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CCR CLOSURE PLAN

AREA 3 RWS TYPE I LANDFILL, FP 77-04
HOOSIER ENERGY REC, INC.
MEROM GENERATING STATION
SULLIVAN COUNTY, SULLIVAN, INDIANA

ATC PROJECT NO. 170LF00301

OCTOBER 14, 2016

PREPARED FOR:

HOOSIER ENERGY REC, INC.
MEROM GENERATING STATION
P.O. BOX 908
BLOOMINGTON, INDIANA 47402-0908
ATTENTION: LON PETTS

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October 14, 2016

Lon Petts
Hoosier Energy
P.O. Box 908
2501 South Cooperative Way
Bloomington, Indiana 47403-5175

ATC Group Services LLC

7988 Centerpoint Dr.
Suite 100
Indianapolis, IN 46256

Phone **+1 317 849 4990**
Fax +1 317 849 4278

www.atcgroupservices.com

Re: **Landfill CCR Closure Plan**
Merom Generating Station
Area 3 Type I RWS Landfill
Sullivan County, Sullivan, Indiana
ATC Project No. 170LF00301

Dear Mr. Petts:

ATC is pleased to present the following CCR Closure Plan for the Hoosier Energy Merom Generating Station Area 3 Type I Restricted Waste (RWS) Landfill. Contained herein is a copy of the report which summarizes the compliance of the landfill closure plan with requirements of 40 C.F.R. Part 257, Subpart D.

This Closure Plan provides a description of the final cover system, the maximum CCR inventory estimate, a summary of the closure activities, approximate timeline for completing closure, and engineering certification of the plan.

We appreciate the opportunity to assist you with this project. If you have any questions concerning information contained in this report, please do not hesitate to call the undersigned at 317.849.4990.

Sincerely,

ATC Group Services LLC

Charles Dewes, E.I., CFM
Project Engineer

David Stelzer, PhD., P.E.
Senior Project Engineer

Donald Bryenton, P.E.
Principal Engineer

DONALD LEE BRYENTON
REGISTERED
N° 17877
STATE OF
INDIANA
PROFESSIONAL ENGINEER

HOOSIER ENERGY

A Touchstone Energy® Cooperative

CCR CLOSURE PLAN

HOOSIER ENERGY
MEROM GENERATING STATION
AREA 3 TYPE I RESTRICTED WASTE LANDFILL

OCTOBER 14, 2016

PREPARED BY:

ATC

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1.0 Background

1.1 CCR Rule

The federal regulations set forth under 40 CFR §257.102 require all owners or operators of a CCR unit to provide a written and published Closure Plan which contains the information identified in §257.102, items (b)(1)(i) through (vi).

1.2 Site Description

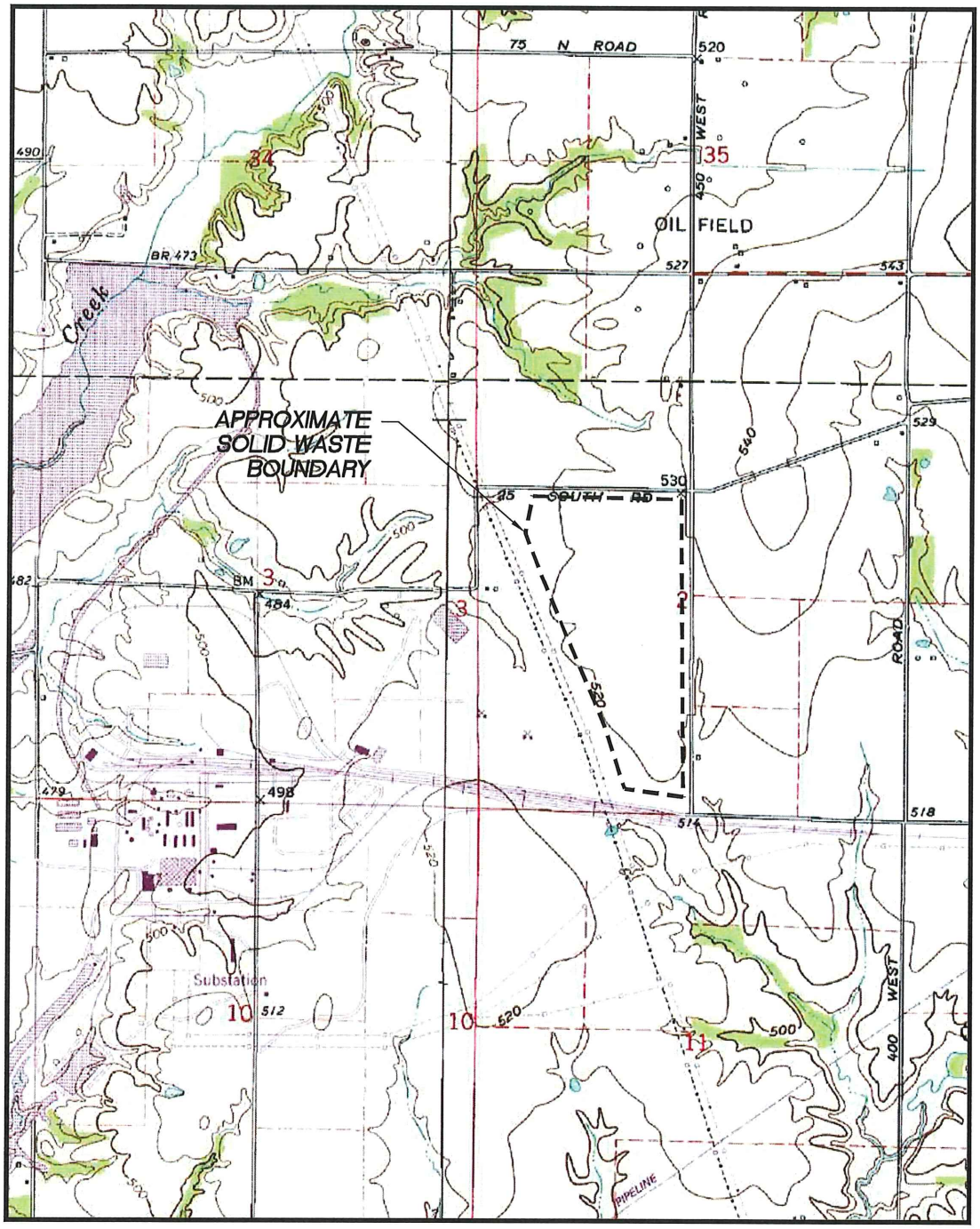
The Hoosier Energy Merom Generating Station Area 3 Type I Restricted Waste Landfill (Merom Area 3 Landfill) is permitted by the Indiana Department of Environmental Management (IDEM) under Permit FP-77-04 and is regulated under Indiana Administrative Code 329 IAC, Article 10. The facility is located in Sullivan County, Indiana, in Section 2 of Gill Township and within Township-7-North / Range-10-West (See Figure 1). The permitted facility Solid Waste Boundary includes an area of approximately 112.0 acres.

2.0 Closure Method

2.1 Closure Overview

The Merom Area 3 Landfill will undergo closure-in-place as specified under §257.102 (d)(1) and will be closed in a manner that will:

i. Control, minimize or eliminate, to the maximum extent feasible, post-closure infiltration of liquid into the waste and releases of CCR, leachate, or contaminated run-off to the ground or surface waters or to the atmosphere;
ii. Preclude the probability of future impoundment of water, sediment, or slurry;
iii. Include measures that provide for major slope stability to prevent the sloughing or movement of the final cover system during the closure and post-closure care period;
iv. Minimize the need for further maintenance of the CCR unit; and
v. Be completed in the shortest amount of time consistent with recognized and generally accepted good engineering practices.



VICINITY MAP

VICINITY MAP
AREA 3 RESTRICTED WASTE LANDFILL
MEROM GENERATING STATION

Project Number: 170LF00301		Drn. By: WS
Drawing File: SEE LOWER LEFT		Ckd. By: CD
Date: 10/16	Scale: 1" = 2000'	App'd By: DB
ATC		Figure: 1

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2.2 Final Cover System

Closure of the Merom Area 3 Landfill will be accomplished by leaving CCR in place. The final cover system will meet the following performance standards of 40 C.F.R. § 257.102(d)(3)(i):

(A) The permeability of the final cover system must be less than or equal to the permeability of any bottom liner system or natural subsoils present, or a permeability no greater than 1 x10^-5 cm/sec, whichever is less.
(B) The infiltration of liquids through the closed CCR unit must be minimized by the use of an infiltration layer that contains a minimum of 18 inches of earthen material.
(C) The erosion of the final cover system must be minimized by the use of an erosion layer that contains a minimum of six inches of earthen material that is capable of sustaining native plant growth.
(D) The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.

The design of the Merom Area 3 Landfill includes a composite base liner system. As a result, the final cover system for this landfill will consist of a geomembrane overlain with a geosynthetic drainage layer, a minimum of an 18 inch earthen infiltration layer and a minimum of 6 inches of earthen material capable of sustaining a vegetative layer. The final cover system will include surface water controls such as diversion berms and downdrains, and be designed to minimize the potential for damage to the cover system due to settlement and/or subsidence. As allowed in §257.102 (d)(3)(ii) and if approved by IDEM, the landfill could select an alternative final cover system.

Construction quality assurance measures will be completed to ensure measures are taken to ensure that the final cover soil installation is constructed as designed. At the time final closure is completed, a Qualified Professional Engineer will certify that the final cover system meets the requirements of §257.102 (d)(3).

3.0 Maximum Area Receiving Final Cover

The largest area requiring final cover during the landfill's active life is estimated based on the assumption that the entire landfill will remain open until it is taken out of service. Therefore, the maximum area requiring final cover is estimated to be approximately 112 acres.

4.0 Maximum CCR Inventory

The Merom Area 3 Landfill maximum CCR inventory is based on the permitted airspace volume from the most recent IDEM-approved permit. According to the 2010 permit, the maximum volume of CCR allowed during the active life of the landfill is approximately 14,487,000 cubic yards.

5.0 Closure Activities

5.1 Closure Narrative

The Merom Area 3 Landfill is divided into five (5) total cells. Development of the cell area will occur sequentially from north to south. Partial closure of individual cells may occur before final closure of the entire landfill.

5.2 Closure Timeline

The Merom Area 3 Landfill will complete final closure within the generally allowed six (6) month period required under §257.102(e). Additional closure time may be requested by the facility under the allowed extension periods of §257.102(f)(2)(i). The Merom Generating Station will commence closure no later than 30 days after the date on which the CCR unit either:

(i) Receives the known final receipt of waste, either CCR or any non-CCR waste stream; or
(ii) Removes the known final volume of CCR from the CCR unit for the purpose of beneficial use of CCR.

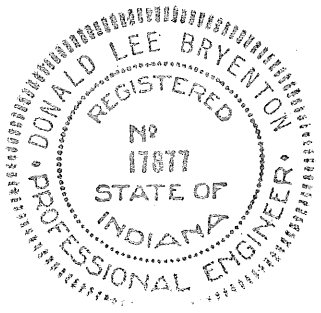
Currently, closure of the Merom Area 3 Landfill is expected to begin around the year 2030. The following is an estimated timeline of closure activities:

Activity	Pre-Closure	Closure by Month						Post-Closure
		1	2	3	4	5	6	
• Preparation of closure construction plans	×							
• Notification of Intent to Close	×							
• Acquire Borrow Materials for Final Cover	×							
• Commence Closure (no later than 30 days after final receipt of CCR)		×						
• Final Grading Side Slopes and Top Surface		×	×					
• Install Final Cover Infiltration and Erosion Layers				×	×			
• Construct Diversion Berms, Downdrains and Perimeter Stormwater Control Measures						×		
• Seeding/Vegetation of Slope							×	
• Complete Closure (Including Notification of Closure with Certification by Qualified Professional Engineer)							×	
• Deed Notation								×

6.0 Engineering Certification

I, Donald L. Bryenton, being a registered Professional Engineer of the State of Indiana, do hereby certify to the best of my knowledge, information, and belief, that the information contained in this Closure Plan dated October 14, 2016 was conducted in accordance with the requirements of 40 C.F.R. § 257.102, is true and correct, and has been prepared in accordance with recognized and generally accepted good engineering practices.

SIGNATURE: Donald L. Bryenton



DATE: 10/14/16