Attachment 10
Treatment Process Description

FORM EQP 5111 ATTACHMENT C4
TREATMENT PROCESS DESCRIPTION

This license application section addresses the treatment processes conducted at Petro-Chem in Detroit, Michigan.

This section is organized as follows:

INTRODUCTION

All processing activities at the Facility are described in the processing descriptions found in Volume Vl, Section 5 of the Application.

C4.A Fuel Blending

Fuel type wastes are selectively blended to meet the specifications as an alternative fuel ('WDF') for industrial furnaces. The treatment does not change the physical state of the constituents; hence, it will remain a liquid after the treatment. The treatment is intended to change the heat value of the treated material so that it can be of beneficial use as a fuel supplement.

The WAP identifies the parameters that are tested to verify the material is suitable for entry into the fuel program. Reactive and corrosive fuel type materials are not suitable for the process as they may form gases or polymerize in the process vessel; these fuel types are eliminated from the process by performing bench scale lab tests (reactivity). Any change in temperature that accompanies gas formation, change in color or state will eliminate the material from the process. Any significant change in temperature that does not accompany a visible reaction will result in elimination of the material from the process. These materials will be trans-shipped to an authorized facility for further management.

The process is controlled via laboratory testing of pre and post treatment parameters. The parameters to be monitored will be heat value (BTU/lb), pH (pH unit), solids (%) and water (%). The laboratory test method SOPs for these parameters are found in Volume I, Section 2 of the license application.

Batch sizes vary from labpack inner container quantities up to bulk volumes of a tanker truck or tank volumes.

C4.B Filtration

Solvent type wastes that can be reclaimed through simple filtration may be candidates for the solvent reclamation process. This process involves passing the solvent waste through a screen via a centrifugal pump to separate the solids.

This process has no effect on the physical, chemical or biological character or composition of the material to the extent that it would impact the storage systems or natural environment in any manner.

The % solids will be monitored both pre and post treatment. The SOP for this test parameter is found in the laboratory SOPs included in Volume I, Section 2, Appendix I of the License Application.

C4.C Commingling

Similar waste types may be commingled to effect more efficient transportation outbound to an authorized facility. This process will not be performed to alter the physical, chemical or biological properties of the material.

Reactive type materials are not suitable for the process as they may form gases or polymerize in the process vessel; these waste types are eliminated from the process by performing bench scale lab tests (reactivity). Any change in temperature that accompanies gas formation, change in color or state will eliminate the material from the process. Any significant change in temperature that does not accompany a visible reaction will result in elimination of the material from the process. These materials will be trans-shipped to an authorized facility for further management.

In the highly unlikely event, the reactivity tests do not identify material unsuitable for commingling, this process will be conducted under a fumehood in the labpack depack area (CPPS) and pump room fumehood (PR-CPPS) where the emissions are captured and vented to an air scrubber system.

Commingling batch sizes typically range from lab pack individual containers up to bulk containers.

C4.D Adulteration

Waste materials may be adulterated to prevent reintroduction into the supply chain or personal use by rendering the material unsuitable for ingestion, inhalation, dermal application or resale.

A reactivity test will be performed on the material with a proposed solvent (aqueous or organic) to verify compatibility. If results are negative, the material will be commingled with the chosen solvent and repackaged for storage and shipped to an authorized facility for further management.

This process will be conducted at CPPS or PR-CPPS located within the CMB. All prescription drug wastes will be adulterated within the waste pharmaceutical storage area (WPSA) located within the SBS Container Storage Area. Materials that cannot be adulterated due to

incompatibility of all available solvents will be transferred to the WPSA for storage where the material will be monitored under surveillance cameras.