Municipal Good Housekeeping Manual

for the

CITY OF ALCOA

McGill ASSOCIATES
ENGINEERING • PLANNING • FINANCE

2240 Sutherland Avenue, Suite 2 | Knoxville, Tennessee 37919
(865) 540-0801 | www.mcgillengineers.com

CITY OF ALCOA

TABLE OF CONTENTS

CITY OF ALCOA

INTRODUCTION

The City of Alcoa (City) and its consultant McGill & Associates has developed this Storm Water Good House Keeping Manual in accordance with Part 4.2.6 of the State of Tennessee NPDES General Permit for Discharges from Small Municipal Storm Sewer Systems (Permit No. TNS075132).

The General Permit requires the City to develop and implement an operation and maintenance program that has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. The program must include employee training to prevent and reduce stormwater pollution from activities such as parks / open space maintenance, fleet and building maintenance, new construction, land disturbing activities, and stormwater system maintenance.

The Good House Keeping Manual is the principal document that outlines the programs the City will implement to minimize pollutants within its municipal operations. The Manual will be updated as necessary as City operations change or new sites are added to remain effective in reducing the discharge of pollutants to the municipal storm sewer system to the maximum extent practicable.

Stormwater Municipal Good Housekeeping
BMP Relevance

CITY OF ALCOA

No.	BMPs	Relevance	Applicable Facilities								
			Fire Station	Police Station	Schools	Recreation	Office Bldg	Public Works	Roads	Cemetery	WTP/WWTP
1	Street Sweeping	Roads							x		
		Large Parking Lots			x	x	x	x			
		Sweepings Storage						x			
2	Storm Drain Maintenance	Roads							x		
		Storm Piping & Inlets	x	x	x	x	x	x	x	x	x
3	Permanent Stormwater Facility Mgmt	Stormwater Ponds/Storage	x	x	x	x	x	x			x
		Water Quality Devices	x	x	x	x	x	x	x	x	x
		Storm Piping & Inlets	x	x	x	x	x	x	x	x	x
4	Illicit Discharge & Illegal Dumping Control	Roads							x		
		Garbage Collection	x	x	x	x	x	x		x	x
		Chemical Storage	x	x	x	x	x	x			x
		Sanitary Sewer	x	x	x	x	x	x			x
		Vehicle Maintenance	x					x			
		Hotspot Facilities			x			x			x
		Stormwater Hotline	x	x	x	x	x	x	x	x	x
		Pools				x					
5	Construction Site Mgmt	Roads							x		
		Utility Work			x	x	x	x	x		x
		Stormwater Piping/Inlets			x	x	x	x	x		
		Athletic Fields			x	x					
		Landscaping				x			x		
6	Hazardous Materials Storage	Pesticides				x		x		x	
		Chemical Storage	x	x	x	x	x	x			x
		Oils & Solvents	x	x	x	x	x	x			x
		Road Salt						x			
		Food Waste			x						
7	Fleet Maintenance Mgmt	Vehicle Maintenance						x			
		Car Washing	x					x			
8	Employee Training	City Personnel	x	x	x	x	x	x	x	x	x

CITY OF ALCOA

STREET SWEEPING

Description: Streets, roads, highways and parking lots accumulate significant amounts of pollutants that contribute to stormwater runoff to surface waters. Pollutants, including sediment, debris, trash, road salt, hydrocarbon-laden materials, and trace metals can be minimized by street sweeping. Street sweeping can also improve the aesthetics of municipal roadways, control dust, and decrease the accumulation of contaminants in catch basins. An effective street sweeping program can remove several tons of debris a year from city streets minimizing pollutants in stormwater runoff.

Program: The street sweeping program needs to be flexible to accommodate climate conditions and areas of concern. For instance, by sweeping soon after a snow melt in areas where pavement winterizing practices are common, excess sand, grit, salt, and debris from the road is captured before these pollutants can enter surface waters. Areas of concern should be based on traffic volume, land use, field observations of sediment and trash accumulation, and proximity to surface waters. A log of all street sweeping times, locations, distances, and removal quantities shall be kept on a daily basis and reviewed at least annually in order to evaluate the program's effectiveness.

Since street sweeping collects a variety of potentially harmful materials, the handling of this debris is an important aspect of the program. The site selected for the deposition and storage of "sweepings" should have limited runoff exposure, and preferably be covered or have proper BMP's in place in order to reduce the potential for contaminate release during storm events. Storage locations should be sized based on the estimated volume of material collected and the removal rate of disposed sweepings. Additionally, storage facilities should be equipped with secondary containment or other BMPs that allow for the capture and dewatering of collected material via infiltration, treatment, or direct flow to the sanitary sewer. Fluids removed from the sweepings during dewatering activities, as well as sweeper wash water, must be collected and treated properly prior to release.

Relevance: Roads, parking areas, pervious paving, City of Alcoa Service Center

CITY OF ALCOA

STORM DRAIN MAINTENANCE

Description: Fine particles and pollutants naturally tend to accumulate along the curbs of roads between rainfall events. This accrual of stormwater pollutants such as sediment, nutrients, metals, hydrocarbons, bacteria, pesticides, trash and chemicals needs to be removed in order to limit surface water contamination, as well as to ensure that pipes convey design flow. Clogged drains and storm drain inlets can cause the drains to overflow, leading to flooding and increased erosion. The persistent nature of the pollutants' sources (run-on, vehicle emissions, breakup of street surface, littering, etc.) requires that cleaning be performed on a routine basis. If performed regularly, cleaning increases dissolved oxygen, reduces levels of bacteria, and supports in-stream habitat.

Program: While all portions of the public storm drainage system should be inspected and maintained on a regular basis, areas with relatively flat grades or low flows should be given special attention because they rarely achieve high enough flows to flush themselves (Ferguson et al., 1997). Such storm drain reaches with deposition problems shall be identified and a flushing schedule developed to clear excessive deposits.

While it is common practice to use a "pumper" truck to provide the water source for such flushing, fire hydrants are also a viable option, especially if the storm drain cleaning can be coordinated to coincide with fire line flushing to make optimal use of the water. When using water to clean storm pipes via flushing, it is important to collect and treat the waste water. This is commonly achieved by use of a "vacuum" truck to suck up the flushed water. However, other acceptable means include diverting the flushed effluent to a sediment trap, sediment basin, detention basin, or other treatment device that allows for energy dissipation and sedimentation.

Generally, flushing efficiencies are greatly reduced when pipe sizes exceed 36" or when the length of line flushed exceeds 700'. However, by working within these constraints, it has been found that between 65-75% of organics and 55-65% of dry weather grit/inorganic material can be expected to be removed via line flushing.

CITY OF ALCOA

Areas with significant tree canopy require special attention, especially during the Fall and Winter months, due to the large amount of leaf litter produced. The mass accumulation of tree and other landscaping-related debris can clog storm drainage collection systems at the inlet structure. Similarly, catch basins with inserts for filtration or screening have a higher risk of becoming blocked and necessitate more frequent attention. Such locations should be identified and a seasonal schedule developed to collect the associated buildup prior to it causing facility malfunction.

Relevance: Roads, Storm Piping & Inlets

CITY OF ALCOA

PERMANENT STORMWATER FACILTY MANAGEMENT

Description: Permanent stormwater management facilities are engineered to mitigate the long-term impacts of land development and are required in areas of new, existing, and altered developments as specified in the City's Stormwater Management Ordinance. They provide benefits to the quality and/or quantitiy of water that runs off of the land and help to minimize environmental damage via pollution reduction, flood protection, and aesthetic degradation. Typical stormwater management facilities include extended detention basins, wet (retention) ponds, bioretention basins, wetlands, infiltration swales, proprietary water quality structures, catch basin inserts, and much more. They are intended to function for the duration of a development and require regularly scheduled maintenance; without such efforts, their effectiveness at treating stormwater runoff can be vastly reduced.

Program: The City of Alcoa requires water quality and quantity management practices to be considered for all land development, including those facilities within its own municipal operations. Therefore, it is important for a process to be in place that provides verification that the long-term operation and maintenance (O&M) of these facilities is reliably performed. The keys to ensuring that this proper O&M occurs are:

- Tracking all permanent stormwater facility locations,
- Formalizing the understanding of the party responsible for each facility,
- Outlining the minimum O&M procedures required for each facility, and
- Inspecting the facilities to check that the O&M requirements are being met.

In order to achieve these objectives, the following procedures shall be followed:

1. *Facility Tracking*:
    a. A system is to be put in place where all existing permanent stormwater management facilities are inventoried via field survey. The location of each facility is to be mapped and its detailed description logged within the City geographic information system (GIS). At a minimum, the description shall include the facility type, coordinates, approximate installation date, general

maintenance requirements (what and when), and inspection history (including dates, findings, follow-up activities, and compliance status).

b. Upon completion of any new City facilities where permanent stormwater infrastructure is constructed, the location and description of each new facility are to be field surveyed and logged into the GIS as outlined in item 1(a) above.

2. *Responsible Party*:
   a. Unless otherwise agreed to and recorded in legal form, it shall be the responsibility of the City of Alcoa to inspect, operate, and maintain all permanent stormwater facilities that it installs on public lands with the intent of treating runoff from public operations.
   b. Prior to acceptance of the new construction and issuance of a final Certificate of Occupancy (if relevant), the new facility must be certified for both water quantity and quality and an as-built completed.

3. *O&M Requirements*:
   a. The City of Alcoa shall provide the site facility managers/operators who are responsible for the O&M of permanent stormwater management facilities a description of the minimum practices, procedures, and schedule that will be required of them. The procedures outlined shall include all tasks necessary to ensure the continued compliance of the facility with its design performance standards.
   b. The O&M description shall be specific to the type of facility being addressed so as to neither overburden the manager/operator with unnecessary requirements nor neglect practices that may be uncommon with other facilities yet essential to the subject one.
   c. The O&M requirements should also be outlined in each Facility Stormwater Pollution Prevention Plan (FSWPPP).
   d. At a minimum, site facility managers/operators will be required to perform annual "routine" inspections of their stormwater facilities to ensure their proper functioning. These inspections shall be documented and performed by a person familiar with the control measures.
   e. In addition to the "routine" annual inspections, site facility managers/operators will also be required to have "comprehensive" inspections performed by a professional engineer or landscape architect at least every five (5) years. These more thorough inspections must also be documented and shall, at a minimum, include:
      - Inspection date,
      - Facility type,
      - Facility address/location,

- Contact information for the owner/operator,
- Description of facility and condition (ex: vegetative cover, structural condition, slope condition, erosion, siltation, debris accumulation, clogging, etc.),
- Photographs documenting facility condition, and
- Description of any corrective actions necessary (including deadlines and re-inspection dates).

f. The records from each "routine" and "comprehensive" inspection shall be maintained by the City stormwater manager.

4. *O&M Oversight*:
   a. A stormwater facility prioritization list that considers the potential failure risk to the environment and the public's health, safety, and welfare shall be utilized to create a Facility Oversight Inspection Schedule where the facilities with the most liability are visited more frequently and those with the least liability are less frequently. In no instance shall the planned inspection reoccurrence be more than three (3) years.
   b. Oversight inspections of permanent stormwater management facilities shall be performed at or more frequently than the interval outlined in the Facility Oversight Inspection Schedule.
   c. Prior to each visit, the inspector shall review the inspection and compliance history of the subject site and its stormwater facilities.
   d. During each visit, inspectors are to, at a minimum, record the date of observation, site location, type of facility inspected, description of facility conditions, and any corrective actions, as well as associated deadlines for correction. When possible, photographic evidence should be obtained and owner/operator inspection reports reviewed.
   e. In the event inadequacies are discovered, the inspector or other City designee shall promptly notify the stormwater facility manager/operator of the deficiencies. The owner/operator must then complete corrective action within an agreed upon deadline for compliance.. A follow-up inspection shall be performed at the end of the compliance deadline to ensure completion of the required repairs.

Relevance: Ponds, Underground Storage, Water Quality Devices, Infiltration Practices, Ditches, Storm Piping & Inlets/Outlets, Other Related BMP's

CITY OF ALCOA

ILLICIT DISCHARGE & ILLEGAL DUMPING CONTROL

Description: In recent years, public policies and education programs have focused on the understanding that water pollution often comes from the broad occurrence of low concentration discharges. However, it is still very important that proper attention be given to "point-source" or "direct" discharges that generally occur less frequently but whose damage can be much more acute. These more obvious pollution releases are sometimes deliberate but often due to an employee's poor understanding of the repercussions of his/her actions. Examples of illicit discharges include littering, illegal dumping, mass chlorinated water releases (e.g., pool maintenance), industrial waste disposal, carwash runoff, sanitary sewer or septic tank leaks/discharges, and improper disposal of paint waste, automotive fluids (i.e. oil & antifreeze), or household chemical waste. See section 16-508.2 of the Stormwater Management Ordinance for a more thorough list of prohibited discharges.

Program: In order to avoid the stormwater pollution caused by illicit discharges through municipal operations, a broad plan of action is necessary to detect, identify, and eliminate these possible non-stormwater releases. One of the first tools needed to enable the tracking and identification of where such pollution discharges originate is a comprehensive inventory of the stormwater network for each site. This network provides the "veins" that carry runoff and, in this case, pollutants from their source to the stream or other location where they are generally first observed. Therefore, each of the City's FSWPPP shall include storm sewer system mapping of the facility's immediate area, the latest site plan information, as-built data, and municipal maintenance logs.

If applicable, inspections and screening for illicit discharges are to be performed during annual site inspections. These inspections should attempt to identify both contaminants that might be more noticeable when accompanied by other flow (i.e. soap suds) and pollutants that are more recognizable when there is little or no runoff (i.e. sewer leaks).

CITY OF ALCOA

In addition to observation by trained City personnel, all city employees are encouraged to keep an eye out for suspicious activities around storm drainage facilities or areas marked with "no dumping" or "drains to creek" type signage, trash or debris near inlets, stain trails from paints or chemicals leading drains, and unusual looking or smelling water. A Stormwater Hotline telephone number (#865-380-4820) is available at all times for the observation of such incidents to be reported anonymously.

When an illicit or non-stormwater discharge is observed by or reported to City personnel, an illicit discharge report is to be recorded and a follow-up investigation of the incident performed. See Appendix A for copies of pertinent City inspection and incident reporting forms.

As soon as any person directly or indirectly responsible for an illicit discharge becomes aware of its existence, that person shall take immediate action to contain, cease, and cleanup the discharge. Such parties are required to notify their supervisor immediately of the release and submit a written report detailing the accident and corrective actions taken. Corrective actions and preventative measures to eliminate such discharges shall be taken/implemented as soon as possible.

In order to help reduce the occurrence of illicit discharges at public sites, the City will strive to provide adequate storage facilities (and secondary containment - when necessary) for the disposal of trash and other environmentally sensitive materials, as well as regular collection of such wastes. Pertinent sites/activities include used oil collection receptacles and trash collection at ball fields, parks, and swimming pools.

Relevance: Garbage Collection, Dumpsters, Chemical Storage, Sanitary Sewer, Vehicle Maintenance, Industrial & Commercial Land Use, Laundromats, Restaurants, Car Washing, Pools & Roads

CITY OF ALCOA

CONSTRUCTION SITE MANAGEMENT

Description: On a regular basis, the City of Alcoa performs a wide range of capital improvement and maintenance-related construction projects. The nature of these construction projects often mean that erosion and sedimentation from excavation activities, hydrocarbons, and hydraulic fluid from construction equipment, and miscellaneous construction waste pose a potential threat to stormwater quality. These activities primarily include maintaining, repairing, and expanding the City's various infrastructure (i.e. domestic water, sanitary sewer, stormwater, electrical, road, parks & recreation, and public building facilities).

Program: In order to minimize risk to the stormwater system, the City shall identify those departments whose practices could potentially be hazardous to stormwater quality and train the personnel involved in the subject activities. Regular training shall be provided to these employees on what the construction-related pollution risks are and how to avoid them.

Each crew shall have at least one person that is TDEC Level 1 certified.

When planning a construction activity, the City shall prepare construction project erosion and sediment control (E&SC) plans and implement procedures that meet its own adopted standards or that of the requirements of the Tennessee Erosion and Sediment Control Handbook, whichever is greater. These plans and procures shall include the following practices, at a minimum:

- Clearing minimization,
- Protection of waterways,
- Phasing of construction to limit exposure,
- Installation perimeter controls prior to construction,
- Implementation of rapid soil stabilization,
- Protection of steep slopes,
- Inspection of E&SC measures after rain events,
- Repair of failing or inadequate E&SC measures, and
- Adjustment E&SC plans for encountered site conditions.

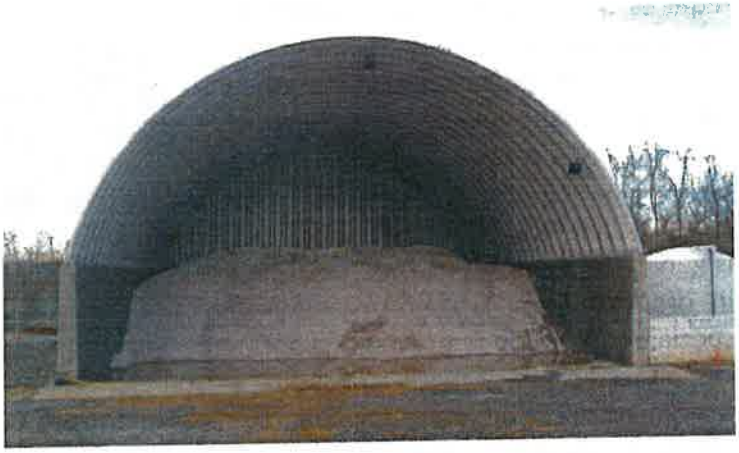
Inter-departmental collaboration on municipal construction related activities is encouraged to better link the technical and regulatory stormwater knowledge of the engineering staff with the practical field experience of the crew leaders and laborers. When City of Alcoa activities are performed that would typically require plans review if done by a non-municipal entity, a similar review should also be performed.

Relevance: Utility Work, Stormwater Installations, Road Improvements, Ball Field Maintenance & Landscaping

CITY OF ALCOA

HAZARDOUS MATERIALS STORAGE

Description: Many materials that the City of Alcoa uses to provide services to their residents are useful for a specific application, but when not stored properly could cause stormwater contamination or other public health hazards. An example of such a hazardous material is bulk salt. When applied in limited quantity over roads during winter months, it can be an essential tool in keeping them ice-free and safely passable. However, if not covered sufficiently, rainfall can dissolve the salt, carry it to nearby streams in high concentrations, and cause severe water quality impairment. Proper storage of such materials not only limits to the possibility of pollution but also saves wasted supply.



Program: Each department of the City is responsible for evaluating the products and materials that it uses, considering its exposure risks, and assessing the manner in which it is stored. Common municipal materials requiring special storage considerations are cleaning chemicals, road salt, brine, new and used automotive fluids, electrical transformers, sewer and potable water treatment chemicals, food wastes, transfer station solid waste, pool chemicals, pesticides, and wastes removed during sanitary and storm sewer maintenance. Consultation with industry experts and applicable material safety data sheets (MSDS) shall be included in such storage assessments. Specific storage characteristics to be considered are to include, but are not limited to:

- Cover,
- Enclosure,
- Space,
- Stability,
- Traffic,
- Temperature,
- Signage, and
- Primary and secondary containment.

If, after the storage assessment for each material is complete, there is deemed to be an unnecessary exposure or risk posed, corrective action shall be taken as soon as possible. If an event occurs that could potentially compromise the soundness of a material's storage condition, it shall be checked and remedied if necessary.

Relevance: Transfer Stations, Cafeterias, Cleaning Chemicals, Janitorial, Schools, Public Buildings, Parks & Recreation, Ball Field Maintenance, Landscaping, Vehicle Maintenance, Utilities, Pools & Road De-Icing

CITY OF ALCOA

FLEET MAINTENANCE

Description: The City of Alcoa owns and operates a variety of vehicles and equipment that is depended upon on a daily basis to help provide needed services to its residents. This equipment includes pickup trucks, police cars, fire engines, utility service vehicles, garbage trucks, street sweepers, sewer vacuum trucks, backhoes, dump trucks, and a number of others. The constant use of such vehicles requires the need for consistent and varied maintenance of the fleet. Providing such maintenance requires the filling, draining, and storage of numerous fluids (oils, solvents, etc.) that, while safe when used properly on the vehicles, can be toxic to the environment if mishandled.

Offering this type of vehicle maintenance is generally done in a centralized location in order to pool the skilled labor and specialized equipment necessary to complete the wide-ranging upkeep or repairs that are needed for the fleet. Providing vehicle maintenance via this concentrated, one-stop-shop method puts all of the necessary resources in one location and limits the liability of having hazardous materials, which are inherent to the work, spread out in a less manageable setting. However, it may also require large areas of storage for vehicles, fluids, and other hazardous materials which could increase the likelihood of an accidental spill.

Program: In order to minimize the pollution from these sometimes leaking pieces of equipment, the City should only store them under cover from rainfall or in areas whose runoff is contained. In both conditions, any equipment leakage should be collected and disposed of properly via routing through an oil/water separator, the sanitary sewer system, bioretention area, etc. Where possible, the performance of vehicle maintenance and washing shall also be performed under cover or in areas with proper containment and collection routing. In certain instances, it may not be feasible for such to occur. During such an occurrence, drip pans, wet/dry vacuums, or other pertinent devices shall be used to collect and dispose of any wastes properly.

To the maximum extent practicable, service, storage, and fueling activities shall be performed with as much physical separation as possible from storm drainage systems. Stormwater contact with spilled or wasted oils and solvents should be avoided.

All waste materials (lubricants, antifreeze, cleaning solvents, batteries, fuels, etc.) shall be disposed of properly. When recycling options are available, such materials shall be stored appropriately and then taken to the identified facilities with extreme care and disposed of there. Spent fluids should be treated as liquid waste if they are not recycled or collected by a licensed EPA hauler for proper disposal.

Relevance: Service Center, Vehicle Maintenance & Car Washing

CITY OF ALCOA

EMPLOYEE TRAINING

Description: As the operator of a municipal separate storm sewer system (MS4), the City of Alcoa is required to provide pollution prevention training to its municipal employees. This training helps employees be aware, during the course of their workday, of the impacts their everyday tasks can have on stormwater management. The only way for the City's pollution prevention and good housekeeping programs to achieve success is for its employees to know what practices within their normal activities are potentially harmful (avoid) and which ones are beneficial (encourage).

Employees in the field are the "eyes and ears" of the City and, if properly trained, are a great resource for detecting illicit discharges and other stormwater management issues that may otherwise go unnoticed.

Program: Employee training is an on-going practice rather than a one-time event. At least once per year, City personnel shall undergo stormwater pollution prevention training related to their job responsibilities. A concerted effort is to be made to provide the correct information to the proper employees. For example, employees engaged in landscape and park maintenance shall be trained in landscaping techniques that use less fertilizer and pesticides, while employees responsible for maintaining fleet vehicles shall be trained in the proper disposal of waste automotive fluids and how to correctly deal with leaky or disabled vehicles.

There are a variety of methods that can be used to educate employees on stormwater pollution prevention and good housekeeping practices. Some include:

- Training Sessions,
- Meetings,
- Annual Performance Reviews,
- Walkthroughs,
- Conferences,
- Workshops,
- Brochures,
- Bound training manuals,
- Videos, and
- Workplace Posters.

There are numerous resources available from regulatory and other government agencies from around the country that have developed training programs. These programs should be considered when investigating employee guidance options that have been proven to work elsewhere.

CITY OF ALCOA

Consideration shall be made, when identifying the appropriate time intervals for staff training, for the amount of turnover that has occurred or regularly occurs within a specific practice division. In instances of high turnover, more frequent training opportunities should be made available for personnel practicing new activities. The key to success for the training program is to ensure that institutional knowledge about pollution prevention and good housekeeping practices is maintained over time.

In order to manage the training program, sign-in sheets shall be used to acknowledge participation in or receipt and review of all training events/materials and the date that the employee participated. These records shall be submitted to the City employee(s) responsible for maintaining the training tracking system and filed for historical use.

Relevance: All City Personnel

CITY OF ALCOA

REFERENCES

United States Environmental Protection Agency (USEPA), *NPDES Best Management Practices Manual*, October 1993.

Ferguson, T., R. Gignac, M. Stoffan, A. Ibrahim, and H. Aldrich. 1997. *Rouge River National Wet Weather Demonstration Project Cost Estimating Guidelines: Best Management Practices and Engineered Controls*. Rouge River National Wet Weather Demonstration Project, Wayne County, MI.

Livingston, E., E. Shaver, and J.J. Skupien. 1997. *Operation, Maintenance, & Management of Stormwater Management Systems*. Watershed Management Institute, Inc. Ingleside, MD.

City of Knoxville TN, Stormwater Engineering Division, *Best Management Practices Manual*, May 2011, originally prepared by Camp Dresser & McKee (CDM), Inc.

The Center for Watershed Protection (CWP), *Urban Subwatershed Restoration, Manual 9 - Municipal Pollution Prevention/Good Housekeeping Practices, Version 1.0*, September 2008.

CITY OF ALCOA

GENERAL SITE INSPECTION CHECKLIST:

City of Alcoa Public Works & Engineering
Program: NPDES PH II Stormwater Program – Good Housekeeping

Division: _____ **Bldg Name:** _____ **Date:** _____

Location: _____

Inspector: _____ **Title:** _____

This inspection checklist can be used by area managers to:

- Conduct general inspections
- Determine if additional best management practices (BMPs) may be required

GOOD HOUSEKEEPING **(Circle one)**

1. Does the site have a Facility Stormwater Pollution Prevention Plan (FSWPPP) in place? **Yes No N/A**
2. Are outside areas kept neat, clean, and orderly? **Yes No N/A**
3. Are storm drain inlets labeled "No Dumping, Flows to Creek / River?" **Yes No N/A**
4. Are garbage cans, waste bins, and dumpsters covered? **Yes No N/A**
5. In these waste disposal areas, is there evidence of overflow, spillage, or leakage? **Yes No N/A**
   - If yes, has the excess waste been cleaned up? **Yes No N/A**
6. Has the stormwater conveyance system been recently altered? **Yes No N/A**
   - If yes, does the alteration maintain SWPPP compliance? **Yes No N/A**
7. Are stormwater drainage paths clear? Grates clean? **Yes No N/A**
8. Are vehicles, equipment, or grounds washed at this facility? **Yes No N/A**
   - If yes, is wash water being collected and disposed of properly? **Yes No N/A**

HAZMAT STORAGE

9. Are vehicles fueled at this location? **Yes No N/A**
   - If yes, are fuel tanks locked and/or properly operated? **Yes No N/A**
   - If yes, are measures taken to protect storm drains from spills? **Yes No N/A**
   - Briefly describe: _____
10. Does this site store hazardous materials such as solvents, pesticides, or acids? **Yes No N/A**
    - If yes, are containers weather tight or covered? **Yes No N/A**
    - If yes, are ignitable or reactive wastes stored at least 50 feet from the property line? **Yes No N/A**

CITY OF ALCOA

APPENDIX:

A. City Inspection & Incident Report Forms
B. Municipal Site BMP Maps

CITY OF ALCOA

11. Do aboveground tanks (liquid) have secondary containment? **Yes No N/A**
12. Are containment structures or surface slabs liquid tight? **Yes No N/A**
13. Has the facility had a hazardous waste spill since the last inspection? **Yes No N/A**
    - If yes, was the problem resulting in the spill corrected **Yes No N/A**

OTHER BEST MANAGEMENT PRACTICES

14. Does this site store hazardous or other materials that could impact the storm drain such as detergent, paint, or powders? **Yes No N/A**
    - If yes, are they stored in a manner prohibiting exposure to rain or runoff? **Yes No N/A**
15. Are waste materials kept on site in closed, leak-tight containers? **Yes No N/A**
16. Are all leaking vehicles or equipment equipped with drip pans? **Yes No N/A**
17. Are erodible soils uncovered or exposed to rainwater? **Yes No N/A**
18. Is the ground surface stained by oil or significant materials? **Yes No N/A**
    - If yes, has the source been found and contained? **Yes No N/A**
19. Are truck unloading areas covered? **Yes No N/A**
20. Does the facility have wastes, products, salvaged materials and recyclables stored properly? **Yes No N/A**
21. Does the facility have a clarifier/oil/water separator? **Yes No N/A**
    - If yes, is it clean and functioning properly? **Yes No N/A**
22. Has this facility received a complaint regarding stormwater discharge? **Yes No N/A**
    - If yes, has the problem been addressed? **Yes No N/A**
23. Have personnel received training on Stormwater Pollution Prevention? **Yes No N/A**
24. Are spill response materials available? (Circle all that apply) **Yes No N/A**

    Sand Rice Hulls Sorbent Booms/Pillows/Blankets
    Kitty Litter Neutralizer Drip Pans
    Other: _____

25. Identify existing management practices employed to reduce pollutants in stormwater discharges: (Check all that apply and describe conditions)

    Good Housekeeping Containment Catch Basin Insert Deadend Sumps
    Leachate Collection Sand Filter Recycling Oil/Water Separator
    Retention Facilities Silt Fence Sorbent Booms Spill Mitigation
    Infiltration Device Berms
    Other: _____
    Describe: _____

26. Action Items:
    -
    -
    -