



KOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES

4014 NW THIRTEENTH STREET
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352/377-5822 ■ FAX 377-7158

PROJECT 263-97-06

FAX TRANSMITTAL FORM

TO: Tom Conrardy
FDEP Tally — Bureau of Waste Cleanup
[Rinker Materials Corporation]

SUBJECT: Request for Alternate Procedure per Rule 62-775.500, FAC

FAX NO. 850.922.4939

FROM: Steve Cullen

DATE: 8/19/97 SENT BY: SCC *SC*

The text being transmitted consists of 6 pages PLUS this one. If you do not receive all of the pages or if there are difficulties with this transmission, please call (352) 377-5822.

REMARKS: Request for Alternate Procedure — requested to allow
continued processing of petroleum-containing residues/sludges.

Please review this Request, and prepare a determination.

If you have any questions or comments, please contact me.

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ENVIRONMENTAL SERVICES

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July 16, 1997

Mr. Paul Wierzbicki, P.G.
Waste Cleanup Supervisor
Department of Environmental
Protection -- Southeast District
Post Office Box 15425
West Palm Beach, Florida 33416

SUBJECT: Request for Alternate Procedure per Rule 62-775.500, F.A.C.
Rinker Materials Corporation – Miami Soil Thermal Treatment Facility
General Permit No. SO13-290034

Dear Mr. Wierzbicki:

This letter and the attached Request for Alternate Procedure ("Request") are in response to your letter to Rinker dated June 9, 1997.

In accordance with your suggestion, Rinker is requesting an Alternate Procedure per Rule 62-775.500, F.A.C., to allow the continued acceptance and thermal processing of petroleum contaminated sludges (described herein as other petroleum containing media).

The Request addresses all of the items contained in the referenced rule section, and also addresses the additional items listed in your letter.

If you have any questions, please contact me at (352) 377-5822, or Mike Vardeman of Rinker at (305) 229-2955.

Sincerely,

Steven C. Cullen, P.E.
Koogler & Associates

copy to: Mike Vardeman -- Rinker

Request for Approval of Alternate Procedure

This request for the approval of an alternate procedure was suggested by Paul Alan Wierzbicki (DEP Southeast District, Waste Cleanup Section) in a letter to Rinker Materials Corporation, dated June 9, 1997.

This requests, in writing, a determination from the Department that Rule 62-775.200(9), F.A.C., does not apply in a limiting manner to this facility.

This request for approval of an alternate procedure will add certain other materials (see below) to the narrow definition of "*Petroleum Contaminated Soil*" found at Rule 62-775.200(9), F.A.C. This will allow the continued acceptance and processing of such materials at this facility.

The facility for which an exception is sought:

Rinker Materials Corporation
Soil Thermal Treatment Facility
1200 NW 137th Avenue
Miami, Dade County, Florida 33182
General Permit No. SO13-290034

The specific provision of Rule 62-775, F.A.C. from which an exception is sought:

Rule 62-775.200(9), F.A.C. Definitions

"Petroleum contaminated soil" means soil which has become contaminated with one or more of the following liquid products made from petroleum: all forms of fuel known as gasoline, diesel fuel, jet fuel, kerosene, grades 2 through 6 fuel oils, crude oil, bunker C oil, residual oils, and nonhazardous petroleum based lubricating, hydraulic, and mineral oils. This definition applies only to the regulation of soil thermal treatment facilities.

The basis for the exception:

It is Rinker's belief that other petroleum containing media should be included in the definition of petroleum contaminated soil, and such wording was inadvertently omitted during rulemaking.

Further, the Department has, to date, allowed the processing of other petroleum containing media in soil thermal treatment facilities permitted under Rule 62-775, F.A.C.

The alternate procedure or requirement for which approval is sought:

Rinker requests an expansion of the referenced definition of petroleum contaminated soil, to include other petroleum containing media, including

- sludges, and/or tank bottoms from petroleum product storage tanks
- mineral-type sorbent materials that have been used for the cleanup of petroleum spills and/or leaks
- oil/water separator residues
- soakage pit residues
- car wash reclaim water tank residues
- storm water catch basin residues
- French drain residues

multiple processes cause concern

Demonstration that the alternate procedure provides a substantially equivalent degree of protection for the lands, surface waters, or ground waters of the state as the established requirement:

The petroleum products are the same as those contained in the referenced definition -- only the "soil" fraction is different.

The reason for thermal processing is to volatilize the petroleum compounds from a solid matrix, and then expose such petroleum compounds to a specified combination of temperature and residence time.

Hence, the solid matrix, be it soil or other materials, will not affect the degree of protection for the environment.

The petroleum compounds are the same as defined above, and the requirements of Rule 62-296.415, F.A.C. provide an equivalent degree of protection for the lands, surface waters, or ground waters of the state as the established requirement.

Soil is defined by the Natural Resources Conservation Service (formerly Soil Conservation Service) as:

A natural, three-dimensional body at the earth's surface. It is capable of supporting plants, and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief over periods of time.

It is important to note that this definition does not include any chemical characteristics. The solid matrices requested for approval herein are not substantially different than components of soil.

Interestingly, Rule 62-775.300(9), F.A.C expressly allows the treatment of material other than soil:

Soil thermal treatment facilities are allowed to treat debris, other than soil, such as concrete, rocks, and wood. [emphasis added]

In summary, this request for alternate procedure to allow the thermal treatment of other petroleum containing media, will provide an equivalent degree of protection for the lands, surface waters, or ground waters of the state as the established requirement.

Demonstration that the alternate procedure is at least as effective as the established requirement:

The petroleum compounds are the same as defined above, and the operating requirements of Rules 62-775 and 62-296, F.A.C. are unchanged. Therefore the volatilization and destruction of the petroleum compounds will be unaffected by this request.

Description of the specific types of sludges/residues you intend to accept at the facility:

Within this request, the materials are described as other petroleum containing media, and include:

- petroleum storage tank bottom residues *sludges?*
 - mineral-type sorbent materials that have been used for the cleanup of petroleum spills and/or leaks
 - oil/water separator residues *petroleum only?*
 - soakage pit residues
 - car wash reclaim water tank residues *Automobiles only*
 - storm water catch basin residues
 - French drain residues
- need analysis of components Fe*
- light truck & car*

These other petroleum containing media are not hazardous wastes per 40 CFR 261.

Solid and semi-solid materials come in contact with petroleum compounds to generate other petroleum containing media. These materials include:

- sand/dirt/soil/grit/silt/clay
- sediment
- rust and other oxidation products
- debris
- algae and other similar organic matter
- leaves and twigs
- precipitates

Typically, the amount of moisture (as H₂O), and the amount of petroleum compounds present in the petroleum containing media will control the viscosity. Petroleum containing media will range from granular solids to sludges, and will include some materials with liquid:solid phases.

The types of containers the sludges/residues will be shipped in and storage/handling procedures to be used at the facility:

- vacuum equipment designed for media handling and transportation
- roll-off containers
- drums
- dump trucks and dump trailers

The acceptance criteria used to ensure the sludges/residues are not characterized as hazardous waste, do not fail TCLP criteria, and are contaminated with petroleum products only:

Representative samples of the petroleum containing media will be obtained in accordance with the sampling frequency shown in Table II of Rule 62-775, F.A.C., and the samples will be analyzed in accordance with Rule 62-775.410(3) and (4). These procedures will ensure that the petroleum containing media are not characterized as hazardous waste, do not fail TCLP criteria, and are contaminated with petroleum products only.

Any liquid fraction which emerges from stockpiled soil, sludges or media is defined as leachate by Rule 62-775.200(7), F.A.C., and will be treated in the thermal treatment facility per Rule 62-775.620(5), F.A.C.

The manner in which the sludges/residues are mixed/blended with other petroleum contaminated soils for incorporation into the treatment process:

Once deemed acceptable, petroleum containing media will be mixed/blended with petroleum contaminated soil without restriction or limitation; as is presently authorized by General Permit SO13-290034 for soils currently acceptable under that permit.

This mixing/blending will be utilized, as necessary, for the following reasons:

- to "dry up" wet or viscous materials to improve handling
- to control heat input to the thermal treatment facility
- for effective utilization of storage space

Mixing/blending will typically be accomplished by mechanical means, such as a front-end loader, Bobcat, clamshell bucket, excavator, or manual shovel.

Procedures to follow in the event of TCLP failure after acceptance:

The petroleum containing media will be analyzed for applicable criteria before acceptance, or will be segregated on-site during acceptance analysis. The acceptance criteria includes total metals analysis for the eight RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver). In accordance with Rule 62-775.410(4), TCLP analysis for metals shall not be required if total metals analysis do not indicate the potential for toxic leachate concentrations.

The acceptance criteria and handling procedures ensure that material is accessible for proper removal if deemed unacceptable.