DEBRIS AND TRASH MANAGEMENT

DESCRIPTION

Large volumes of debris and trash are often generated at construction sites including: packaging, pallets, wood waste, concrete waste, soil, electrical wiring, cuttings, and a variety of other materials. There are several techniques and procedures to minimize the potential of storm water contamination from solid waste through appropriate storage and disposal practices. Recycling of construction debris also reduces the volume of material to be disposed of and associated costs.

PRIMARY USE

Debris and trash management should be a part of all construction practices. By limiting the trash and debris on site, storm water quality is improved along with reduced clean up requirements at the completion of the project.

APPLICATIONS

Solid waste management for construction sites is based on proper storage and disposal practices by construction workers and supervisors. Key elements of the program are education and modification of improper disposal habits. Cooperation and vigilance is required on the part of supervisors and workers to ensure that the recommendations and procedures are followed. Following are lists describing the targeted materials and recommended procedures:

- ❑ Construction (and Demolition) Debris
  - Dimensional lumber
  - Miscellaneous wood (pallets, plywood, etc)
  - Copper (pipe and electrical wiring)
  - Miscellaneous metal (studs, pipe, conduit, sheathing, nails, etc)
  - Insulation
  - Concrete, brick, and mortar
  - Shingles
  - Roofing materials
  - Gypsum board

- ❑ Trash
  - Paper and cardboard (packaging, containers, wrappers)
  - Plastic (packaging, bottles, containers)
  - Styrofoam (cups, packing, and forms)
  - Food and beverage containers
  - Food waste

Storage Procedures

- ❑ Wherever possible, minimize production of debris and trash.
- ❑ Designate a foreman or supervisor to oversee and enforce proper debris and trash procedures.
- ❑ Instruct construction workers in proper debris and trash storage and handling procedures.
- ❑ Segregate potentially hazardous waste from non-hazardous construction site debris.
- ❑ Segregate recyclable construction debris from other non-recyclable materials.

Applications

Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents

- ○ Sediment
- ● Nutrients Toxic Materials
- ○ Oil & Grease
- ● Floatable Materials
- ● Other Construction Wastes

Implementation Requirements

- ◒ Capital Costs
- ◒ Maintenance
- ◒ Training
- ○ Suitability for Slopes > 5%

Legend

- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

M-1

1/2

Scale : N/A Date : 02/21/05 Design : COG Drawn : COG Dwg. File : ERO_009.DWG Project No. : STANDARD-DETAILS	GARLAND ENGINEERING STANDARD DETAILS	DEBRIS AND TRASH MANAGEMENT	PAGE 1

DEBRIS AND TRASH MANAGEMENT

- ❑ Keep debris and trash under cover in either a closed dumpster or other enclosed trash container that limits contact with rain and runoff and prevents light materials from blowing out.
- ❑ Store waste materials away from drainage ditches, swales and catch basins.
- ❑ Do not allow trash containers to overflow.
- ❑ Do not allow waste materials to accumulate on the ground.
- ❑ Prohibit littering by workers and visitors.
- ❑ Police site daily for litter and debris.
- ❑ Enforce solid waste handling and storage procedures.

Storage Procedures

- ❑ If feasible, recycle construction and demolition debris such as wood, metal, and concrete.
- ❑ General construction debris may be hauled to a licensed construction debris landfill (typically less expensive than a sanitary landfill).
- ❑ Use waste and recycling haulers/facilities approved by the local jurisdiction.

Education

- ❑ Educate all workers on solid waste storage and disposal procedures.
- ❑ Instruct workers in identification of solid waste and hazardous waste.
- ❑ Have regular meetings to discuss and reinforce disposal procedures (incorporate in regular safety seminars).
- ❑ Clearly mark on all debris and trash containers which materials are acceptable.

Quality Control

- ❑ Foreman and/or construction supervisor shall monitor on-site solid waste storage and disposal procedures.
- ❑ Discipline workers who repeatedly violate procedures.

Requiremebts

- ❑ Job-site waste handling and disposal education and awareness program.
- ❑ Compliance by workers.
- ❑ Sufficient and appropriate waste storage containers.
- ❑ Timely removal of stored solid waste materials.
- ❑ Training workers and monitoring compliance.

LIMITATIONS

Only addresses non-hazardous solid waste.
One part of a comprehensive construction site management program.

2/2

Scale : N/A Date : 02/21/05 Design : COG Drawn : COG Dwg. File : ERO_009.DWG Project No. : STANDARD-DETAILS	GARLAND ENGINEERING STANDARD DETAILS	DEBRIS AND TRASH MANAGEMENT	PAGE 2

CHEMICAL MANAGEMENT

DESCRIPTION

Chemical management addresses the problem of storm water polluted with chemical pollutants through spills or other forms of contact. The objective of the chemical management is to minimize the potential of storm water contamination from construction chemicals through appropriate recognition, handling, storage, and disposal practices.

It is not the intent of chemical management to supersede or replace normal site assessment and remediation procedures. Significant spills and/or contamination warrant immediate response by trained professionals. Suspected job-site contamination should be immediately reported to regulatory authorities and protective actions taken. Significant spills should be reported to the National Response Center (NRC) at (800) 424-8802.

PRIMARY USE

These management practices along with applicable OSHA and EPA guidelines should be incorporated at all construction sites that use or generate hazardous wastes. Many chemicals such as fuel, oil, grease, fertilizer, and pesticide are present at most construction sites.

INSTALLATION, APPLICATION AND DISPOSAL CRITERIA

The chemical management techniques presented here are based on proper recognition, handling, and disposal practices by construction workers and supervisors. Key elements are education, proper disposal practices, as well as provisions for safe storage and disposal. Following are lists describing the targeted materials and recommended procedures:

- ❑ Targeted Chemical Materials
  - Paints
  - Solvents
  - Stains
  - Wood preservatives
  - Cutting oils
  - Greases
  - Roofing tar
  - Pesticides, herbicides, & fertilizer
  - Fuels & lube oils
  - Antifreeze

Storage Procedures

- ❑ Wherever possible, minimize use of hazardous materials.
- ❑ Minimize generation of hazardous wastes on the job-site.
- ❑ Segregate potentially hazardous waste from non-hazardous construction site debris.
- ❑ Designate a foreman or supervisor to oversee hazardous materials handling procedures.
- ❑ Keep chemicals in appropriate containers (closed drums or similar) and under cover.
- ❑ Store chemicals away from drainage ditches, swales and catch basins.
- ❑ Use containment berms in fueling and maintenance areas and where the potential for spills is high.

Applications

- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

Targeted Constituents

- ○ Sediment
- ● Nutrients Toxic Materials
- ● Oil & Grease
- ○ Floatable Materials
- ● Other Construction Wastes

Implementation Requirements

- ◒ Capital Costs
- ◒ Maintenance
- ◒ Training
- ○ Suitability for Slopes > 5%

Legend

- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

M-2

1/2

Scale : N/A Date : 02/21/05 Design : COG Drawn : COG Dwg. File : ERO_010.DWG Project No. : STANDARD-DETAILS	GARLAND ENGINEERING STANDARD DETAILS	CHEMICAL MANAGEMENT	PAGE 3

CHEMICAL MANAGEMENT

Waste Handling
- ❑ Ensure that adequate hazardous waste storage volume is available.
- ❑ Ensure that hazardous waste collection containers are conveniently located.
- ❑ Do not allow potentially hazardous waste materials to accumulate.
- ❑ Enforce hazardous waste handling and disposal procedures.
- ❑ Clearly mark on all hazardous waste containers which materials are acceptable for the container.

Disposal Procedures
- ❑ Ensure that adequate cleanup and containment materials are available onsite.
- ❑ Regularly schedule hazardous waste removal to minimize on-site storage.
- ❑ Use only licensed hazardous waste haulers.

Education
- ❑ Instruct workers on safety procedures for construction site chemical storage.
- ❑ Instruct workers in identification of chemical pollutants.
- ❑ Ensure that workers are trained in procedures for spill prevention and response.
- ❑ Educate workers of potential dangers to humans and the environment from chemical pollutants.
- ❑ Educate all workers on chemical storage and disposal procedures.
- ❑ Have regular meetings to discuss and reinforce identification, handling, and disposal procedures (incorporate in regular safety seminars).
- ❑ Establish a continuing education program to indoctrinate new employees.

Quality Assurance
- ❑ Foreman and/or construction supervisor shall monitor on-site chemical storage and disposal procedures.
- ❑ Educate and if necessary, discipline workers who violate procedures.
- ❑ Ensure that the hazardous waste disposal contractor is reputable and licensed.

Requirements
- ❑ Job-site chemical and hazardous waste handling and disposal education and awareness program.
- ❑ Commitment by management to implement chemical storage and hazardous waste management practices.
- ❑ Compliance by workers.
- ❑ Sufficient and appropriate chemical and hazardous waste storage containers.
- ❑ Timely removal of stored hazardous waste materials.

Cost
- ❑ Possible modest cost impact for additional chemical storage containers.
- ❑ Small cost impact for training and monitoring.
- ❑ Potential cost impact for hazardous waste collection and disposal by licensed hauler - actual cost depends on type of material and volume.

LIMITATIONS

This practice is not intended to address site-assessments and pre-existing contamination. Major contamination, large spills and other serious hazardous waste incidents require immediate response from specialists.

Demolition activities and potential pre-existing materials, such as lead and asbestos, are not addressed by this program. Site-specific information on plans is necessary.

Contaminated soils are not addressed.

2/2

CONCRETE WASTE MANAGEMENT

DESCRIPTION

Concrete waste at construction sites comes in two forms: 1) excess fresh concrete mix including truck and equipment washing, and 2) concrete dust and concrete debris resulting from demolition. Both forms have the potential to impact water quality through storm water runoff contact with the waste.

PRIMARY USE

Concrete waste is present at most construction sites. This BMP should be utilized at sites in which concrete waste is present.

APPLICATIONS

A number of water quality parameters can be affected by introduction of concrete - especially fresh concrete. Concrete affects the pH of runoff, causing significant chemical changes in water bodies and harming aquatic life. Suspended solids in the form of both cement and aggregate dust are also generated from both fresh and demolished concrete waste.

Unacceptable Waste Concrete Disposal Practices

- ❑ Dumping in vacant areas on the job-site.
- ❑ Illicit dumping off-jobsite.
- ❑ Dumping into ditches or drainage facilities.

Recommended Disposal Practices

- ❑ Avoid unacceptable disposal practices listed above.
- ❑ Develop pre-determined, safe concrete disposal areas.
- ❑ Provide a washout area with a minimum of 6 cubic feet of containment area volume for every 10 cubic yards of concrete poured.
- ❑ Never dump waste concrete illicitly or without property owner's knowledge and consent.
- ❑ Overflow of washdown water shall be discharged in an area protected by one or more sediment removal BMPs and shall be done in a manner that does not result in a violation of groundwater or surface water quality standards.

Education

- ❑ Drivers and equipment operators should be instructed on proper disposal and equipment washing practices (see above).
- ❑ Supervisors must be made aware of the potential environmental consequences of improperly handled concrete waste.

Enforcement

- ❑ The construction site manager or foreman must ensure that employees and pre-mix companies follow proper procedures for concrete disposal and equipment washing.
- ❑ Employees violating disposal or equipment cleaning directives must be re-educated or disciplined if necessary.

Demolition Practices

- ❑ Monitor weather and wind direction to ensure concrete dust is not entering drainage structures and surface waters.
- ❑ Where appropriate, construct sediment traps or other types of sediment detention devices downstream of demolition activities.

Applications

Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents

- ○ Sediment
- ○ Nutrients Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ● Other Construction Wastes

Implementation Requirements

- ◒ Capital Costs
- ◒ Maintenance
- ◒ Training
- ○ Suitability for Slopes > 5%

Legend

- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

M-3

1/2

CONCRETE WASTE MANAGEMENT

Requirements

- ❑ Use pre-determined disposal sites for waste concrete.
- ❑ Prohibit dumping waste concrete anywhere but pre-determined areas.
- ❑ Assign pre-determined truck and equipment washing areas.
- ❑ Educate drivers and operators on proper disposal and equipment cleaning procedures.

Costs

- ❑ Minimal cost impact for training and monitoring.
- ❑ Concrete disposal cost depends on availability and distance to suitable disposal areas
- ❑ Additional costs involved in equipment washing could be significant.

LIMITATIONS

Concrete waste management is one part of a comprehensive construction site waste management program.

2
2

Scale : N/A Date : 02/21/05 Design : COG Drawn : COG Dwg. File : ERO_011.DWG Project No. : STANDARD-DETAILS	GARLAND ENGINEERING STANDARD DETAILS	CONCRETE WASTE MANAGEMENT	PAGE 6

CONCRETE SAWCUTTING WASTE MANAGEMENT

DESCRIPTION

Sawcutting of concrete pavement is a routine practice, necessary to control shrinkage cracking immediately following placement of plastic concrete. It is also used to remove curb sections and pavement sections for pavement repairs, utility trenches, and driveways. Sawcutting for joints involves sawing a narrow, shallow groove in the concrete, while sawcutting for removals is usually done full depth through the slab. Water is used to control saw blade temperature and to flush the detritus from the sawed groove. The resulting slurry of process water and fine particles and high pH must be properly managed.

A number of water quality parameters can be affected by introduction of concrete fines. Concrete affects the pH of runoff, causing significant chemical changes in water bodies and harming aquatic life. Suspended solids in the form of saw fines are also generated from sawcutting operations.

DESIGN CRITERIA

Slurry Collection

- ❑ During saw cutting operations, the slurry and cuttings shall be continuously vacuumed to control the flow of water from the operations site.
- ❑ The slurry and cuttings shall not be allowed to drain to the storm drain system, swale, stream or other water body.
- ❑ The slurry and cuttings shall not be allowed to remain on the pavement to dry out.

Slurry Disposal

- ❑ Develop pre-determined, safe slurry disposal areas.
- ❑ Collected slurry and cuttings shall be discharged in an area protected by one or more sediment removal BMPs and shall be done in a manner that does not result in a violation of groundwater or surface water quality standards.
- ❑ Never dump waste illicitly or without property owner's knowledge and consent.
- ❑ Slurry may be disposed of in facilities designated for washdown of concrete trucks (see M-3, Concrete Waste Management).

MAINTENANCE

Project personnel should inspect the operations to assure that operators are diligent in controlling the water produced by the saw cutting activities. Following operations the pavement should be inspected to ensure that waste removal has been adequately performed.

Applications

Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents

- ○ Sediment
- ○ Nutrients/Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ● Other Construction Wastes

Implementation Requirements

- ○ Capital Costs
- ◒ Maintenance
- ◒ Training
- ○ Suitability for Slopes > 5%

Legend

- ○ Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

M-4

1/1

Scale : N/A Date : 02/21/05 Design : COG Drawn : COG Dwg. File : ERO_012.DWG Project No. : STANDARD-DETAILS	GARLAND ENGINEERING STANDARD DETAILS	CONCRETE SAWCUTTING WASTE MANAGEMENT	PAGE 7

SANDBLASTING WASTE MANAGEMENT

DESCRIPTION

The objective of sandblasting waste management is to minimize the potential of storm water quality degradation from sandblasting activities at construction sites. The key issues in this program are prudent handling and storage of sandblast media, dust suppression, and proper collection and disposal of spent media. It is not the intent of this BMP to outline all of the worker safety issues pertinent to this practice. Safety issues should be addressed by construction safety programs as well as local, state, and federal regulations.

INSTALLATION/APPLICATION CRITERIA

Since the sandblasting media consists of fine abrasive granules, it can be easily transported by running water. Sandblasting activities typically create a significant dust problem that must be contained and collected to prevent off-site migration of fines. Particular attention must be paid to sandblasting work on bridges, box culverts, and headwalls that span or are immediately adjacent to streams and waterways.

Operational Procedures

- ❑ Use only inert, non-degradable sandblast media.
- ❑ Use appropriate equipment for the job; do not over-blast.
- ❑ Wherever possible, blast in a downward direction.
- ❑ Install a windsock or other wind direction instrument.
- ❑ Cease blasting activities in high winds or if wind direction could transport grit to drainage facilities.
- ❑ Install dust shielding around sandblasting areas.
- ❑ Collect and dispose of all spent sandblast grit, use dust containment fabrics and dust collection hoppers and barrels.
- ❑ Non-hazardous sandblast grit may be disposed in permitted construction debris landfills or permitted sanitary landfills.
- ❑ If sandblast media cannot be fully contained, construct sediment traps downstream from blasting area where appropriate.
- ❑ Use sand fencing where appropriate in areas where blast media cannot be fully contained.
- ❑ If necessary, install misting equipment to remove sandblast grit from the air prevent runoff from misting operations from entering drainage systems.
- ❑ Use vacuum grit collection systems where possible.
- ❑ Keep records of sandblasting materials, procedures, and weather conditions on a daily basis.
- ❑ Take all reasonable precautions to ensure that sandblasting grit is contained and kept away from drainage structures.

Educational Issues

- ❑ Educate all on-site employees of potential dangers to humans and the environment from sandblast grit.
- ❑ Instruct all on-site employees of the potential hazardous nature of sandblast grit and the possible symptoms of over-exposure to sandblast grit.
- ❑ Instruct operators of sandblasting equipment on safety procedures and personal protection equipment.
- ❑ Instruct operators on proper procedures regarding storage, handling and containment of sandblast grit.

Applications

Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents

- ○ Sediment
- ● Nutrients Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ● Other Construction Wastes

Implementation Requirements

- ● Capital Costs
- ● Maintenance
- ● Training
- ○ Suitability for Slopes > 5%

Legend

- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

M-5

1/2

Scale : N/A Date : 02/21/05 Design : COG Drawn : COG Dwg. File : ERO_013.DWG Project No. : STANDARD-DETAILS	GARLAND ENGINEERING STANDARD DETAILS	SANDBLASTING WASTE MANAGEMENT	PAGE 8

SANDBLASTING WASTE MANAGEMENT

- ❑ Instruct operators to recognize unfavorable weather conditions regarding sandblasting activities.
- ❑ Instruct operators and supervisors on current local, state and federal regulations regarding fugitive dust and hazardous waste from sandblast grit.
- ❑ Have weekly meetings with operators to discuss and reinforce proper operational procedures.
- ❑ Establish a continuing education program to indoctrinate new employees.

Materials Handling Recommendations

- ❑ Sandblast media should always be stored under cover away from drainage structures.
- ❑ Ensure that stored media or grit is not subject to transport by wind.
- ❑ Ensure that all sandblasting equipment as well as storage containers comply with current local, state and federal regulations.
- ❑ Refer to Hazardous Waste BMP fact sheet if sandblast grit is known or suspected to contain hazardous components.
- ❑ Capture and treat runoff, which comes into contact with sandblasting material or waste.

Quality Assurance

- ❑ Foremen and/or construction supervisor should monitor all sandblasting activities and safety procedures.
- ❑ Educate and if necessary, discipline workers who violate procedures.
- ❑ Take all reasonable precautions to ensure that sandblast grit is not transported off-site or into drainage facilities.

Requirements

- ❑ Education and awareness program for all employees regarding control of sandblasting and potential dangers to humans and the environment.
- ❑ Operator and supervisor education program for those directly involved in sandblasting activities - instructions on material handling, proper equipment operation, personal protective equipment, fugitive dust control, record keeping and reporting.
- ❑ Proper sandblast equipment for the job.
- ❑ Site-specific fugitive dust control and containment equipment.
- ❑ Site-specific fugitive dust control procedures.
- ❑ Compliance by supervisors and workers.

Costs

- ❑ Minimal cost for training and monitoring.
- ❑ Potential for significant cost for containment procedures on large jobs.
- ❑ Potential for significant costs associated with cleanup, correction and remediation if contamination occurs.

LIMITATIONS

Site-specific solutions to sandblasting problems may be required.
Sandblasting operations on structures known to contain hazardous materials require special procedures not specifically outlined above including professional hazardous waste specialists.
Where hazardous materials are known or suspected, a site assessment and remediation plan may be necessary.
Sandblasting waste management is one part of a comprehensive construction site waste management program.

2/2

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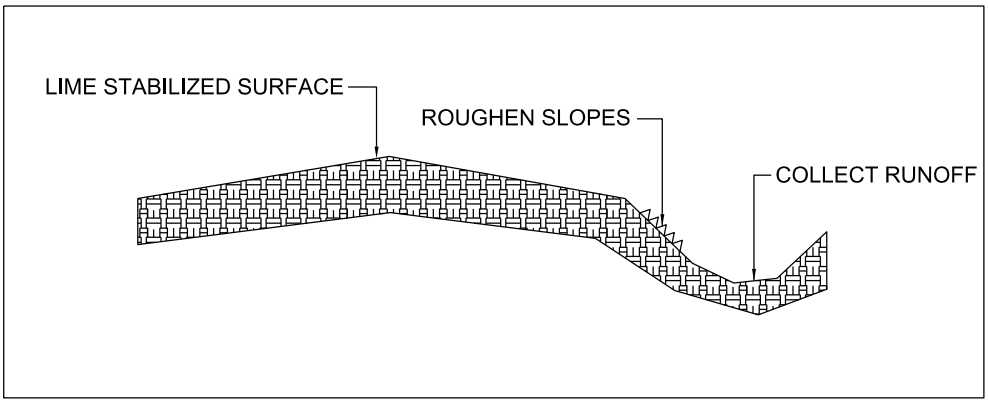
LIME STABILIZATION MANAGEMENT



Applications

Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents

- ○ Sediment
- ◒ Nutrients Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ○ Other Construction Wastes

Implementation Requirements

- ○ Capital Costs
- ◒ Maintenance
- ○ Training
- ○ Suitability for Slopes > 5%

Legend

- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

M-6

DESCRIPTION

Lime stabilization is used extensively in the North Central Texas region to stabilize pavement subbases for roadways, parking lots, and other paved surfaces, and as a subgrade amendment for building pad sites. Hydrated lime is applied to the soil and mixed through disking and other techniques, then allowed to cure. This practice will reduce the potential for runoff to carry lime offsite, where it may impact aquatic life by changing the pH balance of streams, ponds, and other water bodies.

PRIMARY USE

This BMP should be implemented when lime is required for soil stabilization.

APPLICATIONS

Lime stabilization can be used under a variety of conditions. The engineer should determine the applicability of lime stabilization based on site conditions such as available open space, quantity of area to be stabilized, proximity of nearby water courses and other BMPs employed at the site. The use of diversion dikes and interceptor swales (see appropriate fact sheets) to divert runoff away from areas to be stabilized can be used in conjunction with these techniques to reduce the impact of the lime.

DESIGN CRITERIA

- ❑ The contractor shall limit lime operations to that which can be thoroughly mixed and compacted by the end of each workday.
- ❑ No traffic other than water trucks and mixing equipment shall be allowed to pass over the spread lime until after completion of mixing.
- ❑ Areas adjacent and downstream of stabilized areas shall be roughened to intercept lime from runoff and reduce runoff velocity.
- ❑ Geotextile fabrics such as those used for silt fence should not be used to address lime since the grain size of lime is significantly smaller than the apparent opening size of the fabric.
- ❑ For areas for which phasing of lime operations is impractical, use of a curing seal such as Liquid Asphalt, Grade MC-250 or MC-800 applied at a rate of 0.15 gallons per sq. yd. of surface can be used to protect the base.
- ❑ Use of sediment basins with a significant (>36 hour) drawdown time is encouraged for large areas to be stabilized (see S-6, Sediment Basin).
- ❑ Provide containment around lime storage, loading, and dispensing areas.

LIMITATIONS

Lime stabilization can be part of an overall plan to reduce pollutants from an active construction site. In the case of pollution due to lime, prevention of contamination is the only effective method to address this pollutant. Proper application and mixing along with avoiding applications when there is a significant probability of rain will reduce lime runoff.

1/1

SANITARY FACILITIES

DESCRIPTION

Facilities for collection and disposal of sanitary waste must be provided and properly managed to minimize the potential contamination of surface water with septic wastes. Location of portable facilities away from storm drain systems and surface waters or containment is necessary in case of spills.

PROCEDURES

- ❑ Sanitary facilities must be provided on the site in close proximity to areas where people are working.
- ❑ Portable toilets must be provided if no permanent facilities are available.
- ❑ Locate portable toilets a minimum of 20 feet away from storm drain inlets, conveyance channels, or surface waters
- ❑ If unable to meet 20-foot distance requirement, provide containment for portable toilets.
- ❑ Portable toilets should be regularly serviced.

Applications

Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices

Targeted Constituents

- ○ Sediment
- ● Nutrients Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ● Other Construction Wastes

Implementation Requirements

- ○ Capital Costs
- ◒ Maintenance
- ◒ Training
- ○ Suitability for Slopes > 5%

Legend

- ● Significant Impact
- ◒ Medium Impact
- ○ Low Impact
- ? Unknown or Questionable Impact

M-7

1/1