

ZERO DISCHARGE (P-7007)

On October 13, 1982, the announcement was made that a zero discharge study program was to be implemented at Lake Charles and that a five member team would begin Phase I engineering work on certain pre-selected areas of the Complex. B. E. Evans, Central Engineering, is the Project Manager and T. C. Jeffery is the coordinator for team activities.

A "kick-off" meeting was held on October 19, 1982, but for a variety of reasons most team members were not active on the project until after the first of the year.

The scope of zero discharge as applied to PPG chemicals operations includes the following practices:

1. No process contaminated water will be discharged outside the plant boundaries.
 - a. Process waters are waters that come into direct contact with process, raw, intermediate, or product materials.
 - b. Process waters also include:
 - (1) Cooling tower and boiler blowdown
 - (2) Barometric condenser discharge
 - (3) Runoff from process pads*
 - (4) Once through heat exchanger cooling water at a lower pressure than the process
2. Storm runoff outside of process areas and higher pressure heat exchanger cooling waters are not process water.
3. SPCC controls will be established as necessary to prevent the discharge of spills and leaks outside of plant boundaries.

*System to be designed to contain a 24-hour, 25-year rain with pumps sized to a 15 minute, 25 year rain intensity rate. Reference is made to EPA 40CFR, Section 415.23 for a definition of Zero Discharge as applied by EPA to BAT for the aluminum sulfate industry.

(Alterations to this criteria may be necessary to develop a practical engineering design.)

(This is the only variance from the Natrium Zero Discharge Plant, which was designed for a steady rain fall rate of 1/2" per hour, continuously.)

For the zero discharge study at Lake Charles (P-7007), no process water stream may leave the area under study (24 areas), unless it is to be used for a definite desirable purpose in another area or is to be sold as a product.

The 25-year rain is defined by the Environmental Department as 10.1"/24 hours (6.3 gal./ft²) for containment purposes, and 2.1"/15 minutes (0.09 gpm/ft²) for pumping purposes.

11/1/83

ZERO DISCHARGE POLICY

IT IS THE OBJECTIVE OF PPG INDUSTRIES, INC., TO ACHIEVE THE GOAL OF THE CLEAN WATER ACT BY ELIMINATING THE DISCHARGE OF POLLUTANTS INTO NAVIGABLE WATERS OR INTO GROUNDWATERS. PPG WILL ASSIGN PRIORITIES TO THOSE PROCESS STREAMS WHICH DISCHARGE TOXIC POLLUTANTS AND WILL EMPHASIZE THE ACHIEVEMENT OF THE GOAL THROUGH PROCESS MODIFICATIONS TO RECYCLE, REDUCE, OR ELIMINATE POLLUTANTS WHERE PRACTICAL RATHER THAN BY SUPPLEMENTAL CONTROL TECHNOLOGY. SUCH ANALYSIS SHOULD RECOGNIZE AND AVOID THE PROBLEM OF MERELY SHIFTING POLLUTANTS FROM ONE MEDIUM TO ANOTHER.

ALL AUTHORIZATIONS FOR CAPITAL TRANSACTION REQUESTS TO CONSTRUCT NEW, OR MODIFY EXISTING, PROCESS UNITS SHALL INCLUDE AN ASSESSMENT OF THE PRACTICABILITY OF THE ELIMINATION, RECYCLING OR REDUCTION OF PROCESS WATER DISCHARGES AS WELL AS A COST-BENEFIT ASSESSMENT OF AVAILABLE TREATMENT TECHNOLOGIES.

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