WRITTEN BY: FSN
DATE: 11/6/89
APPROVED BY:
DATE:

SOP # 5606-010.SOP
ENVIRONMENTAL RESPONSE TO INCINERATOR SHUTDOWN

CHECK	ACTION STEPS (Capital letters) and Comments (Small letters)

IN ORDER TO COMPLY WITH VCM EMISSION REGULATIONS, THE FOLLOWING GUIDELINES APPLY. ALL ACTIVITIES SHOULD BE COORDINATED THROUGH THE B-II SHIFT SUPERVISOR AND/OR VCM II SUPERVISION.

____ 1. IF # 4 INCINERATOR SHUTS DOWN FOR ANY REASON FOR ANY AMOUNT OF TIME, NOTIFY BOTH LEAD OPERATORS SO THAT ANY OF THE FOLLOWING OPERATIONS CAN BE STOPPED OR NOT STARTED.

A. Any unnecessary venting of organic to the vent header.

B. Stop venting the neutralizer drain drum and the neutralizer wash storage tank.

C. Block pump tandem seal vents.

D. Switch the quench dopp kettles back to the quench tower and block the vent from the quench dopp overhead drum.

NOTE: THE OTHER VCM BEARING VENTS STOP AUTOMATICALLY (HIGH PRESSURE VENT HEADER F-5005; SHIFT STORAGE VENT PDV 7427; LOW TEMP STORAGE F-6005).

____ 2. IF THE # 4 INCINERATOR CAN BE RESTARTED IMMEDIATELY WITHOUT ANY DELAY, THEN OMIT STEPS B, C, AND D ABOVE.

____ 3. IF THE # 4 INCINERATOR SHUTS DOWN CONTACT PLANT B-I IMMEDIATELY AND MAKE ARRANGEMENTS TO SWITCH ALL VENTS TO INCINERATORS # 1, # 2, OR # 3. IF THIS CAN BE DONE IMMEDIATELY, THEN OMIT STEPS B, C, AND D OF THE ITEMS ABOVE.

____ 4. IF THE VENTS CANNOT BE SENT TO ANY INCINERATOR, THEN FOLLOW THE STEPS OF ITEM 1. ABOVE, AND DO THE FOLLOWING.

A. Notify B-2 shift supervisor and when he orders do steps B and C.

B. Begin an orderly, and safe shutdown of both OHC Reactors.

C. Reduce VCM section rates to match OHC rate production - or - send HCL from the VCM section to HCL consumers in Plant B.

NOTE: IF ANY INCINERATOR CAN BE FOUND TO PUT THE VENTS INTO DURING THE SHUTDOWN SEQUENCE, THEN BRING THE UNITS BACK UP TO NORMAL OPERATION.

WRITTEN BY: MKH
DATE: 9/10/90
APPROVED BY:
DATE:

SOP # 5606-024.SOP
RESPONSE TO INC. BYPASS OF VC VENT STREAMS

OPERATOR'S NAME: _____ DATE_____

CHECK	ACTION STEPS (Capital letters) and Comments (Small letters)

VC regulations are very demanding and highly restrictive because VC has been shown to be a cancer suspect agent. The regulations are designed in such a way that the intent is to do everything possible to keep the VC contained within the piping.

_____ 1. THESE PROCEDURES APPLY ONLY TO THE VC REGULATED VENT STREAMS, WHICH ARE DESCRIBED IN SOP # 5602-103.SOP. IN ESSENCE, THESE STREAMS MAKE UP THE VENT FLOW ENTERING THE INCINERATORS THROUGH THE VCM II, TE-II, AND VC TANK CAR LOADING (OLD VC-1) VENT HEADERS.

A. The CSS vents are tied into the VCM II vent header.

_____ 2. SHOULD ONE OF THE ABOVE VENT STREAMS BYPASS THE CONTROL DEVICE (INCINERATOR) AND ENTER THE ATMOSPHERE THROUGH A SCRUBBER, THE 10 PPM STANDARD DESCRIBED IN SOP # 5602-103.SOP IS NO LONGER MET.

A. Not meeting the 10 PPM standard means that PPG is not meeting the requirements of the law. Thus, one can see the significance of meeting this standard. Except for manual trips, computer failure, power failure, and high pressure trips in their respective areas, the VCM II and TE-II vent header scrubber valves act as PCV's and do not open until pressure builds in the headers. This gives us short periods of time to get incinerators back on line before an incident becomes a VC bypass.

_____ 3. THE RESPONSE OF THOSE INVOLVED SHOULD BE AS FOLLOWS:

A. DO EVERYTHING POSSIBLE TO GET THE PROBLEM CORRECTED AS SOON AS POSSIBLE.

a. Work on the incinerator, correct the faulty control valve, swap to back-up systems, call out computer help, whatever. Work should proceed on an emergency basis.

_____ 4. FOR BYPASSES WHICH LAST <u>LESS THAN 60 MINUTES.</u>

A. No notifications are necessary. All necessary information to document the incident should be collected (as is the current practice). VCM II and TE-II should fill out their vent bypass logs, WTU should make notes on their vent outage sheet.

_____ 5. *FOR BYPASSES WHICH LAST 60 MINUTES OR GREATER.*

A. These incidents must be reported to the DEQ within 3 hours of the beginning of the incident. That leaves us 2 hours to report it if the incident lasts an hour. If we have a four hour long incident, at some point we will be notifying the DEQ that we are in the "midst" of a bypass incident. All information pertinent to the incident (cause, when incineration will resume, etc.) must be gathered and reported to the Environmental Department so that they can make the necessary phone calls. Of course, the same report information gathered for the less than 60 minute incidents must be collected by the appropriate operations units.

NOTE: It is very important that these types of incidents be avoided. The reason for reporting these "significant" events is so that the State can evaluate the situation and, if not satisfied with immediate corrective actions, have us shut down (in the extreme case) until repairs can be made.

WRITTEN BY: WFS
DATE: 09/11/90
APPROVED BY: M.G.
DATE: 10-16-90

SOP # 5606-025.SOP
VC EMISSIONS > 10 PPM INCINERATOR STACKS

CHECK	ACTION STEPS (Capital letters) and Comments (Small letters)

As part of the LESHAP regulations a continuous monitoring system must be in service at all times to monitor the emissions from the #4 incinerator stack by gas chromatography (GC) and record the results. A system to automatically calculate and record emission concentrations averaged over each one hour period is necessary to comply with the LESHAP's Quarterly Report requirements. The incinerator stack is sampled at approximately five minute intervals and analyzed by GC with flame ion detection. Hourly averages and analysis greater than 10 ppm are printed out on the control room "daily report" printer. Operation without the monitoring system in service (except for momentary outages for calibration, etc.) would be a violation of the LESHAP regulations.

FOR INDIVIDUAL INCINERATOR STACK VCM ANALYSIS > THAN 10 PPM:

_____ 1. WATCH FOR TWO SUCCESSIVE INDIVIDUAL STACK ANALYSIS GREATER THAN 10 PPM VC AFTER THE FIRST ALARM.

_____ 2. IF TWO SUCCESSIVE ANALYSIS ARE GREATER THAN 10 PPM MAKE ADJUSTMENTS TO #4 INCINERATOR TO TRY AND REDUCE THE VC IN THE INCINERATOR STACK.

A. Increase combustion chamber temperature if possible.

B. Increase air flow to the incinerator by taking the air TCV-4603 off automatic and manually increasing the air.

C. Reduce the vent load on the incinerator if possible. Stop all non-essential VC containing equipment being vented to the incinerator.

_____ 3. IF VC STACK ANALYSIS IS STILL GREATER THAN 10 PPM VC SWITCH THE VENTS FROM #4 INCINERATOR TO THE WTU INCINERATORS.

A. Manually block the vents to the #4 incinerator to prevent leak-through to the incinerator.

_____ 4. IF THE VC STACK ANALYSIS IS STILL GREATER THAN 10 PPM WITH THE VENTS SWITCHED TO THE WTU INCINERATORS (FOR 2 CONSECUTIVE HOURLY AVERAGES) HAVE THE SHIFT SUPERVISOR CALL OUT THE ANALYZER REPAIRMAN TO CHECK OUT THE GC ON THE INCINERATOR STACK.

FOR HOURLY AVERAGES OF VC EMISSIONS > 10 PPM IN INCINERATOR STACK FOR ONE HOUR OR MORE:

_____ 5. *IF VC VENTS ARE BEING BURNED IN THE #4 INCINERATOR WHERE > 10 PPM VC EMISSIONS ARE SEEN, A COMPLETED LESHAP VCM EMISSION REPORT IS NECESSARY.*

A. Unit foreman will fill out the report on the following day of the emission.

WRITTEN BY: WFS
DATE: 09/11/90
APPROVED BY: MG
DATE: 10-16-90

SOP # 5606-026.SOP
LOSS OF INCINERATOR AIR BLOWER

OPERATOR'S NAME: _____ DATE_____

CHECK	ACTION STEPS (Capital letters) and Comments (Small letters)

LOSS OF THE INCINERATOR AIR BLOWER RESULTS IN AN EMERGENCY IN WHICH IMMEDIATE ACTION MUST BE TAKEN TO PREVENT DAMAGE TO THE COMBUSTION CHAMBER REFRACTORY. ALSO, THE LOSS OF THE BLOWER WILL CAUSE AN INCINERATOR SHUTDOWN AND A TRIP OF THE VENTS.

____ 1. IMMEDIATELY CLOSE THE WATER TO THE PRIMARY SCRUBBER (FCV-4007) LEAVING ONLY A MINIMUM FLOW OF ABOUT 50 - 100 GPM GOING TO THE SCRUBBER.

A. The water flow to the primary scrubber is reduced to prevent splashing of the water from the scrubber back into the hot combustion chamber. This water can damage the hot refractory in the combustion chamber.

B. The stack on the incinerator will continue to pull a draft which will move some amount of air through the combustion chamber and the scrubbers.

C. Since some hot air will be moving through the scrubbers a close eye will have to be kept on the primary scrubber bed and stack temperatures to keep them from overheating. If the scrubber temperatures get too hot, then additional water will have to be added to the scrubber. (Use only the minimum amount of water).

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____ 2. SWITCH THE VCM II VENTS TO THE WTU INCINERATORS USING THE VENT SWITCHING SOP, 5606-007.SOP.

A. The vents must be switched before the pressure in the vent header gets too high (~6 psig) to cause a vent trip to the scrubber.

____ 3. **HAVE THE INCINERATOR AIR BLOWER RESTARTED AS SOON AS POSSIBLE.**

A. When the air blower is restarted water will have to be re-established to the primary scrubber to keep it from overheating.