

**THE UNIVERSITY OF MICHIGAN
MUNICIPAL STORM SEWER NPDES PERMIT MI0053902
1998 MID YEAR REPORT**

In accordance with Part III, paragraph C-2 of NPDES Permit MI0053902, the University of Michigan is required to submit a mid year report of activities associated with the storm water system program. This program is a requirement of the NPDES permit issued by the Michigan Department of Environmental Quality Surface Water Quality Division on December 19, 1995. This report covers the period July 1, 1997 through December 31, 1997 and follows the format identified in the permit.

1. *Provide a brief summary of the implementation status of the plans for the elimination of illicit discharges, public education, and storm water pollution prevention.*

In accordance with Part II, Storm Water Management Program, “the permittee shall submit an approvable Storm Water Management Program and program implementation schedule to the Jackson District Supervisor within one year after the effective date of this permit.” The draft document “Storm Water Management Program for The University of Michigan Ann Arbor Campus” was submitted to the MDEQ Jackson District office on December 10, 1996 for review and approval. Comments were received from Ms. Melissa Middleton, Soil Erosion and Sedimentation Control Program, on June 18, 1997 regarding erosion control methods employed during operation and maintenance activity. Those comments are under review and revisions are being implemented at this time. No additional comments have been received to date. The University has undertaken several items in the management of storm water runoff and pollution prevention.

- A survey of University owned/managed facilities, initiated by the Department of Occupational Safety and Environmental Health (OSEH), was completed in October 1997. Only one major concern was identified during this survey effort. Refer to Paragraph 2 below for a description of that concern.
- According to the Storm Water Program submitted to MDEQ, the University is divided into 4 distinct areas based on geographical separation - South Campus, Central Campus, Medical Campus, and North Campus. Dry weather screening was completed during this period on the South Campus. One suspect flow was identified during the survey and it is being investigated further. At this time it appears the flow enters the U-M system upgrade from our property. Once this is defined further, we will notify the appropriate agency for follow-up. A copy of the report of the screening program for South Campus is attached.
- Education programs are being undertaken in a formalized manner this year. The OSEH department has established a project with the School of Natural Resources and Environment (SNRE) to develop a formal education effort addressed at faculty, staff, students and visitors to the campus. Draft brochures and a master plan for the education effort have been prepared and are currently undergoing review by the advisory team from the U-M OSEH, Plant Utilities, Plant Grounds, Plant Waste Management, faculty, and students. The review process is expected to be completed by end of February and initial implementation should be in place by the fall semester. The second phase of the effort will be to identify potential use of mass media for getting the message to the audience. A storm drain stenciling project was also initiated by a group of students in October. This project is anticipated to continue in the spring when the weather improves. A copy of the news article regarding this effort is attached.
- Guideline documents have been prepared, in draft form at this time, and are undergoing final review. One Guideline outlines requirements of the University storm water permit and

program. It should be available on the U-M OSEH Web page in the near future for anyone to access. It will also be discussed at Plant Operations safety meetings in the future. The second Guideline outlines requirements for erosion control efforts and addresses concerns previously raised by Ms. Melissa Middleton. Once the review process is complete, it too will be on the Web page and briefed at safety meetings.

2. *Provide a report of illicit discharges and illicit connections removed, and schedules for illicit connections and their associated discharges yet to be removed.*

One “illicit connection” was identified in the last annual report that could not be corrected immediately. During the sewer system survey discussed in paragraph 1 above, a potential cross connection was identified at the G.G. Brown building on North Campus. Investigation of the building identified the following information:

- The structure was originally designed in the mid-1950s as a hydraulic engineering laboratory. The operations in the building used a considerable amount of water for hydraulic design studies, including large water tanks to study wave and seismic activity. The water was considered potable and no additives were involved. The drainage from the operations was connected to the storm water system. The only connections to sanitary sewer in the building were for the bathrooms.
- The building use has changed over the years and other activities now use the laboratory space. The majority of the structure has been converted to classroom and office space. Discharges from the building now include some contact and non-contact cooling water, hand-washing activity, and some sediment from suspended solid filtration design, soils, and concrete design laboratories.
- Dye testing initially performed last year identified a potential concern over the main connections from the building to the storm water system rather than the sanitary sewer. An investigation performed by the U-M Facilities Planning & Design mechanical engineer initially confirmed this based on building drawings. Additional dye testing showed the drawings were not updated through all the construction periods.
- In actuality, only the sinks five rooms in the building were cross-connected. Floor drains in various areas of the building were cross-connected, but were typically not being used.
- Based on the investigation efforts, a project has been initiated through Facilities Planning & Design to rework the plumbing systems in the five rooms. This project has been significantly scaled back from when it appeared the majority of the building was a problem. Once the scope of the project is fully defined, an updated cost estimate will be developed. The project completion is anticipated to be August 1998.
- Interim measures being taken at the building included education of building staff, faculty, and students on what can and cannot be placed in the drainage system, based on connection to either storm or sanitary. Non-essential sinks were shut off and signs were posted to tell personnel where active sinks are located. A system of buckets and periodic collection of the waste was put into place in rooms that required continued operation of the sinks. This program has been scaled back to just the five rooms in question until such time as the cross-connection can be fixed.