

## AM NO. 13-116

**TO:** Mayor Marchione and City Council

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**SUBJECT: STAFF REPORT: NPDES (National Pollution Discharge Elimination System) Western Washington Phase II Municipal Stormwater Permit**

*The Western Washington Phase II Municipal Stormwater Permit* (the NPDES permit) is a requirement of the Federal Clean Water Act and administered at a national level by the Environmental Protection Agency (EPA). In Washington State, the Department of Ecology is authorized by EPA to administer NPDES permits. Redmond is one of 85 western Washington cities of a similar size, all under an identical NPDES Phase II permit. Larger jurisdictions, such as the City of Seattle and King County, are under a separate permit that contains more extensive requirements—the NPDES Phase I Permit. The Phase II permit was first issued in 2007 and was effective through 2012; it was then extended one year by Ecology for economic considerations. A new permit with additional requirements will begin on August 1, 2013, and continue through December 31, 2018.

Even before the NPDES permit requirements, water resource protection was a community priority and Redmond had numerous programs in place. Compliance with the initial permit was mostly a documentation exercise of an already existing program. Moving forward, we have been anticipating new requirements. We have initiated regional facilities in our urban centers and are developing a watershed plan that will allow Redmond to be more strategic in our approach to water resource protection and compliance with the new NPDES permit. However, even with our progressive stormwater efforts, some program enhancements will be required to meet permit requirements. We will bring recommendations forward to Council as appropriate, consistent with the permit schedule.

### **Main Provisions of the NPDES Phase II Permit**

The NPDES Phase II permit enables the City of Redmond to discharge stormwater into Waters of the State in a manner that is compliant with the Federal Clean Water Act, provided that the City develops and implements a stormwater program that contains the following components:

### Five minimum control measures

1. Outreach and education to reduce or eliminate behaviors and practices that cause and contribute to stormwater runoff pollution.
2. A plan written for the general public detailing how the City will meet permit requirements and offer the public an opportunity to comment.
3. An Illicit Discharge Detection and Elimination (IDDE) to detect and prevent illicit connections and illicit discharges into the storm system, and responds to spills that can degrade surface water quality.
4. Stormwater regulations for new and redevelopment projects that require a plan review process, the use of construction best management practices, construction-site inspections and ongoing post-construction maintenance inspections. This applies to private and public development, including streets.
5. Actions to ensure that municipal operations and maintenance activities do not pollute stormwater and that public stormwater facilities are maintained.

### Three Major General Permit Conditions

In addition to the Minimum Control Measures the permit also contains general conditions that require specific actions—the three most significant of these require the City to:

- Conduct surface water monitoring or pay into a regional monitoring program.
- Prepare an annual report to the State Department of Ecology that tracks the City's compliance with permit requirements.
- Notify Ecology if we are not in compliance, including an approach for coming into compliance.

### **New Requirements in the 2013-2018 Permit**

The new permit contains a number of new provisions that will require various work groups within the City to take on additional tasks, change certain practices, and track their activities in a manner that is consistent with the NPDES annual reporting. The permit provides a degree of flexibility as to how permittees can go about meeting some provisions. The City's NPDES Coordinator is working with affected work groups to interpret permit provisions and create efficient compliance strategies.

There are three notable changes that will require substantial efforts to implement. These include:

***New Surface Water Monitoring Requirements***—a decision regarding how the City will choose to meet monitoring requirements is required by December 2013 and program implementation is required by August 2014. These new provisions require the City to conduct surface water quality monitoring by either paying into regional monitoring programs or by instituting local monitoring programs equivalent to the regional programs. At a maximum, this requirement will cost roughly \$35,000/year.

*Compliance Strategy:* The City is currently investigating the options provided in the permit to determine which best address City's needs and interests.

***Increased Maintenance of Municipal Stormwater Facilities Requirements***—required by August 2017. The new permit requires the City to clean all city-owned stormwater catch basins every 2-years—the previous permit allowed the City 5-years to complete this task.

*Compliance Strategy:* Provisions in the permit allow permittees to use reduced cleaning frequencies if there is data justifying this reduction. The City is looking to develop and evaluate asset management data to support reduced cleaning frequencies that are also protective of water quality.

***New Low-Impact Development (LID) Requirements***—required by December 31, 2016. LID is a system of stormwater management that uses infiltration, pervious pavement, green roofs, bioretention and other similar methods to treat and reduce the volume of stormwater runoff. The permit requires the City to comprehensively examine codes, development review processes, and maintenance operations actions in order to emphasize LID as the “preferred and commonly used” stormwater management technique. Implementation of this requirement presents some challenges because of the City's shallow drinking water aquifer and other areas where soils are not conducive to infiltration.

The new LID requirements were the major catalyst driving a coalition of western Washington municipalities to file a formal appeal against the new NPDES permit. These jurisdictions are seeking more time and more flexibility in which to implement the LID requirements. Redmond is supportive of LID stormwater methods and is not participating in this appeal. The court date for the appeal is October of 2013. The Department of Ecology has required permittees to continue to implement the permit as the appeal moves forward.

*Compliance Strategy:* City staff is currently monitoring the appeal and waiting to see if it will result in significant changes to the permit.

In addition, the permit allows permittees to substitute a set of prescriptive LID requirements that pertain to new and redeveloped construction, with locally customized requirements that have been developed during a watershed planning process and approved by the Department of Ecology. This being the case, the City will use the *Redmond's Watershed Management Plan* to determine how and where certain types of LID facilities should be placed within the City.

## **Summary**

The 2013–2018 Phase II NPDES permit will require various work groups throughout the City to take on additional stormwater management-related actions. Some of these changes will require additional funds and resources. By and large, however, the City is in a relatively good position to meet the new provisions within the permit: 1) because the City’s compliance usually entails altering already well-established programs, as opposed to creating new programs, and 2) because the *Redmond’s Watershed Management Plan* will enable the City to integrate the permit’s requirements in a more strategic manner that complements City goals and objectives.

## **Additional Resources**

*The City of Redmond Stormwater Management Program Plan* and *2012 NPDES Annual Report* are posted on the City’s website at: <http://www.redmond.gov/Environment/StormwaterUtility/NPDES/>. In addition, a presentation providing an overview of the NPDES permits is also available on the Puget Sound Regional Council’s website at: <http://www.psrc.org/assets/9546/06b-EcologyPresentation.pdf>.