From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] February 7 next Quarterly Maintenance Shutdown - Notice 2 of 3
Date:	Wednesday, January 21, 2009 8:24:45 AM
Attachments:	<u>ATT00015.txt</u>

Quarterly planned maintenance on the building's four main Air Handler Units and their six connected Exhaust Fans will be conducted by FOD on Saturday, February 7. Maintenance is scheduled to start at 7:00 AM and is planned to be completed by no later than 6:00 PM.

Because the Lab Side Air Handlers and connected Exhaust Fans will be shut down, fume hood operations shall be suspended for the full maintenance period.

Please note that due to acceptable results from the recent fume hood testing campaign, this maintenance shutdown will be conducted without a corresponding building evacuation.

Occupants are reminded that although the building will remain open and accessible, air flows and other related building processes will be impacted throughout the day as maintenance is done.

Please take planned action to prepare for this event.

Key Summary Points

- Air handler/Exhaust Fan shut down Saturday Feb. 7
- No building closure or evacuation
- Suspend fume hood operations
- Building air flow and processes will be interrupted throughout the day

This message is Notice 2 of 3 of such alerts

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] February 7 next Quarterly Maintenance Shutdown - Notice 1 of 3
Date:	Friday, January 09, 2009 8:43:31 AM
Attachments:	ATT00192.txt

Quarterly planned maintenance on the building's four main Air Handler Units and their six connected Exhaust Fans will be conducted by FOD on Saturday, February 7. Maintenance is scheduled to start at 7:00 AM and is planned to be completed by no later than 6:00 PM.

Because the Lab Side Air Handlers and connected Exhaust Fans will be shut down, fume hood operations shall be suspended for the full maintenance period.

Please note that due to acceptable results from the recent fume hood testing campaign, this maintenance shutdown will be conducted without a corresponding building evacuation.

Occupants are reminded that although the building will remain open and accessible, air flows and other related building processes will be impacted throughout the day as maintenance is done.

Please take planned action to prepare for this event.

Key Summary Points

- Air handler/Exhaust Fan shut down Saturday Feb. 7
- No building closure or evacuation
- Suspend fume hood operations
- Building air flow and processes will be interrupted throughout the day

This message is Notice 1 of 3 of such alerts

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Lab Compressed Air Back in Service
Date:	Friday, January 09, 2009 3:34:08 PM
Attachments:	ATT00289.txt

The motor on the lab air compressor has been replaced and compressed air service is now restored.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Lab Compressed Air Out of Service
Date:	Monday, January 05, 2009 4:59:21 PM
Attachments:	<u>ATT00060.txt</u>

The motor on the lab air compressor has failed and must be replaced.

The compressor is expected to be down for the majority of this week.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Service Interruption in Main Machine Shop - January 7-8
Date:	Friday, January 02, 2009 11:38:21 AM
Attachments:	ATT00063.txt

The machinist staff in the main machine shop will be receiving advanced MasterCam CNC software training all day on January 7 and 8.

The shop will remain open but with very limited support and with no machining services during this time.

Users anticipating a need for machined items are asked to include this known service interruption in their planning.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Unusual increase in nitrogen consumption in recent days
Date:	Thursday, January 29, 2009 11:26:22 AM
Attachments:	<u>ATT00122.txt</u>

BOC Gases reports a higher than normal nitrogen usage rate during the last 2-3 days.

Normal usage rates are ~4 gal/hr and recent usage rates have been ~11 gal/hr.

Investigations of the tank and building services revealed no unusual conditions.

Consequently, it is believed this increase is only normal consumption and not a leak or open valve.

Cryogens Management staff will continue to monitor consumption rates for unusual trends.

Please check your nitrogen connections and report any recent known consumption increases to <u>merritt@mps.ohio-state.edu</u>.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Update on Air Handler Status and Power Outage
Date:	Friday, January 16, 2009 4:24:59 PM
Attachments:	<u>ATT00075.txt</u>

All air handler units are now on-line and have remained stable during the last few hours. Power lost early this morning is also fully restored.

The PRB is one of many buildings campus-wide experiencing operational issues due to the extreme weather.

Special thanks to the FOD maintenance teams who with resources stretched thin continued to support Physics Department needs.

For occupants who are interested in a deeper explanation of today's many events, an Air Handler Report and Power Outage Report is provided below.

Air Handler Report:

Very early this morning, temperatures in the range of -10 degree F, triggered a freeze-protection shutdown in Air Handler 1, Air Handler 2, and Air Handler 4.

FOD maintenance staff used a temporary and non-standard means of running air handlers to overcome these extreme temperatures and to get units back on line.

Later in the morning, a pneumatic control line feeding the main supply inlet dampers in AHU-1 froze and split. This caused the dampers to close on loss of air. When these inlet dampers close, air is blocked from entering the unit, and the control system automatically initiates a shut down.

With the air flow stopped in AHU-1, a large amount of vapor-laden (steamy) air was present in the room which caused a smoke detector to go off, thus triggering the building evacuation alarm.

FOD is currently completing a replacement of freeze-protection devices and will continue to monitor and spot-check the systems throughout the weekend.

Power Outage Report:

As a separate and unrelated event, very early this morning (probably around 1:00 am) power was lost when the main circuit breaker failed in the Main Distribution Switchboard 2 (MDS2).

MDS2 is upstream of Distribution Switchboards that send 208V power out to panelboards throughout the building.

This caused a large number of receptacles to lose power at locations dependent upon their proximity to the downed distribution switchboard.

FOD maintenance staff located the failed circuit breaker and replaced it with parts on hand from spares inventory.

MDS2 is now fully back in function and not expected to cause further problems. It is not known if this electrical failure was related to weather, but with campus-wide heating systems under peak load some sort of power grid transient condition may have existed to trigger the failure.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Weather Conditions Increase Risk of Air Handler Shutdowns
Date:	Wednesday, January 14, 2009 4:35:22 PM
Attachments:	ATT00492.txt

Freeze protection circuits within the lab-side air handlers are known to cause shutdowns in extreme cold weather conditions.

Although improvements have been made, temperatures called for in the shortterm weather forecast are in the range where shutdowns have occurred in the past.

As a precautionary measure, the Department recommends limiting the use of fume hoods for significant chemistry, where possible, during the coldest portions of the next few days (particularly Thursday PM/Friday AM).

From:	Phil Davids
То:	<u>"EVAN SUGARBAKER (614)292-8396";</u>
Subject:	[ALERT] Weather Conditions Increase Risk of Air Handler Shutdowns
Date:	Wednesday, January 14, 2009 3:22:00 PM

Here is my proposal on message

Freeze protection circuits within the lab-side air handlers are known to cause shutdowns in extreme weather conditions.

Temperatures called for in the short-term weather forecast are in the range where shutdowns have occurred in the past.

As a preemptory measure, the Department recommends limiting the use of fume hoods, where possible, during the next few days.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[CRITICAL] Fire Alarm - Building Evacuation - REVISED STATEMENT
Date:	Friday, January 23, 2009 4:08:52 PM
Attachments:	ATT00446.txt

REVISED STATEMENT

The previous message incorrectly stated that a vacuum pump had failed. The vacuum pump did not fail.

Exhaust systems serving the basement level have been erratic in the last several days causing over pressurization of labs in both the north half and south half of the building.

FOD has repaired the systems serving the south half of the building, but the north half problems remain unresolved.

The smoke from the vacuum pump did cause the alarm, but not due to pump failure.

Exhaust limitations on the building side allowed smoke to accumulate, thus triggering the alarm.

Apologies to the Lemberger research team and others for the mischaracterization of the root cause of the alarm described in the previous message.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[CRITICAL] Fire Alarm - Building Evacuation
Date:	Friday, January 23, 2009 2:04:24 PM
Attachments:	<u>ATT00410.txt</u>

A Department supplied and maintained vacuum pump in the basement (Room 0135M) failed causing smoke to accumulate in the area and setting the fire alarm off on smoke detection.

The pump has been shut off and the building has returned to normal operation.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[NEWS] KEYS FOUND NEAR TABLE-TENNIS - BASEMENT OF PRB
Date:	Tuesday, January 13, 2009 2:49:40 PM
Attachments:	<u>ATT00340.txt</u>

A set of keys was found in the basement of PRB on the green couch near the tabletennis table.

The keys are at the front desk in Lost and Found

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[NEWS] Bounce Messages within Facility_Info System - now resolved
Date:	Thursday, January 15, 2009 9:43:21 AM
Attachments:	ATT00555.txt

Many e-mail addresses received an unusual "bounce notice" after yesterday's weather alert message.

The "FACILITY_INFO" list incorporates the "physics-all" list as the source for most of its subscribers.

As a result, the automatic bounce detection of "FACILITY_INFO" sent a warning to "physics-all" instead of to individual email addresses when the bounce threshold was exceeded.

This condition has now been resolved.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[NEWS] Reminder for Emergency Contact Numbers
Date:	Tuesday, January 20, 2009 9:01:11 AM
Attachments:	<u>ATT00155.txt</u>

A minor plumbing issue occurred over the long weekend for which several occupants tried to respond but were unclear who to contact.

Recall that the Physics Department pays maintenance fees to the University's Facility Operation and Development group.

This group (most commonly called FOD) includes the "Operations" division which is responsible for building maintenance tasks.

FOD operates a 24/7 service desk (located at the Fawcett Center) under the name "Service2Facilities" which can be reached by calling 2-HELP. (292-4357 ext. 1). There are also emergency contact wallet cards available at the front desk in PRB which list the FOD and Departmental contact numbers. (reference e-mail from Facility_Info sent 02-OCT-2008)

http://www.fod.osu.edu/s2f/index.htm

Service2Facilities Dispatchers will ask for the caller's name, building name, room number, description of the problem, and a level of urgency, and will then dispatch maintenance staff accordingly.

More information related to FOD can be found at the following links.

http://www.fod.osu.edu

In addition to the phone-in desk, an online service request option is also available at

<u>http://www.fod.osu.edu/s2f/index.htm</u> by clicking on the box labeled "request service online now"

All such service requests are normally routed through the Department's Facility Team (Reed, Kitts, Davids), but in a weekend or emergency case any occupant can make a service call/request.

As further detail, FOD Operations is organized according to the recent structure

put forth by Project RIO (Regional Integrated Operations). RIO splits the campus into Districts and Zones and assigns team leaders to each. The PRB and Smith Lab are in Zone 1 District 3.

http://fod.osu.edu/operations/

The Department thanks those occupants who responded to the plumbing issues this weekend and hopes this clarification e-mail is of use.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[NEWS] Surplus Furniture Fair complete and all claimed items delivered
Date:	Tuesday, January 20, 2009 10:55:41 AM
Attachments:	ATT00215.txt

The Surplus Furniture Fair is now complete.

Of the 176 tagged items, 34 were claimed, resulting in an 18% reuse rate.

Department technical staff have now completed delivery of all claimed items.

Due to relocations and handling, there were a very few items with lost id/claim tags.

For claimed items not yet delivered, please reply to this message with a description of the item, destination, and contact details.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[CRITICAL] Fire Alarm - Building Evacuation
Date:	Wednesday, February 04, 2009 11:58:08 AM
Attachments:	<u>ATT00059.txt</u>

A water low flow alarm in the sprinkler system in the vicinity of M2015 caused today's evacuation.

Repair works were underway in this area and the monitoring devices covering this area were not sufficiently deactivated.

The normal course of events for repairs of this type is to temporarily deactivate the monitoring system while work is being done.

In order to provide the most safety coverage, only those monitoring sensors in the immediate vicinity of the work are deactivated.

Today's evacuation resulted from one too few monitoring sensors being deactivated.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[NEWS] Traffic Alert - Tuttle Park Place Detour
Date:	Wednesday, February 04, 2009 2:19:44 PM
Attachments:	ATT00108.txt

From OSU Traffic and Parking:

Beginning Feb. 16, Tuttle Park Place will be closed between Lane and Neil Avenues. Traffic on Lane Avenue turning south on Tuttle will be detoured to Neil Avenue and back to Tuttle Park; Tuttle Park traffic will be detoured on to Neil to proceed to Lane. This area will be closed through April as part of a utilities expansion project to support future development in the north campus region. A map of the closures can be viewed at fod.osu.edu/news.

Pedestrian detours will also be required and sidewalks through Remembrance Park will be closed (NW corner of Tuttle and Woody Hayes); the north/south and east/ west sidewalks along Woody Hayes and Tuttle will remain open.

This is the first phase of the utilities expansion project. The second phase begins in June and will require additional closures along Woodruff and Tuttle Park.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] February 7 next Quarterly Maintenance Shutdown - Notice 3 of 3
Date:	Thursday, February 05, 2009 8:19:58 AM
Attachments:	<u>ATT00166.txt</u>

Quarterly planned maintenance on the building's four main Air Handler Units and their six connected Exhaust Fans will be conducted by FOD on Saturday, February 7. Maintenance is scheduled to start at 7:00 AM and is planned to be completed by no later than 6:00 PM.

Because the Lab Side Air Handlers and connected Exhaust Fans will be shut down, fume hood operations shall be suspended for the full maintenance period.

Please note that due to acceptable results from the recent fume hood testing campaign, this maintenance shutdown will be conducted without a corresponding building evacuation.

Occupants are reminded that although the building will remain open and accessible, air flows and other related building processes will be impacted throughout the day as maintenance is done.

Please take planned action to prepare for this event.

Key Summary Points

- Air handler/Exhaust Fan shut down Saturday Feb. 7
- No building closure or evacuation
- Suspend fume hood operations
- Building air flow and processes will be interrupted throughout the day

This message is Notice 3 of 3 of such alerts

From: Physics facility information

To: facility_info@pacific.mps.ohio-state.edu;

Subject: [NEWS] Theft from office PRB 3151

Date: Thursday, February 05, 2009 9:02:18 AM

The Department has received a theft report of a book bag from PRB3151 yesterday between 2:20 and 4:00 pm.

Any related information should be reported to the front desk staff in PRB1040.

The book bag is described as a Microsoft Tech-Ed 2007 book bag and is shown in the photograph found on the link below.

http://frenchfamily.org/hunter/wp-content/uploads/2007/06/img-0073.jpg

Occupants will recall past periods of increased incidents of theft and are encouraged to heighten their awareness.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[NEWS] Smith Lab Freight Elevator - Maint. Outage Feb 4 to 18
Date:	Thursday, February 05, 2009 9:55:59 AM
Attachments:	<u>ATT00032.txt</u>

FOD is conducting an extended maintenance outage on the freight elevator at the southwest end of Smith Lab.

The work extends from Feb. 4 to Feb 18.

From:	Phil Davids
То:	"facility_info@pacific.mps.ohio-state.edu";
Subject:	[ALERT] Lab Side Compressor Maintenance Outage Friday 7:00 am to 1:00 pm
Date:	Thursday, February 05, 2009 3:48:00 PM

The compressor that provides Lab side compressed air will be out of service tomorrow (Feb 6, 2009) from 7:00 am to 1:00 pm to allow for the installation of emergency repair parts.

In cases of urgent need, please contact Mark Reed by e-mail and the work will be rescheduled as needed.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Planned Shutdown AHU-1 and AHU-2 for Testing - Notice 1 of 2
Date:	Wednesday, February 11, 2009 9:38:20 AM
Attachments:	<u>ATT00493.txt</u>

Air Handlers AHU-1 and AHU-2 (Lab Side) will be briefly shutdown on the morning of Thursday, March 5th, 2009.

The shutdowns will occur during the time period of 05:30am to 09:00am.

Each shutdown will be approximately 10-20 mins in duration.

Fume hood operations should be suspended and hood sashes closed during this period.

The purpose of the shutdown is to allow data collection on building pressure fluctuations and low frequency noise in labs during various operational scenarios.

The testing will be done by a team from Sebesta-Blomberg (Consultant), FOD, and the Physics Dept.

Please take planned action for this known service interruption.

This is Notice 1 of 2.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[NEWS] Helium Dewars Full or Empty - Hang Tag System
Date:	Thursday, February 19, 2009 12:40:51 PM
Attachments:	<u>ATT00250.txt</u>

In response to user input, a simple "hang tag" system has been developed to allow helium dewars to more clearly be identified as full or empty.

For those who are helium users, additional details of the system and photos of the tags can be found at the link below.

http://www.physics.ohio-state.edu/fac_engr/Hang%20Tags.pdf

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Air Handler 2 - Brief Shutdown Friday morning
Date:	Thursday, February 19, 2009 5:42:22 PM
Attachments:	ATT00405.txt

AHU-2 will be shutdown briefly Friday morning (20-FEB-2009) between 6:45 am and 7:30 am.

The shutdown is expected to take approximately 10 minutes and is necessary to allow a visual inspection of humidity sensors within the unit.

Humidity levels are currently lower than needed and FOD has requested this brief access in response to this condition.

AHU-2 serves the lab side north end.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[NEWS] Unidentified Person in Smith Lab on Saturday Afternoon
Date:	Monday, February 23, 2009 9:50:58 AM
Attachments:	<u>ATT00110.txt</u>

The Department has received a report of an unidentified person inside Smith Lab RM1132. (Gramila Cryostat Lab)

The person was met and questioned by a graduate student while leaving the lab on Saturday at approximately 3:30 pm.

The person is described as a tall, African-American male, wearing a dark jumpsuit.

Based on the description/lack of uniform, location, and time, FOD reports that this was not likely one of their staff.

Although no items are reported missing, a University Police report has nonetheless been filed.

Occupants will recall past periods of increased incidents of theft and are encouraged to heighten their awareness.

From:	Physics facility information
To:	facility_info@pacific.mps.ohio-state.
Subject: Date: Attachments:	edu; [CRITICAL] Air Handler 1 off-line Tuesday, February 24, 2009 3:37:04 PM ATT00506.txt

Air Handler #1 which serves the lab side south end is off line.

FOD has been contacted and will be responding.

From:	Physics facility information
To:	facility_info@pacific.mps.ohio-state.
Subject: Date: Attachments:	edu; [CRITICAL] Air Handler 1 back on line Tuesday, February 24, 2009 3:53:24 PM ATT00523.txt

Air Handler 1 is back on line at 100%.

Preliminary diagnosis is a problem with the integrated face and by-pass damper (IFB) mechanical adjustment and freeze protection circuitry.

The department expresses thanks to FOD Maintenance Staff for their prompt response.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Reminder - Building Pressure Testing Thursday 5:30am to 9:00 am
Date:	Wednesday, March 04, 2009 2:36:02 PM
Attachments:	ATT00387.txt

As previously announced, building pressure fluctuation testing will take place tomorrow morning and will involve shut downs of Air Handlers 1 and 2.

Operations in fume hoods should be suspended and fume sashes closed.

For details please follow the link below to the "Current Alerts" section of the Facility Engineering website.

http://www.physics.ohio-state.edu/fac_engr/alerts.html

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Building Pressurization Testing Complete
Date:	Thursday, March 05, 2009 9:00:00 AM
Attachments:	<u>ATT00019.txt</u>

Data collection during building pressure testing was performed as planned this morning and is now complete.

Air handlers have returned to normal operating conditions with no further on/off manipulation required or foreseen.

The Department expresses special thanks to Dr. Jay Gupta and Dr. Tom Gramila for their direct and significant contribution to this effort.

The Department also expresses thanks to Bob Wells and Jenn Holt for providing critical technical support.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Reboiler Repair Shutdown - Humidity level to be impacted
Date:	Thursday, March 12, 2009 6:00:09 PM
Attachments:	<u>ATT00064.txt</u>

A flange seal on the high pressure steam circuit of the reboiler has developed a severe leak that requires an immediate repair.

Consequently, a shutdown of the reboiler is planned as soon as a contractor can be arranged.

This shutdown may be as early as Friday (March 13) and will be preceded by another announcement.

Due to 100% outside air intake, the humidity levels will nominally approach atmospheric conditions at the time of the shutdown.

Please take planned action for this known, but unexpected, service interruption.

For those who require additional details, the links below provide visual content.

http://www.physics.ohio-state.edu/fac_engr/mail_attach.html

http://www.physics.ohio-state.edu/fac_engr/P1010002.MOV

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Reboiler Repair Shutdown - Contractor now on site
Date:	Friday, March 13, 2009 8:53:56 AM
Attachments:	<u>ATT00100.txt</u>

As announced late yesterday, the reboiler was shutdown this morning around 7:00 am and a contractor is currently making repairs.

Current atmospheric conditions as reported by the Denney Hall Rooftop Weather Station are 25 F and 72% relative humidity.

This ambient outside condition will result in an interior relative humidity in the range of 20% and will vary throughout the day.

The reboiler also serves the domestic hot water system. Consequently, this service will be interrupted during the repair.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Reboiler Repair Complete - Unit back online
Date:	Wednesday, March 18, 2009 3:59:00 PM
Attachments:	<u>ATT00149.txt</u>

Repairs to the reboiler have been completed and the unit is back online as of late this morning.

Normal operating conditions are expected to resume over the next few hours.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Campus Wide Grounds Upkeep - Please Support the Effort
Date:	Wednesday, March 25, 2009 11:32:42 AM
Attachments:	ATT00041.txt

The OSU Roads and Grounds Team is requesting a helping hand from the occupants and custodial staff of the PRB to please not set out unsecured trash at the dumpster.

Of particular concern are boxes with foam shipping protection and/or foam peanuts or other loose items that can easily be blown about by wind.

In preparation for Spring, the Roads and Grounds Team is directing its efforts to spruce up the grounds Campus-wide and would greatly appreciate support for this request.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] May 6 next Quarterly Maintenance Shutdown - Notice 2 of 3
Date:	Monday, April 20, 2009 9:18:40 AM
Attachments:	ATT00389.txt

Quarterly PM (planned maintenance) on the PRB's four air handler units and six connected exhaust fans will be conducted by FOD on Wednesday, May 6.

Maintenance is scheduled to start at 7:00 AM and is planned to be completed by no later than 3:00 PM.

Because the lab side air handlers and connected exhaust fans will be shut down, fume hood operations shall be suspended for the full maintenance period.

Occupants are reminded that although the building will remain open and accessible, air flows and other related building processes will be impacted throughout the day as maintenance is done.

Please take planned action to prepare for this event.

Key Summary Points

- Air handler/Exhaust Fan shut down Wednesday, May 6
- No building closure or evacuation
- Suspend fume hood operations
- Building air flow and processes will be interrupted throughout the day

Please note that this outage marks a full return to conducting planned maintenance during normal business hours.

This message is Notice 2 of 3 of such alerts

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] May 6 next Quarterly Maintenance Shutdown - Notice 1 of 3
Date:	Monday, April 06, 2009 3:19:34 PM
Attachments:	ATT00536.txt

Quarterly PM (planned maintenance) on the PRB's four air handler units and six connected exhaust fans will be conducted by FOD on Wednesday, May 6.

Maintenance is scheduled to start at 7:00 AM and is planned to be completed by no later than 3:00 PM.

Because the lab side air handlers and connected exhaust fans will be shut down, fume hood operations shall be suspended for the full maintenance period.

Occupants are reminded that although the building will remain open and accessible, air flows and other related building processes will be impacted throughout the day as maintenance is done.

Please take planned action to prepare for this event.

Key Summary Points

- Air handler/Exhaust Fan shut down Wednesday, May 6
- No building closure or evacuation
- Suspend fume hood operations
- Building air flow and processes will be interrupted throughout the day

Please note that this outage marks a full return to conducting planned maintenance during normal business hours.

This message is Notice 1 of 3 of such alerts

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] May 6 next Quarterly Maintenance Shutdown - Notice 3 of 3
Date:	Monday, May 04, 2009 9:45:31 AM
Attachments:	<u>ATT00060.txt</u>

Quarterly PM (planned maintenance) on the PRB's four air handler units and six connected exhaust fans will be conducted by FOD <u>this Wednesday</u>, May 6.

Please take special note that control damper repairs have been added to the work planned for this outage. These repairs will require welding to be done inside the air handler and may result in noticeable welding odors in the building. These non-hazardous weld odors are expected to be slight in intensity and short-term in duration.

Maintenance is scheduled to start at 6:00 AM and is planned to be completed by no later than 3:00 PM.

Because the lab side air handlers and connected exhaust fans will be shut down, fume hood operations shall be suspended for the full maintenance period.

Occupants are reminded that although the building will remain open and accessible, air flows and other related building processes will be impacted throughout the day as maintenance is done.

Please take planned action to prepare for this event.

Key Summary Points

- Air handler/Exhaust Fan shut down Wednesday, May 6
- No building closure or evacuation
- Suspend fume hood operations
- Building air flow and processes will be interrupted throughout the day
- Weld odors may be noticeable throughout the maintenance period.

Please note that this outage marks a full return to conducting planned maintenance during normal business hours.

This message is Notice 3 of 3 of such alerts

From:	Physics facility information
To:	facility_info@pacific.mps.ohio-state.
Subject: Date: Attachments:	edu; [ALERT] Quarterly PM Work Complete Wednesday, May 06, 2009 1:36:10 PM ATT00192.txt

Today's quarterly PM work is now complete.

Air handlers are back online and normal operating conditions have resumed.

The Department expresses thanks to the FOD maintenance teams for a successful outage.

Fire panels will be returned to active status shortly, after which fire doors in halls will hold open.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[CRITICAL] Flooding in PRB RM4147 and adjacent hall and lower floors
Date:	Monday, June 01, 2009 9:32:28 AM
Attachments:	ATT00284.txt

A process cooling water filter unit developed a substantial leak over the weekend in RM4147 of the PRB (Lab side, 4th Floor, NW corner).

The flow of incoming water is stopped and water is being collected by a team from FOD with complete water removal expected shortly.

3rd floor and 2nd floor labs below 4147 (i.e. 3147 & 2147) experienced small accumulations of water that are contained and/or removed.

Occupants adjacent to or below any of the above mentioned rooms may also notice minor water drips or accumulation.

An inspection of similar installations at other locations within the building will commence immediately.

The department expresses thanks to FOD custodial teams for their prompt response.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] **CORRECTION** August 5th next Quarterly Maintenance Shutdown - Notice 1 of 3
Date: Attachments:	Wednesday, July 08, 2009 9:48:17 AM <u>ATT00209.txt</u>

CORRECTION

Quarterly PM (planned maintenance) on the PRB's four air handler units and six connected exhaust fans will be conducted by FOD on Wednesday, AUGUST 5th (not as incorrectly written in previous alert message as May 6th).

All other points from previous alert message are correct and valid.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] August 5th next Quarterly Maintenance Shutdown - Notice 2 of 3
Date:	Monday, July 20, 2009 11:25:54 AM
Attachments:	ATT00808.txt

Quarterly PM (planned maintenance) on the PRB's four air handler units and six connected exhaust fans will be conducted by FOD on Wednesday, August 5th.

Maintenance is scheduled to start at 7:00 AM and is planned to be completed by no later than 3:00 PM.

Because the lab side air handlers and connected exhaust fans will be shut down, fume hood operations shall be suspended for the full maintenance period.

Occupants are reminded that although the building will remain open and accessible, air flows and other related building processes will be impacted throughout the day as maintenance is done.

Please take planned action to prepare for this event.

Key Summary Points

- Air handler/Exhaust Fan shut down Wednesday, August 5th.
- No building closure or evacuation
- Suspend fume hood operations
- Building air flow and processes will be interrupted throughout the day

Please note that this outage continues the process of conducting planned maintenance during normal business hours.

This message is Notice 2 of 3 of such alerts

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] August 5th next Quarterly Maintenance Shutdown - Notice 1 of 3
Date:	Tuesday, July 07, 2009 9:40:49 AM
Attachments:	ATT00116.txt

Quarterly PM (planned maintenance) on the PRB's four air handler units and six connected exhaust fans will be conducted by FOD on Wednesday, May 6.

Maintenance is scheduled to start at 7:00 AM and is planned to be completed by no later than 3:00 PM.

Because the lab side air handlers and connected exhaust fans will be shut down, fume hood operations shall be suspended for the full maintenance period.

Occupants are reminded that although the building will remain open and accessible, air flows and other related building processes will be impacted throughout the day as maintenance is done.

Please take planned action to prepare for this event.

Key Summary Points

- Air handler/Exhaust Fan shut down Wednesday, August 5th.
- No building closure or evacuation
- Suspend fume hood operations
- Building air flow and processes will be interrupted throughout the day

Please note that this outage continues the process of conducting planned maintenance during normal business hours.

This message is Notice 1 of 3 of such alerts

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[CRITICAL] Campus Chilled Water Repair - Now Complete
Date:	Monday, July 27, 2009 12:42:23 PM
Attachments:	ATT00311.txt

Campus chilled water repairs are complete and normal system performance has resumed.

Process cooling water is now on line. Water-cooled lab equipment can now be brought back in service.

The department expresses thanks to FOD maintenance teams for their efforts.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[CRITICAL] Campus Chilled Water Repair - Now Underway
Date:	Monday, July 27, 2009 8:26:36 AM
Attachments:	ATT00238.txt

*** Special Note: This message is a follow up to a [CRITICAL] class message sent Friday ***

The Campus Chilled Water repair described in earlier messages is now underway.

Process Cooling is now shutdown. All water-cooled lab equipment dependent on process cooling water should be shutdown.

Occupants will experience temperature and humidity approaching ambient outdoor conditions due to the absence of cooling coils within air handlers.

A follow up message will be sent when the repairs are complete and systems are returned to normal operating conditions.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[CRITICAL] Campus Chilled Water Repair - Process cooling to be shut down
Date:	Friday, July 24, 2009 1:09:10 PM
Attachments:	<u>ATT00130.txt</u>

*** Special Note: Users dependent on Process Cooling Water for equipment cooling please carefully read this message. ***

A flange seal on the return circuit of the campus chilled water system has developed a severe leak that requires an immediate repair.

FOD is evaluating spare parts availability as a first step in preparation to make the repair. When repair timing is better known, a second announcement will be made prior to shutdown. It is anticipated that the shutdown may occur as soon as Sunday or early Monday morning, but latest Tuesday.

Please take preliminary steps now to prepare for a loss of process cooling in the next 48 to 96 hours and be ready to take immediate action to shut down equipment in accordance with the details given in the announcement that will follow later.

Although the leak is contained now, the amount and timing of an increase in leak size and rate cannot be known. Therefore, FOD will be closely monitoring the on-site condition and any alarm condition throughout the weekend.

Some examples of equipment cooled by process cooling water are vacuum pumps, diffusion pumps, lasers, Liebert units, cold rooms, and other items.

For those who require additional details, the links below provide visual content.

http://www.physics.ohio-state.edu/fac_engr/mail_attach.html

http://www.physics.ohio-state.edu/fac_engr/P7240006.MOV

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[CRITICAL] Campus Chilled Water Repair to begin Monday at 7:30 am
Date:	Friday, July 24, 2009 4:07:55 PM
Attachments:	<u>ATT00172.txt</u>

*** Special Note: This message is a follow up to a [CRITICAL] class message sent earlier today ***

FOD advises that repair work on the return circuit of the campus chilled water system will begin at 7:30 am on Monday morning (July 27).

The repairs are expected to take approx. 2-3 hours to complete.

Please take steps to prepare for a loss of process cooling on Monday morning from 7:30 to ~10:30 including all necessary shutdowns of water-cooled lab equipment.

A status update message to inform users will be sent after the repairs are complete and when normal system performance resumes.

Tests were conducted to measure the flow rate of the leak over several hours with results indicating that the leak is not increasing dramatically. This allows for a reasonable degree of confidence that the Monday repair time will be sufficiently soon. Nonetheless, FOD will continue with plans to closely monitor the on-site condition and any alarm condition throughout the weekend.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] August 5th next Quarterly Maintenance Shutdown - Notice 3 of 3
Date:	Monday, August 03, 2009 10:59:23 AM
Attachments:	ATT00057.txt

Quarterly PM (planned maintenance) on the PRB's four air handler units and six connected exhaust fans will be conducted by FOD this coming Wednesday, August 5th.

Maintenance is scheduled to start at 7:30 AM and is planned to be completed by no later than 3:00 PM.

Because the lab side air handlers and connected exhaust fans will be shut down, fume hood operations shall be suspended for the full maintenance period.

Occupants are reminded that although the building will remain open and accessible, air flows and other related building processes will be impacted throughout the day as maintenance is done.

Please take planned action to prepare for this event.

Key Summary Points

- Air handler/Exhaust Fan shut down Wednesday, August 5th.

- No building closure or evacuation
- Suspend fume hood operations

- No entry/exit to ENCOMM Clean Room (Room 0115) during AHU-3 belt change outage

- Building air flow and processes will be interrupted throughout the day

Please note that this outage continues the process of conducting planned maintenance during normal business hours.

Of special interest for this outage is the installation of a new type of V-Belt on AHU-4 (office side). The department and FOD have been jointly investigating extended life belt technologies and are using this installation on AHU-4 as a test case for possible further deployment on other air handlers.

This message is Notice 3 of 3 of such alerts

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] LAB COMPRESSED AIR - Z45 UNIT - Back Online
Date:	Wednesday, August 05, 2009 12:56:51 PM
Attachments:	ATT00154.txt

Preventative maintenance efforts on the Z45 air compressor which serves lab compressed air is now complete and the unit is back online.

Lab compressed air supply has returned to normal operating parameters.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] LAB COMPRESSED AIR - Z45 UNIT - OFFLINE FOR PM WEDNESDAY AUG 5TH
Date: Attachments:	Monday, August 03, 2009 3:27:43 PM <u>ATT00121.txt</u>

The Z45 air compressor which serves lab compressed air will be offline for preventative maintenance on Wednesday August 5th from 8:00am to 12:00 noon.

Air supply to optical tables and various other air-fed lab equipment will be interrupted during this planned outage.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] PRB Reboiler out of service week of August 24th - Notice 2 of 2
Date:	Friday, August 21, 2009 3:55:36 PM
Attachments:	<u>ATT00105.txt</u>

An extended outage of the steam reboiler system in the PRB will occur the full week of August 24th to allow FOD time to clean the internals of the reboiler and to install additional equipment (upgrades).

This system provides steam to the air handlers for humidification and to the domestic hot water system for heating the water. Consequently, these two services will be unavailable during this outage period.

Occupants may notice variations in humidity levels in the building and will have no domestic hot water available at lab, kitchenette, and restroom sinks.

Both of these actions are part of a larger, multi-phase effort funded by FOD to improve the operational characteristics of the humidification system and to reduce the amount of water-treatment salts (grit) carried over into labs and offices.

Please take planned action to prepare for this event.

Key Summary Points

- Reboiler shutdown full week of August 24th for cleaning and upgrades.
- No humidification will be available (none is needed during this time of year)
- No domestic hot water will be available.
- Upgrades and cleaning are first steps to reducing grit in labs and offices.

This message is Notice 2 of 2 of such alerts.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Quarterly PM Work Complete
Date:	Wednesday, August 05, 2009 12:59:54 PM
Attachments:	ATT00160.txt

Today's quarterly PM work is now complete.

Air handlers are back online and normal operating conditions have resumed.

The Department expresses thanks to the FOD maintenance teams for a successful outage.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Reboiler out of service week of August 24th
Date:	Tuesday, August 11, 2009 4:01:27 PM
Attachments:	<u>ATT00586.txt</u>

An extended outage of the steam reboiler system will occur the full week of August 24th to allow FOD time to clean the internals of the reboiler and to install additional equipment (upgrades).

This system provides steam to the air handlers for humidification and to the domestic hot water system for heating the water. Consequently, these two services will be unavailable during this outage period.

Occupants may notice lower than normal humidity levels in the building and will have no domestic hot water available at lab, kitchenette, and restroom sinks.

Both of these actions are part of a larger, multi-phase effort funded by FOD to improve the operational characteristics of the humidification system and to reduce the amount of water-treatment salts (grit) carried over into labs and offices.

Please take planned action to prepare for this event.

Key Summary Points

- Reboiler shutdown full week of August 24th for cleaning and upgrades.
- No humidification will be available (none is needed during this time of year)
- No domestic hot water will be available.
- Upgrades and cleaning are first steps to reducing grit in labs and offices.

This message is Notice 1 of 2 of such alerts.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Smith Power Outage - Tues Sept. 1st 4:00-9:00pm - Notice 1 of 2
Date:	Monday, August 24, 2009 12:18:38 PM
Attachments:	ATT00193.txt

A building-wide power outage is planned for Smith Lab on Tuesday, Sept. 1 beginning at 4:00 pm and ending at 9:00 pm.

This outage is required as part of an ongoing project to install a lightning protection system.

Work crews will be installing a disconnect at each of the three primary switchgear.

Transient Voltage Surge Suppression (TVSS) units will be installed later when delivery of these items is completed.

With the disconnects in place, the TVSS units can be installed without another outage.

Please take planned action to prepare for this event.

Key Summary Points

- Complete power outage in Smith Lab beginning Tuesday September 1st at 4:00pm
- New disconnects to be installed at primary switchgear
- TVSS units to be installed later

This message is Notice 1 of 2 of such alerts.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[CRITICAL] Smith Lab - Room 2017 - Partial Flooding
Date:	Monday, August 10, 2009 1:07:57 PM
Attachments:	<u>ATT00401.txt</u>

Smith Lab room 2017 has water slowly entering from reverse flow out of the floor drain resulting in accumulation covering most of the floor area.

Minor water seepage has also entered 2011A.

Demonstration staff are aware of the flooding and have taken immediate action including equipment and computer protection precautions.

Water pick-up crews from FOD are dispatched to the site and suitable repairs will follow.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] North Passenger Elevator - Back in Service - PRB
Date:	Thursday, September 10, 2009 4:45:30 PM
Attachments:	<u>ATT00219.txt</u>

The north passenger elevator in the PRB is back in service.

From:	Phil Davids
То:	"facility_info@pacific.mps.ohio-state.edu";
Subject:	[ALERT] North Passenger Elevator Out of Service - PRB
Date:	Thursday, September 10, 2009 2:02:00 PM

The north passenger elevator in the PRB is out of service.

A service request call has been made to the maintenance team.

A follow up announcement will be made when service is restored.

Occupants are directed to the south elevator in the interim.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] October 18th next Quarterly Maintenance Shutdown with Building Closure - Notice 1 of 3
Date: Attachments:	Tuesday, September 01, 2009 4:15:07 PM <u>ATT00338.txt</u>

The PRB will be closed and evacuated on Sunday October 18th from 6:00 am to 9:00 pm (15 hours) for a specific one-time repair to the main exhaust duct.

Welding crews will make repairs by working inside this main duct which will require all air flow from air handlers and exhaust fans to be stopped.

In parallel with these weld repairs, FOD will also complete the normal series of preventative maintenance items.

Building services including process cooling water, CAP I water, lab air, elec. power, and others not related to air flow will remain operational during the outage.

Because all air handlers and connected exhaust fans will be shut down, fume hood operations shall be suspended for the full maintenance period.

Please take planned action to prepare for this event.

Key Summary Points

- Building closed and evacuated Sunday, October 18th

- Air handlers/Exhaust Fans shut down, welding to be done inside main exhaust duct

- Suspend fume hood operations

- Building services not related to air flow will remain in operation

Please note that this outage and related evacuation is addressing a specific, onetime repair. After completion of this repair, the recently implemented practice of conducting preventative maintenance during normal business hours will resume.

This message is Notice 1 of 3 of such alerts

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] PRB Reboiler back on line
Date:	Tuesday, September 01, 2009 10:15:17 AM
Attachments:	ATT00266.txt

The extended outage that took place all last week on the steam reboiler system is now complete. All related systems including domestic hot water have returned to normal operating conditions.

During start-up yesterday afternoon, occupants may have noticed an increased amount of grit for a short duration. This was a start-up phenomena and has now passed.

New equipment installed during the outage will allow better operational control of condensate removal and an incremental step improvement in reducing airborne grit.

The department expresses thanks to the FOD "Steam Team", Farber Corporation, and to others for a very low impact outage and successful installation.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Smith Lab Power Outage - Saturday October 17th 8:00am-1:00pm - Notice 1 of 2
Date: Attachments:	Thursday, September 17, 2009 12:59:31 PM ATT00881.txt

A building-wide power outage is planned for Smith Lab on Saturday, October 17th beginning at 8:00 am and ending at ~1:00 pm.

Although this outage was previously announced and then twice delayed, contractors advise scheduling is now firm and final.

This outage is required as part of an ongoing FOD project to install a lightning protection system.

Please take planned action to prepare for this event.

Key Summary Points

- Complete power outage in Smith Lab beginning Saturday October 17th at 8:00am
- New power equipment to be installed at primary switchgear
- Non-football Saturday

This message is Notice 1 of 2 of such alerts.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] MAIN EXHAUST FAN (1 OF 6) OFFLINE
Date:	Thursday, October 22, 2009 3:16:54 PM
Attachments:	ATT00431.txt

One of six main exhaust fans (EFH4) has been offline for most of this week due to an extensive series of drive motor issues.

This fan will remain out of service for some additional days until a replacement motor can be located and installed.

Occupants may have noticed main entrance doors staying partially open in the last few days due to increased internal building air pressure. This is caused by the exhaust fan being offline and will continue until the repairs are completed.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] North Passenger Elevator - Back in Service - PRB
Date:	Thursday, September 10, 2009 4:45:30 PM
Attachments:	<u>ATT00219.txt</u>

The north passenger elevator in the PRB is back in service.

From:	Phil Davids
То:	"facility_info@pacific.mps.ohio-state.edu";
Subject:	[ALERT] North Passenger Elevator Out of Service - PRB
Date:	Thursday, September 10, 2009 2:02:00 PM

The north passenger elevator in the PRB is out of service.

A service request call has been made to the maintenance team.

A follow up announcement will be made when service is restored.

Occupants are directed to the south elevator in the interim.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] October 18th next Quarterly Maintenance Shutdown with Building Closure - Notice 1 of 3
Date: Attachments:	Tuesday, September 01, 2009 4:15:07 PM <u>ATT00338.txt</u>

The PRB will be closed and evacuated on Sunday October 18th from 6:00 am to 9:00 pm (15 hours) for a specific one-time repair to the main exhaust duct.

Welding crews will make repairs by working inside this main duct which will require all air flow from air handlers and exhaust fans to be stopped.

In parallel with these weld repairs, FOD will also complete the normal series of preventative maintenance items.

Building services including process cooling water, CAP I water, lab air, elec. power, and others not related to air flow will remain operational during the outage.

Because all air handlers and connected exhaust fans will be shut down, fume hood operations shall be suspended for the full maintenance period.

Please take planned action to prepare for this event.

Key Summary Points

- Building closed and evacuated Sunday, October 18th

- Air handlers/Exhaust Fans shut down, welding to be done inside main exhaust duct

- Suspend fume hood operations

- Building services not related to air flow will remain in operation

Please note that this outage and related evacuation is addressing a specific, onetime repair. After completion of this repair, the recently implemented practice of conducting preventative maintenance during normal business hours will resume.

This message is Notice 1 of 3 of such alerts

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] October 18th next Quarterly PRB Maintenance Shutdown with Building Closure - Notice 3 of 3
Date: Attachments:	Thursday, October 15, 2009 10:14:58 AM <u>ATT00332.txt</u>

The Physics Research Building (PRB) will be closed and evacuated on Sunday October 18th from 6:00 am to 9:00 pm (15 hours) for a specific one-time repair to the main exhaust duct.

Welding crews will make repairs by working inside this main duct, which will require all air flow from air handlers and exhaust fans be stopped.

In parallel with these weld repairs, FOD will also complete the normal series of quarterly preventative maintenance items.

Building services including process cooling water, CAP I water, lab air, elec. power, and others not related to air flow will remain operational during the outage.

Because all air handlers and connected exhaust fans will be shut down, fume hood operations shall be suspended for the full maintenance period.

Because of the extended outage period, labs with equipment that produce heat loads that are dependent on building air flow for cooling should evaluate the need to shut such items down and act accordingly.

Please take planned action to prepare for this event.

Key Summary Points

- Building closed and evacuated Sunday, October 18th for ~15 hours

- Air handlers/Exhaust Fans shut down, welding to be done inside main exhaust duct

- Suspend fume hood operations
- Evaluate equipment cooled by air flow for possible shut down
- Building services not related to air flow will remain in operation

Please note that this outage and related evacuation is addressing a specific, onetime repair. After completion of this repair, the practice of conducting preventative maintenance during normal business hours will resume.

Please also note that this PRB outage is in no way related to the planned power

outage in Smith Lab announced by separate message.

This is the final alert message for this event (Notice 3 of 3)

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] October 18th next Quarterly PRB Maintenance Shutdown with Building Closure - Notice 2 of 3
Date: Attachments:	Monday, September 28, 2009 11:45:57 AM <u>ATT00086.txt</u>

The PRB will be closed and evacuated on Sunday October 18th from 6:00 am to 9:00 pm (15 hours) for a specific one-time repair to the main exhaust duct.

Welding crews will make repairs by working inside this main duct, which will require all air flow from air handlers and exhaust fans be stopped.

In parallel with these weld repairs, FOD will also complete the normal series of preventative maintenance items.

Building services including process cooling water, CAP I water, lab air, elec. power, and others not related to air flow will remain operational during the outage.

Because all air handlers and connected exhaust fans will be shut down, fume hood operations shall be suspended for the full maintenance period.

Please take planned action to prepare for this event.

Key Summary Points

- Building closed and evacuated Sunday, October 18th for ~15 hours

- Air handlers/Exhaust Fans shut down, welding to be done inside main exhaust duct

- Suspend fume hood operations

- Building services not related to air flow will remain in operation

Please note that this outage and related evacuation is addressing a specific, onetime repair. After completion of this repair, the practice of conducting preventative maintenance during normal business hours will resume.

This message is Notice 2 of 3 of such alerts

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] PRB Reboiler back on line
Date:	Tuesday, September 01, 2009 10:15:17 AM
Attachments:	ATT00266.txt

The extended outage that took place all last week on the steam reboiler system is now complete. All related systems including domestic hot water have returned to normal operating conditions.

During start-up yesterday afternoon, occupants may have noticed an increased amount of grit for a short duration. This was a start-up phenomena and has now passed.

New equipment installed during the outage will allow better operational control of condensate removal and an incremental step improvement in reducing airborne grit.

The department expresses thanks to the FOD "Steam Team", Farber Corporation, and to others for a very low impact outage and successful installation.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Smith Lab - Compressed Air Repair - Brief Steam Outage
Date:	Thursday, October 22, 2009 3:38:56 PM
Attachments:	ATT00447.txt

An urgent repair to compressed air circuits in Smith Lab is planned for early Friday morning 23-OCT-2009.

Due to close proximity of the repair area to hot steam pipes, the FOD team will also shut down steam supply overnight tonight.

Because outdoor ambient conditions are relatively mild, it is expected that occupants will experience near normal temperature conditions upon morning arrival at Smith.

Repairs are expected to be completed and normal heating restored by mid to late morning.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Smith Lab Power Outage - Moved to Sat. Nov. 7th
Date:	Thursday, October 15, 2009 10:13:03 AM
Attachments:	ATT00326.txt

The building-wide power outage most recently planned for **Smith Lab** on Saturday, Sept. 17th has again been delayed due to a special request from a research group in the Chemistry Department who operates computing assets in Smith.

The new date is Saturday, November 7th from 8:00 am to 12:00 noon.

Additional notifications will follow as the date approaches.

Occupants are cautioned to not confuse this Smith Lab outage with the upcoming PRB outage on Sunday October 18th which remains as planned.

The department regrets any inconvenience this schedule change may cause.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Smith Lab Power Outage - Saturday October 17th 8:00am-1:00pm - Notice 1 of 2
Date: Attachments:	Thursday, September 17, 2009 12:59:31 PM ATT00881.txt

A building-wide power outage is planned for Smith Lab on Saturday, October 17th beginning at 8:00 am and ending at ~1:00 pm.

Although this outage was previously announced and then twice delayed, contractors advise scheduling is now firm and final.

This outage is required as part of an ongoing FOD project to install a lightning protection system.

Please take planned action to prepare for this event.

Key Summary Points

- Complete power outage in Smith Lab beginning Saturday October 17th at 8:00am
- New power equipment to be installed at primary switchgear
- Non-football Saturday

This message is Notice 1 of 2 of such alerts.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Smith Lab Power Outage - Saturday November 7th 8:00am- 12:00pm - Notice 2 of 2
Date: Attachments:	Thursday, November 05, 2009 1:44:56 PM ATT00313.txt

A building-wide power outage is planned for Smith Lab on Saturday, November 7th beginning at 8:00 am and ending at ~12:00 pm.

Although this outage was previously announced and then often delayed, scheduling is now firm and final.

This outage is required as part of an ongoing FOD project to install a lightning protection system.

Please take planned action to prepare for this event.

Key Summary Points

- Complete power outage in Smith Lab beginning Saturday November 7th at 8:00am

- New power equipment to be installed at primary switchgear
- Non-football Saturday

This is Notice 2 of 2 of such alerts and is the final message regarding this event.

Link to online alert messaging site: http://www.physics.ohio-state.edu/fac_engr/alerts.html

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Domestic Cold Water Back Online
Date:	Wednesday, December 02, 2009 10:13:55 AM
Attachments:	<u>ATT00073.txt</u>

The domestic cold water system is back online.

Some drinking fountains and sinks may sputter when first used due to small amounts of air in the lines. This is normal and can be resolved by leaving the water flowing for a few extra seconds until the air is cleared.

Auto-flush valves in toilet areas should resume normal function, but occupants are asked to report any non-functioning items to the facility team.

The department expresses thanks to FOD and Farber Corporation for achieving the planned outage timing.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Domestic Cold Water Outage - Wednesday Dec 2nd 7:00am to 9:00am - Notice 1 of 1
Date: Attachments:	Tuesday, December 01, 2009 12:13:25 PM ATT00206.txt

FOD will be conducting a brief outage of domestic cold water (DCW) tomorrow morning (Wednesday – Dec. 2nd) between 7:00 am and 9:00 am.

The outage is necessary to allow a piping connection to be made to the DCW circuits for new lab support equipment.

Service to drinking fountains, kitchenette sinks, toilets, Millipore units, and some lab sinks will be interrupted.

The department is not aware of any labs using DCW for cooling water. However, if a lab is using DCW for equipment cooling, then please take all necessary steps to shut down this equipment.

Occupants are kindly asked to restrict their use of all PRB restroom facilities, when and if possible, until after 9:00 am.

Key Summary Points

- Complete outage of domestic cold water (DCW) on Wednesday December 2nd from 7:00am to 9:00am

- Avoid use of restroom facilities if possible during this outage

- Outage allows for tie-in to DCW circuit for new lab equipment

- Shut down any lab equipment using DCW for cooling (no such use is known by the department)

This message is Notice 1 of 1 of such alerts.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Emergency Maintenance Outage on Air Handler 2 - Saturday Dec. 19th - Notice 2 of 2
Date: Attachments:	Thursday, December 17, 2009 1:48:24 PM ATT00146.txt

Due to a piping leak, FOD is planning an emergency repair of humidity injection piping internal to Air Handler 2 (AHU-2 = lab side, north end).

Because the leak is internal to the unit, a shutdown is needed to execute the repair.

The outage will take place Saturday, December 19th from 8:00 am to approx. 12:00 noon.

Fume hood operations should be suspended for the full 4 hour outage period for labs in the north half of the building.

The building will remain open and fully accessible, but occupants are advised that air flow will be interrupted during this time.

Key Summary Points

- Outage on Air handler 2 – Lab Side, North End on Saturday Dec. 19th from 8:00 am to 12:00 noon.

- Suspend fume hood operations in labs in the north half of the building

- Building services not related to air flow will remain in operation

This is Notice 2 of 2 for this event, no further messaging will precede this outage.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] Emergency Maintenance Outage on Air Handler 2 - Saturday Dec. 19th - Notice 1 of 2
Date: Attachments:	Wednesday, December 09, 2009 1:03:21 PM ATT00114.txt

Due to a piping leak, FOD is planning an emergency repair of humidity injection piping <u>internal</u> to Air Handler 2 (AHU-2 = lab side, north end).

Because the leak is internal to the unit, a shutdown is needed to execute the repair.

The outage will take place Saturday, December 19th from 8:00 am to approx. 12:00 noon.

Fume hood operations should be suspended for the full 4 hour outage period in any lab in the north half of the building.

The building will remain open and fully accessible, but occupants are advised that air flow will be interrupted during this time.

Key Summary Points

- Outage on Air handler 2 – Lab Side, North End on Saturday Dec. 19th from 8:00 am to 12:00 noon.

- Suspend fume hood operations in labs in the north half of the building

- Building services not related to air flow will remain in operation

This is Notice 1 of 2 for this event

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] January 13th next Quarterly Maintenance Shutdown - Notice 2 of 3
Date:	Monday, December 28, 2009 12:18:12 PM
Attachments:	<u>ATT00071.txt</u>

Quarterly PM (planned maintenance) on the PRB's four air handler units and six connected exhaust fans will be conducted by FOD on Wednesday, January 13. 2010.

Maintenance is scheduled to start at 7:00 AM and is planned to be completed by no later than 1:00 PM.

Because the lab side air handlers and connected exhaust fans will be shut down, fume hood operations shall be suspended for the full maintenance period.

Occupants are reminded that although the building will remain open and accessible, air flows will be impacted throughout the day as maintenance is done.

Please take planned action to prepare for this event.

Key Summary Points

- Air handler/Exhaust Fan shut down Wednesday, January 13th.
- No building closure or evacuation
- Suspend fume hood operations
- Building air flow will be interrupted throughout the day

For long range planning purposes, the 2010 quarterly maintenance dates are planned as follows:

Q1 = January 13th Wednesday

- Q2 = April 14th Wednesday
- Q3 = July 14th Wednesday
- Q4 = October 13th Wednesday

This message is Notice 2 of 3 of such alerts

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[ALERT] January 13th next Quarterly Maintenance Shutdown - Notice 1 of 3
Date:	Monday, December 14, 2009 4:04:37 PM
Attachments:	<u>ATT00173.txt</u>

Quarterly PM (planned maintenance) on the PRB's four air handler units and six connected exhaust fans will be conducted by FOD on Wednesday, January 13. 2010.

Maintenance is scheduled to start at 7:00 AM and is planned to be completed by no later than 3:00 PM.

Because the lab side air handlers and connected exhaust fans will be shut down, fume hood operations shall be suspended for the full maintenance period.

Occupants are reminded that although the building will remain open and accessible, air flows and other related building processes will be impacted throughout the day as maintenance is done.

Please take planned action to prepare for this event.

Key Summary Points

- Air handler/Exhaust Fan shut down Wednesday, January 13th.
- No building closure or evacuation
- Suspend fume hood operations
- Building air flow and processes will be interrupted throughout the day

Please also note that the humidity piping emergency repair outage on AHU-2 scheduled for Saturday December 19th remains in place and necessary.

For long range planning purposes, the 2010 quarterly maintenance dates are planned as follows:

Q1 = January 13th Wednesday

Q2 = April 14th Wednesday

Q3 = July 14th Wednesday

Q4 = October 13th Wednesday

This message is Notice 1 of 3 of such alerts

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[CRITICAL] Air Handler 2 - Belt replaced - Unit back online at 100%
Date:	Thursday, December 03, 2009 9:58:59 AM
Attachments:	<u>ATT00300.txt</u>

Air Handler 2 (lab side – north end) failing belt is now replaced and unit is back online at 100%.

The department expresses thanks to FOD maintenance teams for their prompt response to this unplanned event.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[CRITICAL] Air Handler 2 - Unplanned Outage This Morning
Date:	Thursday, December 03, 2009 9:28:10 AM
Attachments:	ATT00286.txt

An unplanned outage of Air Handler 2 (lab side – north end) will take place this morning at approximately 9:30 to replace a power transmission belt that is failing.

The outage is expected to last approximately 20 minutes with a goal of being back online by 10:00 am.

Air handler 2 was stopped briefly this morning for an inspection to locate the source of strong rubber odor coming from this unit and is currently running with only 1 of 2 fans. (i.e. 50% capacity). The failing belt was identified conclusively during this inspection and was found to be sufficiently deteriorated to require an immediate replacement.

The department regrets any inconvenience this unplanned outage may cause and kindly asks all north side lab occupants to take measures to accommodate this unexpected event.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[CRITICAL] Process Cooling Water - In Alarm
Date:	Wednesday, December 09, 2009 2:28:40 PM
Attachments:	<u>ATT00143.txt</u>

Process cooling water circuits are showing in alarm with elevated temperatures.

The cause of these elevated temperatures has not yet been determined.

Water flow continues on the building side, but campus chilled water circulation is underperforming.

Labs dependant on process cooling water should take immediate action to secure equipment until further notice.

A follow up message will be sent as soon as additional information is available.

From:	Physics facility information
То:	facility_info@pacific.mps.ohio-state.edu;
Subject:	[CRITICAL] Process Cooling Water - Normal Condition Resumes
Date:	Wednesday, December 09, 2009 4:13:31 PM
Attachments:	<u>ATT00154.txt</u>

Process cooling water circuits have been restored to normal conditions.

Labs that have taken equipment to safe states may resume normal operations.

The outage was caused by a series of unforeseeable, unexpected, and cascading events.

The initiating event was a pressure relief value in a hot water circuit that had a mistakenly trapped volume of water that heated up due to pump work and properly discharged its volume. As the water relieved and splashed onto the floor near a drain, a nearby water flood sensor was wetted, that in turn closed a series of values, that in turned signaled the campus chilled water to stop flowing.

Several "lessons learned" have emerged from this sequence of unintended consequences. FOD and the Physics Facility Team will be working in the coming days to resolve the now apparent system deficiencies to prevent similar future occurrences. Among the anticipated remediating actions are control system programming logic changes and physical piping location changes.

The department expresses thanks to FOD for their rapid response to the outage. The department further thanks the many research groups who quickly reacted with equipment shutdowns and other evasive responses.