STANDARD OPERATING PROCEDURES FOR THE CONTROL OF FUGITIVE EMISSIONS

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INTRODUCTION

EnviroFocus Technologies, LLC (EFT), formerly Gulf Coast Recycling, Inc. (GCR), is a secondary lead smelter. The facility processes spent lead acid batteries. Battery components are separated and the lead-bearing materials are smelted in a blast furnace rendering a product known as blast lead. The blast lead is further refined to produce specific grades of lead for the manufacture of new batteries, ammunition, and other uses.

The facility has a Battery Breaking Operation, a Blast Furnace Operation, a Refining Operation, and a Materials Storage and Handling Area for lead-bearing materials.

EFT is committed to the operation of its facility in a manner that will comply with applicable federal, state, and county environmental regulations and in harmony with the surrounding community. GCR operated at its present location for more than forty (40) years, and EFT expects to continue operation well into this century. Regulatory compliance is a corporate commitment. This commitment is vigorously reinforced throughout the company, from the top down.

PURPOSE

The purpose of this plan is to maintain effective fugitive controls to meet the requirements of the U.S. Environmental Protection Agency (EPA), the Florida Department of Environmental Protection (FDEP), and the Environmental Protection Commission of Hillsborough County (EPC).

The EPA's National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Lead Smelting (40 CFR 63 Subpart X) apply to this facility. This rule requires the owner to prepare and operate in accordance with a standard operating procedures (SOP) manual that describes the measures used to control fugitive emissions at the facility. The NESHAP requirements are also referred to as EPA Maximum Achievable Control Technology (MACT) standards for secondary lead smelters.

FDEP Rule 62-296.601, F.A.C. requires lead-processing operations located within lead non-attainment or maintenance areas to employ reasonably available control technology (RACT) to control potential fugitive emissions at the facility. The RACT rule addresses measures that apply to areas and activities that are not addressed by MACT rule or are more stringent than the MACT requirements. These measures are also covered in this SOP. Additionally, GCR entered into a Consent Order (CO), case No. 95-00728SKW057, with the EPC which has specific requirements which are also incorporated into this SOP manual.

The EPC is the administrator of the aforementioned EPA and FDEP regulations and is authorized to issue facility construction and operation permits. All of the NESHAP, MACT, RACT, and CO requirements were incorporated as specific conditions into the EFT Title V Permit issued by

the County and all future renewals. This SOP manual will also be incorporated, by reference, as a specific permit condition.

Potential sources of fugitive emissions at the facility include:

(1) Plant Roadways and Parking Areas
(2) Battery Breaking
(3) Blast Furnace Area
(4) Refining and Casting Area
(5) Materials Storage and Handling Area (Group Pile)
(6) Unpaved Outside Areas

The list of supporting documents is located at the end of this SOP.

OPERATING PROCEDURES

The following procedures will be used at EFT, at a minimum, for the control of fugitive emissions:

Plant roadways and Parking Areas

Vehicular traffic areas are mostly paved and are periodically wetted down by an eleven (11) zone (see attached Site Layout) automatic sprinkler system. Each zone is setup with a timer and control valve that cycles the zone on several times a day. The timers are electronic programmable timers in lockable cases. Sprinkler operation will be noted on the Sprinkler Operation Log form on a weekly basis. The sprinkler system zones may be deactivated on a temporary basis due to construction activity. The alternate methods of wet dust suppression like hose wetting and water trucks will be employed where sprinkler zones are inactive. The sprinkler zones, approximate number of sprinkler heads, and on and off times are as follows:

Zone	Location	#Sprinklers	On/Off Time
1	North Parking Lot Fence	11	3 Min./12 Min.
2	Maintenance Shop and fuel	3	3 Min./12 Min.
3	Pig Warehouse and N.E. Corner of Furnace	3	3 Min./12 Min.
4	Furnace Baghouses	4	3 Min./12 Min.
5	S.E. Wall Section	9	3 Min./12 Min.
6	S.W. Wall Section	15	3 Min./12 Min.
7	Wastewater Treatment Plant	4	3 Min./12 Min.
8	West Pavement Perimeter	7	3 Min./12 Min.

9	Northwest Pavement Perimeter	4	3 Min./12 Min.
10	Refining Area & Refining Warehouse	4	3 Min./12 Min.
11	Hygiene Building & Covered Parking	6	3 Min./12 Min.

The sprinklers cycle according to the following table. After the first fifteen minutes at least two zones will be on at all times.

ZONE 1—3 minutes			
ZONE 2—3 minutes			
ZONE 3—3 minutes			
ZONE 4—3 minutes			
ZONE 5—3 minutes			
ZONE 6—3 minutes	ZONE 1—3 minutes		
ZONE 7—3 minutes	ZONE 2—3 minutes		
ZONE 8—3 minutes	ZONE 3—3 minutes		
ZONE 9—3 minutes	ZONE 4—3 minutes		
ZONE 10—3 minutes	ZONE 5—3 minutes		
ZONE 11—3 minutes	ZONE 6—3 minutes	ZONE 1—3 minutes	
	ZONE 7—3 minutes	ZONE 2—3 minutes	
	ZONE 8—3 minutes	ZONE 3—3 minutes	
	ZONE 9—3 minutes	ZONE 4—3 minutes	
	ZONE 10—3 minutes	ZONE 5—3 minutes	
	ZONE 11—3 minutes	ZONE 6—3 minutes	ZONE 1—3 minutes
		ZONE 7—3 minutes	ZONE 2—3 minutes
		ZONE 8—3 minutes	ZONE 3—3 minutes
		ZONE 9—3 minutes	ZONE 4—3 minutes
		ZONE 10—3 minutes	ZONE 5—3 minutes
		ZONE 11—3 minutes	ZONE 6—3 minutes

Traffic paths shall be vacuumed three (3) times each day with a Tennant, or equivalent, vacuum sweeper, except when rain occurs or when areas are sufficiently wetted by the pavement sprinkler system. The employee parking lots will be vacuumed a minimum of three (3) times each week, unless prohibited by prolonged periods of rainfall. Records of the areas swept shall be included in documentation of sweeper operation. Sweeper operation will be noted on the Sweeper Operation Log Wet and Dry forms.

Battery Breaking Area

Partial walls surround this area on three (3) sides. The walls extend down from the roofline to approximately ten (10) feet from the top of the curbing that is around the entire floor area. Approximately three quarters of the east wall (the fourth wall) is directly adjacent to the west wall of the Materials Storage and Handling Area that provides a wall from the roof to the floor. Any wash-down water or process water from the operation gravity flows to a collection sump on the north side of the building. Water collected in the sump is pumped to the on-site wastewater treatment plant for treatment. The battery breaking area is washed down at least two times each day. The directed wash-down is noted on the Battery Breaking Operations Process Worksheet log form and signed by the operator. Equipment leaving the roofed area is pressure washed or washed.

Blast Furnace Area

The Blast Furnace Area is completely enclosed with three 14' overhead doors, an 8' overhead door for slag pass thru, a 24' x 14'access way to the Material Storage and Handling Area, and four man-doors. The furnace is bordered on the south by the baghouses that are walled in and is bordered on the west (approximately 30 feet away) by the Materials Storage and Handling Area building. The furnace work area is washed/hosed down at least two times each day. Each wash-down will be noted on EFT Supervisor Checklist form and signed by the operator. The wash-down water in the furnace area gravity flows to one of two floor sumps. The sumps are located on the east and west sides of the Blast Furnace Area. Water collected in these sumps will be pumped to the wastewater treatment plant for treatment. Equipment leaving the roofed area is pressure washed or washed.

The Blast Furnace Enclosure and entrance to the Group Pile Storage are under negative pressure from the Torit Downflo II dust collector to control fugitive emissions in the blast furnace operations area. The blast furnace slag tapping enclosure, the lead tapping hood and the blast furnace charging enclosure are vented to the furnace hygiene baghouse. Dust from the Tapping/Charging (Hygiene) baghouse is conveyed via covered screws to a tank where it is weighed, slurried with water, and pumped to a reactor in the battery breaking area for desulfurization. The openings or faces of these hoods and enclosures meet the MACT face velocity requirements when access doors are in their normal operating position. The Supervisor Checklist and the Supervisor Shift Change Reports document the area wash down events.

Refining and Casting Area

The Refining and Casting Area is partially enclosed. The work area is washed/hosed down at least two (2) times each day. Each wash-down is noted on the Refining Daily Environmental Inspection form and signed by the operator. Wash-down water in the refining area is collected in a floor sump and pumped to the wastewater treatment plant for treatment.

Potential process fugitive emissions in the Refining and Casting Area are controlled by hoods over each of the four refining kettles and by enclosures for the dross receptacles. The hoods and enclosures are vented to a baghouse. The kettle hoods meet the MACT face velocity requirement when the access doors are in their normal operating position and are tested annually when the Refining baghouse stack test is completed.

Molten lead is pumped from the kettles to one of two casting machines. A pre-set amount of lead is delivered to the pig molds through a star ladle at the front end of the casting machines. The star ladles are kept hot by a gas flame. A hood is provided over each star ladle to capture potential emissions. The face of the hood meets the MACT face velocity requirements.

Materials Storage and Handling Area (Group Pile)

The Materials Storage and Handling Area is completely enclosed with a single point access way through the Furnace Enclosure and wheel wash site. The access way is an approximately 24' x 14' opening and designed for equipment. The archway of the access point contains a horseshoe type hood around the perimeter of the opening and approximately 32,500 acfm is drawn to the Torit dust collectors in order to create a null air flow within the storage area opening. Accumulated water in this area gravity flows to one of two floor sumps. There is a collection sump on the east wall near the southeast corner of the area and one sump on the north side of the area. Water collected in the sumps is pumped to the wastewater treatment plant for treatment. The pathways within this area will be wetted down as needed to prevent the generation of dust. The materials stored in this area are washed/wetted prior to storage and will remain

moist even after long-term storage. Additional wetting of the stored material will be provided, if necessary, to prevent the generation of dust; however, it is not anticipated that additional wetting will be necessary. The archway access point to the Material Storage and Handling Area contains a 40" duct that transports air collected at the horseshoe hood, as previously mentioned, to the Torit Dust collector. Stored materials in the Group Piles will not be stored higher than the top edge of the concrete wall. Normal feed material stored in this area will contain 3-10% moisture and doesn't require sprinkling. Minor amounts of dry recyclable materials are mixed into the damp materials before being charged to the furnace.

Forklifts and front-end loaders leaving the roofed area are pressure washed or washed. The form used to document the washing of the equipment is the Vehicle Wash Log and maintained by the shift leader and supervisor.

Unpaved Outside Areas

The unpaved areas of the facility are grassed and will be maintained as such. There will be no routine traffic in these areas. Equipment traffic in the grassed areas will be limited to access for maintenance and up keep or to affect repairs to equipment (i.e. pumps, motors) that are located off or at the edge of the paved areas.

Supporting Documents:

1. Sprinkler Operation Log Weekly – A04f
2. Weekly Sweeper Log-Wet-A01f(a) and Dry-A01f(b)
3. Battery Breaking Operation Process Worksheet-A09f
4. ETF Supervisor Checklist
5. Supervisor Shift Change Report-0751:54
6. Refining Daily Environmental Inspection-A07f
7. Vehicle Wash Log-A03f