

Werner, Elizabeth

From: Dave Pasko [dave.pasko@mcgillengineers.com]
Sent: Friday, March 18, 2011 4:21 PM
To: Werner, Elizabeth; Keller, Andrea
Cc: 'Marty Stamey'; 'Stephen King'; 'David Francis'; Jeff Bishop; Gaither, Allen; bill.sperry@mcgillengineers.com
Subject: RE: Gas Monitoring - Francids Farm Landfill Haywood County (44-03)
Attachments: image001.jpg; Francis Farm Landfill Schedule.pdf

Ms. Werner,

In accordance with the Landfill Gas Monitoring Plan submitted on September 13, 2010, quarterly monitoring took place at the Francis Farm Landfill on March 17, 2011. Samples were taken from the thirteen (13) landfill gas monitoring probes. Methane monitoring probes 2, 3, 4, 6, 10, 11, and 12 exceeded 100% of the lower explosive limit (LEL) for methane gas. Probes 2, 3, 4, and 6 are located on the north/northeast side of the landfill. Probes 10, 11, and 12 are located along the south/southwestern border. Additionally, sample points within the on-site buildings were monitored with all of the buildings showing 0% LEL. There are three additional sampling points at groundwater monitoring wells – MW's 4, 5, & 12, and stable readings at MW's 4 & 5 were not obtained, and the results are not valid for these points. MW 12 results show 0% methane gas at this MW. MW 12 is being sampled in lieu of SM-4 as delineated in the Assessment Plan, due to a recent death in that family and the inability to access the property.

Haywood County is proceeding with Phase 2 of the Gas Collection, Combustion, and Generation System. Phase 1 of the project – the installation of 21 gas extraction wells – was completed in September 2010. Phase 2 consists of the installation of gas collection piping, well dewatering pumps, a flare station, and a waste water pumping station. The County hopes to complete construction of Phase 2 by the end of the summer. The County received a grant to produce electricity from the combustion of landfill gas. Phase 3 of the project – the installation of a 75 KW generator – will begin at the completion of Phase 2, and the goal is to produce electricity by the end of 2011. The Gas Collection, Combustion and Generation System will assist the County with the control of LFG migration by combusting approximately 100 scfm of landfill gas continuously. Over time, the gas flow gradient will be diverted from the LFG monitoring wells at the periphery of the property to the extraction wells instead, where the gas will then be collected and used to create electricity. The monthly data collected as part of the LFG assessment monitoring plan has been consistent and will provide a good measure of the effectiveness of the Gas Collection and Combustion System when it comes on line. In addition to controlling the migration of landfill gas, leachate will be removed from the extraction wells and discharged into the Town of Waynesville Waste Water Treatment system. Within the first few weeks of operation of the dewatering pumps, we anticipate that approximately 200,000 gallons of leachate will be removed from the landfill. After the initial pump down of leachate, leachate removal rates will be lower, with the intent to continuously pump from 5 locations within the landfill. The design of the dewatering pumps is such that if an area of the landfill becomes dry, the pumps can be moved to other extraction wells to allow the County to remove leachate from different areas of the landfill. Please see the attached schedule for the construction of Phases 2 & 3 of this project.

We are continuing to monitor on a monthly basis in accordance with the Assessment Plan submitted on September 13, 2010.

Please call should you have any questions or need additional information.



“Building Partnerships by Providing Superior Service with Professional Integrity”

Dave Pasko

McGill Associates, P.A.

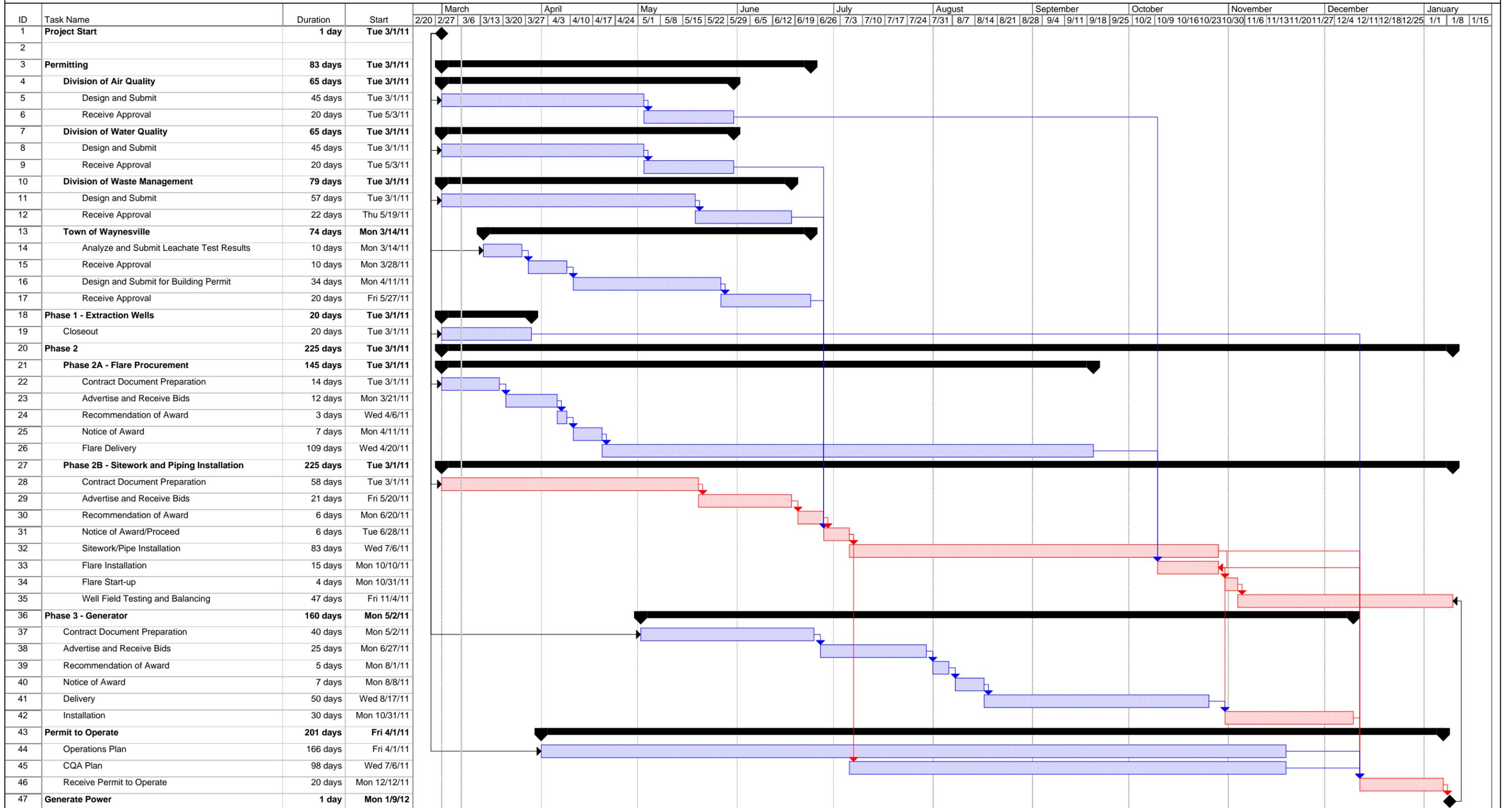
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FRANCIS FARM LANDFILL HAYWOOD COUNTY PROJECT SCHEDULE



Task		Progress		Summary		Rolled Up Critical Task		Rolled Up Progress		External Tasks		Group By Summary	
Critical Task		Milestone	◆	Rolled Up Task		Rolled Up Milestone	◇	Split	Project Summary			