Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

April 11, 2007

APR 23 2007

Mr. Randy Melton
Chair, Solid Waste Subcommittee
Florida Electric Power Coordinating Group, Inc.
1408 North Westshore Boulevard, Suite 1002
Tampa, Florida 33607-4512

Dear Mr. Melton:

I am pleased to acknowledge the revised *Mineral Oil Dielectric Fluid Emergency Response Action Protocol*, dated April 2007, as an acceptable procedure for meeting the requirements of Rule 62-780.550, Florida Administrative Code *De Minimis Discharges*, when responding to mineral oil dielectric fluid discharges. The protocol is the product of a cooperative effort by the Florida Electric Power Coordinating Group and the Division of Waste Management to establish guidance for use by electric utility responders and Department employees.

Copies of this letter and the protocol are being provided to the Department's District Waste Program Administrators and to the Bureau of Emergency Response for their information and use. Please contact Doug Jones, Chief of the Bureau of Waste Cleanup, at (850) 245-8930 if you have any comments or questions.

Sincerely,

Mary Jean Yon, Director
Division of Waste Management

MJY/djr

cc: Phil Wieczynski, Chief, Bureau of Emergency Response
Waste Program Administrators

MINERAL OIL DIELECTRIC FLUID
EMERGENCY RESPONSE ACTION PROTOCOL

Introduction

The Florida Electric Power Coordinating Group, Inc. (FCG) submits the following proposed protocol for emergency response actions that may be followed by Florida electric utilities to respond to highly/severely refined mineral oil dielectric fluid (MODEF) (e.g., CAS Nos. 64742-53-6, 64742-46-7, 64742-54-7, and 64741-88-4) discharges from transformers and other MODEF filled electrical equipment discovered on residential, commercial, and industrial properties. The protocol is founded on certain of the requirements of 40 CFR Section 761.125(b), which applies to cleanup of spills from equipment containing concentrations of PCBs ranging from 50 to 499 parts per million (ppm). The proposed protocol is also based on the toxicological profile of MODEF, provided in Attachment "A", which concludes that MODEF used in transformers and other electrical equipment exhibit a negligible degree of toxic potential. The FCG believes that this proposed protocol adequately protects human health and the environment while allowing Florida electric utilities the necessary operational flexibility to meet their statutorily mandated obligation of providing cost effective, safe, and reliable electric service to Florida residents. The FCG is submitting this proposal to confirm our mutual understanding with the Florida Department of Environmental Protection (FDEP) regarding how FCG members intend to comply with FDEP's Rule 62-780.550, F.A.C. In responding to MODEF discharges, including those into or near waters of the state, FCG members will also comply with all other applicable laws and regulations, including applicable notification requirements.

The electric utility industry strives to maintain high electric service reliability to its customers. As a result, there is an immediate response by Florida electric utilities to electrical outages. Emergency response to electrical equipment outages, including MODEF discharges resulting from the failed equipment, typically occurs concurrently with the replacement of the failed or damaged equipment so as to minimize outage time to customers.

Emergency response to electric equipment outages consists of mobilization of utility company personnel and/or its contractors assist with the immediate restoration of electrical service to customers including remediation of any newly released MODEF to the environment that may have occurred during the equipment failure. During emergency response, remediation of newly released MODEF typically occurs during the time period in which the failed electrical equipment is being replaced. This activity is initiated no later than 48 hours from the time the failed electrical equipment is discovered or reported.

Non-emergency response to MODEF discharges is a planned process that may require an electrical outage to customers so that the electrical equipment may be removed or safely worked around (i.e., in substations) so that remediation of the MODEF discharge may be completed. Non-emergency response actions typically take longer than 48 hours to initiate but are completed within 30 days. Non-emergency response activities

include newly released MODEF discharges as well as any older MODEF discharges that are identified.

All responses will be made after a determination has been made regarding whether the MODEF release is believed to have resulted from a PCB transformer or other PCB-contaminated electrical equipment as defined in 40 CFR part 761, based on company knowledge, records search, screening (e.g., Clor-N-Oil), etc. MODEF releases containing PCB concentrations of 50 ppm or greater will be remediated in accordance with all applicable sections of the U.S. Environmental Protection Agency regulations contained in 40 CFR Part 761. MODEF releases containing PCB concentrations greater than 0 and less than 50 ppm will be remediated according to this protocol and disposed of in accordance with applicable solid waste laws and regulations.

The MODEF discharge response process under an "emergency" response scenario consists of the following:

(1) Removal of all soil contaminated with freshly released MODEF within the spill area (i.e., visible traces of oily soil and a buffer of 1 lateral foot around the visible traces) and the ground restored to its original configuration by backfilling with commercially available fill; and

(2) Physically removing all visible traces of oil/oil sheen observed in the groundwater with oil absorbent pads/material or via vacuum assisted equipment.

(3) Solid surfaces will be washed and rinsed and the rinse water collected, or such surfaces will be cleaned using appropriate chemical, sorbent or absorbent materials;

(4) These emergency response actions will be initiated within 48 hours after the Florida electric utility is notified or becomes aware of the electrical outage, unless such actions must be delayed in case of circumstances including but not limited to civil emergency, adverse weather conditions, lack of access to the site, or emergency operating conditions.

The MODEF discharge response process under a "non-emergency" response scenario consists of the following:

(A) If the MODEF spill is 25 gallons or less and not resulted in contact with groundwater, follow items (1), (2) and (3) above.

(B) If the MODEF spill is greater than 25 gallons, or (regardless of quantity discharged) if MODEF is found to be in groundwater or a sheen is removed from groundwater, follow (1), (2) and (3) above. Confirmatory field screening will be conducted via approved field test kits to ensure/verify that impacted soil has been removed. Verification (e.g., Petroflag) will be confirmed by ensuring the TRPH levels remaining in the soil are below the lower of the direct exposure or leachability soil cleanup target level for TRPH. For MODEF found to be in groundwater or where

a sheen is removed from groundwater, confirmatory laboratory analysis will be conducted to ensure that TRPH levels are below 5 mg/l in groundwater, or an alternative number agreed to with the Department. Removal will continue until TRPH levels are below the aforementioned concentrations, unless prevented by a physical obstacle such as a tree, building, etc. To the extent such removal cannot take place within 30 days, then the electric utility will contact the relevant Department district office to develop an appropriate discharge response in accordance with Chapter 62-780, F.A.C.

(C) Non-emergency response actions may be initiated more than 48 hours after the Florida electric utility is notified or becomes aware of the MODEF discharge.

(5) Upon completion of response action activities, Florida electric utilities will prepare and maintain the following records for a period of at least 5 years constituting adherence to the Interim Source Removal Report requirement found in Rule 62-780.500(7), F.A.C.:

(a) Date of discharge or date of discovery of discharge;

(b) Location of discharge (e.g., street address of discharge, if known).

(c) A statement regarding whether the MODEF release is believed to have resulted from a PCB transformer or other PCB-contaminated electrical equipment as defined in 40 CFR Part 761, based on company knowledge, records search, screening, etc.

(d) Estimate of quantity of MODEF released;

(e) Estimate of free MODEF collected, if any;

(f) Estimate of volume of impacted soil excavated or groundwater recovered; and

(g) Name and address of facility where free MODEF, impacted soil or groundwater was disposed or treated, including disposal and/or treatment manifests or certifications.

(h) For non-emergency cleanups greater than 25 gallons,

(1) Narrative description or illustration indicating where discharge occurred;

(2) Narrative description or illustration indicating where samples were taken;

(3) Screening method used;

(4) TRPH information and a description of any physical obstacles, if applicable, preventing removal to levels below the lower of the direct exposure or leachability soil cleanup target level for TRPH (or 5 mg/l for groundwater), or an alternative number agreed to with the Department;

(5) Narrative description or illustration of the limits of the excavation.