Flint Communication and Shutdown Plan for Abatement Malfunction ECOAT Tank & Oven Operations

ELPO Tank & Oven RTO Abatement

All zones of the ELPO tank and ELPO oven

ROP MI-ROP-B1606-2020; EU-ECOAT and FG-CONTROLS

Process / Operational Restrictions

• All zones of the ELPO TANK AND ELPO OVEN operations are abated by the RTO and must be installed and operating properly

Regenerative Thermal Oxidizer (RTO)

Proper operation includes:

- Minimum operating set point (SP) temperature of 1520° F
- Minimum retention time of 0.5 seconds
- No visible emissions
- No bypass of emissions from permitted zones to atmosphere without a documented alarm
- Temperature data recording on a continuous basis at equally spaced intervals at least once every 15 minutes

Initiate Steps to Reduce Emissions

Sequentially shut down the processes linked to the malfunctioning abatement equipment in a safe manner that will minimize emissions and any loss of product.

Contact Flint Assembly Environmental

Flint Communication and Shutdown Plan for Abatement Malfunction ECOAT Tank & Oven Operations

ROP MI-ROP-B1606-2020; EU-ECOAT & FG-CONTROLS

Determine if a reportable malfunction has occurred

The owner or operator of a source, process or process equipment shall provide notice of an abnormal condition, start-up, shutdown, or a malfunction that results in emissions of a hazardous air pollutant or a toxic air contaminant which continue for more than 2 hour in excess of any applicable standard or emission limitations. (Michigan AQD R 336.1912)

Determination will include the following personnel:

- Environmental Engineer (Kimberly Gerlock @ 517-275-0717)
- Strategic Environmental Solutions (Jeff Hummel @ 517-719-9053)
- GM Legal Staff (Ken Gold @ 313-348-1908)



Flint Communication and Shutdown Plan for Abatement Malfunction Sealer Oven Operations

SEALER Oven RTO Abatement All zones of the SEALER oven ROP MI-ROP-B1606-2020; EU-SEALERS & ADHESIVES and FG-CONTROLS **Process / Operational Restrictions** All zones of the SEALER oven operations are abated by the RTO and must be installed and operating properly **Regenerative Thermal Oxidizer (RTO)** Proper operation includes: Minimum operating set point (SP) temperature of 1555° F • Minimum retention time of 0.5 seconds No visible emissions No bypass of emissions from permitted zones to atmosphere without a documented • alarm Temperature data recording on a continuous basis at equally spaced intervals at least once every 15 minutes

Initiate Steps to Reduce Emissions

Sequentially shut down the processes linked to the malfunctioning abatement equipment in a safe manner that will minimize emissions and any loss of product.

Contact Flint Assembly Environmental

Flint Communication and Shutdown Plan for Abatement Malfunction SEALER Oven Operations

ROP MI-ROP-B1606-2020; EU-SEALERS & ADHESIVES and FG-CONTROLS

Determine if a reportable malfunction has occurred

The owner or operator of a source, process or process equipment shall provide notice of an abnormal condition, start-up, shutdown, or a malfunction that results in emissions of a hazardous air pollutant or a toxic air contaminant which continue for more than 2 hour in excess of any applicable standard or emission limitations. (Michigan AQD R 336.1912)

Determination will include the following personnel:

- Environmental Engineer (Kimberly Gerlock @ 517-275-0717)
- Strategic Environmental Solutions (Jeff Hummel @ 517-719-9053)
- GM Legal Staff (Ken Gold @ 313-348-1908)



Flint Communication and Shutdown Plan for Abatement Malfunction THREE WET Booth Operations

RTO Booth Abatement (Booths 1 and 2)

Heated flash between prime/basecoat & between basecoat/clearcoat The entire clearcoat sprsay booth

Water Wash System

ROP MI-ROP-B1606-2020; EU-THREE WET and FG-CONTROLS

Process / Operational Restrictions

- The THREE WET booth operations abated by the RTO must be installed and operating properly
- The spray booth portions of the THREE WET cannot operate unless the water wash system is installed, maintained, and operated in a satisfactory manner.

Regenerative Thermal Oxidizer (RTO)

Proper operation includes:

- Minimum operating set point (SP) temperature of 1575° F
- Minimum retention time of 0.5 seconds
- No visible emissions
- No bypass of emissions from permitted zones to atmosphere without a documented alarm
- Temperature data recording on a continuous basis at equally spaced intervals at least once every 15 minutes

Water Wash System

Proper operation includes:

- Visible flow while operating the three wet spray booths 1 and 2
- Visual inspection must be documented weekly

Initiate Steps to Reduce Emissions

Sequentially shut down the processes linked to the malfunctioning abatement equipment in a safe manner that will minimize emissions and any loss of product.

Contact Flint Assembly Environmental

Flint Communication and Shutdown Plan for Abatement Malfunction THREE WET Booth Operations

ROP MI-ROP-B1606-2020; EU-THREE WET & FG-CONTROLS

Determine if a reportable malfunction has occurred

The owner or operator of a source, process or process equipment shall provide notice of an abnormal condition, start-up, shutdown, or a malfunction that results in emissions of a hazardous air pollutant or a toxic air contaminant which continue for more than 2 hour in excess of any applicable standard or emission limitations. (Michigan AQD R 336.1912)

Determination will include the following personnel:

- Environmental Engineer (Kimberly Gerlock @ 517-275-0717)
- Strategic Environmental Solutions (Jeff Hummel @ 517-719-9053)
- GM Legal Staff (Ken Gold @ 313-348-1908)



Flint Communication and Shutdown Plan for Abatement Malfunction Topcoat Oven Operations



Initiate Steps to Reduce Emissions

Sequentially shut down the processes linked to the malfunctioning abatement equipment in a safe manner that will minimize emissions and any loss of product.

Contact Flint Assembly Environmental

Flint Communication and Shutdown Plan for Abatement Malfunction THREE WET (TOPCOAT) Oven Operations

ROP MI-ROP-B1606-2020; EU-THREE WET & FG-CONTROLS

Determine if a reportable malfunction has occurred

The owner or operator of a source, process or process equipment shall provide notice of an abnormal condition, start-up, shutdown, or a malfunction that results in emissions of a hazardous air pollutant or a toxic air contaminant which continue for more than 2 hour in excess of any applicable standard or emission limitations. (Michigan AQD R 336.1912)

Determination will include the following personnel:

- Environmental Engineer (Kimberly Gerlock @ 517-275-0717)
- Strategic Environmental Solutions (Jeff Hummel @ 517-719-9053)
- GM Legal Staff (Ken Gold @ 313-348-1908)



Immediately Contact the Regulatory Agency

EGLE (previously MDEQ) (Robert Byrnes), Inspector 517-275-0439

Make appropriate notification to the regulatory agency of the malfunction via telephone and follow-up letter.

Note: If a repair is necessary that will adversely delay production, determine if a request to the local agency to operate in malfunction mode is warranted. (See R 336.1915 Enforcement Discretion)

Decision to make request to agency will be made by the following panel:

- Plant Environmental Engineer
- Facility Environmental Services
- GM Legal Staff
- Plant Manager
- Manufacturing Engineering Manager
- Facility Area Manager

No

Deviation Determine if a deviation has occurred and document as necessary (ECM and State / EPA Deviation reports).

Communication

Contact the following personnel to inform them of deviation:

- Strategic Environmental Solutions (Jeff Hummel @ 517-719-9053)
- Facility Area Manager (Brian Eubank @ 989-239-8001)
- ME Manager Flint Assembly (Charles Sageman @ 931-626-7958)
- Plant Director of Engineering (Steve Heuer @ 810-577-0861)
- Paint Area Director (Justen Bond @ 810-250-8776)