

4.0 DESCRIPTION OF POTENTIAL POLLUTANT SOURCES

4.1 Inventory of Exposed Materials

This sub-section contains an inventory of the potentially exposed materials found on-site. These materials are handled, stored, processed, treated or disposed of in a manner that potentially allows exposure to precipitation or storm water runoff. The potentially exposed materials found at RBD are listed below.

- Fuels and Fuel Additives
- Solvents, Degreasers, Cleaners, Hydraulic Fluids, Transmission Fluids, Anti-Freeze, Lubricants
- Paints, Paint Thinners, Adhesives
- Metal Products (i.e. scrap metal)
- Rubber Products (i.e. tire residue)
- Herbicides, Pesticides, Insecticides, Fertilizers
- Waste Products
- Anti-Icing Agents (i.e. NAAC, sand)
- Surfactants/Detergents

The inventory includes DOA facilities and information received from tenant facilities. *Exhibit 1, Exhibit 2a, and Exhibit 2b* are site maps showing the location of DOA material and the direction of flow to the final permitted outfalls. An inventory of potentially exposed materials and a site map indicating the location of the material and the direction of flow for each tenant is contained in *Appendix I*.

The inventory shall be updated, by the responsible party (either the DOA or the tenant), within 30 days following a significant change in the types of materials that are exposed to precipitation or runoff, or significant changes in material management practices that may affect the exposure of materials to precipitation or runoff. A significant change in the types of materials is exposure of a material, not already included in the inventory that could be transported by precipitation or storm water runoff and subsequently discharged. A significant change in material management practices is a change that would result in either initial exposure of a material not already listed in the inventory, or increased exposure of a

material to the extent that the material could be transported by precipitation or storm water runoff and subsequently discharged.

4.1.1 Fuels

Jet-A and AvGas (100LL) fuel is used to power jet and reciprocating engine aircraft, respectively. This fuel is stored in underground storage tanks (USTs) and aboveground storage tanks (ASTs) at RBD. All aircraft are fueled at the terminal and/or at the hangars by fuel trucks. This fueling occurs in Drainage Basins B and D and is handled by two fixed-base operators (FBOs): Ambassador Aviation and Jet Center of Dallas. The Dallas Police Helicopter Unit maintains at Jet-A UST at its facility located in Drainage Basin D. Diesel is also contained on the airport property in Drainage Basin B and F for use with DOA vehicles (see *Appendix D*).

4.1.2 Solvents, Hydraulic Fluids, Etc.

Solvents, degreasers, cleaners, hydraulic fluids, and lubricants are often used in aircraft and ground vehicle maintenance activities located in Drainage Basins B, D, F and G. Aircraft engine maintenance involves fluid changes and parts or engine replacement. Aircraft body and under-carriage work encompasses the hydraulic system, braking system, and associated mechanical components. Aircraft maintenance activities usually occur inside a hangar, or, rarely, outside on a ramp area. If maintenance is not performed indoors or under covered areas, the materials described above can potentially become exposed to storm water runoff when good housekeeping practices are not followed.

Ground vehicle maintenance or equipment used in maintenance activities may also use solvents, degreasers, hydraulic fluids, batteries, oil, transmission fluids, and anti-freeze. If the maintenance of ground support equipment or vehicle maintenance is performed in an uncovered area, these materials along with their respective waste products can potentially contaminate storm water runoff when safeguards are not implemented.

4.1.3 Paints, Paint Thinners, and Adhesives

In addition to aircraft maintenance, aircraft refurbishment may also occur on-site at the airport within Drainage Basins B and D. These types of activities may include painting of aircraft parts or interior cabin

retrofits. Materials used in support of refurbishment include solvents, paint thinners, paints, or adhesives.

4.1.4 Metallic and Rubber Products

Often, airport operators recycle metal and rubber products in large, open containers, or operators may store used surplus material or equipment in a salvage area. Since these materials are generally stored uncovered, they come into contact with precipitation. For example, the recycling containers may trap and temporarily hold rainwater, allowing for direct contact of the rainwater with scrap materials. As the rainwater slowly escapes through cracks or crevices of the container, it may carry with it paint particles or other types of contaminants. Material storage areas are located in Drainage Basins B and D and are shown in *Appendix I*.

4.1.5 Herbicides, Pesticides, Insecticides, and Fertilizers

Herbicides, pesticides, insecticides, or fertilizers are generally used by DOA in Drainage Basins A, B, D, E, and F on airport grounds, parking ramps, and taxiways during landscape maintenance activities. Prior to any application of herbicide, weather forecasts are checked for any predicted precipitation: rainfall is a contraindication for herbicide application. Small quantities of herbicides, pesticide, insecticide, and fertilizers are stored in the maintenance buildings (located in Drainage Basin B and F) until used. Commercial roach or rodent exterminators are used under contract by a few airport operators to spray inside offices, and are the only known exception to the above.

4.1.6 Waste Products

Waste oil and materials considered to be hazardous waste are routinely collected and stored in covered 55-gallon drums at several locations on airport property, both indoors and outside within Drainage Basins B, D, and F (see *Appendix I*). Secondary containment is often, but not always, used. Licensed hazardous-waste-disposal contractors remove these materials on a periodic basis.

Solid waste dumpsters and trashcans are utilized throughout the DOA and tenant areas at RBD in Drainage Basins B and D. Dumpsters and trash cans are covered and are unlikely to come into contact with precipitation. Liquid discharges from waste material inside dumpsters and trashcans are prohibited from draining into the airport storm drain system. A commercial waste contractor removes materials on a

periodic basis. Locations of waste containers are shown in *Appendix I*.

4.1.7 Anti-Icing Agents

Aircraft deicing operations are not performed at RBD due to the prevailing mild temperatures of the area. However, anti-icing agents (i.e., NAAC) are occasionally used on roadways and sidewalks within Drainage Basins B and D. When used, salt is applied sparingly on sidewalks and removed by a sweeper as soon as conditions permit. The salt is typically stored inside the terminal building. NOTE: Salt is not used on the airfield. Instead, FAA-approved sand is used for deicing runways, taxiways and ramps within Drainage Basins A, B, D, E, and F. A sweeper and vacuum truck removes the sand as soon as conditions permit.

4.1.8 Surfactants/Detergents

Surfactants are used in aircraft, ground vehicle or equipment-washing activities. Washing activities may occur outside at a dedicated wash rack facility, or inside a hangar. Dry wash activities may occur in covered or uncovered outside areas. The outside washing occurs in Drainage Basins B and D. Outside wash waters are prohibited from entering the airport storm drainage system. An internal drain that is connected to an oil/water separator, which is connected to the sanitary sewer system, drains the washing activities within the hangars. Sometimes degreasers or emulsifiers are used in conjunction with the surfactants. Equipment subject to cleaning operations are located in Drainage Basins B, D, & F.

4.2 Narrative Description of Activities Potentially Contributing Pollutants

Potential pollutant sources originating from industrial activities can be found in both DOA and tenant activities. These activities are summarized below and elaborated in the following subsections.

4.2.1 City of Dallas and Department of Aviation Activities

DOA personnel perform facility, airfield, and grounds maintenance and operations duties. As a part of those duties, maintenance workers paint runways and taxiways; mow; sweep runway, taxiway, apron, and parking area pavement surfaces; and clean-up small spills. DOA uses materials such as fuel, lubricants, paint, adhesives, cleaners, solvents, fertilizer, pesticides, herbicides, and associated applicators. These

materials are usually stored in covered facilities when not in use, thereby reducing contact with storm water.

DOA vehicles, with the exception of tractors, are fueled off-site at the City of Dallas Southwest Maintenance Service Center. DOA maintains one registered 2000 gallon aboveground storage tank (AST) for the diesel requirements of the tractors (*Appendix I*). The 2000 gallon tank is filled approximately once each year. Diesel fuel is handled and unloaded at the site of the aboveground storage tank. There are two emergency generators which each contain 100 gallon day tanks and each generator is attached to a 100 gallon fuel tank, housed in secondary containment; these provide back up power for runway lighting. The total fuel storage for the emergency generators is 400 gallons. There is also a mobile fuel cart containing 300 gallons of diesel fuel stored at Field Maintenance facility that is used for fueling off road equipment.

The DOA keeps a supply of FAA-approved sand, for runway deicing purposes, under cover in a roofed, three-sided shed (*Appendix I*).

Initially, the materials, with Material Safety Data Sheets (MSDS), if applicable, are received and warehoused near the general aviation terminal area. The structural controls at DOA-operated facilities provide for adequate exterior chemical storage and transfer locations. Such structural controls include roofs or overhanging loading areas, walls, and containment facilities.

Material handling and usage results in waste products. Waste oil is kept in the Field Maintenance facility, in covered drums, on secondary containment. Spent solvents are kept in the Field Maintenance facility, in covered drums, on secondary containment while waiting for pick-up and proper disposal off-site by a licensed contractor. Equipment for pesticide or herbicide spraying is kept in the Field Maintenance facility, in covered drums, on secondary containment when not in use. Chemical/material storage areas are indicated in *Appendix I*.

The debris from sweeping runway, taxiway, and apron areas is placed in a covered dumpster and is picked up and disposed of by a waste management contractor.

Currently, an inventory of paint is stored under cover at RBD (*Appendix I*). This paint will be used for

painting runway and taxiway markings. FAA specifications for airside paint and associated markings are based on air transportation safety considerations for inclement weather conditions, and have limitations for product substitution. Airside paint markings must be visible at all times to the pilot, and color fading or color changes can not be allowed for safety reasons.

4.2.1.1 Runway Activities

Routine runway maintenance and cleaning activities by DOA provide for safe aircraft take-off and landing. The primary objective is to provide a surface with good friction characteristics in all types of weather. The DOA maintenance crews use sweepers to collect debris on runways, taxiways, and apron areas. The debris is either recycled where practicable or placed into containers for pick-up and disposal by a commercial waste collection contractor.

Runway pavement deterioration results from the action of airport traffic and the gradual effects of weathering. Runway contaminants, such as rubber deposits, dust particles, paint markings, aircraft fuel, and oil spillage decrease the frictional property of the pavement when wet. During wet conditions, heavy rubber deposits can cover runway pavement texture, thereby causing loss of aircraft braking and directional control capabilities.

If necessary, DOA or its contractor may apply an alkaline soap to rubber deposits that accumulate on the runway surface. After the rubber deposits soften, high-pressure water is applied, followed by a water truck that rinses the residue off the runway. Cements, joint sealers, crack fillers, or asphalt patching materials are used to repair cracks, joint seal damage, spalling, and other surface pavement defects. Paint is removed by high-pressure water. Routine runway maintenance activities conducted by DOA or its contractors may generate some of the potential pollutants given in *Table 4.1*.

Table 4.1 - Runway Maintenance Potential Pollutants

ACTIVITY	POTENTIAL POLLUTANTS
<i>Surface Cleaning (ramps, taxiways and runways)</i>	Grit/Suspended Solids Fuel Combustion Residues Oil and Grease Rubber Particles Surfactants (BOD)
<i>Runway Painting</i>	Paint Fragments (Lead/Chromium) Sand

4.2.1.2 Aircraft Firefighting/Training

One fire truck is maintained at the City of Dallas Fire Station #49 in an alert status by DOA. The fire station is located off airport property as shown on *Exhibit 1*. Periodic training is necessary to keep those personnel assigned duties as firefighters in top proficiency. All training activities are conducted with potable water. During an actual emergency, both water and aqueous film-forming foam (AFFF) would be used to combat the emergency. All chemicals used for firefighting and training are controlled and contained. Aircraft Firefighting/Training conducted by DOA may generate some of the potential pollutants given in *Table 4.2*.

Table 4.2 - Aircraft Firefighting/Training Potential Pollutants

ACTIVITY	POTENTIAL POLLUTANTS		
<i>Aircraft Firefighting Training Activities</i>	Toluene Benzene Ethylbenzene Xylene Trimethyl Benzene	Aromatic Naphtha Naphthalene Hexalene Glycol Methyl Isobutyl Ketone	Propoxylate Alcohols Polyalkoxylate Amide Ignitable Wastes
	Petroleum Hydrocarbons Aqueous Film-Forming Foam (AFFF) Potassium Bicarbonate (Purple K)		

4.2.2 Airport Tenant Activities

4.2.2.1 Airport Tenant Operators With SIC Code 45 (Transportation By Air)

Airport tenant operators and contractors conduct a number of aviation functions on airport property. Examples of industrial activities performed by tenants or contractors at the airport include aircraft, vehicle, and equipment maintenance, painting, or refurbishing; aircraft, vehicle, and equipment fueling, washing, and cleaning; outdoor open storage; and material loading and unloading. Operator industrial activities may occur in tenant-lease areas or at DOA facilities. Tenant or contractor areas generally contain maintenance facilities, loading/unloading areas and outdoor material storage areas. A list of tenants with Standard Industrial Classification (SIC) Code 45 and that perform industrial activities on-site at the airport as referenced in the storm water regulations 40 CFR 122 is contained in *Table 4.3*. This table summarizes these airport tenant operators with specific industrial activity.

Table 4.3 - Airport Tenants With SIC Code 45 Associated With Industrial Activity

OPERATORS	
Ambassador Aviation SIC 4581	Jet Center of Dallas SIC 4581
Dallas Police Helicopter Unit SIC 4581	

SIC Code 4581: Airports, Flying Fields, and Services

Table 4.4 is a summary of tenant activities conducted at RBD. There are checklists associated with the activities and they are contained in blank form in *Appendix A*. When completed, these forms are retained and are to be used as part of the site compliance evaluation process.

Table 4.4 - Summary of Tenant Activities

OPERATOR	FACILITY ACTIVITY													
	Maintenance				Washing			Storage				Fuels		Controls
	AM	EM	VM	PN	AW	EW	VW	CS	HW	LU	OL	FD	AF	OS
Ambassador Aviation		I	O		I	I		I	I	O	I	O	O	NO
Dallas Police Helicopter Unit	I	I			O*			I	I		I	O	O	YES
Jet Center of Dallas								I		O	I	O	O	YES

"I" Industrial Activity Conducted Under Covered Area or Indoors

"O" Industrial Activity Conducted Without Cover Outdoors

"O*" Industrial Activity Conducted Without Cover Outdoors and Either Drains to Sanitary Sewer System or is Collected and Disposed of Properly

"O-" Industrial Activity Conducted Without Cover Outdoors: Rinse Off Only, No Soap

AD Aircraft Deicing/Anti-Icing Operations

FD Fuel Dispatching, Distribution, or Handling

V Vehicle Washing

W

AF Aircraft Fueling Operations

HW Hazardous Waste Handling or Temp. Storage

AM Aircraft Maintenance and Refurbishing

LU Loading/Unloading Areas

AW Aircraft Washing Operations

OL Temporary Storage of Oil or Antifreeze

CS Chemical Storage

OS Oil Water Separator

EM Equipment Maintenance

PN Painting Aircraft, Vehicles, Equipment, or Parts

EW Equipment Degreasing or Washing

VM Vehicle Maintenance

FBO Fixed Base Operators: Ambassador Jet Center and Jet Center of Dallas

4.2.2.2 Airport Tenant Operators Not Defined as Storm Water Discharges Associated with Industrial Activity

There are a number of tenants at RBD that do not conduct industrial activities and are therefore not required to apply for a TPDES MS General Permit to cover regulated discharges. All tenants at RBD shall be reviewed during the annual Comprehensive Site Compliance Evaluation to determine if their activities require them to be included in this SWPPP.

4.2.3 DOA and Tenant Activities

The following information pertains to tenant areas or common airport areas. DOA participation in a given activity will be specifically noted below.

4.2.3.1 Tenant Aircraft Activities

Aircraft activities include maintenance and cleaning of aircraft engines, chassis, or bodies; refurbishment or installation of aircraft interiors and cabinetry; refurbishment of brakes or electronic equipment; lubrication or fluids replacement; and aircraft washing and painting. These activities also include maintenance or cleaning of instruments, equipment, or work areas used to service aircraft.

As maintenance is performed on aircraft, leaks or spills of hydraulic fluids, lubricating materials, solvents, degreasers, paint strippers, and other materials may occur. Aircraft maintenance or storage activities may generate some of the potential pollutants given below. Whenever possible, maintenance at RBD is performed inside the maintenance hangar and is, therefore, not exposed to precipitation.

4.2.3.2 Fueling Operations

The Jet Center of Dallas has two registered petroleum USTs in Drainage Basin D. One tank has a capacity of 10,000 gallons and holds Avgas. The other, with a capacity of 15,000 gallons, contains Jet-A fuel. Jet Center of Dallas also has two registered aboveground storage tanks (ASTs) in Drainage Basin D, both with 14,000-gallon capacity. One contains Jet-A fuel and the other Avgas. The aboveground storage tank fuel farm has a secondary containment capacity of 14,000 gallons, which includes the truck refueling area (*Appendix D*). In addition, this FBO operates five fuel trucks: three with Jet-A (two with

5,000-gallon and one 3,000-gallon capacities) and two AvGas trucks (750-gallon and 1500-gallon) (*Appendix I*).

Ambassador Aviation maintains three registered petroleum USTs, two with a 10,000-gallon capacity, and located in Drainage Basin B. One contains Jet-A fuel and the other AvGas. One UST is 1,000 gallons and it contains waste fuel. This FBO operates two fuel trucks: a 3,000-gallon Jet-A truck, and a 750-gallon AvGas truck (*Appendix I*).

Another petroleum UST is located at the Dallas Police Helicopter Unit in Drainage Basin D. This tank holds Jet-A fuel and has a capacity of 10,000 gallons (*Appendix I*). There is no fuel hydrant system at RBD.

Diesel fuel tank storage and fueling is also located on airport property in Drainage Basin B. The DOA maintains one registered 2000 gallon aboveground storage tank (AST) for the diesel requirements of the tractors (*Appendix I*). Fueling operations may generate some of the potential pollutants given in *Table 4.5*.

Table 4.5 - Fueling Operations Potential Pollutants

ACTIVITY	POTENTIAL POLLUTANTS		
<i>Aircraft Fueling (including storage tanks and fueling areas)</i>	Lead Toluene Benzene Ethylbenzene Xylene	Trimethyl Benzene Aromatic Naphtha Naphthalene Ignitable Wastes	Petroleum Hydrocarbons Propoxylate Alcohols Polyalkoxylate Amide Methyl Isobutyl Ketone
	Jet-A AvGas Diesel	Antioxidants (Variations of Dimethylphenol or Butylphenol) Fuel System Icing Inhibitor (Ethylene Glycol Monomethyl Ether) Corrosion Inhibitors	

4.2.3.3 Ground Vehicle and Equipment Maintenance and Cleaning

Ground vehicle and equipment maintenance and cleaning activities by DOA and tenants provide for engine or chassis rebuilding; parts rebuilding, replacement, cleaning or painting; lubrication/fluids or fluid lines replacement; body work, or vehicle cleaning. These activities include maintenance or cleaning of instruments, equipment, or work areas used for the service of ground vehicles. As these activities are performed, lubricating materials, hydraulic fluids, solvents, degreasers, paint strippers, or other materials may leak or spill onto the work floor. Materials used to clean up spills or leaks are of concern and require proper storage and disposal methods. Vehicles or equipment awaiting maintenance are located where maintenance occurs in maintenance buildings or on adjacent parking areas, as indicated in the legend as *Vehicle or Equipment Maintenance or Storage Areas* on the individual tenant site maps in *Appendix I*. Ground vehicle and equipment maintenance may generate some of the pollutants given in *Table 4.6*.

Table 4.6 - Vehicle and Equipment Maintenance Potential Pollutants

ACTIVITY	POTENTIAL POLLUTANTS		
<i>Aircraft Facility Maintenance, Refurbishing, or Painting</i>	Cadmium Mercury Acetone Toluene Benzene Arsenic	Chromium Selenium Reactive Wastes Tetrachloroethylene Barium Oil and Grease	Lead Silver Spent Acids Chlorobenzene Methyl Ethyl Ketone (MEK)
<i>Vehicle or Equipment Maintenance, Parts or Fluids Replacement</i>	Cadmium Mercury Chlorobenzene Toluene Benzene Methylene Chloride Petroleum Hydrocarbons (Lubricants, Hydraulic Fluids) Waste Oils/Antifreeze	Chromium Selenium Barium Tetrachloroethylene Arsenic Surfactants (BOD)	Lead Acetone Silver Ignitable Wastes Spent Acids
<i>Vehicle or Equipment Fueling (including storage tanks and fueling areas)</i>	Xylene Toluene Benzene Ethylbenzene Methyl Isobutyl Ketone	Trimethyl Benzene Aromatic Naphtha Naphthalene Hexalene Glycol	Petroleum Hydrocarbons Propoxylate Alcohols Polyalkoxylate Amide Ignitable Wastes
<i>Aircraft Washing</i>	Oil and Grease	Surfactants (BOD)	
<i>Vehicle or Equipment Washing or Steam Cleaning</i>	Surfactants (BOD) Oil and Grease Suspended Solids		
<i>Floor Cleaning</i>	Surfactants (BOD) Oil and Grease Suspended Solids	Fuel Contaminants Paint Solvents (Toluene/Acetone/Methylene Chloride)	

4.2.3.4 Deicing/Anti-Icing Operations

Deicing is a procedure by which frost, ice, or snow is removed from the aircraft or runway in order to provide clean surfaces. This procedure can be accomplished by the use of fluids, by mechanical means, or by heating the aircraft. Anti-icing is a procedure by which the application of certain types of anti-icing agents provides protection against the formation of frost or ice or the accumulation of snow on treated surfaces of the aircraft or taxiways for a limited period of time (holdover time). No deicing/anti-icing of aircraft occurs at RBD, although the runways and taxiways may be maintained ice-free by the application of sand to their surface by DOA.

The recording of information concerning the use of anti-icing is maintained by the DOA. Anti-icing operations may generate some of the potential pollutants given below.

Table 4.7 - Anti-Icing Potential Pollutants

ACTIVITY	POTENTIAL POLLUTANTS
<i>Anti-icing of Sidewalks and Pedestrian Areas</i>	NAAC(Solid)
<i>Anti-icing of Runway, Taxiway, or Ramp</i>	Washed Sand (Suspended Solids)

4.2.3.5 Outdoor Storage Activities

Chemical materials are sometimes stored in drums, containers, or tanks at uncovered storage areas. These containers shall be stored on spill pallets or in some manner of appropriate secondary containment. Materials stored in drums or containers may be opened and periodically accessed, or they may be waste products awaiting later transport and disposal. Outdoor storage facilities include associated conduits, piping, valves, or other distribution system components associated with the drums and containers. Storage and handling equipment used in conjunction with the stored materials is also included; for example, pesticide sprayers or fertilizer spreaders are stored in a covered facility. Outdoor storage activities may generate some of the potential pollutants given in *Table 4.8*.

Table 4.8 - Outdoor Storage Potential Pollutants

ACTIVITY	POTENTIAL POLLUTANTS
<i>Storage tanks including ASTs, USTs, drums and containers</i>	Petroleum Hydrocarbons Non-Halogenated Hydrocarbons Solvents (Toluene/Acetone/Methylene Chloride) Oil and Grease Ethylene or Propylene Glycol (BOD) Fuel Additives
<i>Bulk chemical and equipment storage areas</i>	Surfactants (BOD) Bulk Fertilizer Bulk Pesticides/Herbicide and Equipment Petroleum Hydrocarbons Oil and Grease

4.2.3.6 Loading and Unloading Operations

Material loading, unloading, and transport operations are closely related to outdoor storage activities. Chemical materials are routinely loaded and unloaded at RBD DOA and tenant facilities. Fuel transporting tankers, forklifts, and hand lifting are all methods used in loading and unloading operations at this facility. These operations may occur at outdoor storage areas, aircraft, or tank farm locations. Occasionally, a spill may occur as a result of loading or unloading activities. If so, the party that causes the spill is responsible for spill response and reporting to the appropriate authority, clean-up, and proper disposal of all contaminated or waste material. Loading and unloading operations may generate some of the potential pollutants given in *Table 4.9*.

Table 4.9 - Materials Handling Potential Pollutants

ACTIVITY	POTENTIAL POLLUTANTS
<i>Transport, loading and unloading of materials</i>	Petroleum Hydrocarbons Halogenated Hydrocarbons Solvents (Toluene/Acetone/Methylene Chloride) Oil and Grease Ethylene or Propylene Glycol (BOD) Surfactants (BOD) Bulk Fertilizer/Pesticide/Herbicide and Equipment Cleaners

4.3 Spills and Leaks

No significant spills and leaks of toxic or hazardous materials have occurred in areas that are exposed to precipitation or that may otherwise drain to the storm water drainage system at RBD since August 1, 1996. For spill reporting procedures, see *Airport Emergency Plan*. Significant spills required to be listed in *Appendix E* are releases of oil, fuels or hazardous substances in excess of quantities that are reportable

under Section 311 of the Clean Water Act or Section 102 of CERCLA. Locations of these significant spills are shown in *Appendix I*. This list will be updated on a quarterly basis. Records of this list shall be kept for five years.

4.4 Sampling Data

Annual wet-weather monitoring for metals is required by the TPDES MS General Permit. The annual wet-weather metals monitoring is the responsibility of the DOA and will be recorded on Discharge Monitoring Reports (DMRs) using Environmental Protection Agency (EPA) Form 3320-1 or equivalent, which will be made available to TCEQ upon request. Benchmark monitoring (for BOD, COD, Ammonia and pH) is not required, since RBD's combined activities do not utilize more than 100 tons of urea or 100,000 gallons of deicing chemicals per year for deicing. Aircraft deicing/anti-icing operations do not occur at RBD, therefore sampling is not required at RBD during the deicing season. All sampling data shall be evaluated annually, at a minimum, during the site compliance evaluation process. Sampling data may be found in *Appendix G*.

Samples collected during the annual wet-weather metals monitoring shall be analyzed for the following constituents:

- Arsenic
- Barium
- Cadmium
- Chromium
- Copper
- Lead
- Manganese
- Mercury
- Nickel
- Selenium
- Silver
- Zinc

Wet-weather monitoring procedures are the same as for the quarterly visual monitoring, which is discussed in *Section 5.9.1*.

The DOA will collect samples at the facility outfalls. When applicable tenants shall file a hazardous metals monitoring waiver for the permit term and a copy of the completed waiver must be submitted to the DOA for filing.