Preparedness and Prevention Plan

Contents

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Design and Operation of the Facility

The hazardous waste facility owned by Triumvirate Environmental Services, Inc. is located on a site with a contiguous area of approximately 6 acres. The facility consists of two adjacent buildings rectangular in shape each having a north-south orientation. The southwest area of the site contains the loading dock and trailer parking. Located in the northwest corner of the east side of the site is a storm water retention pond, and a vacant area. The structures, buildings, and other features described above are shown in Figure II.A.5.

The southernmost building (the south building) houses administrative offices in the south end of the building and a hazardous waste container storage unit in the north end. Drums stored in the container storage unit are received in trailers and are unloaded on a dock located at the west side of the unit. The northernmost building (the north building) is a little shorter and narrower than the south building and is used to consolidate waste, lab packing, and for solidification/ stabilization operations.

The continuation of this section describes how the facility is designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water that could threaten human health or the environment. Each area, process, and operation described in the previous paragraph will be discussed below to address the issue referenced in the sentence above.

Container Storage Unit

This unit stores a maximum number of 824 — 55-gallon drums, or equivalent, on pallets, as shown in Figure I D 1. Each pallet holds up to four drums, and the pallets are stacked, at the most, two high. The pallets are arranged in single rows; some rows are eleven pallets long, and others are three pallets long. The storage area is divided into three subunits. One of the sub-units is made of six cells, each containing one row three pallets long. This sub-unit is located along the south wall of the unit, arranged as shown by Figure I D 1. For the purpose of this discussion, this sub-unit is labeled the south subunit. The south subunit will store acids, toxic, and non-hazardous solid waste. Each cell is separated from the next cell by a 3 ½-inch-high berm, which provides individual secondary containment to each row of pallets and provides separation for incompatible wastes that may be stored in an adjacent cell. Drums are transferred to and from the cells with forklifts that have access to the cell through a roll-over berm 3½ inches high, which runs along north side of all the cells in the south sub-unit. The secondary containment system for each cell is provided by the wall of the unit on the south, the roll-over berm on the north, and the berms that separate the cells on the east and west, except for the cells located at both ends of the sub-unit, which are contained by the east and west walls of the storage unit. The secondary containment volume of each cell is capable of holding more than 10% of the maximum volume that may be stored in the cell. Discussions of these calculations are located in II.B.1 Secondary Containment System. The floor surface in each cell has been coated with a chemical-resistant coating designed to protect the floor material against the chemical attack

from solvents and corrosives. There is a concrete block wall (minimally rated as a two-hour fire wall) that separate the office from the Container Storage Unit.

There are two other sub-units, one located along the existing east wall (the east sub-unit) and the other in the northwest corner (the northwest sub-unit) of the unit. The east subunit will be used to store alkaline, toxic, non-hazardous, and universal waste types. The east sub-unit is identical to the south sub-unit as described in the previous paragraph, except that it has nine cells rather than six as the south sub-unit, and that the cell at the north end of the east sub-unit has the capacity to hold two rows of pallets rather than one as the other cells. The northwest sub-unit is one cell that has five rows eleven pallets long, all placed in a single and common secondary containment provided by the roll-over berms that run along the other sub-units at the south and east and the walls of the storage unit at the north and west. The northwest subunit will store only non-hazardous wastes. There are no berms or other type of structures protruding from the floor surface inside this sub-unit, except for a ramp for forklifts on the west side that provides access to the loading dock. The entire floor area of this sub-unit is covered with the same protective coating described in the previous paragraph. The south, east, and northwest sub-units are permitted to store 144, 240, and 440 — 55-gallon drums, respectively. Calculations for secondary containment are found in section II.B.1.

To minimize the potential for fire in the container storage unit, all electrical systems, equipment, and tools used in this area are operated, constructed, and designed to prevent the generation of sparks. Electrical systems in this unit consist of lighting, electrical outlets, and equipment necessary to the fire alarm system. There are no electric motors in operation in this unit except for the ones used to drive fans or blowers. Forklifts used inside the container storage unit for transferring drums are propelled by internal combustion engines that run on propane gas, which eliminates the possibility of sparks through the tail pipe. The container storage unit is operated in a manner that minimizes the generation and concentration of flammable gases due to emissions from drums stored in it. Drums stored in this unit are closed except when opened for sampling or inspection. This usually occurs only once during the stay of the drum in the unit. The bunghole lids of the drums to be sampled or inspected are loosened so the closures can be easily opened by hand. The closures are not removed until the drum is actually sampled. When the drums are opened for sampling or inspection, they remain opened only for the time it takes to sample or inspect the drum, after which the bunghole lids are screwed in and tightened.

Fire, explosion, and generation of toxic gases may also be caused by the chemical reaction of two wastes that are not compatible with each other. This situation may happen when incompatible wastes are stored in the same cell and the incompatible wastes leak from their containers at the same time, coming into contact with each other. Also, one waste could leak first and cause the other incompatible one to leak out of its container, resulting in incompatible contact. To prevent storage of incompatible wastes in the same cell, Triumvirate Environmental Services, Inc. . utilizes a segregation system established by the DOT. Using this segregation system, combinations of compatible DOT hazard classes or divisions can be made. Triumvirate Environmental Services, Inc. . reviews and determines with the generator the appropriate DOT hazard class or division for every waste stream, in accordance with information and properties

of the waste, before receipt by the facility. The DOT hazard class or division is displayed on the hazardous waste label affixed to the drum and is shown on processing documents accessible to the operators handling the waste. Upon arrival at the Triumvirate Environmental Services, Inc. . facility, every drum is inspected for consistency of the information shown on the hazardous waste label and the DOT hazard class or division determined previously for the waste stream in question. Upon finding the DOT hazard class or division on the label is correct, operators will store the drum in a cell that contains other drums with a compatible DOT hazard class or division. The segregation of DOT hazard classes or divisions and the use of pallets to prevent leaks from contacting the bottom of the drums minimize the possibility of fire, explosion, and generation of toxic gases that may be caused by the chemical reaction of incompatible wastes.

As explained in previous paragraphs, every cell in the container storage unit has its individual secondary containment system, which is provided by berms built inside the unit. Besides providing a separation between incompatible wastes, these containment systems also prevent leaks from escaping the cell where the leak may occur. Every cell's containment system is capable of holding at least 10% of the maximum volume that may be stored in the cell. The height of the berms that separate the cells is smaller than the height of the walls and berms that surround the sub-unit and the entire unit. If a leak exceeds the secondary containment volume of the cell where it occurred, the excess will spill over the berms into the secondary containment system of the adjacent cells. A leak of large magnitude will spill into adjacent cells in a cascade pattern, but will not escape the sub-unit unless the secondary containment system of every cell in the sub-unit has been exceeded. If a leak is released from the unit, the leak will be contained by a series of berms that may be built on the adjacent parking lot during such emergency.

Consolidation and Stabilization Area

Triumvirate Environmental Services, Inc. . will conduct both consolidation and stabilization activities per the Containers Section, and the Waste Compatibility and Test Manual. The analysis will be done per the Waste Analysis Plan (WAP).

The consolidation and stabilization operations of hazardous waste take place in the Consolidation and Stabilization Area. This area is shown in Figure I D 1. The consolidation area manages wastes that are placed in roll-off boxes or dump trailers. This area is used to manage wastes which are consolidated in drums or totes, and also manages drummed waste that will be stabilized. The wastes consolidated in roll-off boxes or dump trailers do not present a fire or an explosion hazard because they are generally wastes contaminated with heavy metals, and sometimes cyanides, which are not combustible. Inner containers are consolidated in batches with each batch consisting of wastes of similar type. Consolidation activities and procedures are identified in the Waste Analysis Plan.

Inner containers that are to be consolidated are usually received packaged inside drums. Those drums are transferred from the container storage unit to the Consolidation and Stabilization Area. The containers are unpacked at that location, and the inner containers are

placed on tables that can be moved around the area. These containers are segregated by waste material type to prevent commingling incompatible materials. Waste materials are first checked for compatibility and then consolidated per the Waste Compatibility and Test Manual. Personnel conducting this operation wear protective equipment to protect them from injury in the event of a chemical reaction. Fire extinguishers and spill kits are located in the Waste Consolidation and Stabilization Area (II.A.5).

The inside of the Consolidation and Stabilization Area is surrounded by a berm three and a half inches high that has been built along the internal perimeter of the building. The part of the building that has a berm is capable of containing a spill of about 6,100 gallons, which is a volume larger than the volume of the largest container into which liquid waste may be consolidated. Calculations can be found in section II.B.1.

The consolidation operations, including lab packing, can occur anywhere in the consolidation/stabilization area.

Required Communication Equipment

This portion of Preparedness and Prevention Procedures required by section II.A.4.d of the permit application describes the communication system available to advise and instruct personnel at the site when an emergency incident occurs and to summon assistance from emergency response institutions. An account of the emergency equipment available at the site to control fire and spills is also provided.

Internal Communication

The facility shown in Figure I D 1 is small in size, and personnel working at various locations of the facility in most cases could communicate by word of mouth during an emergency situation. Facility personnel also carry a mobile communication device, such as a cell phone or two-way radio. By using radios and cell phones personnel at the facility will be capable of providing information to personnel at other locations and inside the facility and to summon help from outside the facility. In addition a paging system may be used to transmit to facility personnel information or instructions inside and/or outside of the facility. Also, the fire alarm devices located at various parts of the facility will emit a loud sound when activated in case of a fire.

External Communications

The regulations require a communication system capable of summoning assistance from emergency response services. The facility has in place a system that is capable of providing communication between the facility and any other telephone outside the facility. The fire alarm devices installed at several locations throughout the facility will summon the assistance of the fire department when activated. Cell phones can also be used for external communication.

Spill, Fire Control, and Decontamination Equipment

The spill and fire control equipment meets the decontamination equipment required by 264.32(c). There are a number of fire extinguishers distributed throughout the facility as well as spill control equipment. Two types of mobile fire extinguishers are used at the facility: 5- and 20-pound portable fire extinguishers for locations where space is reduced or access is limited and 150-pound, wheel-mounted fire extinguishers for locations where areas are wide and unobstructed and where the floor is even. In addition to the fire extinguisher equipment described above, the container storage unit and the entire area of the north building, which houses the Consolidation and Stabilization Area, are covered with an automatic fire sprinkler system. An 8-inch diameter fire hydrant having a 4-inch and 2 inch hose connectors located just outside the southwest corner of the site is capable of supplying water in adequate volume and pressure to fight large fires.

Spill control equipment consists of absorbent material in granular form and shovels, brooms and dust pans. This material when used will absorb liquid spills, preventing the liquid from spreading and making the spills easier to collect. The absorbent material is kept in pails or drums at strategic locations where spills may occur. This material is available at the facility in sufficient quantities because it is also used to reduce free liquids in certain consolidation operations conducted at the site. A number of air-driven pumps of various sizes are used in processes and operations at the facility and are available to collect liquid spills.

Testing and Maintenance of Equipment

The facility provides regular maintenance to fire extinguishers, fire sprinklers, and fire alarms. Fire extinguishers are inspected at least annually by a private maintenance company. The fire sprinklers and fire alarms are integrated into one system that monitors and controls both pieces of equipment. An outside sprinkler and alarm service company conducts quarterly inspections.

Maintenance of the spill control equipment consists of replenishing containers with the absorbent material used to collect and control liquid spills. The need for replenishing the spill control equipment will be noted on the inspection log for the unit, process, or area where the spill control equipment is located. These inspections are addressed in sections II.B.5 of this application. Communication and decontamination equipment will be maintained and repaired to maintain good working order continuously.

Access to Communications or Alarm System

The regulations require that an internal alarm or emergency communication device must be immediately available to personnel handling waste, and that a telephone or a handheld, two-way radio must be accessible at the scene of operation whenever only one employee is on the premises while the facility is operating. Operators at the facility will be able to communicate by means of stationary communication devices at the facility. Some operators working in the facility are provided with hand-held, two-way radios for communication with other operators carrying

the same communication device. The stationary devices are in permanent operation and can be used by anyone at any time. In the unlikely event that only one employee is on the premises while the facility is operating, this employee will carry a cell phone to make possible immediate outside communication.

Required Aisle Space

Equipment and operations at the facility will provide aisle space adequate for the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of the facility operation during an emergency. The layout of equipment, buildings, and structures in the facility has been designed so that forklifts, carts, dollies, and other mobile equipment of reasonable size, including fire and spill control, and decontamination equipment have access to all areas of the facility. The container storage unit may be accessed by forklifts through the ramp that leads to the loading dock, and drums in pallets are arranged in rows at locations delineated by yellow lines. The rows are spaced at least two feet apart from each other. Inspections conducted in the unit ensures that aisle spaces are maintained unobstructed for movement of personnel and equipment. The north building has roll-over berms at three locations on the west side of the building to make it accessible to forklifts. The layout of process equipment inside the building has been designed to allow unobstructed movement to mobile and portable equipment and to provide rapid exit for personnel in case of an incident requiring evacuation of the building. Clear and unobstructed areas for the movement of emergency equipment will be monitored and maintained by means of inspections.

Arrangements with Local Authorities

To familiarize emergency response organizations with the facility layout, the type of hazards presented by the wastes managed at the facility, and other features associated with emergency assistance, the facility will provide the organizations with a copy of the contingency plan, which includes emergency procedures. Triumvirate Environmental Services, Inc. . has an electronic record of wastes onsite and that can be accessed at any time, from any location, and provided to emergency response personnel. Emergency response personnel will be requested to visit the facility once a year including the Orange County Emergency Management Department. The location of the facility is serviced by emergency organizations under one local government. This eliminates the problem of having to coordinate with more than one organization that renders the same type of service and having to designate a primary emergency authority. The emergency response organizations, except hospital and police, are coordinated by the Orange County Emergency Management Department, which is committed to assist the facility during emergencies without the need of an agreement. Similarly, emergency response contractors will provide their services on an as-needed basis without a prior agreement or a contract. One of the hospitals designated in the contingency plan to receive injured personnel, The Orlando Regional Medical Center, is capable of treating any type of injury or illness that could result from fires, explosions, or releases at the facility. When state or local authorities decline to enter into

arrangements for emergency assistance, Triumvirate Environmental Services, Inc.. must document the refusal in the operating record (40 CFR Part 264.39(b)).

Emergency Service Organizations

Table II.A.4.b.-1 lists the service type, name of the service organization, and telephone number for each organization that has been identified as a potential emergency service organization. This list will be posted near telephones located in areas from which emergency calls are most likely to be made to provide callers with the information necessary to summon help in case of an incident.

The type of organizations that are most needed in case of an emergency are: Emergency Response (Hazardous Materials) Team, Fire Department, Hospital, and Sheriff's Department. The locations of the organizations mentioned in the previous sentence that are closest to the Triumvirate Environmental Services, Inc. . site. These organizations will be provided with a copy of the contingency plan and Preparedness and Prevention Plan upon its approval by the Florida DEP. These organizations will also be notified every time there is a change in –

1. emergency coordinators.
2. waste type or location of waste types that pose an additional or different safety concern to the ones described in this plan.
3. structures, equipment, or operations that affect the way this plan is to be implemented.
4. structures, equipment, or operations that alter the level of hazard at the facility
5. emergency procedures contained in this plan that may affect the level of service to be rendered by these organizations.

This document will be amended to reflect any of the changes described above, and a copy of the amended document will be provided to those organizations. This plan will also be amended when changes are necessary to improve response to emergencies. Finally, this plan will be amended if the plan fails in an emergency (40 CFR Part 264.54(b)).

Emergency organizations are expected to provide the following support during emergencies:

Hazardous Materials Emergency Response Team

The emergency coordinators and cleanup contractor(s):will help mitigate hazards posed by hazardous materials that are out of control and help retrieve injured personnel from hazardous environments. The local emergency response team, from the local fire department, that renders this type of service is based at Orange County Fire Rescue Station #50, which is located near the intersection of Interstate 4 (I-4) and U.S. Highway 441 (OBT) about 7 miles north of the site at 1415 West 29 Street, Orlando (about 12 minutes from the facility). This unit is known as Squad 1. This organization will be provided with a copy of this Preparedness and Prevention Plan.

Fire Department

The Orange County Fire Department has visited our facility to familiarize themselves with our operations and in addition to conducting yearly inspections. The Orange County Fire Department

will respond to fires and other emergency incidents providing fire protection and rescue services. The department operates units located in several stations near the Triumvirate Environmental Services, Inc.. site. These stations and their response capability are listed below.

Station #73: This unit is located in the town of Taft less than 2 miles northeast from the site at the intersection of Orange Avenue (State Road 527) and 1st Street, at 811 E. 1st Street, Orlando. The response time for this unit is about 4 minutes. This unit will be the first responder in the event of a fire.

Station #53: This unit is located just east of OBT about 2 miles northeast from the site, at 1270 La Quinta Drive, Orlando. The response time is approximately 6 minutes. The unit can provide medical support.

Station #51: This unit is located just west of OBT about 4.5 miles north from the site, at 1700 W. Oakridge, Orlando. The unit's response time is approximately 10 minutes. The unit can provide a ladder truck in case of a fire.

A copy of the contingency plan for the Orange County Fire Department will be provided to the Deputy Chief, Operations at the Orange County Fire Rescue Division, 6590 Amory Court, Winter Park, Florida 32792 upon approval of the plan by the Florida DEP.

Hospital

Orlando Regional Healthcare (ORH) is capable of providing almost all emergency medical services that may be needed by injured personnel. ORH offers minor trauma services at the Dr. P. Phillips Hospital located just west of I-4 and about 6 miles east of the site, at 9400 S. Turkey Lake Road, Orlando. The time of travel is about 10 minutes from the facility. ORH offers major trauma services at the Orlando Regional Medical Center (ORMC) located about 8 miles north of the site at 1414 Kuhl Avenue, Orlando, Florida 32806. The time of travel to this unit is about 14 minutes from the facility. A copy of the contingency plan will be mailed to the ORMC upon approval of this plan by the Florida DEP.

Sheriff's Department

The Orange County Sheriff's Office is available to direct traffic, handle crowds, and provide security during emergency situations. The Sheriff will be provided a copy of this document at the Orange County Sheriff Office, 2500 W. Colonial Drive, Orlando, Florida 32802, upon its approval by the Florida DEP.

Copies of the Preparedness and Prevention Plan, in accordance with statements shown above, will be provided to the emergency service organizations within 30 days after the application is deemed complete. Certified return receipt slips providing proof of mail and delivery of the documents will be kept with pertinent records at the facility.

Incidents of large magnitude may require the use of heavy equipment for containment, removal, and transportation of contaminated materials. In the event that the heavy equipment is not available, Triumvirate Environmental Services, Inc. . will seek the help of outside emergency

Table II.A.4.b.-1
EMERGENCY SERVICE ORGANIZATIONS PHONE NUMBERS

Emergency Contact List		
Facility Information: Triumvirate Environmental Services, Inc. 10100 Rocket Boulevard, Orlando, Florida 32824 407-859-4441		
Emergency Coordinators:		
Primary	Frank Colosi 9650 Universal Blvd Apt 457 Orlando, FL 32819	Cell: (813) 629-1104 Alt#: 407-859-4441
Secondary	Tyler Klawinksi 4256 Fawn Meadows Cir Clermont, FL 34711	Cell: (352)217-5431 Alt #: 407-859-4441
Alternate	Ross Taylor 545 South Keller Road Unit 1106 Orlando, FL 32810	Cell: (407)913-1882 Alt: 407-859-4441
The National Incident Management System (NIMS) will be followed. Additional information can be found: http://www.fema.gov/national-incident-management-system		
Designated Person Accountable for Discharge Prevention:		
Facility Manger – Frank Colosi		Cell: (813) 629-1104
National Response Center (NRC):		1-800-424-8802
Cleanup Contractor(s):		
Eagle SWS Emergency Response		1-800-852-8878
Clean Harbors of Florida, LLC		1-800-645-8265
State Oil Pollution Control Agency – FDEP 24-Hour State Warning Point (Depart. of Community Affairs' Division of Emergency Management)		1-800-320-0519
Local Emergency Response Planning Committee:		
East Central Florida Regional Planning Council 309 Cranes Roost Boulevard, Suite 2000 Altamonte Springs, FL 32701		407-262-7772 ext. 335
Other Federal/State/Local Agencies:		
EPA – Regional IV – 24-Hour Spill Reporting		1-800-424-8802
FDEP – Central District		407-897-4100
Orange County Emergency Management		**911*** or 407-836-9140 (local)
Local Fire Department – Orange County Fire Department		**911*** or 407-836-9000 (local)

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Local Police Department – Orange County Police Department	**911*** or 407-836-6500 (local)
Hospital – Orange County Regional Medical Center	**911*** or 407-841-5111 (local)
Other Contact References:	
Boggy Creek (east-northeast) – South Florida WMD	800-432-2045
Neighboring Facility (west) – Cook Composites & Polymers	407-859-3030
Neighboring Facility (north) – Oldcastle Precast, Inc.	407-855-7580
Neighboring Facility (south) – L&S Logistics Services Orlando	407-582-0900

***Note: In the event of emergency, dial 911.**

Figure I D 1: Facility Layouts

See maps and figures at the end of the application

Figure II.A.9 : Evacuation Routes

See maps and figures at the end of the application