Ciniza

Monzeglio, Hope, NMENV

From: Jim Lieb [jlieb@giant.com]
Sent: Monday, February 05, 2007 8:48 AM
To: Chavez, Carl J, EMNRD
Cc: Price, Wayne, EMNRD; Monzeglio, Hope, NMENV; Cobrain, Dave, NMENV; Ed Riege; Ed Rios; Steve Morris; Loren Pritzel; Carl Shook
Subject: RE: Giant - Ciniza Refinery NAPIS Leakage Correction Plan

Attachments: 42400sch.pdf

42400sch.pdf (35 KB)

Thank you for your recent email with conditional approval of the Ciniza Refinery of Giant Refining's New API Separator (NAPIS) Leakage Correction Plan (plan).

1. Giant is committed to implementing the plan at the earliest possible moment. Giant Corporation has approved the funding for the stainless steel insert system ($750,000) as offered by Siemens Water Technology Group (Siemens). The schedule we provided to OCD and NMED in the plan was based primarily on a proposed schedule that was provided with Siemen's budgetary proposal. We have discussed the schedule with Siemens in regards to whether their proposed schedule can be accelerated. Their schedule is based on design timeframe, materials procurement, transportation, and on-site fabrication. Siemens has provided Giant with a revised schedule with a shorter timeframe. Due to the complexity of the project (customized fabrication/ construction of a complicated liner), the earliest that Siemens can guarantee completion is October 2007. Siemen's schedule is included as an attachment to this email. I submitted a purchase requisition on January 30, 2007 for purchase of the Siemens liner insert system.

2. In your email you state that "if Giant chooses to install a protective coating to repair the cracks with a sealant that handles freeze-thaw conditions and repair of the secondary containment system (SCS), then Giant must install two monitoring wells." One option as an alternative to coating, is insertion of a secondary stainless steel liner inside the NAPIS in addition to the primary insert liner. The secondary SS steel liner would likely offer the best protection against leakage in comparison to the other options including coating the inside of the bays. The secondary steel liner would be a significantly higher cost option for Giant to implement (additional to the $750,000 primary insert liner) than the protective coating option. If Giant were to install a steel based secondary liner with secondary leak detection in the NAPIS would OCD and NMED be willing to forego installation of the two monitoring wells?

3. As mentioned in item 2, the liner inserts system will be fabricated inside the NAPIS using high temperature thermal welding. We will provide details on leak detection at a later date. At present we are anticipating equipping the existing sludge pit of the API with a small notch to catch any accumulated liquid in conjunction with a stand pipe that would be monitored. The Siemens scope of services includes a check out of the final equipment assembly for integrity. Siemens will use a vacuum box test on the welded seams which is an acceptable test in accordance with API 650 equivalent to the mechanical integrity testing under positive pressure as you requested.

4. Specifications for selection of the NAPIS were based on expected maximum flow rate anticipated during operation of the Ciniza Refinery. Maximum flow rate is less than 150 gpm. The design capacity of each bay is 150 gpm. Each bay individually has the capacity

to handle the refinery's process waste water. Cinza will make sure that the NAPIS is in good operating condition prior to beginning the repair work. Ciniza will also ensure that the benzene strippers and all 5 aerators are operating properly during the repairs. Giant will test water samples for TPH including benzene twice weekly at the effluent from the second aeration lagoon during the repairs.

Giant will keep OCD and NMED posted as to the progression of the SS insert liner system. Please let us know soon if the secondary steel liner would be acceptable as an alternative to placement of monitoring wells. If you have any questions, please contact me at jlieb@giant.com or (505) 722-0227.

Sincerely,

Jim Lieb

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Thursday, January 18, 2007 3:45 PM
To: Jim Lieb; Monzeglio, Hope, NMENV
Cc: Ed Rios; Ed Riege; Loren Pritzel; Carl Shook; Steve Morris; Price, Wayne, EMNRD; Powell, Brandon, EMNRD
Subject: RE: Giant - Ciniza Refinery NAPIS Leakage Correction Plan

Jim, et al.:

Thanks for providing the above plan. The OCD and NMED (agencies) have completed our review of Giant Refining, "Ciniza Refinery NAPIS Leakage Correction Plan" (plan) for resolving the leakage from the new API Separator and secondary containment system (SCS). The agencies approve the plan with the following conditions:

1) There is concern about the drawn out work schedule to complete the repair work (January to November 2007) on the leaky New API Separator (NAPIS). Seems like this should be tightened up to half the time for everything associated with the NAPIS to be completed. We have been dealing with this problem, since September 8, 2005, when the government agencies first became aware of the problem. However, the presented schedule has unknowns as Giant may be dealing with different contractors and the agencies do not know what time lines Giant was given by the contractors? The agencies believe that the repair work on the leaky NAPIS can be completed over a shorter time period than that proposed and that Giant's target date for completion can and should be closer to July 31, 2007.

2) Giant must demonstrate that there is no downward migration of contamination to groundwater from beneath the NAPIS. If Giant chooses to install a protective coating to repair the cracks with a sealant that handles freeze-thaw conditions in the NAPIS and repair of the secondary containment system (SCS), then Giant must install two monitoring

wells.

One monitoring well (MW) should be located next to the NAPIS suspected leak and the second MW should be installed down gradient of the NAPIS. Assuming that subsurface conditions are similar to the conditions at the aeration lagoons, the screened interval in the monitoring well to be located near the leaky NAPIS and adjacent to the SCS. The MW must be installed below the bottom depth of the SCS, but above any water bearing zone such as the sand layer observed beneath the west side of the aeration lagoons. It may be necessary to install the monitoring well at an angle or drill an angled boring for the collection of soil samples and to determine if ground water is present during drilling. If an angled boring is not drilled, soil samples must be collected during the installation of the MW.

The purpose of the boring/MW installation is to help determine the competency of the SCS; whether there has been a release from the NAPIS to soil and groundwater, and whether groundwater is present that intersects the secondary containment system of the leaky NAPIS. Comparison of general chemistry and organic sampling data of ground water in the monitor wells to analytical data from the NAPIS process water should help determine whether ground water is present in the vicinity of the NAPIS or whether fluid in the SCS is attributable to direct leakage from the NAPIS and determine if a leak is artificially creating a localized water table condition around the leaky NAPIS.

Giant must submit a work plan for the installation of the MWs/borings. The work plan must identify the locations of boring and monitoring wells, the depth of the monitoring wells, the depth at which soil and any ground water samples will be collected, including a proposed monitoring well construction diagram, and sampling methods and procedures. This work plan must be submitted to the agencies by February 28, 2007 to assess contaminant hydrogeology near the NAPIS.

3) How will the 304 SS well liners be sealed? The agencies prefer thermal seal techniques/methods to ensure maximum integrity of liner seams, etc. It appears Giant will use a vacuum box for leak detection afterward to ensure seal integrity. This may present problems in application at certain angles or corners of the bays; however, the agencies also require a Mechanical Integrity Test (MIT) under positive pressure to ensure zero leakage after the leaky NAPIS repair work is completed to demonstrate and document the success of the repair work. Also, it is not clear how the leak detection device(s) is going to be installed. Giant needs to provide the agencies with more details as to where the leak detection device(s) will be installed, what the components and design of the detection system are, etc.

4) Giant needs to address the effluent in the NAPIS and demonstrate how Giant is going to monitor and ensure breakthrough of listed waste does not occur at the ponds during the repair procedure that is expected to take approximately 2 weeks. During the repairs, will Giant utilize one-bay at-a-time while the other bay is still functional? Giant must provide this information to the agencies.

Please contact the agencies if you have questions. I will be back in the office on Tuesday, January 23, 2007. Hope will be away next week, but David Cobrain may be available to assist us next week if necessary. Thank you.

From: Jim Lieb [mailto:jlieb@giant.com]
Sent: Friday, December 29, 2006 3:28 PM
To: Chavez, Carl J, EMNRD; Monzeglio, Hope, NMENV
Cc: Ed Rios; Ed Riege; Loren Pritzel; Carl Shook; Steve Morris; Price, Wayne, EMNRD
Subject: Giant - Ciniza Refinery NAPIS Leakage Correction Plan
Importance: High

Carl, Hope_

Attached is Giant Refining – Ciniza Refinery's plan for resolving the leakage from the new API Separator. Included is a schedule and some information from Siemens Water Technologies on our proposed plan.

I have paper copies in the mail to you both.

Regards,

Jim Lieb

Environmental Engineer

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Ciniza Refinery

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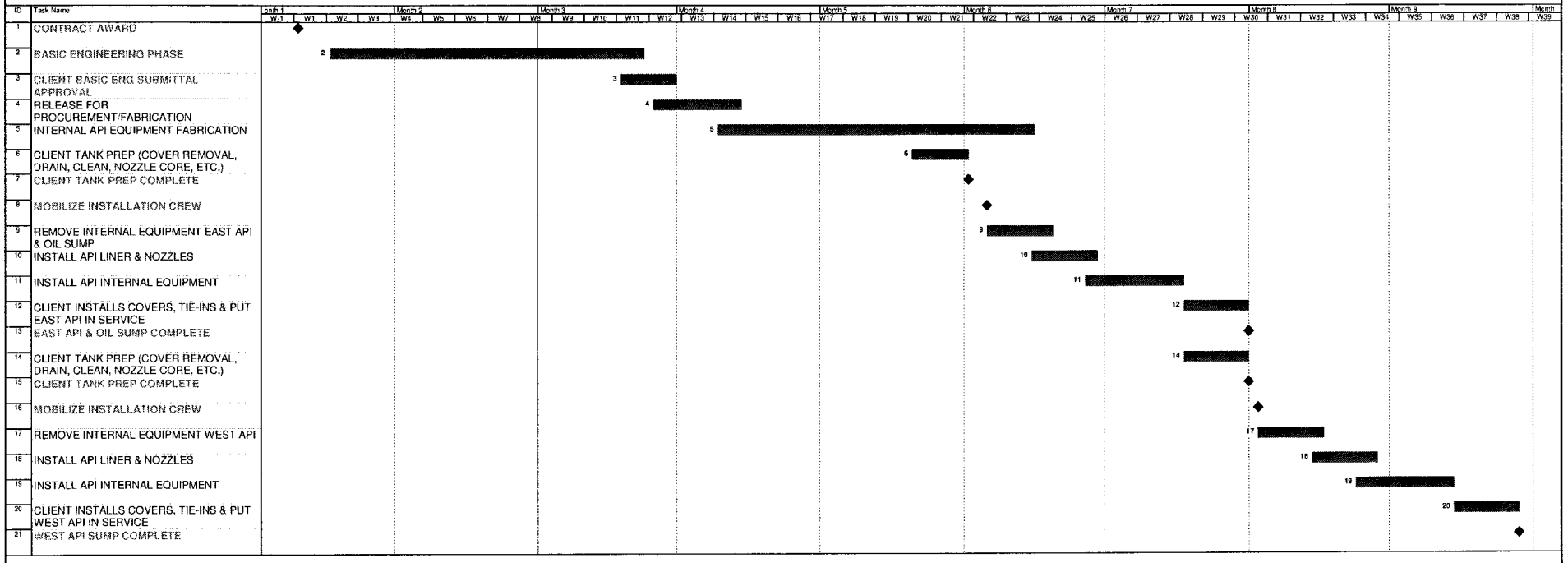

Project: GIANT INDUSTRIES
Date: PRELIMINARY 1/19/07

Task | Split | Milestone | Summary | Rolled Up Task | Rolled Up Split | Rolled Up Progress | External Tasks | Project Summary | External Milestone | Deadline