Specialty Minerals Inc.
Pensacola PCC Plant
Cantonment, FL

Operations & Maintenance Plan
Air Pollution Controls
November, 2013

Purpose

At this time, the Specialty Minerals Inc (SMI) Pensacola PCC facility, located in Cantonment, FL, is inactive. This plan has been prepared to document the work practices designed to ensure the proper operation and maintenance of the air pollution control equipment that were in place at the time of shutdown (September, 2012). This plan will be reviewed prior to the resumption of plant operations to ensure that it remains current.

I. Scheduled Startup/Shutdown of Air Pollution Control Equipment

Startup and shutdown of both the lime handling system and the carbonators are instantaneous operations. The lime handling system (shown in Attachment I) "starts" when the operator connects the transfer hose from the lime railcar to the receiving system. The operator then presses the Start button. A process controller starts the appropriate filter receiver dust collectors (VB1, VB2 and VB3), the surge bin dust collector (SB) and the appropriate lime silo bin vent (either LS1 or LS2). The controller then starts the appropriate vacuum blower and lime is transferred to one of the two silos. When the transfer is complete, the operator presses the Stop button.

The three carbonators are also controlled by the site's computer system. When a carbonator is full of calcium hydroxide solution and ready to begin the batch carbonation process, the operator uses the computer system to start the gas transfer system into the carbonators. Combustion gas from IP's lime kiln enters the carbonator and reacts with the solution. Unreacted gas passes through the mist eliminator and is vented to the atmosphere. When the reaction is complete, the computer automatically shuts off the gas transfer system.

All work procedures, including those for lime receiving and the carbonation process, are maintained and controlled under SMI's ISO 9001 system. These procedures contain proprietary business information and are not included in this O&M plan. These procedures are available to all employees at all times and are used as the basis for employee training.

SMI does not operate the lime handling system or the carbonators unless the associated air pollution control equipment units are working. Similarly, SMI does not operate the lime handling equipment of the carbonators in a manner which would result in emissions above the permitted levels.

II. Operational Parameters

SMI does not monitor any operational parameters to determine the effectiveness of the six dust collectors or the carbonator demisters. Instead, SMI relies upon daily visual inspections, described below, to ensure that these systems are operating properly.

III. Visual Emission Evaluations

A. Lime Silo Bin Vents and Vacuum Blower Baghouses
VB1, VB2, VB3, SB, LS1, LS2

1. As part of their daily inspection, the plant operators visually determine if any particulate emissions are being discharged from the six lime handling dust collectors. This assessment (MTI PM 35) occurs during lime delivery on a daily basis (weather permitting). Results of the assessments are recorded and stored on a spreadsheet (PN PM 01 01 Rev 7) which is located on the process computer. A copy of this spreadsheet is included as Attachment I to this O&M Plan. This information is also recorded on the daily and monthly calendars, also located on the process computer. Representative pages from the daily and monthly calendars are included as Attachment II to this O&M Plan.

2. If the visual assessment indicates that the particulate emissions are excessive, the delivery operation shall be curtailed and the leaking collector inspected.

3. If a collector requires repair, lime deliveries shall not resume until the collector has been repaired.

B. Carbonators
C1, C2, C3

1. As part of their daily inspection, the plant operators visually determine if any particulate emissions are being discharged from the carbonator stacks. This assessment occurs when the carbonator is operating (weather permitting). Results of the assessments are recorded on the daily calendar, located on the process computer. A representative page from the daily calendar is included as Attachment II to this O&M Plan.

2. If the visual assessment indicates that the particulate emissions are excessive, the carbonator shall be shut down and the demister inspected.

3. If the demister requires repair, the carbonator shall not resume operation until the demister has been repaired.

IV. Scheduled Maintenance

A. Lime Silo Bin Vents and Vacuum Blower Baghouses VB1, VB2, VB3, SB, LS1, LS2

1. The Plant Maintenance Technicians rely upon a computer-generated Preventative Maintenance program to issue routine work orders. These work orders remain "open" until the Maintenance Technicians closes the work order.

2. A computer-generated daily Work Order notifies the Maintenance Technician to inspect the bin vents and baghouses on a daily basis. The results of the inspection and any corrective actions are recorded on a spreadsheet (PN PM 01 01 Rev 7) which is located on the process computer. A copy of this spreadsheet is included as Attachment I to this O&M Plan. This information is also recorded on the daily calendar, also located on the process computer. A representative page from the daily calendar is included as Attachment II to this O&M Plan.

3. The computer-generated Preventative Maintenance program issues a monthly work order for the Maintenance Technicians to inspect the bags and internal systems in the six baghouses. The results of the inspection and any corrective actions are recorded on a spreadsheet (PN PM 01 03 Rev 7) which is located on the process computer. A copy of this spreadsheet is included as Attachment III to this O&M Plan.

4. The computer-generated Preventative Maintenance program issues an annual work order for the Maintenance Technicians to inspect and, if necessary, replace the bags in the six baghouses. The results of the inspection and any corrective actions are recorded on a spreadsheet (PN PM 01 03 Rev 7 and PN PM 01 04 Rev 7) which is located on the process computer. A copy of PN PM 01 04 is included as Attachment IV to this O&M Plan.

B. Carbonators

1. The Plant Maintenance Technicians rely upon a computer-generated Preventative Maintenance program to issue routine work orders. These work orders remain “open” until the Maintenance Technicians closes the work order.

2. The computer-generated Preventative Maintenance program issues a quarterly work order for the Maintenance Technicians to clean the carbonator demisters (chevrons) and inspect the water spray nozzles which clean the chevrons. The results of the inspection and any corrective actions are recorded on a spreadsheet (PN PM 01 03 Rev 7) which is located on the process computer (see Attachment III).

V. Training

All new employees receive two weeks on-the-job training under the guidance of an experienced operator or maintenance technician. The Pensacola work team was also responsible for developing the work procedures to meet ISO 9001 standards. The facility is audited annually to ensure that the site continues to meet these standards.

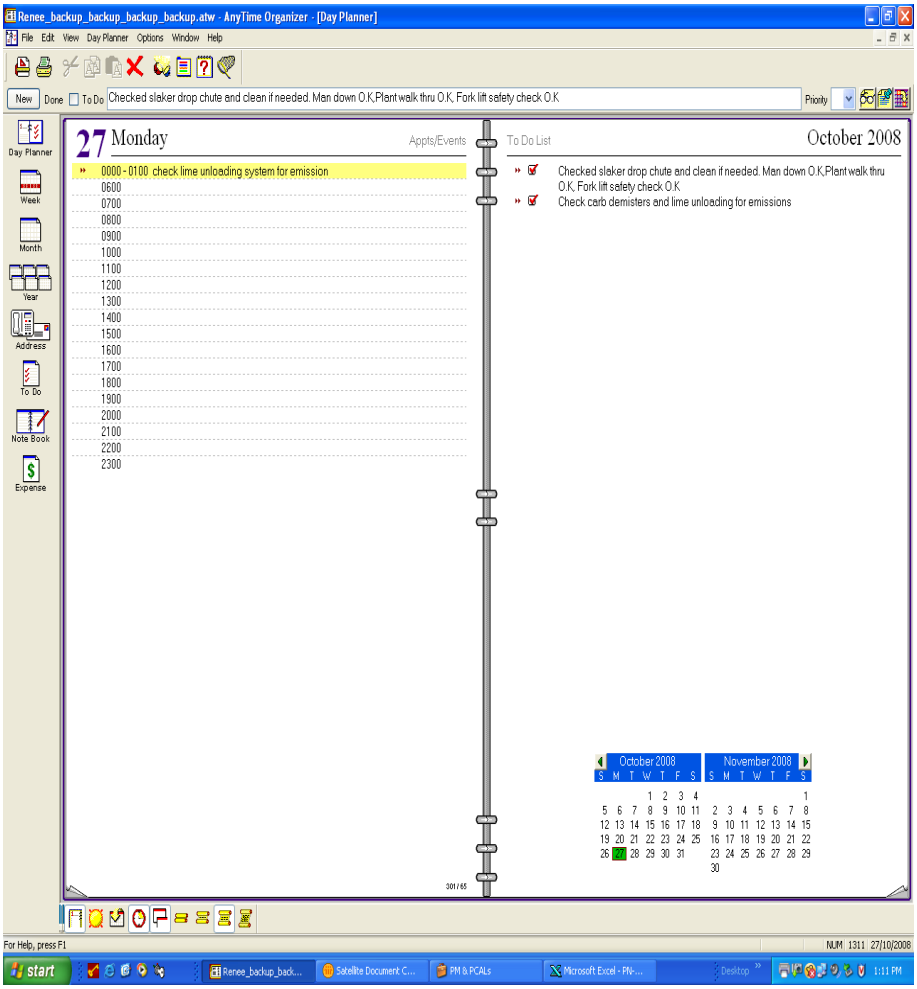
The Operations and Maintenance plan will be reviewed with all employees on an annual basis during a monthly safety meeting.

VI. Record Keeping

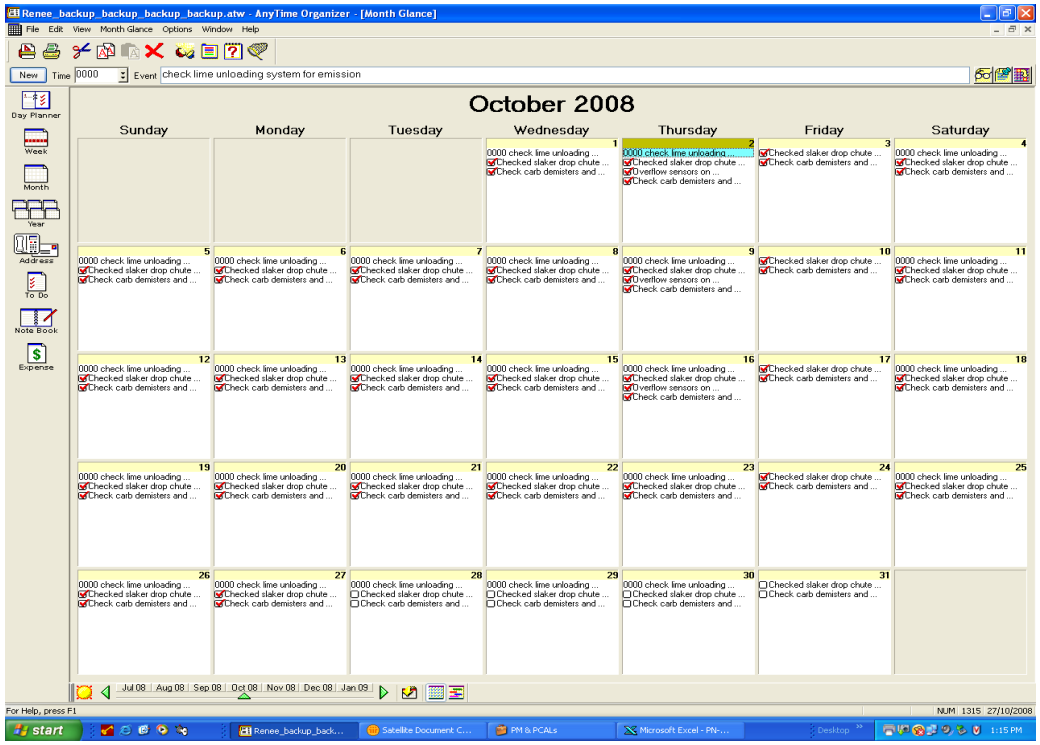
All daily and monthly organizer pages and maintenance tracking spreadsheets are kept in the process computer.

All maintenance inspections and corrective actions are recorded in the preventative maintenance program.

Attachment II
Daily Calendar



Attachment II (continued)
Monthly Calendar



Attachment I
Lime Filter System Daily Checklist

Pensacola Daily Checklist PN-PM-01-01 Rev. 7

DATE:_____

	MTI PM	Mon	Tues	Wed	Thur	Fri	COMMENTS
LIME HANDLING							
FLT 810	PM 35	x	x	x	x	x	OK NO EMISSIONS
FLT 811	PM 35	x	x	x	x	x	OK NO EMISSIONS
FLT 812	PM 35	x	x	x	x	x	OK NO EMISSIONS
FLT 813	PM 35	x	x	x	x	x	OK NO EMISSIONS
FLT 1010	PM 35	x	x	x	x	x	OK NO EMISSIONS
FLT 1020	PM 35	x	x	x	x	x	OK NO EMISSIONS
FLT 1010 Silo 1 BIN VENT	PM 35	x	x	x	x	x	OK NO EMISSIONS
FLT 1020 Silo 2BIN VENT	PM 35	x	x	x	x	x	OK NO EMISSIONS

PM-35 = Lime Silo Bag House

Attachment III
PN PM 01 03 Rev 7

Pensacola PN-PM-01-03 Revision 7

YEAR: ____2008_____

Equip Tag #	MTI PM		HIGHLIGHT WHEN COMPLETED										
	Ref	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**June**	**July**	**Aug**	**Sept**	**Oct**	**Nov**	**Dec**	**Comments**
C 1 Demister area	PM 27		Quarterly			Quarterly			Quarterly			Quarterly		ALL OK
C 2 Demister area	PM 27		Quarterly			Quarterly			Quarterly			Quarterly		ALL OK
C 3 Demister area	PM 27		Quarterly			Quarterly			Quarterly			Quarterly		ALL OK
FLT 810	PM 35	Monthly	Monthly	Annual	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	ALL OK 9/15/08 REPLACED BAGS FLT 811
FLT 811	PM 35	Monthly	Monthly	Annual	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	
FLT 812	PM 35	Monthly	Monthly	Annual	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	ALL OK
FLT 813	PM 35	Monthly	Monthly	Annual	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	ALL OK
FLT 1010 Silo 1 Bin Vent	PM 35	Monthly	Monthly	Annual	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	ALL OK
FLT 1020 Silo 2 Bin Vent	PM 35	Monthly	Monthly	Annual	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	ALL OK

Attachment IV
PN PM 01 04 Rev 7

Pensacola MTI/SAT- PCAL / PM SCHEDULE PN-PM-01-04 Revision 7

YEAR: ***2008***

HIGHLIGHT WHEN COMPLETED

Equipment Tag #		Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	COMMENTS
Lime Unloading System	PM-34		Semi Ann.							Annual				OK

Note: Only the sections that apply to the pollution control equipment are included in this spreadsheet.