| P |  |  | PELPR | Hot Press |  |
|  | INSP | Inspection (MQ-1) |  |  | Not in Builder |
|  |  |  | CMM1 | Hot Infinity Coordinate Measuring Machine One |  |
| P |  |  | CMMC | Cold Coordinate Measuring Machine |  |
| P |  |  | CMMH | Hot Coordinate Measuring Machine |  |
| P |  |  | EDGBRK | Edgebreak |  |
| P |  |  | PROFO | Profilometry |  |
| P |  |  | SHADOW | Shadow Graph Optical Comparator |  |
| P |  |  | SHEFF | Scheffield Gauge |  |
|  | IS | Industrial Safety |  |  |  |
| R |  |  | BA | Breathing Air | D20 Plumbing  D2090 Other Plumbing Systems  D209090 Other Special Plumbing Systems |
|  |  |  | FALPRO | Fall Protection | Not in Builder  Identified tie-off points. |
|  |  |  | OSHA | OSHA Safety | D20 Plumbing  D2010 Plumbing Fixtures  D201090 Other Plumbing Fixtures - EYE – Eyewash SHS – Safety Shower, used also for combination of eyewash and safety shower.  D50 Electrical  D5020 Lighting & Branch Wiring  D502002 Lighting Equipment - Exit Signs  D509002 Emergency Lighting & Power - Emergency Lights  F10 Special Construction  F1010 Special Structures  F101090 Other Special Construction – Use for training simulators  F1050 Special Ctrls / Instrumentation  F105090 Other Special Controls and Instrumentation  Use IS/OSHA for windsocks, Not in Builder |
|  |  |  | STOR | Storage Cabinets | C10 Interior Construction  C1030 Specialties  C103009 Cabinets  Storage cabinets for chemicals, flammables, spill kits, etc. Typically contain items that have PM’s performed on them. |
|  | LIFT | Lift |  |  | For anything associated with “lifting”. |
| R |  |  | DOCKEQ | Loading Dock Equipment | E10 Equipment  E1030 Vehicular Equipment  E103002 Loading Dock Equipment (Architectural equipment, dock bumpers, rubber blocks, dock levelers, dock lifters, dock shelters, truck, scissor arms, etc.) |
| R |  |  | ELV | Elevators | D10 Conveying  D1010 Elevators and Lifts  D101001 General Construction Items  D101002 Passenger Elevators (Includes permanently installed man-lifts)  D101003 Freight Elevators  D101004 Wheelchair Lift  D101005 Dumbwaiters  D101090 Other Vertical Transportation Equipment (Includes permanently installed lift table and other material handling lifts)  D1090 Other Conveying Systems  D109002 Conveyors |
| R |  |  | HC | Hoists and Cranes | D1010 Elevators And Lifts  D101090 Other Vertical Transportation Equipment (use this for stationary, fixed in place, drum handling devices and such)  D1020 Weight Handling Equipment  D102001 Basic Requirements of Cranes and Monorails  D102002 Overhead Cranes – Use for all others, even if unknown. Use for breaker handling devices permanently attached to switchgear.  D102003 Monorails – Use if known to be a monorail  E10 Equipment  E1030 Vehicular Equipment  E103002 Loading Dock Equipment – includes dock levelers  E103004 Automotive Shop Equipment – Use for automotive lifts fixed in place.  Hoists, cranes, or drum handlers fixed in place. |
| R |  |  | MBLEQ | Mobile Lifting Equipment | Not in Builder  For any type of equipment used for lifting and is not fixed in place, e.g. forklifts, material lifts, lift tables, portable gantry cranes (on wheels designed to be pushed around the building), engine hoists, chain hoists, handling equipment such as drum handlers, breaker handling devices if they are designed to be moved around building. None of these will be linked to Builder as Builder is only for fixed assets. Breaker handling devices attached to the electrical cabinet are part of that cabinet. |
| P |  |  | RACK | Rack | Not in Builder  Equipment storage racks and shelving. |
|  |  |  | RGNG | Rigging | Not in Builder  Any rigging equipment such as slings, eye hooks, and shackles. |
| R |  |  | TRUDOC | TRUPACT II Working Platform | E103002 Loading Dock Equipment  Elevated platform and controls/equipment necessary for TRUPACT-II Waste Handling. |
|  | LLW | Low Level Waste |  |  | Not in Builder |
|  |  |  | EFF | Effluent |  |
|  |  |  | UF | Ultra Filter |  |
|  | LLWBLP | Low Level Waste Balance of Plant |  |  | F10 only |
|  |  |  | AR | Argon Gas | See Builder Codes under CGS as Op Sys. |
|  |  |  | AS | Air Sampling | See Builder Codes under HMP as Op Sys.  Vacuum Pump Stack Sampling System |
|  |  |  | BLDG | Building | See Builder Codes under BLDG as Op Sys. |
|  |  |  | CA | Compressed Air | See Builder Codes under CGS as Op Sys. |
|  |  |  | CS | Chemical Supply | See Builder Codes under CS as Op Sys. |
| R |  |  | CW | Chilled Water | See Builder Codes under VNT as Op Sys. |
|  |  |  | ED | Electrical Distribution | See Builder Codes under ES as Op Sys. |
|  |  |  | EP | Electrical Power | See Builder Codes under ES as Op Sys. |
|  |  |  | FCS | Facility Control System | See Builder Codes under CTRL as Op Sys. |
|  |  |  | FP | Fire Protection | See Builder Codes under FP as Op Sys. |
|  |  |  | HR | Heat Recovery | See Builder Codes under VNT as Op Sys. |
| R |  |  | HVAC | Heat, Vent, & Air Cond | See Builder Codes under VNT as Op Sys. |
| R |  |  | HW | Heating Water | See Builder Codes under VNT as Op Sys. |
|  |  |  | LLWICS | Low Level Waste Internal Collection System | Not in Builder |
|  |  |  | LP | Lightning Protection | See Builder Codes under ES as Op Sys. |
|  |  |  | LTG | Lighting | See Builder Codes under ES as Op Sys. |
|  |  |  | NG | Natural Gas | See Builder Codes under FS as Op Sys |
|  |  |  | NPW | Non-Potable Water | See Builder Codes under WS as Op Sys. |
|  |  |  | P10 | P10 Gas | See Builder Codes under CGS as Op Sys. |
|  |  |  | PCW | Process Cooling Water | See Builder Codes under VNT as Op Sys |
|  |  |  | PW | Potable Water | See Builder Codes under WS as Op Sys. |
|  |  |  | RM | Radiation Management | See Builder Codes under HMP as Op Sys. |
|  |  |  | RO | Reverse Osmosis | Not in Builder |
|  |  |  | SECW | Secondary Waste | Not in Builder |
|  |  |  | SS | Sanitary Sewer | See Builder Codes under WSTWTR as Op Sys. |
|  |  |  | VAC | Vacuum | See Builder Codes under VAC as Op Sys. |
|  | LLWPRC | Low Level Waste Process |  |  | F10 only |
| P |  |  | CA | Compressed Air | See Builder Codes under CGS as Op Sys. |
| P |  |  | CS | Chemical Supply | See Builder Codes under CS as Op Sys. |
| P |  |  | EFL | Treated Effluent | Not in Builder |
| R |  |  | HVAC | Heat, Vent, & Air Cond | See Builder Codes under VNT as Op Sys. |
| P |  |  | INF | Influent Storage | Not in Builder |
| P |  |  | IX | Ion Exchange | Not in Builder |
| P |  |  | LLWICS | Low Level Waste Internal Collection System | Not in Builder |
| P |  |  | MCRFLT | Microfilter | Not in Builder |
| P |  |  | MF | Microfiltration | Not in Builder |
| P |  |  | RO | Reverse Osmosis | Not in Builder |
|  |  |  | RXN | Reaction/Precipitation | Not in Builder |
| P |  |  | SECW | Secondary Waste | Not in Builder |
|  | MACH | Machining |  |  | Not in Builder |
|  |  |  | BOSTO | Bostomatic |  |
| P |  |  | FMLATH | Back Machine |  |
| P |  |  | HAASL1 | CNC/Manuel Lathe for Part Prep and Disassembly |  |
|  |  |  | LATS | Lathes |  |
| P |  |  | MDMU | DMU-35 Manufacturing |  |
| P |  |  | MDRILL | Manual Drill and Press |  |
| P |  |  | MHARD1 | Manual Hardinge1 |  |
| P |  |  | MHARD2 | Manual Hardinge2 |  |
| P |  |  | MHARD3 | Manual Hardinge3 |  |
| P |  |  | MLATHE | Myford Lathe |  |
|  |  |  | MMS | Milling Machines |  |
| P |  |  | NNMACH | Non-Nuclear Machining |  |
| P |  |  | TBASE1 | Moore Tbase1 |  |
| P |  |  | TBASE2 | Moore Tbase2 |  |
|  | MAGGEN | Magnetic Generator |  |  | Not in Builder |
| P |  |  | CI | Chemical Injection |  |
| P |  |  | DS | Drive System |  |
| P |  |  | DSC | Drive System Cooling |  |
| P |  |  | EX | Exciter |  |
| P |  |  | EXC | Exciter Cooling |  |
| P |  |  | GAD | Generator Air Drying |  |
| P |  |  | GC | Generator Cooling |  |
| P |  |  | GD | Generator Disassembly |  |
| P |  |  | GLO | Generator Lube Oil |  |
| P |  |  | GJ | Generator Jacking |  |
| P |  |  | GLOC | Generator Lube Oil Cooling |  |
| P |  |  | GT | Generator Turning Gear |  |
| P |  |  | GW | Generator Waste Water |  |
| P |  |  | HEAT | Heat |  |
| P |  |  | HVAC | Heat, Vent, & Air Cond |  |
|  | MCPP | Metals & Ceramic Part Processing |  |  | Not in Builder |
| P |  |  | CENTOR | CENTORR Furnace Operation |  |
| P |  |  | CM1750 | CM Furnace Operation |  |
| P |  |  | PRTPRS | Part Pressing |  |
| P |  |  | PRTSAN | Non-SNM Part Sanitization |  |
|  | MISS | Material, Identification, Surveillance and Stabilization |  |  | Not in Builder |
| P  R |  |  | HGAS | Headspace Gas Analysis System |  |
| P |  |  | MISHR | MIS Heated Reactor |  |
| P |  |  | MISSC | MIS Small Can Sample |  |
| P |  |  | MIS | MIS Large Can Sample |  |
| P |  |  | MISLC | MIS Large Can |  |
|  | MTCHAR | Material Characterization |  |  | Not in Builder |
| P |  |  | MTA | Material Analysis |  |
| P |  |  | MTPREP | Sample Material Preparation |  |
| P |  |  | XRD | X-Ray Diffraction |  |
|  | NCERC | National Criticality Experiments Center |  |  | Not in Builder  DAF Only |
| P |  |  | COMET | Comet | Support stand, two stacked hydraulic rams and a stepper motor drive.  Comet is a general purpose critical assembly machine used to move nuclear materials into a critical configuration. |
| P |  |  | FLATOP | Flat-Top | Support table, two hydraulic rams and three stepper motor driven control rod drives.  The Flat-Top critical assembly is a benchmark critical assembly consisting of a natural uranium reflector and two fissile cores, one enriched uranium, one plutonium. |
| P |  |  | GODIVA | Godiva | Core, hydraulic ram-driven safety block, compressed air cylinder-driven burst rod, 2 stepper-motor-driven control rods.  A prompt burst critical assembly. The core consists of a stack of high enriched uranium rings and plates. |
| P |  |  | NI | Nuclear Instrumentation | Log-N, linear channel, startup counter, and area monitoring subsystems.  Monitors the neutron leakage that is generated in the critical configuration. |
| P |  |  | OIS |  | Part of SCRAM |
| P |  |  | PLANET | Planet |  |
| P |  |  | SCRAM | SCRAM | Buttons, interlocks, horns, beacons.  Provides an automatic shutdown of the critical assemblies due to a trip of the Nuclear Instruments, an operator pushing a manual SCRAM button, or a door being opened during remote operation. Also provides warning horns and beacons that indicate a critical assembly operation is underway. SCRAM Safety System (SSS), Operational Interlock System (OIS) |
| P |  |  | SSS | SCRAM Safety System |  |
|  | NDA | Non-Destructive Analysis |  |  | Not in Builder |
| P |  |  | CAL | Calorimeter |  |
| P |  |  | IRNDA | In Room NDA Devices |  |
| P |  |  | ISO | Gamma Isotopic System |  |
| P |  |  | MC | Multiplicity Counter |  |
| P |  |  | NBC | Neutron Barrel Counter |  |
| P |  |  | NSC | HOLDUP/Safeguards Neutron Slab Counter |  |
| P |  |  | PANI | Passive/Active Neutron Counter |  |
| P |  |  | QED | Low Level Drum Counter |  |
| P |  |  | SAI | Solution Assay Instrument |  |
| P |  |  | SGS | Segmented Gamma Scanner |  |
| P |  |  | SH2 | Uranium Shuffler |  |
| P |  |  | SNAP | Special Non-Destructive Assay Platform |  |
| P |  |  | TGSC | Tomographic Gamma Scanner, Can |  |
| P |  |  | TGSD | Tomographic Gamma Scanner, Drum |  |
| P |  |  | TNC | Thermal Neutron Counter |  |
| P |  |  | WCAS | Crate Counter |  |
|  | NDE | Non-Destructive Evaluation |  |  | Not in Builder  PF4 Only |
| P |  |  | CABRT | Cabinet Radiography Operations |  |
| P |  |  | DYEPEN | Dye Penetrant |  |
| P |  |  | EDDY | Eddy Current |  |
| P |  |  | NDMOS | Nondestructive measurement and observation measurement system |  |
| P |  |  | UT | Ultrasonic Testing |  |
|  | NONRAD | Non Radiological |  |  | Not in Builder  Op Sys & Sys created to allow procurement. For Cold Lab Laboratory equipment |
| P  R |  |  | XPRDEV | Experimental Process Development |  |
|  | OSRP | Off-Site Source Recovery |  |  | Not in Builder |
| P |  |  | OSRPO | Pipe Overpack Container |  |
| P |  |  | OSRPS | Off-Site Source Recovery Material Staging |  |
|  | PLW | Process Liquid Waste |  |  | TA55 only |
| R |  |  | AWS | Acid Waste System | D20 Plumbing  D2090 Other Plumbing Systems  D209002 Acid Waste Systems |
| R |  |  | CWS | Caustic Waste System | G30 Site Civil/Mechanical Utilities  G3090 Other Site Mechanical Utilities  G309090 Other Industrial Waste |
| R |  |  | IWS | Industrial Waste System | G309090 Other Industrial Waste |
|  | PROG | Programs |  |  | No real equipment, but programs. |
| R |  |  | CONOPS | Conduct of Operations Performance Checks | Not in Builder  Includes F06 Quarterly Radioactive Material Inventory Surveillance |
|  | PSAA | Power Source Assembly Area |  |  | TA55 only |
| P |  |  | PCW | Process Cooling Water | D30 HVAC  D3040 Distribution Systems  D304004 Change Over Distribution Systems – Use for water to water heat exchangers  D304006 Chilled Water Distribution Systems – Use for pump, and tanks (expansion, chem feed, etc.)  D50 Electrical  D5090 Other Electrical Services  D509090 Other Special Systems and Devices (Use for VFD’s as well as lighting photo sensors) |
| P |  |  | PSAVAC | PSAA Vacuum | Not in Builder |
| P |  |  | PSPROD | Power Source Production | Not in Builder |
| P |  |  | PSSHIP | Power Source Shipping | Not in Builder |
| P |  |  | PSTEST | Power Source Testing | Not in Builder |
| P |  |  | RGEN | Regen Gas | D209090 Other Special Plumbing Systems  550005 |
|  | PVES | Pressure Vessels |  |  | TA55 Only  Not in Builder |
| P |  |  | CPV | Containment Pressure Vessels |  |
| P |  |  | HIP | Hot Isostatic Press |  |
|  | PYRO | Pyrochemistry WG-Pu |  |  | PF4 Only  Not in Builder |
| P |  |  | CALDOR | Pu Metal Oxidation |  |
| P |  |  | COAL | Coalescence |  |
|  |  |  | DOR | Direct Oxidation Reduction |  |
| P |  |  | DORMC | Direct Metal Oxidation and Metal Chlorination |  |
| P |  |  | ER | Electrorefining |  |
|  |  |  | MC | Metal Chlorination | Added 190513 |
| P |  |  | SALTS | Salt Casting |  |
|  | PYROLS | Pyrolysis HS-Pu |  |  | Not in Builder |
| P |  |  | HYDFLO | Hydroxide Precipitation & Flocculation PYROLS |  |
| P |  |  | TSCM | Thermal Stabilization of 238 HS-Pu |  |
| R | QE | Quartz Encapsulation |  |  | Not in Builder |
| P |  |  |  |  |  |
|  | RDGRPH | Radiography |  |  | Not in Builder |
| P |  |  | HYTEC | Radiography HYTEC |  |
| P |  |  | IRO | Interim Radiography Operations |  |
| P |  |  | RADSCB | Closed Beam Radiography |  |
| P |  |  | RADSOB | Open Beam Radiography |  |
| P |  |  | RADRTR | Real Time Radiography |  |
| P |  |  | RADSU | Radiography Unit |  |
|  | RLW | Radioactive Liquid Waste |  |  |  |
| P |  |  | P |  |  |
| R |  |  | R |  |  |
|  | RLWCS | Low Level Waste Collection Systems |  |  |  |
| R |  |  | RLW | Radioactive Liquid Waste Interior Collection System | D20 Plumbing  D2090 Other Plumbing Systems  D209090 Other Special Plumbing Systems |
| R |  |  | RLBECS | Radioactive Liquid Waste Exterior Collection System | D209090 Other Special Plumbing Systems |
| R |  |  | RLWECS | LLW Exterior Collection System | D209090 Other Special Plumbing Systems |
| R |  |  | RLWICS | LLW Interior Collection System | D209090 Other Special Plumbing Systems |
|  | RLWLLW | Low Level Waste Treatment Systems |  |  | F10 only |
|  |  |  | CG | Calibration Gas | Not in Builder |
|  |  |  | CIP | Clean-in-Place | Not in Builder |
|  |  |  | CL | Clarifiers | Not in Builder |
|  |  |  | CSP | Chemical Supply - Process | Not in Builder |
|  |  |  | CUF | Centrifugal Ultra Filter | Not in Builder |
|  |  |  | EFFEVP | Effluent Evaporation | Not in Builder |
|  |  |  | FP | Fire Protection | See Builder Codes under FP as Op Sys. |
|  |  |  | GRVF | Gravity Filter | Not in Builder |
|  |  |  | INF | Influent Storage | Not in Builder |
|  |  |  | LLWSTO | Low Level Storage | Not in Builder |
|  |  |  | MCRFLT | Microfilter | Not in Builder |
|  |  |  | MFLTS | Media Filters | Not in Builder |
|  |  |  | PIX | Perchlorate Ion Exchange | Not in Builder |
|  |  |  | POL | Polish and Sample Effluent | Not in Builder |
|  |  |  | PRO | Primary Reverse Osmosis | Not in Builder |
|  |  |  | RLWLLW | Low Level Waste Treatment Systems | Not in Builder |
|  |  |  | RO | Reverse Osmosis | Not in Builder |
|  |  |  | RVF | Rotary Vacuum Filter | Not in Builder |
|  |  |  | SRO | Secondary RO | Not in Builder |
|  |  |  | SW | Sanitary Waste | See Builder Codes under WSTWTR as Op Sys. |
|  |  |  | TUF | Tubular Ultra Filter | Not in Builder |
|  |  |  | WEVP | Waste Evaporation | Not in Builder |
|  |  |  | WM2 | WM2 Influent - Effluent Distribution | Not in Builder |
|  |  |  | WMRM | Waste Mitigation Risk Mgmt | Not in Builder |
|  |  |  | ZLD | Zero Liquid Discharge | Not in Builder |
|  | RLWTRU | TRU Systems |  |  | Not in Builder  F10 only |
|  |  |  | INF | Influent Storage |  |
|  |  |  | TCS |  |  |
|  |  |  | TINF | TLW or TRU Influent Storage |  |
|  |  |  | TLT | TRU Liquid Treatment |  |
|  |  |  | TST | TRU Sludge Treatment |  |
|  | SD | Steam Distribution |  |  |  |
| R |  |  | CON | Condensate | D30 HVAC  D3040 Distribution Systems  D304002 Steam Distribution Systems (Use this when applicable to an entire building)  D302004 Auxiliary Equipment – Use for tanks and pumps |
| R |  |  | STM | Steam | D30 HVAC  D3020 Heat Generating Systems  D302001 Boilers – For boilers, feedwater, makeup, blowdown, chemical addition, etc. Safety valves will not be assessed by Builder.  D302004 Auxiliary Equipment – Use for tanks, including air separators.  D3040 Distribution Systems  D304002 Steam Distribution Systems – Reducing valves and steam traps will not be assessed by Builder. |
|  | SEC | Security |  |  |  |
|  |  |  | AACS | Automated Access Control | Badge readers, personal identification number (PIN) entry keypads (RAPs), biometric devices, door strikes, electric latches, door openers/closers/holders  Turnstiles under B203007 Gates |
| R |  |  | ECF | Entrance Control Facility | D503005 Security Systems  F10 Special Construction  F1050 Special Ctrls / Instrumentation  F105090 Other Special Controls And Instrumentation – Use for security x-ray equipment and cameras.  G20 Site Improvements  G2010 Roadways  G202005 Guardrails & Barriers (Barriers used to restrict traffic for security reasons, slow approach, even hydraulic pop-up barriers at entrance gates) |
|  |  |  | IDS | Intrusion Detection System | D503090 Other Communications & Alarm Systems  New, not in ESM or on list.  Intrusion detection inside the perimeter, includes detection, & alarms |
| P |  |  | MARTRK | Material at Risk Tracker | Not in Builder |
| R |  |  | PASS | PASS Site Access Control | D503005 Security Systems  Site Access Control System |
| R |  |  | PIDAS | Perimeter Intrusion Detection/Assessment [& Delay] | D503090 Other Communications & Alarm Systems (Radio communications, microwave detection systems, metal detectors, tamper indicating switches  F10 Special Construction  F1010 Special Structures  F101002 Exterior Utility Buildings - Security tower  F1050 Special Ctrls / Instrumentation  F105090 Other Special Controls And Instrumentation – Use for security cameras.  G20 Site Improvements  G2040 Site Development  G204001 Fencing & Gates  G204004 Security Structures (Guard stations)  G40 Site Electrical Utilities  G4020 Site Lighting  G402002 Special Security Lighting Systems (Security lighting) |
| P  R |  |  | SAFE | Safe | E10 Equipment  E1010 Commercial Equipment  E101005 Security & Vault Equipment – Use for source safes like at TWF. |
| R |  |  | VTR | Vault Type Room | F10 Special Construction  F1020 Integrated Construction  F102090 Other Integrated Construction  Structural assemblies |
|  | SMPFAB | Sample Fabrication |  |  | Not in Builder |
| P |  |  | DMU35 | DMU 35 Milling Machining |  |
| P |  |  | LBASE | Moore L-Base Lathe |  |
| P |  |  | PRECI1 | Precitech Lathe1 |  |
| P |  |  | PRECI2 | Precitech Lathe2 |  |
|  | SNMST | Special Nuclear Material Storage |  |  | Not in Builder  PF4 only |
| P |  |  | FRS | Fire Rated Safes |  |
| P |  |  | KRX | Kardex |  |
| P |  |  | SAFES | Safes, SNM |  |
| P |  |  | STRG | NonCredited SNM Storage |  |
| P |  |  | STRGC | Shelves, Storage Racks, Cages and Kardex | Credited shelves, storage racks, cages, Kardex Stores SNM, prevents criticality including during a seismic event. |
|  | TOOL | Tool |  |  | Not in Builder |
| R |  |  | SHOPEQ | Stationary tools | Tools expected to be stationary such as large drill presses or lathes. |
| R |  |  | PORTL | Portable tools | Sys: PORTL – Portable Tools  If it is designed to be moved, but not down the road, it is likely the Sys of Portable Tool under the Op Sys of TOOL. Examples would be carts designed to push around a building regardless of what is on the cart such as a welder, pressure tester, small air compressor, etc.  Tools designed to be taken to the jobsite such as electric drills, chainsaws, skill saws, etc.  Includes test equipment.  Walk-behind snow blowers, walk-behind mowers, and weed eaters.  Large mowers that are at times attached to tractors via 3-point hitches.  Loader buckets, dozer blades, back blades, etc., that can be attached to tractors.  Snow plows to be attached to trucks or tractors. |
|  | TRIT | Tritium |  |  |  |
| P |  |  | GTE | Gas Treatment, Effluent (SRL) | Not in Builder  PF4 only |
| P |  |  | GTF | Gas Treatment, Furnace (SRL) | Not in Builder  PF4 only |
| P |  |  | HIS | Hot-Inlet System | Not in Builder |
| R |  |  | TC | Tritium Containment Vessel | D20 Plumbing  D2090 Other Plumbing Systems  D209090 Other Special Plumbing Systems |
| R |  |  | TGCS | Tritium Gas Containment System | D209090 Other Special Plumbing Systems |
| R |  |  | TGHS | Tritium Gas Handling System | D209090 Other Special Plumbing Systems |
| R |  |  | TMS | Tritium Monitoring System | F10 Special Construction  F1050 Special Ctrls / Instrumentation  F105090 Other Special Controls and Instrumentation |
| R |  |  | TWTS | Tritium Waste Treatment System | D209090 Other Special Plumbing Systems |
|  | TRU | Transuranic Liquid Waste |  |  | Not in Builder  F10 only |
|  |  |  | INF | Influent Storage |  |
|  |  |  | TCS |  |  |
|  |  |  | TLT | TRU Liquid Treatment |  |
|  |  |  | TST | TRU Sludge Treatment |  |
|  | UCOMM | Utilities Communications |  |  |  |
|  |  |  | TEL | Telecommunications | G40 Site Electrical Utilities  G4030 Site Communication and Security  G403001 Telecommunications Systems  G403003 Cables & Wiring  G403004 Ductbanks, Manholes & Handholes  G403005 Towers, Poles & Stands  G403008 Other Communication & Alarm  G403009 Grounding Systems |
| U | UES | Utilities Electrical Supply |  |  |  |
|  |  |  | UET | Utilities Electrical Transmission | D50 Electrical  D5010 Electrical Service & Distribution  D501001 Main Transformers – oil-filled, 15 kV with taps, 480 V secondary 3 phase, pad mounted  G40 Site Electrical Utilities  G4010 Electrical Distribution  G401001 Substations  G401002 Transformers  G401003 Switches, Controls & Devices  G401005 Towers, Poles, Crossarms & Insulators  G401007 Ductbanks, Manholes, Handholes & Raceways  G401009 Metering |
|  |  |  | UGT | Utilities Gas Turbine | Not in Builder |
|  |  |  | UTG | Utilities Turbine Generator | Not in Builder  Turbine Generators 1, 2, & 3 May be dropped as steam turbine generators no longer in use. |
|  | UFS | Utilities Fuel Supply |  |  | LANL has no bulk fuel storage tanks to supply other tanks or facilities. Facility fuel storage tanks under FS Op Sys. |
| U |  |  | NG  NG1  NG2  NG3  NG4  NG5 | Natural Gas  Natural Gas Line Segment Number | G30 Site Civil/Mechanical Utilities  G3060 Fuel Distribution  G306006 Gas Distribution Piping (Natural Gas only. LANL has no distribution system for propane)  G306009 Other Gas Distribution  NG1 - 5 (distribution) High Pr – NG Med Pr – NGM Low Pr – NGL  Piping, pressure regulators/stations; block, relief, and control valves; rectifiers, meters, gauges, analyzers. NG1 (TAs 3, 60, 61), NG2 (TAs 6, 8, 9, 15, 16, 22, 69), NG3 (TAs 39, 49), NG4 (TAs 53), NG5 (TAs 35, 46, 48, 50-52, 54, 55, 59, 63, 64, 66)  Distributes natural gas (NG1 - 5, Utilities), becomes NG just outside and within facilities for heating and process equipment such as furnaces. High Pr > 5 psig; Low Pr < 14” W.C. |
| U |  |  | NGC | Natural Gas, Compressed | G306006 Gas Distribution Piping  For use in combustion gas turbine. |
|  | UOPS | Uranium Ops |  |  | Not in Builder |
| P |  |  | UCAL | Calorimeter |  |
| P |  |  | UEE | Uranium Electrolytic Etching |  |
| P |  |  | UOX | Uranium Oxidation |  |
|  | URG | Roads and Grounds |  |  |  |
| R |  |  | VB | Vehicle Barriers | G20 Site Improvements  G2010 Roadways  G201005 Guardrails & Barriers (Includes credited barriers preventing vehicles impacting critical facility structures as well as those for general traffic control or in lieu of guardrails) (Includes bollards, jersey barriers, cables, etc.)  Barriers used for security purposes are under SEC/ECF. |
| R |  |  | BRIDGE | Bridges | G90 Other Site Construction  G9090 Other Site Construction  G909001 Bridges |
| R |  |  | PAVMNT | Pavement | G20 Site Improvements  G2010 Roadways  G201001 Bases & Subbases  G201002 Curbs & Gutters  G201003 Paved Surfaces  G201004 Marking & Signage  G201005 Guardrails & Barriers  G201006 Resurfacing  G201090 Other Roadways  G2020 Parking Lots  G202001 Bases & Subbases  G202002 Curbs & Gutters  G202003 Paved Surfaces  G202004 Marking & Signage  G202005 Guardrails & Barriers  G202006 Resurfacing  G202007 Miscellaneous Structures and Equipment  G202090 Other Parking Lots  G2030 Pedestrian Paving  G203001 Bases & Subbases  G203002 Curbs & Gutters  G203003 Paved Surfaces  G203004 Guardrails & Barriers  G203005 Resurfacing  G203090 Other Walks, Steps & Terraces  Includes Roads, Curbs, Gutters, Trails, Striping, Parking Lots, Sidewalks, Signage |
|  |  |  | SB | Site Beautification | G20 Site Improvements  G2040 Site Development  G204001 Fencing & Gates  G204002 Retaining Walls and Freestanding Walls  G204003 Exterior Furnishings  G204005 Signage  G204006 Fountains & Pools  G204008 Terrace and Perimeter Walls  G204009 Flagpoles  G204090 Other Site Improvements  G2050 Landscaping  G205006 Planters  G205007 Irrigation Systems  G205090 Other Landscaping |
| R |  |  | SIGNAL | Traffic Signals | G20 Site Improvements  G2010 Roadways  G201004 Marking & Signage |
|  | USD | Utilities Steam Distribution |  |  | Regardless of system, safety and relief valves will not be assessed by Builder. |
| U |  |  | UBFW | Utilities Boiler Feedwater | D30 HVAC  D3020 Heat Generating Systems  D302001 Boilers – For boilers, feedwater, makeup, blowdown, chemical addition, etc. Safety valves will not be assessed by Builder.  D302004 Auxiliary Equipment – Use for tanks, including air separators.  D3040 Distribution Systems  D304002 Steam Distribution Systems – Reducing valves and steam traps will not be assessed by Builder. |
| U |  |  | UBLR | Utilities Boilers | D302001 Boilers |
| U |  |  | UCON | Utilities Condensate | D304002 Steam Distribution Systems |
| U |  |  | UTW | Utilities Cooling Towers | G30 Site Civil/Mechanical Utilities  G3050 Cooling Distribution  G305006 On-Site Cooling Towers |
| U |  |  | USTM | Utilities Steam | D301003 Steam Supply System (From Central Plant) Includes manholes and pits |
|  | UWSTWR | Utilities Waste Water |  |  |  |
| U |  |  | USTP | Utilities Sewage Treatment Plant | G30 Site Civil/Mechanical Utilities  G3020 Sanitary Sewer  G302004 Packaged Sanitary Sewer Treatment Plants |
| U |  |  | USTW | Utilities Storm Water | G30 Site Civil/Mechanical Utilities  G3030 Storm Sewer  G303001 Storm Sewer Piping  G303002 Storm Sewer Structures  G303003 Lift Stations  G303004 Culverts  G303005 Headwalls  G303006 Erosion & Sediment Control Measures  G303007 Stormwater Management  G303090 Other Storm Sewer |
| U |  |  | USWP | Utilities Sanitary Sewer | F10 Special Construction  F1020 Integrated Construction  F102002 Integrated Assemblies (Sewage lagoon, aerator, etc.)  G30 Site Civil/Mechanical Utilities  G3020 Sanitary Sewer  G302001 Sanitary Sewer Piping  G302002 Sanitary Sewer Manholes & Cleanouts  G302003 Lift Stations and Pumping Stations  G302004 Packaged Sanitary Sewer Treatment Plants  G302005 Septic Tanks  G302006 Drain Fields  G302090 Other Sanitary Sewer – Use for sumps, pumps, and tanks |
|  | UWS | Utilities Water Supply |  |  |  |
| U |  |  | WD  WD1  WD2  WD3  WD4  WD5  WD6  WD7  WD8  WD9  WD10  WD11  WD12  WD13 | Water Distribution | G30 Site Civil/Mechanical Utilities  G3010 Water Supply  G301002 Potable Water Distribution – Use this for the water distribution loop around site  G301003 Potable Water Storage – Use this for water storage tanks. For dedicated FWST’s see Fire Protection.  G301004 Fire Protection Water Distribution – Use this for fire hydrants and block valves outside building jurisdictions  G301007 Pumping Stations  WD00 – Utility water distribution line segment crossing multiple TA's  WD1 (TAs 00, 53, 61, and 72), WD2 (TAs 00, 02, 21, 41, 43, and 73), WD3 (TAs 00, 03, 58, 59, and 60), WD4 (TAs 00, 48 and 64), WD5 (TAs 00 and 55), WD6 (TAs 00 and 16), WD7 (TAs 00, 06, 08, 09, 22, 40 and 69), WD8 (TAs 00, 11, 14 and 15), WD9 (TAs 00, 35, and 50), WD10 (TAs 00, 36, 52, and 63), WD11 (TAs 00, 18, 36, and 54), WD12 (TAs 00, 46 and 51), and WD13 (TAs 00, 33, 39, and 49) |
|  | VAC | Vacuum |  |  | D30 HVAC  D3090 Other HVAC Systems and Equipment  D309090 Other Special Mechanical Systems |
| R |  |  | DV | Dry Vacuum | D309090 Other Special Mechanical Systems  PF4 only |
| R |  |  | DRYVAC | Dry Vacuum | D309090 Other Special Mechanical Systems  RLUOB only |
| R |  |  | HEPVAC | Portable HEPA Vacuums | D309090 Other Special Mechanical Systems |
|  |  |  | HDV | House Dry Vacuum | D309090 Other Special Mechanical Systems |
| R |  |  | HPV | Health Physics Vacuum | D309090 Other Special Mechanical Systems  D50 Electrical  D5090 Other Electrical Services  D509090 Other Special Systems and Devices (Use for VFD’s as well as lighting photo sensors) |
| R |  |  | MVP | Miscellaneous Vacuum Pump | D309090 Other Special Mechanical Systems |
|  |  |  | VAC | Vacuum | D309090 Other Special Mechanical Systems  500230 Only |
| R |  |  | WV | Wet Vacuum | D309090 Other Special Mechanical Systems |
|  | VHCL | Vehicle |  |  | Not in Builder  For equipment designed to go down the road.  Not for anything associated with lifting such as cranes, fork lifts, man lifts, rigging, etc. |
| R | R |  | MOT | Motorized | Trucks, tractors, loaders, riding mowers, ATVs/OHVs, etc. |
| R | R |  | NMOT | Non-Motorized | Trailers of all types from small cargo trailers to belly dump pulled by tandem axle truck tractors.  Large mowers pulled behind tractors that could also be moved by a truck. |
|  | VNT | Ventilation |  |  | Regardless of system, safety and relief valves will not be assessed by Builder. |
|  |  |  | CCHW | Central Circulating Heating Water | D30 HVAC  D3020 Heat Generating Systems  D302001 Boilers – For boilers, feedwater, makeup, blowdown, chemical addition, etc. Safety valves will not be assessed by Builder.  D302004 Auxiliary Equipment – Use for tanks, including air separators.  D3040 Distribution Systems  D304003 Hot Water Distribution Systems – Use for pumps  D3060 Controls & Instrumentation – Some of these in MEL, but did not see any on initial Builder assessments.  D306001 HVAC Controls – Including PDI’s  D306002 Electronic Controls – Includes duct mounted smoke detectors  D306003 Pneumatic Controls (includes VAV’s)  D306004 Instrument Air Compressors (Use this for small systems supplying solely HVAC system as found in office or training buildings. For larger systems used for other purposes as well see Compressed Air System.) |
| R |  |  | CVS | Confinement Ventilation System | D3040 Distribution Systems  D304007 Exhaust Systems – Includes fans.  Filters, HEPA filters, and dampers will not be assessed. |
| R |  |  | CW | Chilled Water | D3010 Energy Supply  D301090 Other Energy Supply – Use for RLUOB ice storage  D3030 Cooling Generating Systems  D303001 Chilled Water Systems – Use for chillers and condensers (small HX’s such as oil coolers will not be assessed iindividually, but as part of the chiller package)  D303002 Direct Expansion Systems  D3040 Distribution Systems  D304004 Change Over Distribution Systems – Use for water to water and glycol to water heat exchangers.  D304005 Glycol Distribution Systems – Use for glycol chillers, condensers, circulating pumps, expansion tanks, chem feed, etc. (small HX’s such as oil coolers will not be assessed iindividually, but as part of the chiller package)  D304006 Chilled Water Distribution Systems – Use for pump and tanks (expansion, chem feed, etc.).  D3090 Other HVAC Systems and Equipment  D309090 Other Special Mechanical Systems – Use for refrigerant storage tanks/systems.  D50 Electrical  D5090 Other Electrical Services  D509090 Other Special Systems and Devices (Use for VFD’s as well as lighting photo sensors) |
| P  R |  |  | EXH | Exhaust | D304007 Exhaust Systems – Includes fans, even fume hood and glove box exhaust fans, and stacks.  Filters, HEPA filters, dampers, scrubbers, and duct mounted smoke detectors will not be assessed. |
| R |  |  | HR | Heat Recovery | D304008 Air Handling Units |
| R |  |  | HVAC | Heat, Vent, & Air Cond | D3020 Heat Generating Systems  D302002 Furnaces  D302003 Fuel-Fired Unit Heaters (use for HUG’s)  D302090 Other Heat Generating Systems  D3040 Distribution Systems  D304001 Air Distribution Heating & Cooling – Use for Fans, Humidifiers, Dehumidifiers, VAV Terminals.  Duct Mounted Heating Coils and Dampers will not be assessed.  D304008 Air Handling Units – Use also for air-to-air heat exchangers  D304090 Other Distribution Systems  D3050 Terminal & Package Units  D305001 Unit Ventilators (fans, including makeup air)  D305002 Unit Heaters (infrared and hydronic, which includes both HUW heating water and HUS steam) Use D305005 Electric Heating if electrically powered HUE. Use D302003 Fuel-Fired Unit Heaters if gas heated HUG.  D305003 Fan Coil Units  D305004 Fin Tube Radiation (baseboard)  D305005 Electric Heating – Used this even when equip is Unit Heater if it is electrically powered.  D305006 Package Units (Includes RUA’s, heat pumps, evap coolers, air washers/pumps,and window AC units)  D305090 Other Terminal & Package Units  D3060 Controls & Instrumentation – Some of these in MEL, but did not see any on initial Builder assessments.  D306002 Electronic Controls – Includes duct mounted smoke detectors  D306003 Pneumatic Controls (includes VAV’s)  D306004 Instrument Air Compressors (Use this for small systems supplying solely HVAC system as found in office or training buildings. For larger systems used for other purposes as well as maybe HVAC see Compressed Air System.) |
| R |  |  | HVACCF | HVAC Confinement | D509090 Other Special Systems and Devices (Use for VFD’s as well as lighting photo sensors) |
| R |  |  | HVACOB | HVAC, Office Bldg | D3010 Energy Supply  D301090 Other Energy Supply – Use for RLUOB ice storage  D3030 Cooling Generating Systems  D303001 Chilled Water Systems – Use for chillers and condensers  D303002 Direct Expansion Systems  D3040 Distribution Systems  D304006 Chilled Water Distribution Systems – Use for pump and tanks (expansion, chem feed, etc.)  D3040 Distribution Systems  D304001 Air Distribution Heating & Cooling – Use for Humidifiers, Dehumidifiers, and VAV Terminals.  Dampers are not to be addressed due to low cost and inaccessibility.  D304008 Air Handling Units – Use also for air-to-air heat exchangers  D3050 Terminal & Package Units  D305001 Unit Ventilators (fans, including makeup air)  D305002 Unit Heaters (infrared and hydronic, which includes both heating water and steam)  D305003 Fan Coil Units  D305004 Fin Tube Radiation  D305005 Electric Heating – Used this even when equip is Unit Heater if it is electrically powered.  D305006 Package Units (Includes heat pumps, evap coolers, and window AC units)  D3060 Controls & Instrumentation – Some of these in MEL, but did not see any on initial Builder assessments.  D306001 HVAC Controls – Including PDI’s  D306002 Electronic Controls – Includes duct mounted smoke detectors  D50 Electrical  D5090 Other Electrical Services  D509090 Other Special Systems and Devices (Use for VFD’s as well as lighting photo sensors)  RLUOB only |
| R |  |  | HVACRL | HVAC, Radiological Lab | RLUOB only |
| R |  |  | HVACUB | HVAC, Central Utility Building | D50 Electrical  D5090 Other Electrical Services  D509090 Other Special Systems and Devices (Use for VFD’s as well as lighting photo sensors)  RLUOB only |
| R |  |  | HW | Heating Water | D30 HVAC  D3020 Heat Generating Systems  D302001 Boilers – For boilers, feedwater, makeup, blowdown, chemical addition, etc. Safety valves will not be assessed by Builder.  D302004 Auxiliary Equipment – Use for tanks, including air separators.  D3040 Distribution Systems  D304003 Hot Water Distribution Systems – Use for pumpsand heat exchangers  D304004 Change Over Distribution Systems – Use for water to water heat exchangers  D50 Electrical  D5090 Other Electrical Services  D509090 Other Special Systems and Devices (Use for VFD’s as well as lighting photo sensors) |
| R |  |  | LRW | Lab Reheat Water | D30 HVAC  D3020 Heat Generating Systems  D302004 Auxiliary Equipment – Use for tanks~~, heat exchangers,~~ and air separators.  D3040 Distribution Systems  D304003 Hot Water Distribution Systems – Use for pumps  D304004 Change Over Distribution Systems – Use for water to water heat exchangers  D50 Electrical  D5090 Other Electrical Services  D509090 Other Special Systems and Devices (Use for VFD’s as well as lighting photo sensors)  RLUOB Only |
| R |  |  | NNHVAC | Ventilation, Non-Nuclear | D50 Electrical  D5090 Other Electrical Services  D509090 Other Special Systems and Devices (Use for VFD’s as well as lighting photo sensors)  TA55 non-nuke |
| R |  |  | PCW | Process Chilled Water  or  Process Cooling Water  (building dependent) | D30 HVAC  D3040 Distribution Systems  D304004 Change Over Distribution Systems – Use for water to water heat exchangers  D304006 Chilled Water Distribution Systems – Use for pumps~~,~~ and tanks (expansion, chem feed, etc.)  D50 Electrical  D5090 Other Electrical Services  D509090 Other Special Systems and Devices (Use for VFD’s as well as lighting photo sensors)  RLUOB only |
| R |  |  | PG | Primary Glycol | D30 HVAC  D3040 Distribution Systems  D304005 Glycol Distribution Systems – Use for glycol chillers, condensers, circulating pumps, expansion tanks, chem feed, etc.  RLUOB only |
| R |  |  | SCW | Secondary Chilled Water | D304006 Chilled Water Distribution Systems – Use for pumps and tanks (expansion, chem feed, etc.)  RLUOB only |
| R |  |  | SHW | Secondary Heating Water | D304003 Hot Water Distribution Systems – Use for pumps  RLUOB only |
| R |  |  | TW | Tower Water | D30 HVAC  D3020 Heat Generating Systems  D302005 Equipment Thermal Insulation  D302090 Other Heat Generating Systems - Use this for heat trace and tank heaters  D3030 Cooling Generating Systems  D303001 Chilled Water Systems – Use for towers, fans, pumps, air separators, and chem add. |
|  | WASTE | Waste Management |  |  | Not in Builder |
| P |  |  | RADW | Radioactive and Mixed Solid Waste Processing | For tools and equipment that deal with solid radioactive waste. The tools and equipment themselves are not waste. |
|  | WELD | Welding |  |  | Not in Builder |
| P |  |  | 1219W | 1219 Welder |  |
| P |  |  | 267W | 267 Welder |  |
| P |  |  | 295W | 295 Welder |  |
| P |  |  | 297W | 297 Welder |  |
| P |  |  | 3013W | 3013 Welder |  |
| P |  |  | EBEAM | Electron Beam |  |
| P |  |  | GTA | Gas Tungsten Arc Welding Operation |  |
| P |  |  | HVEBW | High Voltage EBEAM Welder |  |
| P |  |  | IPGW | IPG Welder |  |
| P |  |  | HSCG | HS Calibration Gas System |  |
| P |  |  | LSRWLD | Laser, Weld |  |
| P |  |  | LVEBW | Low Voltage Electron Beam Welder |  |
| P |  |  | MOXW | MOX Welder |  |
| P |  |  | PIGMA | PIGMA Welder |  |
| P |  |  | YBLAZR | YB Laser Welder |  |
|  | WGCHAR | WG Characterization |  |  | Not in Builder |
| P |  |  | ACHAR | Analytical Chemistry Characterization |  |
| P |  |  | OXPRO | Oxide Processing |  |
|  | WS | Water Supply |  |  | D20 Plumbing  Regardless of system, safety and relief valves will not be assessed by Builder. |
| R |  |  | DEMIN | Demineralized Water | D2090 Other Plumbing Systems  D209090 Other Special Plumbing Systems |
| R |  |  | DIS | Distilled Water | D209090 Other Special Plumbing Systems |
| R |  |  | DIW | Deionized Water | D209090 Other Special Plumbing Systems |
| R |  |  | IW | Industrial Water | D209090 Other Special Plumbing Systems |
| R |  |  | IWH | Industrial Water Hot | D209090 Other Special Plumbing Systems  550005 Only |
| R |  |  | MKUP | Makeup Water | D209090 Other Special Plumbing Systems |
| R |  |  | NPW | Non-Potable Water | D209090 Other Special Plumbing Systems |
| R |  |  | NPWC | Non-Potable Water Cold | D209090 Other Special Plumbing Systems |
| R |  |  | NPWH | Non-Potable Water Hot | D209090 Other Special Plumbing Systems |
| R |  |  | PW | Potable Water | D20 Plumbing  D2010 Plumbing Fixtures  D201001 Waterclosets  D201002 Urinals  D201003 Lavatories  D201004 Sinks  D201005 Showers/Tubs  D201006 Drinking Fountains and Coolers  D201007 Bidets  D201090 Other Plumbing Fixtures - includes Emergency Eye Wash & Shower  D2020 Domestic Water Distribution  D202001 Pipes & Fittings  D202002 Valves & Hydrants - includes BFP’s and hose bibs  D202003 Domestic Water Equipment (includes storage tanks, booster pumps & motors, water heaters, and water treatment equipment) (Use this when applicable to an entire building)  D30 HVAC  D3010 Energy Supply  D301005 Solar Energy Systems (use for solar hot water heating)  D50 Electrical  D5090 Other Electrical Services  D509090 Other Special Systems and Devices (Use for VFD’s as well as lighting photo sensors) |
| R |  |  | PWH | Potable Water Hot | D202003 Domestic Water Equipment (includes storage tanks, booster pumps & motors, water heaters, and water treatment equipment)  Some buildings use PW even for hot potable water. Check tags and drawings. |
| R |  |  | RO | Reverse Osmosis | D209090 Other Special Plumbing Systems |
|  | WSTWTR | Waste Water |  |  |  |
| R |  |  | EFLD | Effluent Discharge | D20 Plumbing  D2090 Other Plumbing Systems  D209090 Other Special Plumbing Systems  Not storm water, not sanitary, suitable for discharge to environment. Example, cooling tower blowdown and sewage plant effluent. |
| R |  |  | IWS | Industrial Waste System | G30 Site Civil/Mechanical Utilities  G3090 Other Site Mechanical Utilities  G309090 Other Industrial Waste  D50 Electrical  D5010 Electrical Service & Distribution  D501004 Panelboards – Use for disconnect switches.  D20 Plumbing  D2030 Sanitary Waste  D203003 Floor Drains – Use for floor drains and floor cups.  D20 Plumbing  D2010 Plumbing Fixtures  D201004 Sinks – Use for sinks.  IWS from PF4 goes to PLW, and is under that Op Sys. |
| R |  |  | STW | Storm Water | D2040 Rain Water Drainage  D204001 Pipe & Fittings  D204002 Roof Drains  D204003 Rainwater Drainage Equipment  D204004 Insulation & Identification  D204090 Other Rain Water Drainage System |
| R |  |  | SWP | Sanitary Sewer | D2030 Sanitary Waste  D203001 Waste Pipe & Fittings  D203002 Vent Pipe & Fittings  D203003 Floor Drains  D203004 Sanitary and Vent Equipment  D203005 Insulation & Identification  D203090 Other Sanitary Waste – Use for sumps and pumps  D2090 Other Plumbing Systems  D209003 Interceptors e.g. oil separators |

RADMON, Radiological Monitoring

Added clarification reading “This is for area radiation level monitoring and alarm, not contamination or airborne.”

RMS, Radiation Monitoring System

Added clarification reading “This is for area radiation level monitoring and alarm, not contamination or airborne.”

Moved Sys ACONV, Aries Conveyor, from Op Sys of AQN, Aqueous Nitrateto Op Sys of ARIES, Advanced Recovery and Integrated Extraction System.

Moved XE, Xenon Gas from Ops Sys PSAA to CGS, Compressed Gas Systems.

Deleted the Sys CCW, Circulating Chilled Water.

Moved Sys IWH, Industrial Water Hot, from Op Sys PSAA to WS.

Added Sys KRX, Kardex, under Op Sys SNMST.

Op Sys CONT, Containers with Sys SCNTR, Containers for Movement of SNM OS GBs

Deleted TRUPACT-II and HalfPACT containers.

Op Sys CONT, Containers with Sys TYPEB, Type B Containers

Added “Includes TRUPACT-II, HallfPACT, 10-160B, and RH TRU 72B – VSS (P) containers.”

Added TRUDOC, TRUPACT II Working Platform, under LIFT Op Sys.

Op Sys BLDG

Moved Ladders from WALLEX and WALLIN to a new Sys of FIXLDR, Affixed Ladders.

Created New Sys of EXTENC, External Enclosure, moved *external walls* here.

Created New Sys of INTCON, Internal Construction, moved *internal walls* here.

Deleted Sys WALLEX and WALLIN.

Added New Sys ILMS, In-Line Material Storage, under ARIES.

Deleted Sys SF2I, SF2I Maching Fluid Feed System, from Op Sys MACH, Machine. Operations moved to RL, Refrigerant Liquid System.

Deleted SRCRT, Source Radiography Operations, from Op Sys NDE.

Deleted NESII, Nuclear Environmental Site Inventory Isolation, from Op Sys ENCL.

Revised Op Sys RLWCS to make it not specific F10.

Revised Sys RLW and RLBECS such that they are not specific to RLUOB. Done since WCRRF has radioactive drains that go to RLWTF.

Moved VCCW, Vault Circulating Chilled Water, from Op Sys SNMST to Op Sys COOLW.

Under Op Sys SNMST, deleted the following Systems:  
VWBC, Vault Water Bath Containers  
VWBCS, Vault Water Bath Cooling System  
VWBL, Vault Water Bath Level

Under Op Sys CONT, deleted Sys VBM, Other Credited Containers.

Under Op Sys SNMST, added Sys VWBC, Vault Water Bath Containers

Under Op Sys UWS, Utilities Water Supply, added Utilities’ Water Distribution Segments and the respective TAs served.

Placed fire walls and doors under FP/FBP. Removed same from EXTENC and INTCON.

Added LATS, Lathes, and MMS, Milling Machines, both as Systems under the Op Sys MACH, Machining, as F01 will be adding equipment to the MEL.

Deleted Sys FBP from Op Sys LLWBLP.

Added Sys RMS, Radiation Monitoring System, with note reading “Includes neutron and gamma detection system” under Op Sys AAC, Actinide Analytical Chemistry.

Added “Process Cooling Water” as an option for the PCW System as in some buildings it is “chilled” and other “process”.

Added Sys D101090 Other Vertical Transportation Equipment (use this for stationary, fixed in place, drum handling devices and such) under the Op Sys of LIFT.