

ENVIRONMENTAL SERVICES

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187-14-09 November 26, 2014

via email

Jeff Koerner, Administrator
Air Permitting and Compliance Program
Division of Air Resource Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399
Jeff.koerner@dep.state.fl.us

Re: Argos USA Corp. -- Request for Extension of Compliance Date under

Portland Cement NESHAP, 40 CFR Part 63, Subpart LLL

Newberry Cement Plant, AIRS ID: 0010087 Clinker Coolers, Emission Units 004 and 011

Dear Mr. Koerner:

Pursuant to the requirements of 40 CFR 63.6(i)(4) as adopted by reference at 62-204.800(d) F.A.C. and under the authority of 42 USC 7412(i)(3)(B), Argos USA Corp. submits this request for an extension of the date for compliance with certain requirements of the Portland Cement NESHAP, 40 CFR Part 63, Subpart LLL ("PCMACT") for its Newberry, Florida cement facility.

Background

On March 8, 2014, Argos USA Corp. ("Argos") completed its acquisition of certain assets of Vulcan Materials Company, including the Thompson S. Baker Cement Plant, Facility ID No.: 0010087, Title V Permit No. 0010087-041-AV, located in Newberry, Fl. Since completion of this acquisition (and before closing), Argos has been assessing the facility's ability to prospectively comply with applicable provisions of the PCMACT which were finalized by U.S. EPA in February 2013 and for which compliance is required by September 2015. This assessment has led to this request for an extension. Argos is requesting an extension to demonstrate compliance to the PCMACT for the two clinker cooler emission units. Specifically, Argos is requesting the extension for Cooler 1 until March 31, 2016 and for Cooler 2 until September 9, 2016.

PCMACT Requirements for Clinker Cooler PM Emissions

With the February 2013 promulgation, U.S. EPA finalized a PM emissions standard for existing clinker coolers of 0.07 pounds per ton of clinker. 40 C.F.R. 63.1343. Just as important, the rule promulgation also incorporated monitoring requirements involving the use of a PM continuous parametric monitoring system (PM CPMS).

Argos Evaluation of Clinker Cooler PM Emission Performance

Both kilns (emission units 003 and 010) at the Newberry facility have clinker coolers (part of emission units 004 and 011) which exhaust to the atmosphere after cooler gases pass through an electrostatic precipitators (ESP). One of the ESPs was installed over 15 years ago, and the other ESP was installed about five years ago. Historical stack testing performed at 90 to 100 percent of the units' maximum operating capacities demonstrates that compliance with the new PCMACT PM standard is achievable, but with a relatively narrow margin of compliance. Because the PCMACT requires continuous monitoring using PM CPMS during all operating conditions and given the relatively narrow margin for compliance at steady-state, full load operations, Argos has concluded that its best course of action is to retrofit both coolers with fabric filter baghouses. This analysis is supported by Argos outside consultant, Mr. Ron Hawks (See Attachment 1). Not only will such a retrofit assure a higher degree of control efficiency, but substitution of fabric filter technology for the ESPs should operate to reduce plant energy consumption.

Satisfaction of 40 C.F.R. 63.6(i)

The provisions of 40 C.F.R. 63.6(i)(6)(i) require that a request for an extension of the compliance date include the following:

The request for a compliance extension under paragraph (i)(4) of this section shall include the following information:

- (A) A description of the controls to be installed to comply with the standard;
- (B) A compliance schedule, including the date by which each step toward compliance will be reached. At a minimum, the list of dates shall include:
- (1) The date by which on-site construction, installation of emission control equipment, or a process change is planned to be initiated; and
 - (2) The date by which final compliance is to be achieved.
- (3) The date by which on-site construction, installation of emission control equipment, or a process change is to be completed; and
 - (4) The date by which final compliance is to be achieved.

Controls to be Installed

The general arrangement for the baghouse on each clinker cooler is depicted in Attachment 2. In addition to the baghouses, the installation will require replacement of clinker cooler vent fans, drives, motors and ducts to accommodate higher system pressure drop associated with the use of baghouses as compared to ESPs. As baghouses are designed to operate

at lower temperatures than ESPs, the installation of air-air heat exchanger on the clinker cooler dust collectors to control baghouse inlet temperatures to acceptable levels will be necessary.

Compliance Schedule

Argos has initiated the design and engineering work necessary for conversion of PM control on the clinker coolers from ESPs to baghouses. On October 24, 2014 FDEP issued the air construction permit (0010087-052-AC) authorizing the replacement of the two clinker cooler ESPs with baghouses. The AC permit to install the baghouses expires June 1, 2016. Depending on Cooler 2 schedule this construction permit may need to be extended to accommodate the completion of Line 1 Cooler baghouse. Additionally, Argos has qualified and selected a vendor to complete the work. A copy of the Letter of Intent between Argos and the vendor, Scheuch Technology, Inc., is under review will be <u>provided separately</u>. In consultation with the vendor, Argos has adopted the attached schedule (see Attachment 3). The schedule shows details of the project timeline goals with projected dates for NESHAP compliance of Clinker Cooler 1 at February 5, 2016 and Clinker Cooler 2 at September 9, 2016. These projected dates presume no delays in the schedule and are generally optimistic target dates. While Argos is working diligently to maintain the proposed schedule, because of the complexity of the project, delays may occur. Therefore, Argos is requesting the extension for Cooler 1 to March 31, 2016 and for Cooler 2 to September 9, 2016.

Compliance

Given the historical PM stack testing data for the two coolers, the two coolers might indeed remain in full compliance with the new PCMACT standard without the requested extension. The PCMACT requires the establishment of new "operating limits" using PM CPMS values. However, if the units' emissions were to exceed these operating limits applicable during all operating conditions, then additional stack testing will be required to demonstrate compliance with the PM limit within 30 days of exceeding the operation limit. If this stack testing data were to reveal PM emissions that are higher than historical levels and in excess of the new PM limit, the requested extension until September 9, 2016 will ensure that Argos can continue to operate in full compliance with its permit and applicable requirements under the new PCMACT while the new baghouses are installed.

Conclusion

While Argos believes that the current ESP PM controls on both clinker coolers at the Newberry facility achieve sufficient emission control to nominally achieve the newly applicable 0.07 lb/ton PM emission standard established under the PCMACT, Argos believes that to assure continuous compliance with appropriate compliance margins that a change in PM emission control technology is necessary. However, installation and commissioning of new baghouses on both clinker coolers will extend beyond the September 2015 compliance date established for the new Clinker Cooler PM standard. The Cooler equipment is projected to be delivered in stages to the site from March 2, 2015 through December 1, 2015. The related kiln equipment is projected to be delivered in stages to the site from July 2015 through April 2016.

Argos expects the new Cooler baghouses to complete commissioning, shakedown and compliance demonstration by February 5, 2016 for Cooler 1 and September 9, 2016 for Cooler 2. Argos is targeting February 5, 2016 for demonstrating compliance on Cooler 1, but that date may be pushed given this project is very complicated to organize and implement. Any slippage of the schedule will push back that date for compliance. As noted above, Argos is requesting the extension for Cooler 1 to March 31, 2016 and for Cooler 2 to September 9, 2016.

Please contact me if you have any questions on the application. Thank you for your time and we look forward to working with you and your staff on this request.

Sincerely,

Signed by Max Lee for William Voshell

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Enc:

ATTACHMENT 1

TECHNICAL COMPLIANCE WITH PC-MACT LIMITS USING AN ELECTROSTATIC PRECIPITATOR FOR PARTICULATE CONTROL

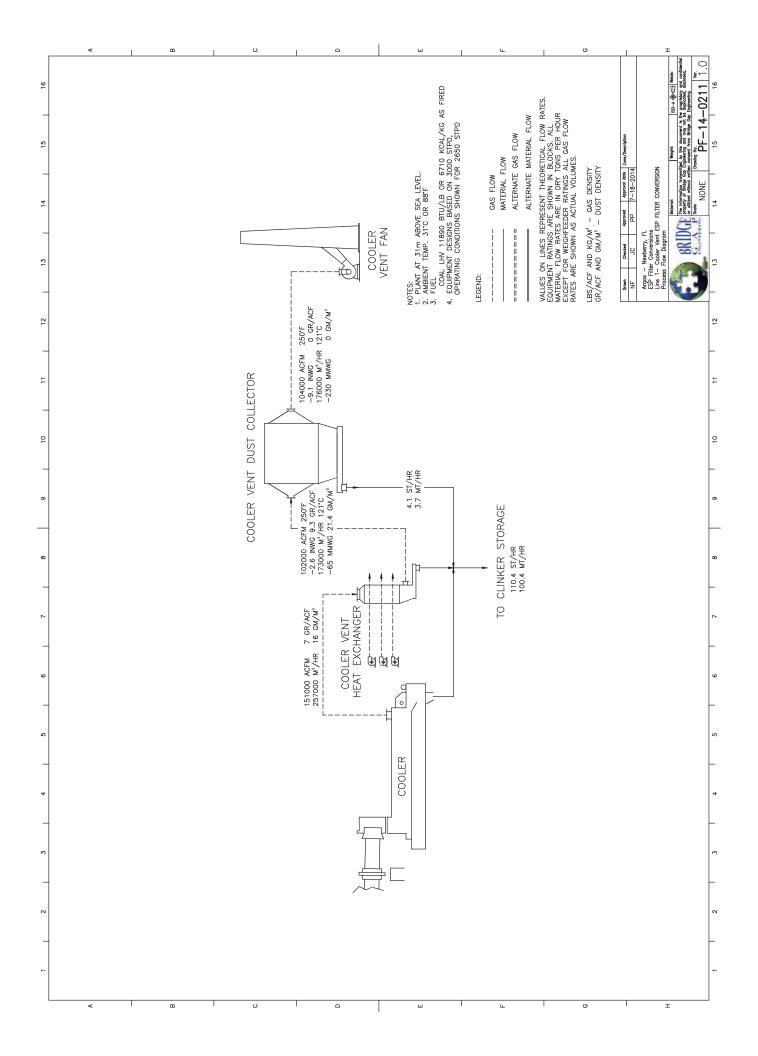
Ron Hawks, QSEM Solutions, Inc.

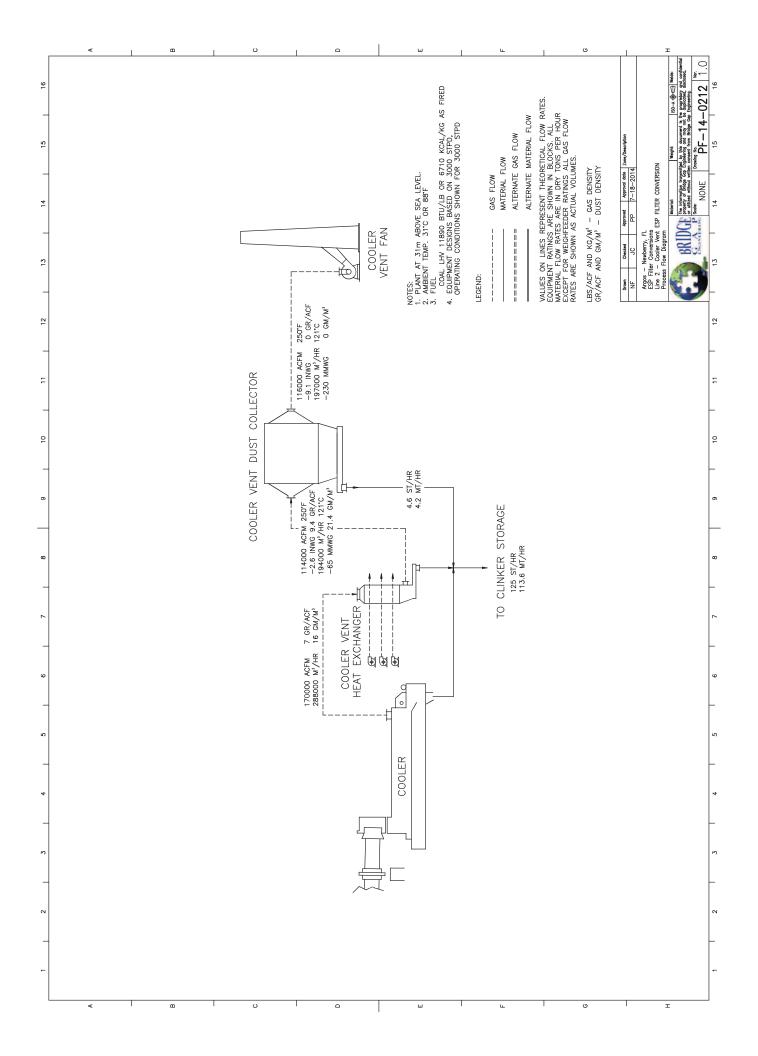
Argos Cement in Newberry, Florida uses an electrostatic precipitator (ESP) to remove filterable particulate matter (PM) from the kiln system. Under the current PC-MACT rules, the plant must install and operate a PM continuous parametric monitoring system (PM CPMS) as an indicator of compliance for the clinker cooler via an operation limit. As specified in the rules, the instrument is to be calibrated for output during a normal compliance test, and the value proportioned to emissions during operation between compliance tests. If the stack test result is higher than 75 percent of the allowed emission limit (0.07 lb/ton clinker), the PM CPMS operation limit (CPMS output determined during the stack test) is established at the corresponding emissions limit. If the stack test result is less than 75 percent of the emission limit, then CPMS operation limit is established to a value corresponding to 75 percent of the emission limit. Exceedance of the operation limit would require a follow-up stack test within 30 days.

This level of monitoring is more aggressive than historic compliance with the emission limit and exposes Argos to potential non-compliance and penalties when operating an ESP. Testing of the clinker cooler stack has shown compliance with the PC-MACT limit for existing coolers (0.07 lb/ton clinker), but there exists the potential for higher emissions during kiln upset conditions, specifically if a kiln flush should occur.

Considering the complexity of kiln operation, ESP response to kiln operation, and the use of PM CPMS, Argos should consider replacement of the ESP with a pulse-jet fabric filter employing membrane bags for PM emission control. This control system would allow Argos to comply with the more exacting compliance requirements.

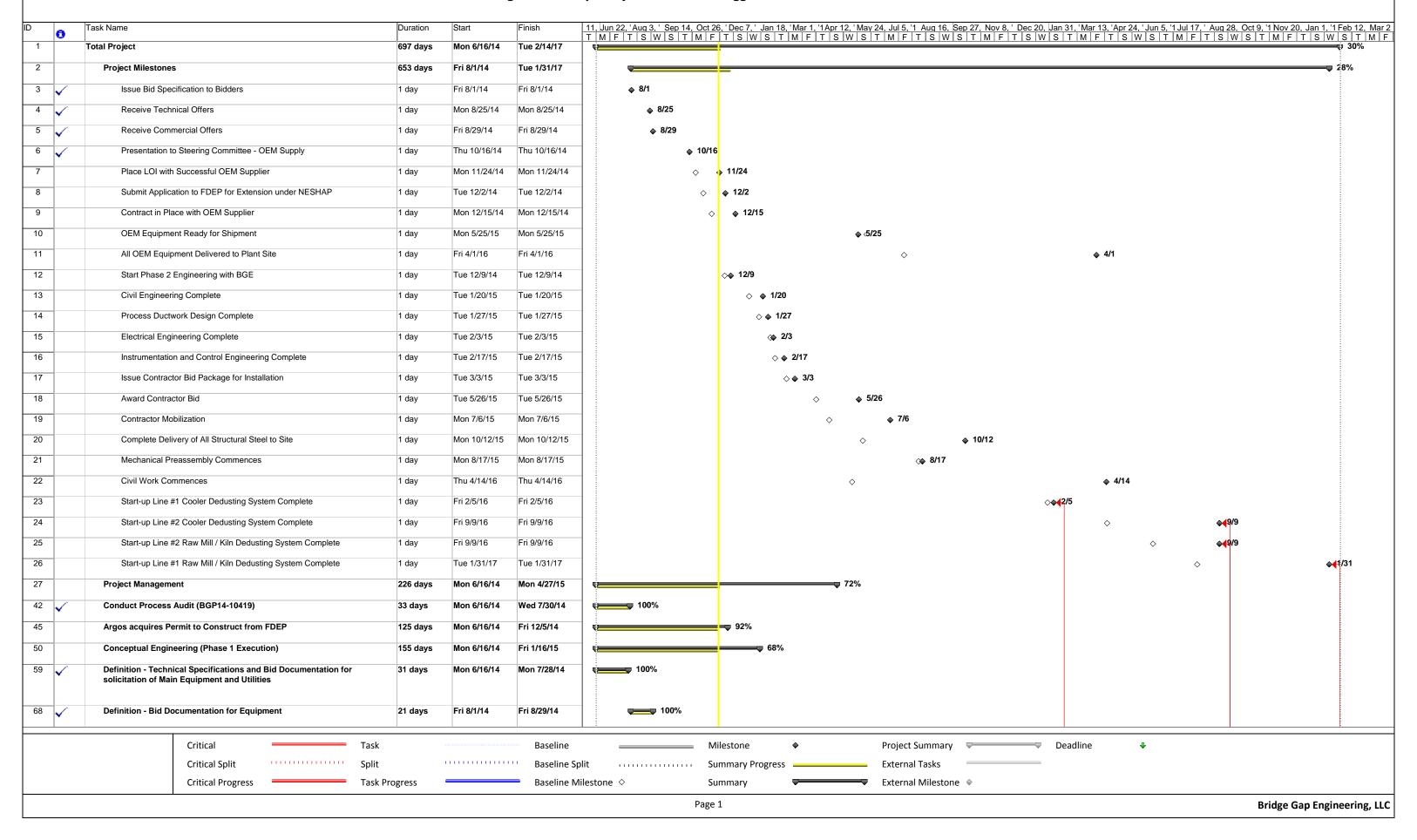
ATTACHMENT 2



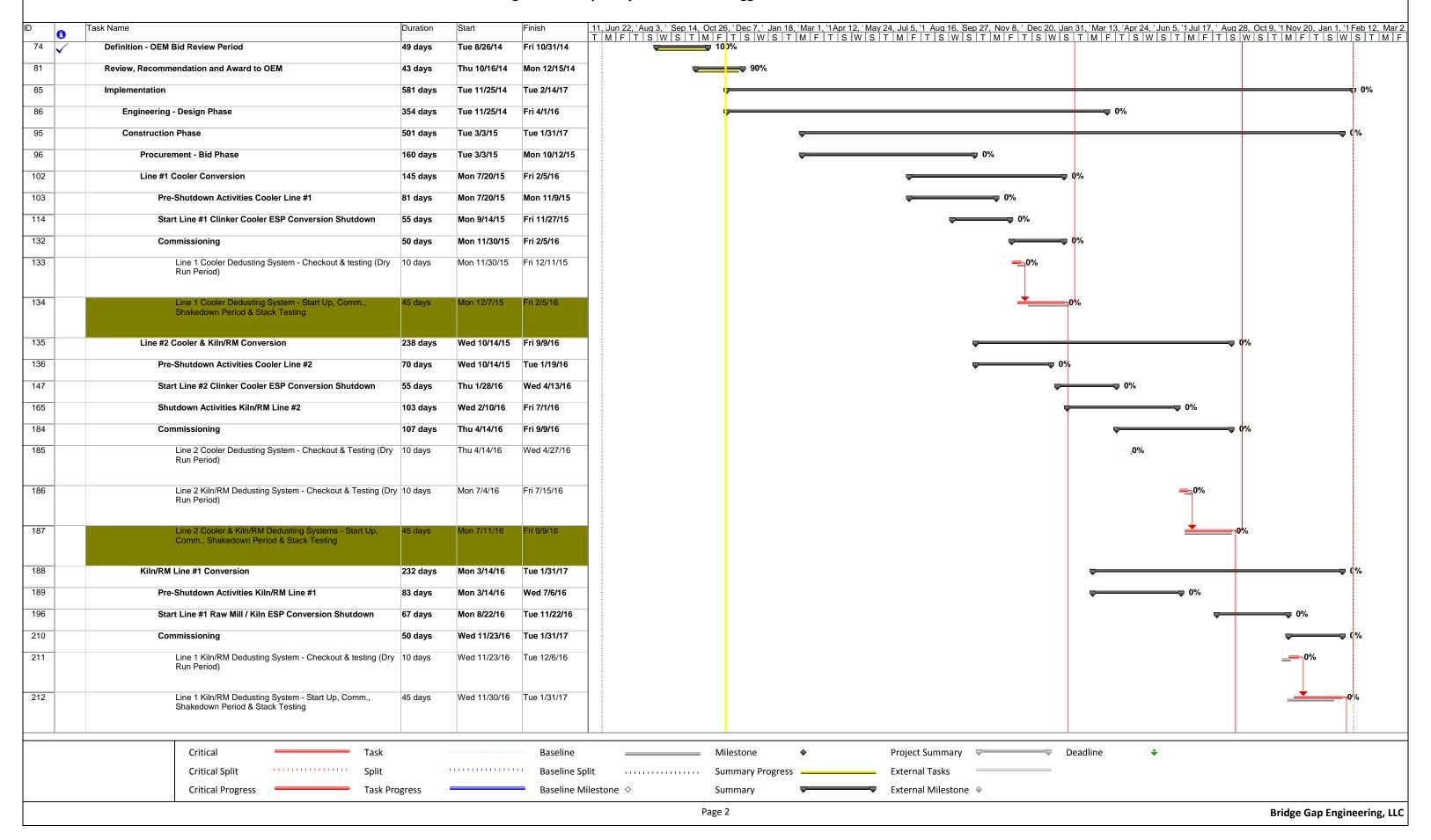


ATTACHMENT 3

Argos Newberry - Project Schedule - Staggered Construction 11 21 2014



Argos Newberry - Project Schedule - Staggered Construction 11 21 2014



Argos Newberry - Project Schedule - Staggered Construction 11 21 2014

D Task Name Duration Start Finish 11, Jun 22, 'Aug 3, 'Sep 14, Oct 26, 'Dec 7, 'Jan 18, 'Mar 1, '1Apr 12, 'May 24, Jul 5, '1 Aug 16, Sep 27, Nov 8, 'Dec 20, Jan 31, 'Mar 13, 'Apr 24, 'Jun 5, '1 Jul 17,	S W S T M F T S W S T M F
214 Closeout Cooler Dedusting System Line #1 10 days Mon 2/8/16 Fri 2/19/16	0%
Closeout Cooler Dedusting System Line #2 10 days Mon 9/12/16 Fri 9/23/16	
10 days 110	∑ 0%
	T
216 Closeout Kiln/RM Dedusting System Line #2 10 days Mon 9/12/16 Fri 9/23/16	★ 0%
210 Gloseout Nill/Nil Dedusting System Line #2 10 days Noth 9/12/10 11 9/25/10	<u> </u>
	↓
217 Closeout Kiln/RM Dedusting System Line #1 10 days Wed 2/1/17 Tue 2/14/17	—— 0%