AVS

Mechanical & Electrical Condition Assessment

Prince Edward Collegiate Institute, Building ID 8347-1

Event Details for Events that are in any status other than “Not Approved” are highlighted in grey

Details	Values
Facility Name (SFIS)	Prince Edward Collegiate Institute
GFA (m2)	16,936
Year Built by Original/Additions	1953
-- ENERGY CHECKLIST --	----------
Energy efficient boiler	No
Energy audit report	No
Energy efficient domestic hot water heater	No
Energy efficient recovery system	No
Energy efficient HVAC pumps and fan motors	No
Energy efficient interior lighting	No
Building Automation System	No
Energy efficient faucets	No
Energy efficient urinals and toilets	No

2. Mechanical Executive Summary

2012 -Building comfort is provided by six natural gas-fired boilers which produce hot water that is distributed by circulation pumps to terminal units in the building. The boilers are manufactured by PK Thermific and were installed in 2006..

Air conditioning and ventilation is provided to the Administrative area and gymnasium by two Trane roof mounted Air Handling Units which were installed in 2009. Two Greenheck HRVs provide fresh air only to the Chemistry Labs and these units were installed in 2008. 15 Central Station AHUs by Trane supply heating to the building and one ADP AHU supplys heating to the Greenhouse. The Central Station AHUs were installed in 2009. Conditioned air is distributed through the building by a
duct distribution system. Building exhaust is provided by 34 roofmounted and five room exhaust fans. An electronic building management control system monitors and controls the HVAC equipment.

Domestic water is supplied by the municipality. Domestic hot water is produced by two natural gas-fired domestic hot water (DHW) heater tanks. The DHW tanks are manufactured by Johnwood and A.O Smith, and were installed in 2009.

The washroom fixtures consist of flush-valve water closets, floor-mounted urinals, bradley basins and lavatories. Drinking fountains are installed in the hallways.

Fire suppression is provided by a fire extinguishers and a standpipe system.

The building is provided with a passenger elevator and four chair

lifts.

A detail designated substances report identifying the quantity of identified designated substances in the building was provided by the board.

3. Electrical Executive Summary

2012 - Electricity is fed to the main secondary switchgear from four pad-mounted transformers. The switchgear consists of a main disconnect manufactured by Westinghouse and rated 1600A at 2400V. The switchgear is located in the electrical room and feeds various branch disconnects and breaker panels provided for mechanical, lighting and receptacle loads in the building.

Interior lighting is supplied by T8 fluorescent fixtures with magnetic ballasts. Battery operated emergency lighting is strategically located in the school. Exterior lighting is provided by wall-mounted fixtures.

The building is monitored for fire by a centralized fire alarm system. Field devices include pull stations, heat and smoke detectors with bells and horns to notify building occupants of an alarm condition. Miscellaneous electrical systems include a wired data network, a public address (PA) system, a security system, and a central clock system.

Definitions for Energy Checklist

Energy audit report: An ASHRAE Level I energy audit report was completed within the last three years.
Energy efficient boiler: The energy efficient boiler provided is a condensing boiler installed within the last five years or is energy star rated.
Energy efficient domestic hot water heater: The energy efficient domestic hot water heater provided is direct or power vented natural gas fired or has an electric heat coil.
Energy efficient recovery system: The building is provided with a Heat Recovery Unit (HRU).
Energy efficient HVAC pumps and fan motors: The energy efficient HVAC pumps and fan motors are reportedly provided with a variable frequency drive.
Energy efficient interior lighting: The provided interior lighting is controlled by motion sensors or building automation system and/or the interior light fixtures are provided with T8 or T5 fluorescent lamps and electronic blast.
Building Automation System: The building has a comprehensive Direct Digital Control (DCC) automation system to monitor and control the mechanical system.
Energy efficient faucets: Approximately 50% of the lavatory faucets are provided with aerators and motion sensors.
Energy efficient urinals and toilets: Approximately 50% of the urinals and toilets are provided with a low flow flush valve (less than 1.6 gpf)

OLD_View of the main entrance.

D SERVICES

D1010 Elevators & Lifts

Details	Values
Technical Condition	Fair
Last Replacement Year	1986
Elevators & Lifts Type	Passenger Elevator - Hydraulic

Description

2012 - There is a hydraulic passenger elevator and four chair lifts in the building. The elevator was installed in 1986 and the chair lifts were installed in 1988.

Condition Assessment

2012 - No major deficiencies were reported or observed. The chair lifts and the passenger elevator are generally performing as intended. Based on age, they are considered to be in fair condition.

Replacement [D1010 Elevators & Lifts]

Details	Values
Brief Description	Replacement [D1010 Elevators & Lifts]
Estimated Cost	$180,000
Fiscal Event Year	2014
GPL Priority	Null

Recommendation

2012 - Based on the age, the passenger elevator and the chair lifts have surpassed their expected useful life, which is approximately 30 years. Replacement of the passenger elevator and the chair lifts in 2014 is recommended to minimize maintenance costs and potential safety hazards.

Aug 2012 - Aged chair lifts

D2010 Plumbing Fixtures

Details	Values
Technical Condition	Poor
Last Replacement Year	1953

Description

2012 - There are approximately 12 student washrooms in the building. Plumbing fixtures consist of flush-valve water closets, floor -mounted urinals,bradley basins and lavatories.

Condition Assessment

2012 - Two washrooms have recently renovated and are in good conditions. The remaining 90% of plumbing fixtures in the building are in poor condition, replacement is recommended.

Replacement [D2010 Plumbing Fixtures]

Details	Values
Brief Description	Replacement [D2010 Plumbing Fixtures]
Estimated Cost	$240,000
Fiscal Event Year	2012
GPL Priority	Null

Recommendation

2012 - 90 percentage of the plumbing fixtures have exceeded their expected useful life, which is approximately 25 years. Replacement of the deteriorated plumbing fixtures is recommended to ensure continued operation.

Aug 2012 - Aged urinal

Aug 2012 - Aged water closet

D2020 Domestic Water Distribution - Plumbing Piping System

Details	Values
Technical Condition	Poor
Last Replacement Year	1953
Domestic Water Distribution Type	Plumbing Piping Systems

Description

2012 - The majority of the water distribution system is either concealed behind interior finishes or installed behind the walls and floors. Where observed, the plumbing piping was copper and dates to the construction of the original building and Addition 1, 2 & 3 in 1953, 1960, 1962 and 1967 respectively.

Condition Assessment

2012 - No significant problems were reported with the building's plumbing piping system. Approximately 80 percent of the plumbing

piping system is original to the construction of the original building and Addition 1, 2 & 3 in 1953, 1960, 1962 and 1967 respectively. A study to evaluate the condition of the plumbing piping system and to provide a cost for replacement is recommended.

.Study [D2020 Domestic Water Distribution - Plumbing Piping System]

Details	Values
Brief Description	.Study [D2020 Domestic Water Distribution - Plumbing Piping System]
Estimated Cost	$10,000
Fiscal Event Year	2012
GPL Priority	Medium

Recommendation

2012 - The plumbing piping system is mostly concealed and therefore its current condition is not fully known. With age, a plumbing piping system is known to develop pinhole leaks. Given its current age, an intrusive study is recommended to determine its condition.

Aug 2012 - Aged plumbing piping system

Aug 2012 - Aged plumbing piping system

Replacement [D2020 Domestic Water Distribution - Plumbing Piping System]

Details	Values
Brief Description	Replacement [D2020 Domestic Water Distribution - Plumbing Piping System]
Estimated Cost	$800,000
Fiscal Event Year	2014
GPL Priority	Null

Recommendation

2012 - Repair or replacement of the plumbing piping system may be required according to the results of the proposed study. The cost provided is for budgeting purposes only. The replacement scope of work is subject to the recommendation of the study. Deferral of the replacement may result in further deterioration of the water supply.

D301002 Gas Supply System

Details	Values
Technical Condition	Poor
Last Replacement Year	1953

Description

2012 - The building energy supply is provided to rooftop and terminal units via a gas piping system. The majority of the gas distribution system is either concealed behind interior finishes or exposed on the exterior of the building.

Condition Assessment

2012 - Corrosion was reported and observed on the main rooftop line and the line serving the science lab. The gas piping system is in poor condition based upon age and observed condition.

Replacement [D301002 Gas Supply System]

Details	Values
Brief Description	Replacement [D301002 Gas Supply System]
Estimated Cost	$30,000

Fiscal Event Year	2012
GPL Priority	Null

Recommendation

2012 - Repair or replacement of the gas piping system may be required to ensure a continuous and reliable supply of fuel to the building.

Aug 2012 - Aged gas piping system

Aug 2012 - Aged gas piping system

D302005 Auxiliary Equipment - Expansion Tanks

Details	Values
Technical Condition	Fair
Last Replacement Year	1994

Description

2012 - The boiler auxiliary system includes two expansion tanks that were installed approximately in 1994. The tanks are located in the 2nd floor mechanical room (227E).

Condition Assessment

2012 - The expansion tanks are aged and are in fair condition.

Replacement [D302005 Auxiliary Equipment - Expansion Tanks]

Details	Values
Brief Description	Replacement [D302005 Auxiliary Equipment - Expansion Tanks]
Estimated Cost	$20,000
Fiscal Event Year	2014
GPL Priority	Null

Recommendation

2012 - The expected useful life of the expansion tanks is approximately 20 years. Based on age, replacement of the expansion tanks is recommended to ensure continued operation of the boiler heating loop.

Aug 2012 - Aged expansion tanks

D304001 Air Distribution, Heating & Cooling - Duct System

Details	Values
Technical Condition	Fair
Last Replacement Year	1953

Description

2012 - A system of ductwork and air diffusers distributes air in the building, and is common to both the cooling and heating systems. The ductwork is built of sheet metal and varies in size.

Condition Assessment

2012 - 40 percent of the duct system was replaced in 2009 and is in good condition. The remainder of the duct system is suspected to be in fair conditon based on age. A study is recommended to confirm condition and to recommend remedial action.

.Study [D304001 Air Distribution, Heating & Cooling - Duct System]

Details	Values
Brief Description	.Study [D304001 Air Distribution, Heating & Cooling - Duct System]
Estimated Cost	$10,000
Fiscal Event Year	2014
GPL Priority	Null

Recommendation

2012 - In order to determine the condition and remaining expected useful life of 60 percent of the duct system, a study is recommended.

Aug 2012 - Aged duct system

Aug 2012 - Aged duct system

Replacement [D304001 Air Distribution, Heating & Cooling - Duct System]

Details	Values

Brief Description	Replacement [D304001 Air Distribution, Heating & Cooling - Duct System]
Estimated Cost	$1,200,000
Fiscal Event Year	2015
GPL Priority	Null

Recommendation

2012 - Pending the outcome of the recommended study, a replacement of the duct system may be required. The cost provided is for budgeting purpose only. The replacement schedule, scope and cost of the system are subject to the proposed study.

D304003 Heating water distribution systems - Heating Piping System

Details	Values
Technical Condition	Poor
Last Replacement Year	1953

Description

2012 - The heating piping system is concealed behind interior finishes and behind the walls and floors.

Condition Assessment

2012 - The condition of the piping system could not be determined during the site assessment because it was not easily accessible. Approximately 90 percent of the heating piping system is likely original to the building construction and is suspected to be in poor condition.

.Study [D304003 Heating water distribution systems - Heating Piping System]

Details	Values
Brief Description	.Study [D304003 Heating water distribution systems - Heating Piping System]
Estimated Cost	$10,000
Fiscal Event Year	2012
GPL Priority	Null

Event Details for Events that are in any status other than “Not Approved” are highlighted in grey

Recommendation

2012 - The heating piping system is known to develop pinhole leaks with age. In order to check the condition of the concealed heating piping system, an intrusive investigation is recommended.

Aug 2012 - Aged heating piping system

Aug 2012 - Aged heating piping system

Replacement [D304003 Heating water distribution systems - Heating Piping System]

Details	Values
Brief Description	Replacement [D304003 Heating water distribution systems - Heating Piping System]
Estimated Cost	$2,600,000
Fiscal Event Year	2013
GPL Priority	Null

Recommendation

2012 - Based on the age and condition of the heating piping system, replacement is recommended. The cost provided is for budgeting purposes only. The replacement schedule, scope and cost of the system are subject to the proposed study. The budget cost, which was

calculated based on the designated substance report provided, includes abatement costs associated with the identified designated substance(s).

D304007 Exhaust Systems

Details	Values
Technical Condition	Poor
Last Replacement Year	1953

Description

Condition Assessment

2012 - The building is equipped with approximately 34 exhaust fans on the rooftop and five exhaust fans in various other spaces.

2012 - 17 roof-top and four room exhaust fans are aged and in poor condition. The remaining fans are in good condition.

Replacement [D304007 Exhaust Systems]

Details	Values
Brief Description	Replacement [D304007 Exhaust Systems]
Estimated Cost	$126,000
Fiscal Event Year	2013
GPL Priority	Null

Recommendation

2012 -17 roof-top and four room exhaust fans have surpassed their expected useful life. Replacement of the aged exhaust fans is recommended to maintain indoor air quality.

Aug 2012 - Aged exhaust fans

Aug 2012 - Aged exhaust fans

D3050 Terminal & Package Units

Details	Values
Technical Condition	Fair
Last Replacement Year	2009

Description

2012 - Terminal units consist of perimeter radiators, cabinet force-flow heaters and unit heaters in the classrooms, hallways and staircases.

Condition Assessment

2012 - 40 percentage of the perimeter radiators were replaced in 2009 and remain in good condition. The remaining 60 percent of the perimeter radiators are aged and in fair condition. Fan coils located at the stairs and entrances are also aged and considered to be in fair condition. There are 10 unit heaters which are considered to be in poor condition based on age.

Replacement [D3050 Terminal & Package Units]

Details	Values
Brief Description	Replacement [D3050 Terminal & Package Units]
Estimated Cost	$1,800,000
Fiscal Event Year	2014
GPL Priority	Null

Recommendation

2012 - With age, unit malfunction or breakdown is anticipated which increases maintenance costs. Replacement of the aged terminal units is recommended.

Aug 2012 - Aged perimeter radiator

Aug 2012 - Aged unit heater

Aug 2012 - Aged space heater

Event Details for Events that are in any status other than "Not Approved" are highlighted in grey

D3090 Other HVAC Systems & Equipment - Walk-in Freezers

Details	Values
Technical Condition	Poor
Last Replacement Year	1953

Description

Condition Assessment

2012 - There is a walk-in freezer located in the school kitchen area.

2012 - The freezer appears aged and has surpassed its expected useful life. Based on age and reported operating condition, the unit is in poor condition.

Replacement [D3090 Other HVAC Systems & Equipment - Walk-in Freezers]

Details	Values
Brief Description	Replacement [D3090 Other HVAC Systems & Equipment - Walk-in Freezers]
Estimated Cost	$12,000
Fiscal Event Year	2012
GPL Priority	Null

Recommendation

2012 - Replacement of the walk-in freezer is recommended to ensure continued operation. Failure to replace the unit may affect the function of the kitchen.

Aug 2012 - Aged walk-in freezer

Event Details for Events that are in any status other than “Not Approved” are highlighted in grey

D501001 Main Transformers

Details	Values
Technical Condition	Poor
Last Replacement Year	1953

Description

2012 - One three-phase 150 kVA transformer and three one-phase 150 kVA transformers are provided for electrical service to the building and are located in the switch room and basement boiler room respectively.

Condition Assessment

2012 - Based on age, the transformera are in poor condition.

Replacement [D501001 Main Transformers]

Details	Values
Brief Description	Replacement [D501001 Main Transformers]
Estimated Cost	$140,000
Fiscal Event Year	2012
GPL Priority	Null

Recommendation

2012 - The transformers have exceeded their expected useful life. Failure of the transformers can significantly disrupt operation of the building. Replacement of the transformers is recommended.

Aug 2012 - Aged three phase main transformer

Aug 2012 - Aged one phase main transformers

D5020 Primary & Secondary Switchgear

Details	Values
Technical Condition	Poor
Last Replacement Year	1953

Description

2012 - 2012 - The main secondary disconnect is manufactured by westinghouse and is rated for 2400 Volts. Various commercial-grade branch disconnects and breaker panels are provided for mechanical, lighting and receptacle loads in the building.

Condition Assessment

2012 - Based on age and observation, all the electrical distribution components which includes primary and secondary switchgear are in poor condition. All the breaker and distribution panels are aged. Some reconfigurations and additions were made to the switchgear over time. Annual maintenance or testing such as thermal scanning is reportedly not to have been performed.

Replacement [D5020 Primary & Secondary Switchgear]

Details	Values
Brief Description	Replacement [D5020 Primary & Secondary Switchgear]
Estimated Cost	$570,000
Fiscal Event Year	2012
GPL Priority	Null

Recommendation

2012 - Most of the electric switchgear has exceeded its expected useful life. Over time, carbon build-up and electrical arcing can occur. Replacement of the switchgear is recommended.

D502001 Branch Wiring

Details	Values
Technical Condition	Poor
Last Replacement Year	1953

Description

2012 – The electrical wiring in the building is standard commercial grade insulated wire in rigid metal conduit. Branch wiring in flexible conduit is provided to lighting, receptacle and mechanical loads. The majority of the wiring is concealed behind walls and floors and other interior finishes.

Condition Assessment

2012 – The electrical wiring is mostly concealed and approximately 80 percent dates back to the construction of the building. Based on age, 80 percent of the wiring is in poor condition. Some wiring may have been added or replaced over time with the secondary switchgear.

.Study [D502001 Branch Wiring]

Details	Values
Brief Description	.Study [D502001 Branch Wiring]
Estimated Cost	$10,000
Fiscal Event Year	2012
GPL Priority	Null

Recommendation

2012 – 80 percent of the electrical wiring has exceeded its expected useful life. Over time, deterioration of the wire insulation and the conduit can occur. Some wiring may have been added or replaced

but the extent of the modifications is not clear. Given the age of the electrical wiring, a study is recommended to determine the integrity of the wiring and to provide a scope and schedule of replacement.

Replacement [D502001 Branch Wiring]

Details	Values
Brief Description	Replacement [D502001 Branch Wiring]
Estimated Cost	$2,114,000
Fiscal Event Year	2013
GPL Priority	Null

Recommendation

2012 – Based on the findings of the recommended study, full or partial replacement of the wiring is recommended. The replacement cost provided is for budgeting purposes only and is subject to the conclusions of the study.

D502002 Lighting Equipment - Emergency Lighting

Details	Values
Technical Condition	Poor
Last Replacement Year	1953
Lighting Equipment Type	Unspecified

Description

2012 – Battery-backed emergency light fixtures are provided strategically in the building to provide illumination at exits and hallways in case of emergency. The emergency lighting consists of wall-mounted battery packs and associated local and remote light fixtures and lamps.

Condition Assessment

2012 – Based on age and observation, the emergency lighting is in poor condition. The emergency lighting has inadequate coverage in the building.

Replacement [D502002 Lighting Equipment - Emergency Lighting]

Details	Values
Brief Description	Replacement [D502002 Lighting Equipment - Emergency Lighting]
Estimated Cost	$78,000
Fiscal Event Year	2012
GPL Priority	Null

Recommendation

2012 – The emergency lighting has exceeded its expected useful life. Over time, deterioration of the battery packs and light fixtures may impact the safety of occupants during emergency evacuation. Replacement of the emergency lighting is recommended.

Aug 2012 - Aged emergency lighting

Aug 2012 - Aged emergency lighting

D502002 Lighting Equipment - Exit Lighting

Details	Values
Technical Condition	Fair
Last Replacement Year	1953
Lighting Equipment Type	Exit Lighting

Description

2012 – Illuminated exit signs are provided at designated building exits. The exit signs are lit by LED lamps.

Condition Assessment

2012 – Based on age and observation, approximately 20 percentage of the exits signs are original and considered to be in fair condition.

Replacement [D502002 Lighting Equipment - Exit Lighting]

Details	Values
Brief Description	Replacement [D502002 Lighting Equipment - Exit Lighting]
Estimated Cost	$10,000
Fiscal Event Year	2014
GPL Priority	Null

Recommendation

2012 – Approximately 20 percentage of the exit lighting has exceeded its expected useful life. Over time, deterioration of the exit signs may impact the safety of occupants during emergency evacuation. Replacement of the aged exit lighting is recommended.

Aug 2012 - Aged exit lighting

Aug 2012 - Aged exit lighting

D502002 Lighting Equipment - Interior Lighting

Details	Values
Technical Condition	Fair
Last Replacement Year	1953
Lighting Equipment Type	Interior Lighting

Description

2012 – Interior lighting is supplied by T8 HID fixtures throughout the building.

Condition Assessment

2012 – Based on age and observation, 20% of the interior lighting is in fair condition. Some fixtures appear to be damaged.

Replacement [D502002 Lighting Equipment - Interior Lighting]

Details	Values
Brief Description	Replacement [D502002 Lighting Equipment - Interior Lighting]
Estimated Cost	$320,000
Fiscal Event Year	2014
GPL Priority	Null

Recommendation

2012 – 20 percent of the interior lighting has exceeded its expected useful life. Over time, deterioration of the light fixtures may impact

the learning environment. Replacement of the interior lighting is recommended.

Aug 2012 - Aged interior lighting

Aug 2012 - Aged interior lighting

D503001 Fire Alarm Systems

Details	Values
Technical Condition	Poor
Last Replacement Year	1953

Description

2012 – The fire alarm system consists of a central fire alarm control panel, initiating devices including pull stations, smoke detectors and heat detectors, and notification devices including bells and horns. The control panel is manufactured by Notifier.

Condition Assessment

2012 – Based on age and observation, the fire alarm system is in poor condition. The control panel is reportedly obsolete.

Replacement [D503001 Fire Alarm Systems]

Details	Values

Brief Description	Replacement [D503001 Fire Alarm Systems]
Estimated Cost	$250,000
Fiscal Event Year	2012
GPL Priority	Null

Recommendation

2012 – The fire alarm system has exceeded its expected useful life. Failure of the fire alarm system may impact the safety of occupants. Replacement of the system is recommended.

Aug 2012 - Aged fire alarm system

D503004 Public Address Systems

Details	Values
Technical Condition	Poor
Last Replacement Year	1990

Description

2012 – The public address (PA) system consists of a central multimedia control unit, handsets and speakers. The control unit was manufactured by Dukane and is located in the office along with handsets. The speakers are located in the hallways and classrooms.

Condition Assessment

2012 – Based on age and observation, the Public Address (PA) system is in poor condition. The control unit is obsolete. The speaker system is old and damaged, some speakers are not working at all.

Replacement [D503004 Public Address Systems]

Details	Values
Brief Description	Replacement [D503004 Public Address Systems]
Estimated Cost	$70,000
Fiscal Event Year	2012
GPL Priority	Null

Recommendation

2012 – The PA system has exceeded its expected useful life. Replacement of the system is recommended.

Aug 2012 - Aged public address system control unit

Aug 2012 - Damaged speakers

D503006 Clock Systems

Details	Values
Technical Condition	Fair
Last Replacement Year	1953

Description

2012 - The central clock system synchronizes all the clocks within

the school. The main panel of the clock system is located in the main office.

Condition Assessment

2012 - Based on age, the clock system is in fair condition. No major deficiencies were reported at the time of the assessment.

Replacement [D503006 Clock Systems]

Details	Values
Brief Description	Replacement [D503006 Clock Systems]
Estimated Cost	$25,000
Fiscal Event Year	2014
GPL Priority	Null

Recommendation

2012 - The central clock systemis at the end of its expected useful life, which is approximately 25 years. Replacement is recommended.

Aug 2012 - Aged clock system

Aug 2012 - Aged simplex clock program

D509099 Other Special Systems and Devices - Dust Collector

Details	Values
Technical Condition	Poor
Last Replacement Year	1953

Description

Condition Assessment

2012 – One dust collector is provided for the wood shop. The dust collector is reported to be at least 25 years old.

2012 – The dust collector is aged and considered to be in poor condition.

Replacement [D509099 Other Special Systems and Devices - Dust Collector]

Details	Values
Brief Description	Replacement [D509099 Other Special Systems and Devices - Dust Collector]
Estimated Cost	$80,000
Fiscal Event Year	2012
GPL Priority	Null

Recommendation

2012 – Replacement of the aged dust collector is recommended to eliminate the repeated high maintenance costs.

Aug 2012 - Aged dust collector duct

D509099 Other Special Systems and Devices - Environment Chamber

Details	Values
Technical Condition	Poor
Last Replacement Year	1953

Description

Condition Assessment

2012 - The building is provided with an environmental chamber for for environmental sciences.

2012 – Based on age, the environmental chamber is in poor condition. No major deficiencies were observed or reported at the time of the assessment.

Replacement [D509099 Other Special Systems and Devices - Environment Chamber]

Details	Values
Brief Description	Replacement [D509099 Other Special Systems and Devices - Environment Chamber]
Estimated Cost	$50,000
Fiscal Event Year	2012
GPL Priority	Null

Recommendation

2012 – Based on age and observed conditions, replacement of the environmental chamber is recommended in order to ensure continuous operation of the equipment and minimize disruption.

Aug 2012 - Aged environmental chamber

Event Details for Events that are in any status other than “Not Approved” are highlighted in grey

Event Details for Events that are in any status other than “Not Approved” are highlighted in grey