

1

Security Procedures, Hazards Prevention And Training Plan

For

Chemical Waste Management of the Northwest, Inc.

Arlington Facility • ORD 089 452 353 17629 Cedar Springs Lane Arlington, Oregon

Standalone Document No. 2

This document is issued by the Oregon Department of Environmental Quality

December 2, 2014

Standalone Document No. 2 • Security Procedures

Table of Contents • Security Procedures

1	INTRODUCTION		
	1.1	Access Control	1-1
	1.2	Barriers	1-1
	1.3	Warning Signs	1-2
	1.4	Residences	1-2
	1.5	Waiver	1-3

Figure

S-1 Security Fence Map

Standalone Document No. 2 • Security Procedures

SECURITY PROCEDURES

1 INTRODUCTION

As required by 40 CFR 264.14, Chemical Waste Management of the Northwest, Inc. (CWMNW) prevents the unknowing or unlawful entry of persons or livestock into the active area of CWMNW's property by supervision of all vehicles entering the active area and by maintenance of two fence systems and associated gates.

1.1 Access Control

Access to the facility is monitored at the main gate located near the active area. All vehicles accessing the site through the main gate are required to contact facility administration or security by using the voice box intercom or telephone located at the gate, by CB radio, or by checking in. All personnel arriving at the site are recorded in a security gate log which is maintained for contingency purposes. Facility administration or security will authorize admittance of all persons entering the site after ensuring knowledge concerning the following: (1) the name of the driver, and (2) names of any passengers. Facility administration or security will authorize admittance of all hazardous waste transporters arriving at the site after ensuring knowledge concerning the following: (3) the name of the driver, (2) names of any passengers, (3) the name of their transportation firm, and (4) whether or not they have the proper safety equipment.

1.2 Barriers

A six-foot fence surrounds the hazardous waste treatment, storage and disposal units (henceforth referred to as the active area fence) at CWMNW. The active area fence is 6-feet high and composed of chain link fencing that is equipped with a 45-degree extension arm, angled outward on which are strung three strands of No. 10 barbed wire. The active area fence will be extended and/or relocated as necessary to accommodate new waste management units or operations. Movement into the fenced active area is controlled by CWMNW personnel located at the receiving/sampling/scale area. The Site Inspector also serves as Day Guard during normal working hours. Normal operating hours for hazardous waste activities at CWMNW are between 7:00 a.m. and 6:00 p.m., Monday through Friday, and may extend beyond these time frames and occasionally include weekends as operations warrant. During off-hours and non-working weekends, the main gate and all gates in the active area fence are locked. Keys and/or combinations for the gate locks are distributed to appropriate site employees for gate operation.

During normal operating hours, gates along the active area fence may be left open to facilitate movement of heavy equipment and facility vehicles into the active area. During the time which these gates are open, unknowing or unlawful entry of persons or livestock into the active area is

Standalone Document No. 2 • Security Procedures

prevented by an additional, continuous, barb-wire fence which extends around the site. The barb-wire fence (henceforth referred to as the perimeter fence) encompasses the active area as well as portions of property owned by CWMNW that is not used in connection with any hazardous waste activities. All gates within the perimeter fence are closed; however, a gate adjoining CWMNW and Columbia Ridge Landfill and Recycling Center may be left open during operating hours to facilitate the movement of equipment and material, including non-regulated waste, between the two facilities. Outside the duration, this gate shall remain locked. The location of the active area and perimeter fences and gates at CWMNW are shown on Figure S-1.

1.3 Warning Signs

Warning signs, legible from a distance of 25 feet, are attached to the active area fence at 300-foot intervals and at each gate. Facing outward, these signs read:

DANGER

UNAUTHORIZED

PERSONNEL KEEP OUT

In addition, speed limit, A 'No Smoking', and safety equipment advisory signs are posted at key points along the active area fence.

Forty-four additional warning and 'No Trespassing/Hunting' signs are attached to the perimeter fence at appropriate intervals.

1.4 Residences

As indicated in the facility's *Contingency Plan*, two residences are located on property owned by CWMNW. Residents have unlimited and unregulated access to the adjacent CWMNW property which does not include the active area. In addition, residents do not access areas where hazardous waste activities are conducted or located, including land used in connection with those activities, unless they have implemented the required security sign-in procedures described herein, and all required contingency procedures.

Property owned by CWMNW that is not used in connection with hazardous waste activities may be leased to local ranchers for grazing livestock. Cattle will be grazed in areas outside the perimeter fence.

Standalone Document No. 2 • Security Procedures

1.5 Waiver

CWMNW does not request a waiver of 40 CFR 264.14(a)(1) and (2) regarding injury to and violations by intruders.

Standalone Document No. 2 • Security Procedures



DEQ Issued Rev 4: December 2, 2014

Standalone Document No. 2 • Hazards Prevention

		Table of Contents • Hazards Prevention			
1.0	INTR	RODUCTION1-1			
2.0	PRO	PROCEDURES, STRUCTURES AND EQUIPMENT TO PREVENT HAZARDS 2-1			
	2.1	Unloading Operations Safety Measures2-1			
		 2.1.1 General Unloading Procedures			
	2.2	Run-off Control			
	2.3	Water Supply Protection			
	2.4	Equipment Failure and Power Outage Protection2-3			
		2.4.1Equipment Failure			
	2.5	Personnel Protection			
3.0	PREC WAS	PRECAUTIONS TO PREVENT ACCIDENTAL IGNITION OR REACTION OF WASTES			
	3.1	Design of Operational Units			
	3.2	General Operation and Inspection Policies and Procedures			
4.0	PREPAREDNESS AND PREVENTION				
	4.1	Design and Operation of the Facility4-1			
	4.2	Required Equipment4-2			
	4.3	Testing and Maintenance of Equipment4-2			
	4.4	Access to Communications or Alarm Systems			
	4.5	Required Aisle Space4-2			
	4.6	Arrangements with Local Authorities			

Standalone Document No. 2 • Hazards Prevention

HAZARDS PREVENTION

1.0 INTRODUCTION

This document is designed to address those items specified in 40 CFR 270.14(b)(8) and (9) and 40 CFR 264, Subpart C, dealing with procedures, precautions, structures, and equipment to prepare for and prevent hazardous waste releases, fires, or explosions and personnel exposure to wastes at the Chemical Waste Management of the Northwest, Inc. (CWMNW) Arlington Facility. This document summarizes information on design, construction, and operational features of the Arlington Facility that are instituted to allow the safe storage, processing, treatment, and disposal of hazardous wastes and to allow site personnel to respond efficiently and effectively if emergency situations occur.

Most of the information contained in this document can be found in more detail in the standalone documents for each waste management unit or operation at the facility.

Standalone Document No. 2 • Hazards Prevention

2.0 PROCEDURES, STRUCTURES AND EQUIPMENT TO PREVENT HAZARDS

This section summaries information regarding waste unloading procedures; run-on and run-off control; measures to protect ground and surface water from contamination by wastes; means and measures to deal with equipment and power failures; personnel protection measures; procedures for handling incompatible, ignitable, and reactive wastes; and emergency equipment provisions.

2.1 Unloading Operations Safety Measures

The design, location, and operation of the hazardous waste unloading operations at the Arlington Facility contribute to prevention of hazards. Hazardous waste unloading stations are located at the container storage areas, bulk liquid storage/treatment tanks, surface impoundments, landfills and stabilization unit, and will be provided for the containment buildings. The precautions described in the following paragraphs are designed to reduce the potential for accidental leaks, spills, and personnel exposure during unloading operations in these areas.

2.1.1 General Unloading Procedures

When a load of wastes is delivered to the Arlington Facility, the following unloading procedures will be followed:

- A CWMNW employee will escort the vehicle to the designated unloading area;
- The CWMNW employee will instruct the driver on the proper positioning of his vehicle;
- Flatbeds will be positioned so that the trailer can be off-loaded from either side with adequate room for equipment to work;
- Vans will be positioned so that the trailer can be off-loaded from the rear;
- Dump trucks will be positioned on level, firm ground and at a safe distance from the top edge of any area into which the waste is to be dumped; and
- The CWMNW employee will escort the vehicle back to the receiving office for check-out.

At the Rail Transfer Station, all waste unloading activities will be performed by trained CWMNW personnel.

2.1.2 Containers and Solids Unloading

CWMNW employees will assist truck drivers that have been escorted to an unloading area in removing hold-down straps, V-boards, tarps, side boards, or other equipment used to secure the load and will select appropriate equipment to off-load the truck. Equipment available for

Standalone Document No. 2 • Hazards Prevention

off-loading includes forklifts (with and without grabbers or turntable), front end loader, and crane.

In unloading dump trucks, the CWMNW employee will determine if the truck will need hydraulic system assistance and obtain the system if needed prior to accompanying the truck to the landfill or stabilization unit. After positioning the truck in the appropriate area, the CWMNW employee will direct the truck driver to dump the load, pull forward, and lower the bed.

2.1.3 Unloading Bulk Liquids

The following precautions will be observed during the unloading of bulk liquids:

- The truck driver will provide his/her own safety equipment; the CWMNW employee will wear the following safety equipment, as appropriate: safety goggles or face shield, rubber gloves, impervious clothing, hard hat, steel-toed boots, and respirators;
- The truck driver will hook up all truck hoses, open and close all truck valves, unload the waste, and wash the truck under the technician's supervision; and
- The CWMNW employee will not climb on the truck unless there is an emergency and a supervisor has been notified.

2.1.4 Unloading Areas Design and Maintenance

The unloading areas are routinely inspected according to the facility's *Inspection Plan*. Materials are periodically removed from non-discharging sumps via on-site vacuum trucks or by portable pumps that transfer the waste into tank trucks or containers following waste analyses performed in accordance with the facility's *Waste Analysis Plan*. The results of the analyses determine proper treatment.

Container unloading areas requiring the use of mobile equipment are designed and constructed to facilitate smooth and accessible movement. Ramp width and slopes are designed and constructed to allow safe and relatively easy movement for the forklifts. The forklifts have special adapters to hold, lift, and transport the various sizes and shapes of containers. Sufficient interior and exterior lighting is provided to safely work in the unloading area.

2.2 Run-off Control

The Arlington Facility and in particular the storage, treatment, and disposal units and operations are designed to prevent run-on or run-off within and between hazardous waste management units and non-active areas of the site. The site drainage system is shown on the topographic maps presented in Section 19.0 of the Permit Renewal Application.

Standalone Document No. 2 • Hazards Prevention

The container storage units and bulk liquid storage/treatment tanks are separately constructed facilities. In addition, where applicable and possible, these facilities will be covered to prevent precipitation from entering the facility and to prevent contaminated run-off. Surface impoundments and landfills are constructed using the terrain, dikes, and berms to contain leaks, spills, and run-off and to prevent run-on. A complete description of the containment systems for storage, treatment, and disposal units can be found in the stand-alone documents for each waste management unit or operation at the facility.

The site is designed such that any precipitation or hazardous waste spill (in excess of what would normally be contained within individual unit containment areas) will drain into the site drainage collection system. The facility is not located within a 100-year floodplain.

2.3 Water Supply Protection

The design, location, and operation of the waste management area and in particular the storage, treatment, and disposal units protect ground and surface water by preventing the release of hazardous wastes or contaminated runoff.

Where possible, these facilities are enclosed for protection from the elements (i.e., wind, precipitation, etc.). Surface impoundments are lined and bermed. Newer landfills (L-12, L-13 and proposed L-14) have berms, liners, and double leachate collection systems.

As shown on the site topographic map presented in Section 19.0 of the Permit Renewal Application, there are no surface waters (including intermittent streams), other than two small irrigation run-off collection impoundments, immediately adjacent to or on the site. Any ephemeral streams resulting from a storm event are diverted around the site. Groundwater monitoring as specified by 40 CFR Part 264, Subpart F is used to assure groundwater quality beneath and adjacent to the cite.

Water is supplied to the Arlington Facility via two deep wells, SW1-3 and SW1-5, as shown on the site topographic map presented in Section 19.0 of the Permit Renewal Application. These wells are monitored on a regular basis. Potable water supply lines have backflow protection.

2.4 Equipment Failure and Power Outage Protection

2.4.1 Equipment Failure

There are two classes of equipment used to manage hazardous wastes at the facility; portable and fixed. Portable equipment is primarily used for transporting the waste and constructing/maintaining the waste management units. Failure of portable equipment typically does not result in a release of hazardous waste. Rather, this type of failure results in a delay in moving the waste and is mitigated through use of alternate equipment or storage capacity.

Standalone Document No. 2 • Hazards Prevention

Failure of fixed equipment typically will not result in release of hazardous waste because the design of this equipment includes features to mitigate such occurrences. These features are described below. All fixed equipment activities are located in contained areas so that any release of hazardous material will be contained. Response to failures that result in release of hazardous waste is addressed in facility's *Contingency Plan*.

- **Container Storage Areas -** There are no fixed power-driven equipment used in the container storage area. All containers are moved with drum dollies, forklifts, and roller bar conveyors.
- **Bulk Liquid Storage/Treatment** The tanks are fed through fill pipe(s) on each tank. The effect of equipment failure during filling operations is mitigated by visible high-level indicators on all tanks.
- **Surface Impoundments** No fixed power-driven equipment is associated with the surface impoundments. In any failure of portable equipment (i.e., pumps), the liquid will gravity drain into the impoundment.
- Landfills No fixed power-driven equipment is used at the landfills.
- **Stabilization** No fixed power-driven equipment is used at the stabilization unit for handling wastes.
- **Containment Building** The design will accommodate any failure of power-driven equipment within the containment buildings. There are ventilation fans, bag-house air controls, crushers, and forklifts, etc., that are included as fixed and mobile equipment. During power failure, no waste handling operations are allowed and the containment building design has all doors and vents closed and waste fugitive emissions contained.

2.4.2 Power Outage

In the event of a brief power interruption, on-site emergency generators will activate automatically to supply power to facility buildings and outside area lighting, emergency warning systems, the water supply system, and critical hazardous waste operations. In addition, the Arlington Facility has two 4-kW gasoline generators located in the Shop Building, and a 100-kW propane generator located adjacent to water supply well SW1-5. The generator(s) will be placed into service as needed during extended power outages. As additional treatment systems are constructed, new generators will be obtained as required.

2.5 Personnel Protection

The location, design, and operation of the waste management area are intended to prevent undue exposure of personnel to hazardous wastes. The perimeter of the hazardous waste management

Standalone Document No. 2 • Hazards Prevention

area is fenced and a single entry control point prevents unauthorized entry into the site. These and other security procedures at the facility are described in the *Security Procedures* document. Activities not directly involved with receipt, storage, treatment, and disposal of hazardous wastes (i.e., administrative, maintenance, security, etc.) are not located adjacent to any hazardous waste activity.

Where applicable, individual waste management units have additional provisions to protect personnel from undue exposure to hazardous wastes. These include vehicle and foot traffic controls (i.e., walls, fences, doors, gates, and guard rails). Strategically located first aid stations, eyewash/shower units, emergency response equipment, and a comprehensive facility *Contingency Plan* further protect personnel from potential injury.

Personnel protection and safety equipment are required at the Arlington Facility. As a standard safety practice, all employees are issued hard hats, safety glasses, impenetrable boots (steel toed, as required, and rubber), impervious coveralls or rain gear, rubber gloves, ear protection, and appropriate respirators for use when sampling, loading, and unloading hazardous wastes or while working in the process areas. Goggles and face shield are also available for use by all employees. Visitors are provided with the necessary personal protection and safety equipment upon entrance to the site.

As a standard safety practice, only employees properly trained and familiar with the potential hazards, operation, and safety requirements of specific waste management units are allowed access into these areas (see the facility's *Training Plan*). Other personnel may be allowed in these areas only if authorized and accompanied by a trained employee.

Standalone Document No. 2 • Hazards Prevention

3.0 PRECAUTIONS TO PREVENT ACCIDENTAL IGNITION OR REACTION OF WASTES

The facility's *Waste Analysis Plan* dictates the required sampling methodologies, analytical techniques, and overall procedures that are undertaken to determine which wastes will be accepted by the Arlington Facility, and the specific methods for storage, treatment, and/or disposal of the hazardous waste, intermediates, and final material. The waste analysis procedures in conjunction with the design of the operational units and CWMNW's operation and inspection procedures provide the precautions to prevent accidental ignition or reaction of ignitable, reactive, or incompatible wastes.

3.1 Design of Operational Units

The design and location of hazardous waste management units and operations provide for the separation and protection of wastes from open flames, cutting and welding, hot surfaces, frictional heat, sparks, spontaneous ignition, and radiant heat.

All unloading, storage, treatment, and disposal units are designed and located on the site in accordance with all applicable State of Oregon and federal building codes including:

- National Fire Protection Association (NFPA);
- Occupational Safety and Health Administration (OSHA);
- International Conference of Building Officials (ICBO); and
- National Electrical Code (NEMA).

All electrical components in the individual units and operations meet National Electrical Code explosion-proof requirements.

All receiving, storage, and treatment areas containing flammable or reactive waste materials are and will be located at least 50 feet from the Arlington Facility property line. Storage and treatment units are segregated from similar units handling incompatible wastes. Containerized storage areas are internally diked to prevent mixing of potentially incompatible wastes in the event of a spill. More specific descriptions of design features, including aisle space specifications, unit layouts, and buffer zones are provided in the stand-alone documents for each waste management unit or operation at the facility.

Containerized wastes entering the facility are classified as alkalies, acids, ignitables, toxics, reactives, and oxidizers, based on the generator's Waste Profile Sheets and testing performed on incoming loads at the facility's laboratory. The Hazardous Waste Compatibility Chart (from

Standalone Document No. 2 • Hazards Prevention

EPA Document 600/2-80-076) also is used to ensure that incompatible wastes are not grouped within the same category.

Containerized water-reactive solid wastes are stored in a separate waste management unit under conditions that prevent reactions from occurring (e.g., in sealed containers, in diluted form, in combination with appropriate inhibitors, in dry [moisture-free] environments, etc.). Other compatible solid wastes also may be stored with the reactive wastes if capacity needs dictate. Methods for determining the compatibility of containerized wastes are described in the facility's *Waste Analysis Plan*.

The bulk liquid storage/treatment tanks have secondary containment structures. The facility ensures, therefore, that liquid wastes stored in one of the tanks are compatible with wastes in all of the other tanks. Ignitables or reactive wastes are accepted for bulk liquid storage/treatment in accordance with the facility's *Bulk Liquid Storage/Treatment Plan*.

To minimize the effects of ignition or reactivity, storage and process tanks and treatment vessels will include, when appropriate, vents, rupture discs, and pressure relief valves. In addition, where required by Oregon Department of Environmental Quality (DEQ) regulations, emission control systems such as bag filters will be provided to reduce the amount of particulate matter released to the atmosphere.

3.2 General Operation and Inspection Policies and Procedures

The facility design and operation minimizes the internal handling of ignitable and reactive wastes within the Arlington Facility. Containerized reactive solid wastes are transported directly to the reactive solids container storage area. Transportation is via either fork lift or front end loader.

The operators of the vehicles are trained CMWNW employees (see facility's *Training Plan*). The technicians have available, and will use as appropriate, the following safety equipment: hard hat, chemical splash safety goggles, respirators, coveralls, safety boots and gloves. Vehicles used to transport reactive wastes will be equipped with appropriate safety equipment, including a fire extinguisher and first aid kit.

All containers are inspected for potential leaks prior to being unloaded into a storage area and while in the storage area. Containers that show signs of leakage or represent a potential leakage problem are placed in over-packs or the contents may be transferred to a compatible non-leaking container.

Cutting and welding will be done in the maintenance shop whenever feasible. If cutting and/or welding is necessary in the vicinity of a storage, treatment, or disposal area, the precautionary measures in accordance with NFPA, OSHA, and other regulations will be implemented. Safety

Standalone Document No. 2 • Hazards Prevention

inspectors will monitor the whole area, and air samples will be analyzed with portable instruments to ascertain that the area is safe for the intended cutting or welding operation.

Smoking is specifically prohibited in the hazardous waste management area. "No Smoking" signs are posted in all waste processing, storage, and disposal areas. Smoking generally is prohibited throughout the Arlington Facility except in a limited, specifically marked area located away from any hazardous waste activity. Safety signs (e.g., "Flammable Liquid Storage") are and will be posted in all areas and locations where required.

Compatibility of wastes entering a treatment unit or landfill, of waste residues from a spill, and of decontamination fluids, are monitored carefully at the facility. Bulk liquids will be evaluated for compatibility using procedures specified in the facility's *Waste Analysis Plan* prior to placing them in a storage tank or impoundment that holds potentially incompatible wastes. Since the Stabilization Unit normally will be decontaminated between the processing of different wastes, the procedure for determining compatibility of the next waste to be processed consists of testing the compatibility of a representative sample of the waste with a sample of the decontamination rinsate.

When a new waste is to be added to a treatment or storage unit that has not been decontaminated, a sample of the new waste will be tested for compatibility with a sample of the waste previously processed or stored. This procedure is also used when there is any question regarding whether a new waste can be added directly to a waste impoundment. The method for compatibility testing is addressed in the facility's *Waste Analysis Plan*.

The fluid used to decontaminate a process or storage unit or only contaminated equipment is normally water (or steam). Prior to use in decontaminating a unit, the decontamination fluid is tested for compatibility with the waste or residues to be removed if prior experience or existing data are not sufficient to determine whether a dangerous reaction, fire, or explosion would occur when the fluid contacts the waste or residues.

Solid wastes going into a landfill are segregated into four groups: ignitables, corrosives, PCB solids, and toxics. The grouping is made after test results from the facility laboratory are received. The Hazardous Waste Compatibility Chart (EPA Document 600/2-80-076) also is used to ensure that no incompatible wastes are grouped in the same category.

The placement of these wastes within a landfill is made according to a three-dimensional grid system. Landfill disposal procedures for each category of wastes are described in further detail in the facility's *Landfill Design and Operations Plan*. Inert wastes are used to segregate wastes from each category into separate cells.

In responding to an emergency situation involving significant waste releases, CWMNW employees will be directed to make sure that wastes or cleanup residues are isolated whenever

Standalone Document No. 2 • Hazards Prevention

there is any potential that they may be incompatible with nearby wastes or materials. This preventive measure is built into all response criteria for emergency incidents defined in the facility's *Contingency Plan*.

The facility's *Inspection Plan* is designed to prevent accidental ignition or reaction of ignitable, reactive, or incompatible wastes by providing frequent, routine inspection of process-specific monitoring control systems and associated structures. These inspections ensure that alarms and pressure or temperature indicators and gauges are working and provide for prompt detection of any leaks or spills.

Standalone Document No. 2 • Hazards Prevention

4.0 PREPAREDNESS AND PREVENTION

This section addresses the procedures, equipment, and arrangements required under 40 CFR Part 264, Subpart C.

4.1 Design and Operation of the Facility

The Arlington Facility is designed, constructed, and operated on the basis of standard industry practices to minimize the potential for any of the following occurrences that could threaten human health or the environment:

- Fires;
- Explosions; and/or
- Unplanned sudden or non-sudden releases of hazardous waste or hazardous waste constituents to air, soil, or water.

The primary means for minimizing the potential for such occurrences include the following:

- Stabilization of any wastes containing free liquids prior to disposal in landfills;
- Liners and leachate collection and removal systems for new landfills;
- Liners for existing and new surface impoundments, and leachate collection and removal systems for new surface impoundments;
- Site run-off collection system;
- Spill containment systems for all process and above-ground storage units;
- Separation or protection of ignitable and reactive wastes from sources of ignition or reaction, and segregation of incompatible wastes;
- Comprehensive facility Training, Contingency, Inspection, and Waste Analysis Plans; and
- Provision of adequate safety and emergency response equipment.

Standalone Document No. 2 • Hazards Prevention

4.2 Required Equipment

The Arlington Facility is equipped with all the emergency equipment specified in the RCRA regulations to summon help during and respond to emergency situations, including the following:

- Internal communication and alarm systems (see Section 4.1 of the *Contingency Plan*);
- Telephones or two-way radios at the scene of operations (see Section 4.1 of the *Contingency Plan*);
- Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment (see Section 4.2 of the *Contingency Plan*); and
- Water to supply water hose streams, foam producing equipment, and water spray systems (see Section 4.2 of the *Contingency Plan*).

4.3 Testing and Maintenance of Equipment

All facility emergency communications and alarm systems and fire protection, spill control, and decontamination equipment are tested and maintained to ensure their proper operation in time of emergency. The inspection schedule for such equipment is provided in Section 3.2 of the *Inspection Plan*.

4.4 Access to Communications or Alarm Systems

All personnel involved in pouring, mixing, spreading, or other handling of hazardous wastes have immediate access to one of the following:

- A telephone;
- A two-way radio; and/or
- Visual or voice contact with another employee

At no time will the facility be in operation if there is only one employee on the premises.

4.5 Required Aisle Space

All RCRA hazardous waste storage, handling, processing, and disposal areas at the facility are provided with sufficient aisle space or room to allow the unobstructed movement of personnel,

Standalone Document No. 2 • Hazards Prevention

fire protection equipment, spill control equipment, and decontamination equipment to any area of the facility. Descriptions of aisle space specifications, unit layouts, and buffer zones are provided in the stand-alone documents for each waste management unit or operation at the facility.

4.6 Arrangements with Local Authorities

CWMNW has made arrangements with local authorities that may be called to the site in an emergency situation. These are described in Section 8.0 of the *Contingency Plan*. No local authorities have declined to enter into these arrangements.

Standalone Document No. 2 • Training Plan

Table of Contents • Training Plan

1.0	INTRO	ODUCTION		
2.0	POSIT	ION (JOB) DESCRIPTIONS		
	2.1	Facility Organization2-1		
	2.2	Staff Positions		
3.0	TRAIN	ING PROGRAM		
	3.1	Scope of Training for New Personnel		
		3.1.1Orientation Training		
	3.2	Training Program Administration		
		3.2.1Training Personnel Qualifications3-53.2.2Training Formats3-53.2.3Training Effectiveness Evaluation3-53.2.4Qualification of Trainees for Work Under Reduced Supervision3-63.2.5Trainee Feedback3-6		
	3.3	Continuing Training		
		3.3.1Frequency of Training		
	3.4	Documentation of Training		

FIGURES

- 3-1 Flow Diagram of Training Program for Trainees
- 3-2 Flow diagram for Training and Qualification to Work Under Reduced Supervision
- 3-3 Continuing Training Flow Diagram
- 3-4 Example of Training Session Record

Standalone Document No. 2 • Training Plan

TRAINING PLAN

1.0 INTRODUCTION

Chemical Waste Management of the Northwest, Inc. (CWMNW) has developed this *Training Plan* to provide training related to hazardous waste management for employees at it's Arlington Facility located in Gilliam County, Oregon. A copy of this *Training Plan* will be available at the facility at all times.

Training is essential to the efficient and safe operation of all facility processes, and to ensure rapid and effective responses to emergency conditions. It is CWMNW policy that all employees be trained to perform in a manner which emphasizes accident prevention to safeguard human health and the environment.

Training includes both general orientation and facility operation in addition to the specific duties of each job function. No employee is permitted to work under reduced supervision until his or her supervisor has determined that the training program has been completed successfully. Every employee is required to participate in continuing training to maintain proficiency, to learn new techniques and procedures, and to reinforce safety and quality consciousness.

Responsibility for the training program rests with the facility General Manager in conjunction with regional management. The General Manager designates qualified instructors, approves the training program content and format, provides the necessary resources, and maintains employee training records. The General Manager may appoint a training coordinator to plan, organize, and support the training program.

Standalone Document No. 2 • Training Plan

2.0 POSITION (JOB) DESCRIPTIONS

Training is designed to prepare the employee to safely and effectively perform the functions of his or her position, and to ensure that the employee will be able to respond effectively to emergency situations at the facility. Job descriptions are the key to the design of the training program because they identify the responsibilities and duties of each position.

2.1 Facility Organization

The primary functions of this facility are the storage, treatment, and disposal of hazardous wastes, involving highly skilled personnel. In addition, associated business activities include general management functions performed by technical support personnel (e.g., laboratory chemists, engineers), and administrative staff (e.g., secretarial and clerical personnel). A facility organizational chart depicting reporting relationships of all job positions is maintained at the facility.

2.2 Staff Positions

Personnel with the following position titles are employed at the Arlington Facility:

- Vice President-General Manager
- Division Vice President-Operations/Landfill Manager
- Division Vice President-Controller
- Health and Safety Manager
- Receptionist
- Staff Accountant
- Accounts Payable Coordinator
- Transportation Manager
- Driver
- Records Manager
- Information Systems Analyst
- Records Clerk
- Compliance Clerk
- Administrative Clerk

2-1

Standalone Document No. 2 • Training Plan

- Operations Manager
- Maintenance Manager
- Equipment Operator
- Mechanic
- Maintenance Technician
- Material Handler
- Technical Manager
- Facility Services Technician
- Facility Services Data Clerk
- Laboratory Manager
- Laboratory Chemist
- Laboratory Technician
- Environmental Manager
- Compliance Manager
- Compliance Technician
- Monitoring Programs Manager
- Administrative Assistant
- Monitoring Technician
- Environmental Technician
- Staff Engineer
- Facility Engineer
- Special Waste Technician
- Guard

Position descriptions, including basic functions, specific duties and responsibilities, and required qualifications are maintained at the facility main office for all positions related to hazardous waste management. A current list of job titles and the name of the employee filling each respective position also is maintained at the main office. The facility organization and position

Standalone Document No. 2 • Training Plan

descriptions change from time to time, as treatment processes are added and/or as the facility's needs change. The *Training Plan* will be amended accordingly to reflect these changes at the time of the next revision to the plan.

Standalone Document No. 2 • Training Plan

3.0 TRAINING PROGRAM.

All personnel employed at this facility undergo continuing training pursuant to this *Training Plan.* All new employees are introduced to the full training and qualification process illustrated on Figure 3-1 and discussed herein. New employees are considered trainees until they successfully complete an initial training period, not longer than six months in duration.

3.1 Scope of Training for New Personnel

Each new employee undergoes introductory training composed of general orientation training, emergency response training, and job-specific training to varying degrees. The scope of the introductory training program is defined in this section.

3.1.1 Orientation Training

All trainees that are left unsupervised undergo an orientation training session within 6 months of hire to introduce them to the company and to the management and operations of the facility.

This orientation includes procedures for entering and leaving the facility, facility layout, restricted areas, nature and characteristics of hazardous wastes, overview of federal and state regulations, overview of the facility's treatment and disposal processes, introduction to the safety program, general facility rules, administrative procedures and organizational structure. During orientation, the employee is also thoroughly familiarized with the facility's Contingency Plan, especially communications systems, evacuation procedures, and locations of emergency equipment.

3.1.2 Scope of Emergency Response Training

Comprehensive "special" training is provided so that each employee is adequately prepared, as his duties may dictate, to respond quickly and safely to various emergency situations that may arise. This training includes the following elements, where applicable:

- Emergency notification procedures
- Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment
- Procedures for using communication alarm systems
- Response duties for fire or other incidents
- Responsiveness to incidents that release contaminants which could cause groundwater contamination

3-1

Standalone Document No. 2 • Training Plan

- Procedures for shutdown of operations
- Evacuation routes and regrouping areas
- First-aid and CPR
- Casualty control
- Spill Reporting Requirements (Emergency Coordinator and Alternate Emergency Coordinators Only)

The content of each of these elements is purposely kept flexible so that changing operations, changing safety considerations, and special projects can be quickly reflected in the emergency response training program.

3.1.3 Contingency Plan

As discussed in Section 3.1.1 of this *Training Plan*, each trainee is familiarized with the facility's *Contingency Plan* during his orientation period. Training in emergency procedures is provided by either the facility's Emergency Coordinator, the alternative coordinator, or other qualified trainers. At a minimum, emergency training includes:

- Description of the emergency situations which might occur
- Duties of the Emergency Coordinator and others
- Emergency communications and alarm systems
- Evacuation procedures
- Location of emergency equipment such as alarms, first aid stations, eye wash stations, safety showers and fire fighting equipment
- Reporting mechanisms

After a period of classroom instruction, the Emergency Coordinator or other qualified trainer must ensure that each trainee has demonstrated his knowledge of the communications system, evacuation procedures, and location of emergency equipment.

Following the general *Contingency Plan* training, job-specific training regarding specific duties and responsibilities in the event of an emergency is provided. Trainees are familiarized with

Standalone Document No. 2 • Training Plan

facility emergency procedures, emergency equipment, and emergency systems. Emergency response training is individually tailored to specific employee positions and includes, where applicable:

- Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment
- Emergency communications and alarm systems
- Key parameters for automatic waste feed cut-off systems
- Response to fires or explosions (see Section 3.3.2)
- Shut down of operations
- Spill containment/cleanup procedures
- Operation of built-in controls and/or containment mechanisms (i.e., sumps or overhead sprinklers).

Where appropriate, the employee's emergency response training also includes recognizing chemical properties, evaluating hazards and taking proper action. These chemical properties include vapor density, the significance of upper and lower explosive limits, and chemical reactivity. Of particular significance is the selection of proper fire extinguishers for various classes of fires.

3.1.4 Other Emergency Procedures

At least one employee per shift is trained in first-aid and cardiopulmonary resuscitation (CPR). This training may be conducted by the CWM Health and Safety Manager or other qualified employee, the American Red Cross, American Heart Association, YMCA, local fire department, and/or qualified first-aid equipment representatives.

All personnel are trained in basic fire-fighting (e.g., use of fire extinguishers). This training is conducted whenever possible, with the assistance of the local fire department.

Employees assigned to Casualty Control duties are made aware of their function/duties during contingency drill or first-aid/CPR training. Topics include: evacuation procedures, injury evaluation, coordination with ambulance personnel, communication with emergency response organizations (i.e.Chemtrec), and safe transport of injured personnel.

3.1.5 Job-Specific Training

Standalone Document No. 2 • Training Plan

Employees are given training by their supervisor or designee to address the specific needs of their job functions and to insure work is performed safely and legally. After completing orientation and general *Contingency Plan* training or during First Aid/CPR training, all employees receive training which includes the following as applicable:

- Personnel protection and safety which takes employees through the facility's safety rules, the use of protective clothing, eye wash/chemical safety showers, and respiratory and hearing protection used at the facility. Most of this training is hands-on and emphasizes the selection, use, inspection, maintenance, and limitations of this equipment.
- Chemical information which covers recognition of chemical hazards; behavior of chemical substances; the classification of chemical wastes based on Environmental Protection Agency (EPA), Department of Transportation (DOT), and state criteria; sources of data on chemicals; and handling precautions of the various chemical classes.
- Regulatory compliance which provides an in-depth review of federal and state regulations, with the emphasis on application to the facility. Compliance with respect to documents, labeling, manifests, placards, and standards is thoroughly reviewed.
- Facility operation and maintenance which provides detailed instruction in those elements related to the trainee's specific job function. This training may include in-depth coverage of the detailed elements of all job functions within the trainee's management/supervisory scope. This training is composed of the following elements:
 - Process description, including process function and relationship to other facility units
 - Waste acceptance documentation and procedures
 - Process operations
 - Maintenance, including inspection schedules, procedures, spill cleanup, monitoring systems, decontamination, and documentation
 - Basic safety procedures with emphasis on lock-out procedures, confined space entry, and safe emergency response to equipment failures
 - Material handling, loading and unloading, drum handling, and storage
 - Vehicular and mobile equipment operations, including operation, inspection, maintenance and safety procedures
 - Incoming Load Identification procedures for hazardous debris

3-4

Standalone Document No. 2 • Training Plan

3.2 Training Program Administration

The selection of qualified instructors, the use of effective training formats, and the establishment/use of meaningful methods for evaluating an employee's learning are critical. These considerations are described herein.

3.2.1 Training Personnel Qualifications

Regional management counsel and provide concurrence on the selection and/or approval of individuals designated by the General Manager to conduct the specific portions of the training program. The trainers (instructors) are recognized consultants and in-house specialists in the specific fields being taught and have broad experience in hazardous waste management. This actual hands-on experience is important so that the instructor can relate the specific subject area to actual facility operations and can answer employee questions. Specific training may be conducted by an employee, immediate supervisor, department manager, safety specialist, or the General Manager. Supervisory personnel are encouraged to sharpen their instructional skills by periodically attending classes, seminars, meetings, and workshops at outside institutions or other Chemical Waste Management, Inc. facilities. In addition, trainers are assisted by regional management and corporate staff in developing effective training programs and teaching aids.

3.2.2 Training Formats

Training is conducted in classroom meetings, small discussion groups, in-field exercises, emergency drills, and at an employee's work station (i.e., on-the-job). These activities may be supplemented by reading, problem sets, and other teaching aids.

For some classroom training, such as for heavy equipment operators, courses and teaching materials developed by the manufacturer are often used, either by arranging for the course to be presented on-site, or by sending employees to the manufacturer's factory training sessions.

Field demonstrations and practice sessions reinforce skills and promote safety awareness.

Each employee's supervisor is responsible for on-the-job training to assure that the employee learns the correct procedures and can perform them accurately, reliably, and efficiently; and that safety awareness is incorporated into each task. Corrective actions are taken as soon as a deficiency is observed so the trainee does not develop bad work habits. The employee is assigned increasingly complex or responsible duties based on demonstrated performance.

3.2.3 Training Effectiveness Evaluation

Standalone Document No. 2 • Training Plan

Training goals are measured by written or oral examinations whenever possible, or by performance of specific tasks. This demonstrates trainee proficiency at the completion of training. The trainer certifies on the training record that the employee has successfully completed the training.

3.2.4 Qualification of Trainees for Work Under Reduced Supervision

No employee may perform work under reduced supervision at the facility until he or she has been qualified as fully trained by the supervisor. Qualification is earned through successful completion of the orientation training, the emergency response training, the limited and broad job-specific training, and supervised work performance. The method of testing and qualification is shown on Figure 3-2. As shown, some of the training requirements may be waived (i.e., by-passed) by the General Manager if the employee can demonstrate existing competence. Proof of competence may include transcripts from academic institutions, certificates of course completion, demonstrated job experience elsewhere, or a written examination.

3.2.5 Trainee Feedback

Trainee comments and constructive criticism of the training programs are encouraged throughout the entire training process. These comments are used by the trainers to constantly modify/improve training program scope, content or format, as appropriate

3.3 Continuing Training

An employee's training does not end with his initial qualification. In fact, it never ends so long as the employee continues to work at the facility. Periodic "refresher" training is required and provided, as discussed herein.

3.3.1 Frequency of Training

Continuing training is designed to maintain proficiency in job skills, increase safety and quality consciousness, and teach new skills. Such training consists of:

- Regularly scheduled safety meetings
- Annual basic fire-fighting practice
- Annual emergency response exercises
- Annual respirator reviews
- Annual *Contingency Plan* refresher training

Standalone Document No. 2 • Training Plan

• As-needed training to teach new skills, new operating procedures, or to provide greater depth in specific areas.

This continuing training program is depicted in the flow diagram on Figure 3-3.

3.3.2 Continuing Training Content

Safety meetings are scheduled regularly for the employees. These sessions are led by a supervisor, the Health and Safety Manager or other qualified employee. The meetings are used to educate, communicate with, and motivate employees. The agendas cover many topics which may range from a review of a safety procedure such as equipment lock-out, to a presentation of regulatory or policy changes, to a discussion of accident prevention goals. Thus, the meetings may or may not include performance evaluations.

The annual fire extinguisher practice is organized by the facility Emergency Coordinator or designee and, whenever possible, in conjunction with the local fire department. Fire-fighting practice is held for each operating shift at least once each year. Classroom instruction is part of this annual training. **‡ Rev 1**

The facility fire rescue team/emergency response team receives in-depth fire fighting training and performs drills regularly as detailed in 29 CFR 1910.156 and OAR 437-002-180. **‡ Rev 1**.

The annual emergency response review is planned by the Health and Safety Manager or designee. An emergency incident is simulated (e.g., spill, fire, explosion, sudden waste release), and employees are expected to respond according to their assigned emergency response duties.

Annual refresher training related to the *Contingency Plan* is required of all employees. This training reviews the site operations and *Contingency Plan*, to update previous training.

Additional training of a continuing nature is provided. This covers new facility procedures, operations and skills. This training will enhance the broad waste management skills of management and supervisor personnel. Some of this training may be accomplished by attending adult education classes, college courses, or seminars at off-site institutions.

3.4 Documentation of Training

Training records are maintained at the facility. The records contain a written description of the content of each training session, identify attendees and trainer(s), list dates of training sessions, and contain signatures of trainers and attendees certifying that the training was accomplished. An example of such documentation is presented on Figure 3-4.

Standalone Document No. 2 • Training Plan

Each employee has a training history file on-site that contains his job description, the list of initial and continuing training requirements, and appropriate documentation indicating that the requisite training has been satisfactorily completed.

Training documentation will be maintained in a file at the facility until closure. For at least three years after facility closure, the personnel training records will be kept at the corporate offices.

An employee's training history records will be sent to the General Manager or designee of any other facility owned/operated by CWMNW or Chemical Waste Management, Inc. to which the employee may be transferred. Training files of employees who leave employment with CWMNW or Chemical Waste Management, Inc. will be retained for three years at the last facility where they worked.

Standalone Document No. 2 • Training Plan



Standalone Document No. 2 • Training Plan



Standalone Document No. 2 • Training Plan







CHEMICAL WASTE MANAGEMENT OF THE NORTHWEST

SAFETY MEETING AND CONTINUING TRAINING RECORD

CLASS TITLE:

DATE:_____

INSTRUCTOR/TITLE:

The person identified below has successfully completed RCRA orientation. Orientation included:

- RCRA requirements of a TSDF
- Overview of the Part B Permit
- Overview of the site layout and waste handling processes
- Review of internal waste management control systems and the Waste Analysis Plan
- Site security measures
- Site inspection system
- Alarm systems and emergency equipment
- Contingency Plan and evacuation routes
- The purpose of hazardous waste manifests
- Responsibilities of employees in helping comply with the RCRA standards

PRINT Employee Name

Employee Signature

I certify the above employee has successfully completed the listed class (Instructor's signature)