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# LID GENERAL DESIGN REQUIREMENTS

#### CONSTRUCTION

- ENSURE CONSTRUCTION PERSONNEL HAVE THE PROPER EXPERIENCE AND QUALIFICATIONS TO INSTALL LID PROJECTS.
- PROJECT MUST INCLUDE A SUBMITTAL PROCESS DIRECTED TO SME'S WHO HAVE THE AUTHORITY TO APPROVE ACTUAL MATERIALS USED.

#### INSPECTION

- IDENTIFY APPROPRIATE MATERIALS AND ENFORCE 'HOLD POINTS' FOR FIELD INSPECTION TO OCCUR AT PREDETERMINED STAGES DURING CONSTRUCTION
- USE QUALIFIED INSPECTOR WHO ARE FAMILIAR WITH LID STANDARDS METHODOLOGIES.

## MAINTENANCE + MONITORING

REGULAR MAINTENANCE AND MONITORING IS REQUIRED TO KEEP LID COMPONENTS FUNCTIONING AS DESIGNED, AND HELPS TO AVOID EXPENSIVE REPAIRS. THE FOLLOWING ARE GENERAL MAINTENANCE GUIDELINES THAT ARE TO BE ADDRESSED FOR EACH LID CONSTRUCTION PROJECT.

- PROVIDE A LID MAINTENANCE + MONITORING PLAN, OUTLINING THE BASIC FOLLOWING ITEMS:
  - A- WHO IS RESPONSIBLE FOR MAINTENANCE AND MONITORING?
  - B- LIST THE TYPES OF MAINTENANCE AND MONITORING ACTIVITIES NECESSARY, WHEN MAINTENANCE AND MONITORING SHOULD OCCUR, AND ESTABLISH A CHECKLIST OUTLINING WHAT ASPECTS NEED TO BE EVALUATED.
- C- IDENTIFY PERFORMANCE CRITERIA FOR EACH MAINTENANCE ACTIVITY LISTED WITHIN THE LID MAINTENANCE PLAN.
- D- WHAT IS ESTIMATED COST FOR EACH ACTIVITY IDENTIFIED IN THE PLAN, INCLUDING MONITORING?
- ENSURE ON-GOING MAINTENANCE AND MONITORING ACTIVITIES BY QUALIFIED STAFF.
- INCLUDE MAINTENANCE AND MONITORING ACTIVITIES WITHIN THE BUDGET BY DEVELOPING ESTIMATES BASED UPON THE DEFINED LID MAINTENANCE PLAN.
- DISTRIBUTE AND COMMUNICATE THE SCHEDULES FOR MAINTENANCE AND MONITORING ACTIVITIES AT DETERMINED LOCATIONS, OUTLINING THE SCOPE OF WORK TO BE
- EMPLOYEES PERFORMING MAINTENANCE AND MONITORING ARE TO PROVIDE FEEDBACK TO THE MAINTENANCE POINT OF CONTACT FOR UNUSUAL CONDITIONS, AREAS NEEDING REPAIRS, OR SPECIAL MAINTENANCE.
- INTEGRATE CHANGES TO THE LID MAINTENANCE + MONITORING PLAN BASED UPON FEEDBACK FROM THE FIELD.

THERE ARE GENERAL DESIGN CONSIDERATIONS FOR ALL STORM WATER IMPROVEMENTS IMPLEMENTED AT LANL. THE FOLLOWING ARE MANDATED BY EITHER LANL POLICIES AND PROCEDURES, OR BY OTHER AGENCIES WITH REGULATORY ROLES IN LANL STORM WATER MANAGEMENT.

## SWMU'S AND AOC'S

SOLID WASTE MANAGEMENT UNITS (SWMU), AND AREAS OF CONCERN (AOC) ARE AREAS WITH SPECIAL CONSIDERATIONS FOR ENVIRONMENTAL OR HAZARDS MANAGEMENT. THESE ARE GENERAL CONSIDERATIONS FOR THOSE AREAS.

- DO NOT DIRECT STORM WATER TO A SWMU OR AOC.
- GREEN INFRASTRUCTURE FEATURES SHOULD BE DESIGNED, CONSTRUCTED, AND MAINTAINED TO PREVENT PONDING IN SWMUS AND AOC'S
- BASED ON THE SITE CONSTITUENTS, ENVIRONMENTAL MEDIA (E.G., SOIL, SEDIMENT, SURFACE, AND GROUND WATER) MAY CONSTITUTE SOLID WASTE AND/ OR HAZARDOUS WASTE. IF THERE IS ANY POTENTIAL FOR ACCUMULATED SEDIMENT OR OTHER MEDIA TO BE CONSIDERED WASTE, A WASTE DETERMINATION MUST BE MADE AND DOCUMENTED. FOR GUIDANCE, SEE LANL'S PROCEDURES ON WASTE MANAGEMENT.
- BMPS/ GREEN INFRASTRUCTURE USED ON SWMUS OR AOCS MAY BE CONSIDERED WASTE BASED ON SITE CONSTITUENTS AND BMP USE. CONSIDER THE USE OF BIODEGRADABLE OR PERMANENT BMPS THAT CAN BE LEFT ON

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# **ENGINEERING STANDARDS** E. ATENCIO

DESIGN

CHECKED

DATE

OF

DATE:

T. LEMKE

S. RAEL

02-10-20

CIVIL LOW IMPACT DEVELOPMENT **GENERAL DESIGN REQUIREMENTS** 

TA-XX BLDG XXXX

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.C.: UNCLASSIFIED REVIEWER: DONALD YARDMAN PROJECT ID DRAWING NO **CHAPTER 3 ST-G20GEN-1.1**