

RESPONSE TO PUBLIC COMMENTS
UIC WPCF PERMIT FOR THE CITY OF PORTLAND

Department of Environmental Quality
Northwest Region
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CITY:	City of Portland 1120 SW Fifth Avenue, Room 1000 Portland, OR 97204
SOURCE LOCATION:	Jurisdiction of the City of Portland
SOURCE CONTACT:	Dean Marriott, Director of BES Telephone Number: 503-823-5224
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ACTION:	New Permit
SOURCE CATEGORY:	Stormwater
TREATMENT SYSTEM CLASS:	Class V Underground Injection Control Systems (UICs) for Stormwater
COLLECTION SYSTEM CLASS:	Municipal Stormwater and Incidental Non-Stormwater Fluids
PERMIT APPLICATION DATE:	July 1, 2002
PERMIT ISSUANCE DATE:	June 1, 2005
PERMIT EXPIRATION DATE:	May 31, 2015
PERMIT APPLICATION NUMBER:	985599
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The Department of Environmental Quality (Department) has issued an individual Water Pollution Control Facility Permit (WPCF) to the City of Portland to construct, operate and decommission city-owned or operated (public) drywells. The WPCF permit allows the City of Portland to manage stormwater through underground injection. The permit covers all existing and new public Class V Underground Injection Control injection systems (UICs). In preparation of this permit, the Department prepared a Fact Sheet and Evaluation Report, which is part of the permit as a separate document. On January 24, 2005, the Department posted a draft of the WPCF permit and Fact Sheet and Evaluation report for public review and comment. The comment period closed on March 14, 2005. A public hearing was held on February 23, 2005. The Department responded to public comments by modifying the WPCF permit language and providing more in-depth explanations, including data, for its decisions in developing permit conditions. The final permit and Fact Sheet and Evaluation Report reflect these modifications in response to public comments.

The Department received numerous comments on the permit from the public during the public comment period. Because many comments were similar, the Department grouped like comments. This document provides the Department's responses to public comments received.

No.	COMMENT	Number of COMMENTORS	SOURCE	DEQ RESPONSE
1	Permit should focus on installing and using BMPs for stormwater runoff to continue to prevent groundwater pollution problems from occurring.	4	ACWA, City of Eugene, Multnomah County; Portland	The permit is designed to effectively use BMPs to control stormwater discharge quality before discharge to a UIC.
2	Permit focuses excessive resources on monitoring and reporting that reduces funds available for pollution prevent.	3	ACWA, Eugene, Multnomah County	<p>A. The federal Safe Drinking Water Act (SDWA) is a numeric compliance-based act. The UIC program is under the federal SDWA. EPA has established numeric-based criteria for compliance with underground injection, which includes federal drinking water Maximum Contaminant Levels (MCLs) and human health-based standards. Oregon has primacy for the federal UIC program within the state and must comply with federal law at a minimum. [40 CFR Part 145, Subpart B; 40 CFR Part 136, 141; 40 CFR 144.12], [42 U.S.C. §300h]</p> <p>B. The Oregon Groundwater Protection Act and Oregon groundwater rules require groundwater protection for point and non-point sources. Each drywell is an individual point source even though pollutants in storm water may be considered a non-point source. Oregon UIC regulations require either a permit or closure for UICs that do not meet conditions for authorization by rule. Under Oregon groundwater protection regulations, permits required by point sources must specify groundwater quality protection requirements. Where there is a likely adverse impact to groundwater, the Department shall require through the permit groundwater quality protection that includes monitoring. The permittee has registered 9,904 UICs, of which 8,460 are active, there is a likely potential for adverse groundwater quality impacts. Therefore a groundwater quality protection program must be implemented. [ORS 468B.160(6)], [OAR 340-040-0020; OAR 340-040-0030(1) and (2); OAR 340-044-0014], [Oregon HB 3515 (July 2, 1989), Section 18, Section 19(6)].</p>

				<p>C. Oregon’s UIC and groundwater regulations are pollution prevention regulations. The groundwater regulations were designed for monitoring groundwater at a permitted facility such as a wastewater treatment plant. A scientifically valid groundwater monitoring program to demonstrate groundwater protection on an area-wide basis by the permittee would be complex and cost prohibitive. State groundwater regulations require groundwater monitoring to demonstrate the Permittee’s point sources (UICs) are not polluting groundwater. However, there are more than 30,000 private and public UICs that discharge within the city limits of Portland. The permittee-owned UICs represent less than 1/3 of the total UICs. It is very difficult to distinguish the influence of private sector from public sector UICs upon groundwater quality. Therefore, an area-wide groundwater monitoring program would be impractical, ineffective and cost prohibitive to demonstrate compliance. Recognizing the need to a) protect groundwater quality, and b) demonstrate the permittee’s injection activities prevent groundwater quality degradation, the Department designed the permit in a manner that the permittee can demonstrate groundwater protection and meet the intent of state groundwater regulations without cost prohibitive groundwater monitoring wells by establishing pollutant concentration limits for stormwater discharged into a permittee-owned UIC. This approach is very similar to effluent discharge quality limits placed on other WPCF permittees that discharge wastewater or other process fluids under a WPCF permit. The pollutant concentration limits for stormwater quality discharged to a UIC are mostly at the federal MCL, which is protective of drinking water quality. These discharge limits were reviewed by EPA Region 10.</p> <p>D. The number of UICs monitored each year represents 0.3 percent of the City’s active drywells. The permit requires that the number of UICs monitored and the volume of stormwater must be scientifically and statistically valid and the sampling design developed factors in land use drainage areas by traffic volume and patterns, stratification by traffic volume, and</p>
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				allows both fixed and random sample sites. The level of monitoring required in the permit is both valid and necessary to demonstrate groundwater protection by monitoring discharge at the surface during injection activities by the permittee.
3	Pollution prevention should remain the primary focus	2	ACWA, Eugene	Pollution prevention is a primary focus of the state's UIC and groundwater regulations. The permit complies with pollution prevention requirements by using effective BMPs to reduce or eliminate pollutants in stormwater before discharge into the subsurface. The permit also recognizes the ability of the natural geologic units to further attenuate pollutants carried in stormwater.
4	Municipalities are unable to accept numeric discharge standards for stormwater within their jurisdictions.	4	ACWA, Eugene, Gresham, Tri-Met	Numeric standards are required by state and federal regulations. The Department applies numeric limits to stormwater discharged to UICs. These numeric limits are set at the federal Maximum Contaminant Level (MCL) or human health-based limit if there is no MCL, with the exception of lead. The numeric limit for stormwater quality discharged to a UIC may exceed the MCL or human health-based limit if data supports a higher pollutant concentration in stormwater while remaining protective of groundwater quality for drinking water. The stormwater quality discharge limit for is set at 50 micrograms per liter ($\mu\text{g/L}$), which is above the 15 $\mu\text{g/L}$ MCL for lead. The higher lead concentration set in the permit remains protective of the existing high groundwater quality as discussed in the Fact Sheet and Evaluation Report. [OAR 340-044-0035; OAR 340-040-0030], [40 CFR 141 Subpart B; 40 CFR 144.12; 40 CFR 144.51(j); 40 CFR 144.54(b)].
5	Municipal [stormwater] programs are based on, and consistent with federal regulations that use BMP-based approach or more closely emulate the NPDES MS4 permit using BMPs to obtain a discharge quality standard to the Maximum Extent Practicable (MEP).	5	ACWA, Eugene, Gresham, Tri-Met, Clackamas County	<p>A. There are two federal acts that govern stormwater discharge, the Clean Water Act (CWA) with an endpoint of discharge to surface water and the Safe Drinking Water Act (SDWA) with the endpoint of discharge to groundwater. Municipalities with both CWA municipal separate storm sewer systems (MS4) and SDWA UICs must comply with the requirements for both federal acts.</p> <p>B. The CWA protects in-stream water quality with the presumption that the surface water will undergo treatment before use as drinking water. Surface water is typically not used as a direct source of drinking water without treatment required under the SDWA. The SDWA protects groundwater</p>

				<p>as an underground source of drinking water (USDW). Groundwater is a direct source of drinking water used without treatment in many cases. Drywells are point sources of stormwater discharge.</p> <p>C. The CWA requires municipal stormwater management and discharge programs. These are BMP-based. It allows adaptive management practices to meet in-stream water quality standards to the Maximum Extent Practicable (MEP). UIC program, under the SDWA, is strictly numeric-compliance based using federal MCL or human health-based standards when there are no MCLs. Provisions for adaptive management practices or application of MEP principals provided in the SDWA for stormwater discharge to Class V UICs. Although the State’s 1989 Groundwater Protection Act encourages use of BMPs to protect groundwater, The UIC program is a federal program which does not allow BMP adaptive management or MEP practices.[ORS 468B.160(4)], [40 CFR 144.12(a)].</p> <p>D. State UIC regulations require consideration of all other reasonable stormwater disposal alternatives before subsurface injection. Surface infiltration BMPs are encouraged. These are not UICs provided they are designed to infiltrate through surface soils or constructed filtration media such as a sandy loam. Significant pollution reduction is achieved in the upper 6 to 12 inches of the surface soil or loam filter media. Because natural attenuation ability of a soil is reduced with depth, discharge to UICs must have a pretreatment BMP. [OAR 340-040-0020; OAR 340-040-0030; OAR 340-044-0018(12); OAR 340-044-0014(1)].</p>
6	<p>Numeric limits do not account for reduction in pollution loads achieved by surface infiltration BMPs or the benefits provided by recharging groundwater via surface infiltration and subsurface injection.</p>	6	<p>ACWA, Eugene, Gresham, Tri-Met; Clackamas County; Portland Stormwater Advisory</p>	<p>A. As discussed the MADL numeric limits are based on several factors, including the capacity or natural attenuation in the unsaturated zone. Surface infiltration BMPs, in and by themselves, are not UICs and are not covered under this permit. Surface infiltration endpoint is groundwater. As previously discussed, pollution load reduction occurs in the upper 6 to 12 inches of the native soil of manufactured media of the surface infiltration BMP.</p> <p>B. Groundwater as a direct drinking water source is the endpoint</p>

			Committee	<p>for subsurface injection of fluids. Subsurface injection typically by-passes the shallow biologically active zone because of the depth where injection occurs. Natural biological processes to treat infiltrating stormwater diminish with depth. As a result, the natural attenuation capacity of the unsaturated zone diminishes with depth thereby increasing the risk of groundwater quality degradation from injection activity. OAR 340-040-0030 requires groundwater protection from permitted point sources. Because the active biological zone is by-passed and the natural attenuation capacity of the unsaturated zone is reduced with depth, numeric limits are established in the permit and concentration reduction oriented pretreatment is required.</p> <p>C. The numeric limits in Table 1 of Schedule A of the permit establish acceptable levels of stormwater quality that protect groundwater quality and take into account natural attenuation within the unsaturated zone. A discussion of the natural attenuation ability of the unsaturated zone underlying Portland for selected pollutants is in the Fact Sheet and Evaluation Report. Because of the lack of data for most pollutants listed in Table 1 of Schedule A, the Maximum Allowable Discharge Limits (MADLs) are set at the federal primary drinking water MCL. The degree of natural attenuation is dependent on several factors including local geology, separation distance to groundwater, land use and area drained by the UIC. The minimum MADL is the federal MCL or other health-based numeric standard if there is no MCL. The intent of meeting MADLs is that stormwater quality, through a combination of pretreatment BMPS and natural attention within the unsaturated zone, meet the groundwater quality protection requirements of OAR 340-040-0020 at groundwater and the intent of groundwater monitoring requirements of OAR 340-040-0030(2).</p>
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7	Use of PRGs and the requirement to report exceedances of PRGs for parameters analyzed but not listed in table 1 is inappropriate. PRGs leave the impression that a cleanup of contamination needs to occur.	4	ACWA, Eugene, Gresham, Portland	<p>A. When a monitoring program is developed, minimum reporting limits (MRLs) are established in the program so the Permittee and the Department have set expectations for the quality of the data. The public draft version of the permit uses the EPA Region 9 Preliminary Remediation Goals (PRGs) for Tap Water to establish the expected MRL for stormwater. Based on public comment and in consultation with EPA Region 10, the Department amended the condition. For stormwater, the minimum reporting limit (MRL) for pollutants shall be sufficiently sensitive and have a concentration as determined by EPA SW-846 methods, standard of industry practices, or use of best available technology that has been validated and demonstrated that it is appropriate for the intended use of the data, which ultimately is to demonstrate groundwater quality protection while discharging storm water to the subsurface. The Department expects the Permittee to provide MRLs in its Stormwater Discharge Monitoring Plan.</p> <p>B. Groundwater is a direct drinking water source with no treatment in many cases. If groundwater monitoring is conducted under the permit, the Permittee must develop a QA/QC program that would achieve MRLs that are 1/10th of the EAP Region 9 PRG for Tap Water to demonstrate protection of human health. If this level of MRL can not be technologically reached because PRGs are based on a human health risk factor of 10⁻⁶, not analytical equipment capabilities, then the Permittee must propose an appropriate MRL in its groundwater monitoring plan for Department approval. [OAR 340-040-0030(3)(b)], [40 CFR 144.12(a)].</p>
8	The Department should further consider the soil separation [unsaturated zone] between the bottom of the [UIC] and the receiving aquifer to provide treatment (reference to OAR 340, Division 71, On-Site rules), and the stormwater reaching the aquifer to be mixed.	3	ACWA, Eugene, Portland Stormwater Advisory Committee	<p>A. As discussed in the Fact Sheet and Evaluation report, the Department reviewed published literature and data made available to the Department to assess the natural attenuation capacity of the unsaturated zone. The MADLs in the permit were developed from this literature and data review. In establishing the MADLs, the Department also considered a conservative estimate of stormwater mixing in groundwater that occurs between the point of injection and a groundwater monitoring well. However, it is the permittee's</p>

				<p>responsibility to provide the information to support a numeric limit for the stormwater discharge quality when the permit application is submitted. For this permit, the City funded the data and literature review conducted by the Department through the legislature-approved receipts authority process.</p> <p>B. Application of the On-site rules (OAR 340, Division 71) is inappropriate. These rules are designed for small volumes of human waste and the removal of fecal bacteria by natural biological processes that are present only within the shallow (less than 5 feet) aerobic zone of the natural soil.</p>
9	<p>Appropriate separation distance should be set at the local level. Separation distance should be based on:</p> <ul style="list-style-type: none"> a. depth to groundwater, b. local geology, c. weather patterns, d. number of UICs, e. drainage land use, and f. other factors. 	3	ACWA, Eugene, Clackamas County	<p>A. Vertical separation distance in the permit is based on:</p> <ul style="list-style-type: none"> a. Mechanical filtration ability of the unsaturated zone to remove fecal and <i>e. coli</i> bacteria, and b. The ability of the unsaturated zone to achieve natural attenuation of pollutants. <p>B. In the permit, the minimum separation distance applies vertical separation to mechanical filtration of bacteria. In addition, the use of natural attenuation takes into account pollutant concentrations in stormwater associated with land use.</p> <p>C. The number of UICs has no bearing on vertical separation distance between the bottom of the UIC and groundwater. However, the number of UICs (horizontal separation or UIC density) may cause overloading of the natural attenuation capacity of the unsaturated zone and must be considered as required by federal regulations. Effective BMPs and BMP maintenance are critical to setting vertical and lateral separation distances.</p> <p>D. If a UIC can not meet the minimum separation distance, then its operation does not conform to state and federal regulations. It must be either closed or other corrective action taken such that the minimum separation distance is achieved.</p> <p>E. One commenter states that no minimum separation distance is required. No separation distance means direct discharge into groundwater. This is prohibited. Further, a strict interpretation of state regulations for UICs under rule authorization [(OAR 340-044-0018(3)(a)(H))] requires any other owner or operator of a UIC that requests rule authorization to provide scientific evidence or other reliable documentation that a confining barrier exists or the UIC has</p>

				<p>an engineered pretreatment system. The burden to demonstrate that this rule condition is met falls upon the UIC owner/operator. For UICs under a WPCF permit, the state has flexibility under state regulations to develop permit conditions that protects groundwater while maintaining flexibility in stormwater management.</p> <p>[40 CFR 144.12(a); 40 CFR 144.33(c)(3)], [OAR 340-040-0020; OAR 340-044-0012(2); OAR 340-044-0018(1)(c); (OAR 340-044-0014)].</p>
10	Permit should acknowledge and encourage BMPs that reduce stormwater volume. Natural stormwater management systems such as grassy swales, stormwater infiltration planters, or other green building techniques.	5	ACWA, Eugene, Tri-Met, Multnomah County, Gresham	<p>Please refer to response to comment Item Nos. 5 and 6. Injection activities through UICs do recharge groundwater. However, state and federal regulations require the discharge water to be “clean”. The permit does encourage use of stormwater volume reducing and “green” BMPs. It also discourages new UICs unless no other reasonable alternative is available to receive stormwater runoff discharge. Surface infiltration BMPs such as grassy swales, surface infiltration ponds and planters or other “green building” technologies are not UICs and are not covered under this permit.</p> <p>[OAR 340-040-0020; OAR 340-040-0030(3)(b); OAR 340-044-0014], [40 CFR 144.12(a)].</p>
11	Permit focuses too much on monitoring.	4	ACWA, Eugene, Tri-Met, Multnomah County	<p>A. Discharge of stormwater into UICs poses a risk to groundwater quality. The most effective natural attenuation zone in the subsurface is the upper 5 to 10 feet of the unsaturated zone. With UIC discharge typically 25 to 30 feet below ground surface (>15 feet below the most effective natural attenuation zone, the natural ability of the unsaturated zone to remove pollutants may be reduced. It is necessary through monitoring that groundwater is protected.</p> <p>B. The endpoint of discharge from UICs is groundwater. Groundwater is protected as a drinking water source without the need for pretreatment. The permit is specifically designed to protect groundwater by establishing MADLs for stormwater quality before it is discharge. It is more effective and less costly to manage stormwater quality before it is discharged, than to use groundwater monitoring as an after-the-fact compliance demonstration. It is better and proactive to not pollute groundwater by controlling the discharge quality before injection, then to monitor groundwater at compliance points after injection. Reliance on monitoring for urban</p>

				<p>pollutants before discharge is fundamental to the permit design. Meeting the MADLs established in the permit protects groundwater quality. Reliance on monitoring with numeric limits is both necessary and mandatory.</p> <p>C. Unlike the BMP-based, benchmark-oriented and adaptive management-focused NPDES MS-4 permit, the federal Safe Drinking Water Act requires compliance with numeric concentrations that protect underground sources of drinking water. The UIC WPCF permit is performance-based that requires monitoring with numeric limits for stormwater discharge to UICs.</p> <p>D. State groundwater regulations require groundwater quality protection from permitted point sources. State UIC regulations require municipalities with ≥ 50 UICs to monitor the quality of stormwater discharged to a UIC in order to demonstrate groundwater quality is protected from injection activities. The permit requires the permittee to demonstrate groundwater quality is protected. This is accomplished by establishing and complying with numeric limits for pollutants in the discharge fluids. Otherwise, the permittee must develop and implement a costly groundwater quality monitoring program as defined in OAR 340-040-0030.</p> <p>E. Under federal regulations, all permits must comply with the conditions of 40 CFR Part 144, Subpart E which includes monitoring and reporting requirements. [OAR 340-044-0035; OAR 340-040-0030], [40 CFR 144.51(j); 40 CFR 144.54(b)].</p>
12	Five monitoring events are not practicable.	3	ACWA, Eugene, Tri-Met	Stormwater quality compliance is based on the annual mean of the sampling events. A minimum of 5 sampling events to determine the annual mean is based on the Reasonable Potential Analysis approach documented in the US EPA <u>Technical Support Document for Water Quality-Based Toxics Control</u> (March, 1991). The permit allows the permittee to determine the annual mean concentration of a pollutant for less than 5 sampling events when conditions beyond the permittee's control occur.
13	Priority pollutants scan not needed since most of these pollutants have not been typically detected in stormwater.	2	ACWA, Eugene	The pollutants listed in Table 1 of Schedule A as Priority Pollutant Scan pollutants are detected in stormwater (see Fact Sheet and Evaluation Report reference - Pitt, 1996). Most of these pollutants are organic

				compounds not analyzed under the Municipal NPDES MS-4 program. Therefore, the priority pollutants are listed in Table 1 of Schedule A as verification they are not present in Portland stormwater runoff. The analyses occurs 3 times during the 10-year permit duration, with a total of 48 drywells being sampled for priority pollutants over the duration of the permit.
14	BMP effectiveness testing better suited by a university or EPA Environmental Technology Verification program. It is not appropriate for the permit.	5	ACWA, Eugene, Tri-Met, Multnomah County; Clackamas County	<p>A. Groundwater as a direct drinking water source must be protected. Stormwater discharge quality is monitored to demonstrate groundwater quality protection. The stormwater discharge quality is dependent on effective concentration-reducing BMPs, which are required to augment natural attenuation. BMP operation and maintenance is a critical component to BMP performance. The permit requires demonstration that technologies used or will be used as pretreatment BMPs for UICs effectively remove pollutants to levels that, in combination with natural attenuation, protect groundwater quality.</p> <p>B. BMPs used with stormwater discharge quality management to surface water bodies or surface infiltration are not covered under this permit requirement. These BMPS are evaluated under the City's NPDES MS4 permit.</p>
15	Quarterly update of UIC registration database is excessive.	3	ACWA, Eugene; Clackamas County	Under the permit, the permittee may self-register its public UICs. The EPA requires quarterly reports from Primacy states. Oregon is a primacy state. In order for Oregon to meet its reporting requirements, the permit requires quarterly reports from the permittee. These reports are electronically submitted and limited to new, modified and closed UICs that occurred during the reporting period.
16	24-hour notification for exceedance of an MCL with 7-day written follow-up is excessive.	4	ACWA, Eugene, Gresham; Clackamas County	<p>The Public Draft version of the permit required a 24-hour notification and a 5-day written notification of a MCL exceedance. Based on public comment, the Department amended the reporting requirements in the final permit as follows:</p> <ul style="list-style-type: none"> • For individual storm event MADL exceedance, the Permittee must notify the Department within 7 days after review, but not exceeding 30 days after receipt of the laboratory data; • For an annual mean MADL exceedance, the Permittee must notify the Department in writing within 7 days of determining the exceedance; and • For groundwater, upon confirmation of exceedance of a

				groundwater compliance limit, the Permittee must notify the Department in writing within 7 days after review, but not exceeding 30 days after receipt of the laboratory data.
17	Multiple reports are required, condense to a single annual report.	4	ACWA, Eugene, Tri-Met, Gresham	Multiple reports are required in the permit. 24-hour and 7-day reporting has been amended as discussed above. Monitoring reporting is required by July 15 of each year. This is to allow the Department time to review the data, exceedances and proposed compliance response action before the on-set of the next wet season. The first annual UIC Management Plan (UICMP) report is due December 1, 2006 and each subsequent annual UICMP report due Nov. 1 of each year, thereafter. The November 1 annual report date coincides with the annual report due date under the NPDES MS-4 permit. This is to provide the permittee the option to economize by incorporating UIC program reporting in the NPDES report and submit a single annual stormwater management program report to the Department. The permittee may elect to combine the UIC MP annual report with the monitoring report, otherwise, the two annual report requirements remain. Other compliance and reporting dates have been consolidated to economize reporting efforts. Major compliance and reporting dates are presented in Table 3 of the final permit.
18	Some municipalities may choose not to have Rule Authorization covered under the permit. [Page 2, Permitted Activities a.]	2	ACWA, Eugene	This is true. There are advantages and disadvantages to incorporate all UIC that meet rule authorization (RA) criteria into a UIC WPCF permit. Each municipality needs to weigh such decision based on what works best for the municipality. The City of Portland chose to incorporate RA UICs into the permit.
19	The list of permitted fluids is not the list the Department has on public notice as part of the Phase 1 MS4 permits. [Page 5, Schedule A.3.h]. Road washwater and building washwater not included.	3	ACWA, Eugene, Clackamas County	A. The comment is correct. There are distinct differences in the discharge endpoints and beneficial use expectations under the NPDES MS4 (surface water endpoint) and the UIC WPCF (groundwater endpoint) permits. Surface water is not expected to be a direct drinking water source. Treatment is required of surface water before it is used as drinking water. Groundwater historically and currently is a direct drinking water source without expectation of treatment before use. Therefore, the SDWA and the UIC WPCF permit establish numeric limits to a) protect groundwater quality as drinking water and b) protect human health during consumption of groundwater as drinking water.

				<p>B. The Department reviewed the list of “other fluids” allowed to discharge to surface water under the NPDES MS4 and determined fluids that would not pose a likely adverse impact to groundwater quality. Precautions are required for some “other” fluids. As an example, precautions must be taken to protect UICs from firefighting discharges, unless the protection jeopardizes firefighter safety. In any event, the permittee is responsible to comply with the numeric and/or human health-based standards for any fluid discharged into the UIC. Ultimately, the City of Portland is responsible to protect groundwater quality during injection activities of city-owned UICs. [OAR 340-044-0014; OAR 340-040-0020].</p>
20	Health and Safety (H&S) requirements should be handled by Oregon OSHA, and not incorporated into a DEQ permit. [Page 9, Schedule b.2.b.vii].	2	ACWA, Eugene	Permit language is amended in the final version of the permit to require the permittee to comply with Oregon OSHA health and safety requirements and the City’s health and Safety policies during sampling events.
21	Other municipalities will need different time lines to address necessary actions in the corrective action plan. [page 18, Schedule C.8].	2	ACWA, Eugene	<p>A. Time lines in Schedule C are the maximum times negotiated with the permittee and developed to meet the broader regulatory requirements of EPA Region 10.</p> <p>B. The duration to correct non-compliant UICs for each municipality under a UIC WPCF permit will be considered on a case-by-case basis.</p> <p>C. As of September 20, 2001, operating a UIC that does not meet the conditions for authorization by rule or is covered under a permit violates state and federal regulations governing UICs. State UIC regulations do not allow a “grace period”. Therefore, owners and operators of UICs that operate UICs without either rule authorization or under a permit are out of compliance with the States and federal UIC regulations and may be subject to state or federal or both enforcement actions. In addition the owners or operators of non-compliant UICs may be liable under the citizen lawsuit provisions of the federal SDWA. [OAR 340, Division 44; OAR, Division 12], [42 U.S.C. §300h; 42 U.S.C., § 300j-8(a)(1)].</p>
22	In appropriate language for new UICs. [Page 20, Schedule D.3.a].	3	ACWA, Eugene; Clackamas	The language proposed by the commenter is appropriate for UICs that are rule authorized. The language in the permit was negotiated with the City of Portland and reflects the condition of the City’s stormwater

			County	management system. The permit language allows flexibility for the City to manage its stormwater runoff to the extent allowed under state and federal UIC regulations..
23	Vactor waste testing and disposal. [Page 28, Schedule F.2.b.]	3	ACWA, Eugene; Clackamas County	Language in Schedule F.2.b is amended in the final permit to read: “The Permittee shall dispose or otherwise manage any soil, gravel, sludge, liquid, or other material removed from or adjacent to a UIC shall be in accordance with 40 CFR 144.82(b).”
24	Advance notification of changes that may result in a permit violation. [Page 29, Schedule F.4.]	2	ACWA, Eugene	This condition shall remain. Permits for other municipalities may have different requirements specific to the permittee UIC system conditions.
25	Inclusion of perched groundwater in the definition for seasonally high groundwater appears inappropriate. [Page 33, Schedule F.5.II].	2	ACWA, Eugene	Oregon Water Resources Department(WRD) defines perched groundwater. WRD recognizes perched groundwater as a drinking water resource. Federal UIC regulations require protecting underground sources of drinking water from subsurface emplacement of fluids. State regulations require all groundwaters of the state to be protected from pollution that could impair existing or potential beneficial uses for which the natural water quality of the groundwater is adequate. Because perched groundwater can be and is used as drinking water, it must be protected. Therefore perched groundwater and its protection requirements shall remain in the permit. [OAR 690-200-0046; OAR 690-200-0050(72)], [OAR 340-040-0020(3)], [40 CFR 144.12(a)].
26	The proper reference to WPCF is “Water” Pollution Control Facilities. [Page 33, Schedule F.5.xx].	2	ACWA, Eugene	Correction made.
27	Permit creates a set of rules vastly different from current stormwater regulations.	2	ACWA, Eugene	The Stormwater discharge requirements to UIC are vastly different from the requirements to manage and discharge stormwater under the CWA. The permit does not create a set of rules vastly different from stormwater regulations. If a permittee does not choose to comply with the SDWA requirements for stormwater discharge to a UIC or with the State’s groundwater protection regulations, then the permittee must close all its UICs. The permit is consistent with and complies with the federal regulations under the SDWA and complies with the groundwater protection regulations of OAR 340, Division 40.
28	Permit is difficult to read with many references	6	ACWA,	The permit uses the Department’s standard WPCF permit format.

	to other sections of the permit. Missing words, phrases or sentences.		Tri-Met, City of Eugene, Gresham; EPA; Bidleman	References to other sections of the permit were made at the applicant's request. Typographical errors, missing words, phrases or sentences have been corrected.
29	Permit should contain a compliance time-line matrix.	1	Tri-Met	Done.
30	The requirement that stormwater discharge to a UIC must meet drinking water standards is inappropriate and not effective use of public money.	3	Tri-Met, Multnomah County, Clackamas County	<p>A. The SDWA and state UIC regulations prohibit the injection of any fluid in any manner that allows the movement of fluid containing any contaminant into underground sources of drinking water (USDW), if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR part 142 or may otherwise adversely affect the health of persons. [40 CFR 144.12(a)]. Oregon regulations further prohibit any fluid discharge that may fail to comply with the groundwater quality protection requirements specified in OAR 340-040.</p> <p>B. EPA defines the <i>point of injection</i> as the last accessible sampling point prior to waste fluids released into the subsurface environment. [40 CFR 144.3; 40 CFR 146.3]. EPA, in the applicant review draft permit comments, applies the drinking water quality standards at the point of injection. The Department considers this unreasonable and applies the groundwater protection criteria of OAR 340-040 at groundwater. The Department has established discharge limits at the point of injection and considers the sampling point to be the end-of-pipe discharge into the dry well after any pretreatment BMP.</p> <p>C. The stormwater quality discharge limits may be set higher than drinking water standards provided the permittee demonstrates the higher pollutant concentration meets the conditions of OAR 340-040 at groundwater. Unless otherwise demonstrated to be protective, the MADLs in Table 1 of Schedule A are set at the federal MCLs. If a MCL does not exist, then the numeric human health-based criteria is set as the discharge limit. The burden is upon the permittee to demonstrate a higher MADL is appropriate.</p>
31	Permit should take a flexible interpretation of the rules and regulations in order to facilitate	3	ACWA; Eugene;	The SDWA is protects drinking water without consideration to other beneficial uses of groundwater in a watershed context. In developing

	sensible watershed management.		Gresham	the permit , the Department considered and built into the permit as much flexibility as rules and regulations allow, and considers the natural attenuation of unsaturated soils, to further remove pollutants in stormwater. The permit allows discharge to UICs that otherwise is not permitted under rule authorization. However, stormwater discharge limits must be applied or groundwater monitoring undertaken to demonstrate compliance with a numeric-driven permit. Both approaches are resource extensive and costly. The permit encourages surface infiltration of stormwater, yet allows injection from new and existing UICs through a hierarchical approach. [OAR 340-044-0014], [40 CFR 144.12(a)].
32	Stormwater pollutants are fundamentally a non-point source pollution issue.	1	Gresham	The Department concurs. The Department also recognizes a) municipalities reduce the amount of pollutants in stormwater discharged into a UIC through structural and non-structural BMPs, and b) low cost, low-tech sediment manholes when properly maintained are effective pre-treatment controls in residential or low density non-commercial/industrial land uses as discussed in the Fact Sheet and Evaluation Report.
33	Statistically valid sampling design can be costly to develop and implement; the permit should allow municipalities to combine resources.	2	ACWA, Gresham	Each WPCF permit is an individual permit. The Department is not opposed to a combined monitoring approach that economizes and effectively uses available resources to meet permit conditions. In this case, the applicant applied for and is being issued an individual UIC WPCF permit. The applicant may request a permit modification to implement a joint monitoring program with other municipalities.
34	Permit should allow for a compliance point other than end-of-pipe discharge into the drywells.	1	Gresham	Most drywells receive discharge from either a catch basin or sediment manhole. If a UIC has a filter within the drywell itself, then the compliance point and sampling can be at the end of the treatment within the drywell.
35	The current permit language should be modified to specifically require the permittee to address all elements outlined in the final version of the Fact Sheet and Evaluation Report in the Sap and QAPP submitted as part of the permit-required Stormwater Discharge Monitoring Plan (SDMP)	1	EPA	The final version of the permit contain language that specifically references and incorporates into the permit the SAP and QAPP sections of the final Fact Sheet and Evaluation.
36	The permit does not clearly delineate how the permittee is responsible for providing	1	EPA	The permit requires a statistically-valid SDMP that is stratified by traffic volume. The final Fact Sheet and Evaluation report explains the

	representative sampling of all types of stormwater that may be received by a Class V UIC well, i.e. residential, commercial industrial. The permit does not specifically state the statistically based sampling plan must adequately cover all types of anticipated stormwater and likely contaminants to be received by the wells.			Department's intent and the relationship of traffic volume and patterns with land use. Residential land-use areas consistently have <1,000 trips per day (TPD). Commercial, industrial and high transportation land uses consistently have >1,000 TPD. The permit clearly requires the permittee to develop a statistically valid SDMP sampling design based on the EPA NHEERL sampling design plan for the City of Portland UIC system. The plan requires 50% of sites <1,000 TPD areas (residential land use where the majority of the UICs are present) and 50% in >1,000 TPDs. Breakdown of UICs by traffic volume indicates nearly equal number of UICs in each category. With random sampling in addition to fixed locations, the permittee's UICs will be represented. The Permittee has informed the Department it intends to propose in its Stormwater Discharge Monitoring Plan a scientifically and statistically valid sampling design that samples a total of 24 UICs/years, which meets permit requirements. Over 10 years with 5 storm events per year, this represents a total of 1,200 samples from at least 130 UICs split evenly between the land uses represented by traffic volume.
37	It is unclear how ODEQ will verify groundwater protection in the long-term if groundwater sampling is not specified in the permit.	1	EPA	Federal regulations prohibit injection activities in a manner that allows the movement of fluids containing any contaminant into underground sources of drinking water (USDW), if the presence of that contaminant may cause a violation of any primary drinking water regulation or may otherwise adversely affect human health. Primary drinking water regulations are the federal Maximum Contaminant Levels (MCLs), which are human health based. In Table 1 of Schedule A, most MADLs are the federal MCL. When it can be demonstrated that a higher MADL concentration is protective of human health in groundwater, then the higher MADL is applied. For pollutants that have no MCL, the MADL is established at a concentration that is protective of human health based on consideration of other factors such as the preliminary remediation goals (PRGs) for tap water, natural attenuation, and dilution that naturally occurs. If the stormwater pollutant concentrations are less than or equal to the MADLs, then the stormwater discharge is protective of human health at groundwater. Groundwater monitoring is not necessary as long as the MADLs are being met. [40 CFR 144.12(a)], [OAR 340-040-0020 (4) and (5)].
38	The definitions of "non-compliant" and "separation distance" do not provide ODEQ	1	EPA	Comment taken under consideration. The final permit language amended as follows:

	<p>the authority to determine what type of pretreatment and when pretreatment is adequate for UICs located and operated within water well setbacks.</p>			<p><u>Schedule F.5.gg: Non-compliant</u> means a public UICs meets any of the following conditions:</p> <ul style="list-style-type: none"> i. It is within 500 feet of a domestic or irrigation well and does not meet the water quality limits established in the permit; ii. It is within 500 feet of a public water well serving a public water system and does not have a Department of Human Services groundwater time-of-travel (TOT) delineation and the water quality of the discharge does not meet the water quality limits established in the permit; iii. It is within the 2-year TOT delineated by the Department of Human Services (DHS) for a public water well or wells serving a public water system and the water quality of the discharge does not meet the water quality limits established in the permit; iv. Any public UIC that does not meet the water quality discharge limits established in the permit at the end-of-pipe discharge point into the public UIC; v. Any public UIC that has insufficient separation distance, as determined by the Department, between the bottom of the injection well and groundwater to protect the natural water quality; or vi. Any public UIC that is constructed into groundwater, causes direct discharge of fluids into groundwater, or causes a violation of OAR 340-040-0014(1). <ul style="list-style-type: none"> • <u>Schedule F.5.tt: Separation Distance</u> means the distance in the unsaturated zone, confinement barrier or engineered filtration medium between the bottom of the public UIC and groundwater, and prevents contaminants from reaching groundwater. Under no circumstance shall a separation distance between groundwater and the bottom of the public UIC be less than 5 feet, unless specifically authorized in writing by the Department, that protects groundwater to primary drinking water regulations under the federal Safe
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				<p>Drinking Water Act (SDWA), or complies with the groundwater protection requirements specified in Oregon Administrative Rules (OAR) 340-40, including Concentration Limit Variances (CLVs) established as a permit condition under OAR 340-040-0030, or may protect human health. For this permit, minimum separation distance between the bottom of a public UIC and groundwater and must meet the following conditions to physically remove fecal coliform and <i>E. Coli</i> bacteria established in Table F-1 as follows:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="2" style="text-align: center;">TABLE F-1 Minimum Separation Distance for Biological Filtration</th> </tr> <tr> <th style="text-align: center;">Depth of UIC</th> <th style="text-align: center;">Minimum Separation Distance Between UIC and Groundwater¹</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">≤5 Feet</td> <td style="text-align: center;">5 Feet</td> </tr> <tr> <td style="text-align: center;">>5 Feet</td> <td style="text-align: center;">10 Feet</td> </tr> </tbody> </table> <p>¹ For a dry well, it is distance measured from the last perforation, or joint with bottom sediment trap ring. For a soakage trench, French drain, or other infiltration trench, it is the distance measured from the trench bottom.</p>	TABLE F-1 Minimum Separation Distance for Biological Filtration		Depth of UIC	Minimum Separation Distance Between UIC and Groundwater ¹	≤5 Feet	5 Feet	>5 Feet	10 Feet
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39	Alteration of punctuation in “mark-up” version of public draft permit necessary for federal compliance of the permit.	1	EPA	Punctuation corrections made.								
40	The word “acceptance” should be “approval”	1	EPA	The Department accepts a permit required document for review by the Department and posting for public comment as necessary. The Department may approve, require revisions, or decline to approve the document. Where appropriate, the term “approval” is used.								
41	Appropriate and acceptable analytical methods for monitoring.	1	EPA	Language provided by EPA was considered and amended as deemed appropriate by the Department to meet intent for low analytical detection limits.								
42	Concern is expressed over equitable application of UIC rules related to underground injection.	1	Clackamas County	The UIC regulations apply to all owners of UICs. With limited resources to implement the UIC program and enforce regulations do give an appearance of inequitable application of the regulations. The Department is working with multiple private and public owners of UICs to come into compliance with state and federal regulations. Those requiring permits must apply for the permit. Operation of a UIC without								

				<p>rule authorization or permit is subject to independent enforcement actions with civil penalties based on each day of violation per non-compliant UIC by both the Department and the US EPA. The Department has requested EPA assistance for enforcement of UIC regulations upon a number of private and public facilities, including the City of Portland which led to the issuance of this permit. The Department will continue to refer facilities to EPA for enforcement action until such time as the Department has the resources to undertake its own enforcement actions. Regardless whether there is an appearance of inequitable application of the UIC regulations, owners, operators, the Department and the US EPA are subject to citizen lawsuits under the SDWA for operating non-compliant UICs or failure to enforce federal regulations governing UICs. [OAR 340, Division 12; OAR 340-044-0014; OAR340-044-0015; OAR 340-044-0018(1); OAR 340-044-0035], [42 U.S.C. § 300j-8(a)(1)];</p>
43	<p>Strict reading of rules (OAR 340-044-0018(3)(a) prohibits wastes such as those resulting from residential car washing, bird, animals, or other human activities.</p>	1	Clackamas County	<p>Injection activities that allow the direct or indirect movement of fluids containing contaminants into groundwater, if the presence of the contaminants may cause violation of the federal MCLs or fails to comply with state groundwater protection regulations are prohibited, unless the injection activity is allowed under a permit. The Department applies the federal and state groundwater protection regulations at the water table. Under rule authorization, it is presumed groundwater is protected if the RA conditions are met. Under the permit, the Department has established discharge limits for stormwater, which include any fluid discharged to a UIC. These limits are protective of groundwater and meet state regulation requirements. [OAR 340-044-0014; OAR 340-044-0018(1)(c); OAR 340-044-0035; OAR 340-040-0020].[40 CFR 144.12(a) and (b)]</p>
44	<p>The permit should not be viewed as a template for other municipalities, It was developed in a bi-lateral manner between the City and the Department. It was not developed in an open, multi-lateral manner and should not be applied to other public jurisdictions.</p>	1	Clackamas County	<p>This is an individual Water Pollution Control Facilities permit designed specifically for the permittee’s UIC system. It was developed in cooperation with the permittee and EPA Region 10. General permit provisions were discussed with representatives of several municipalities who are members of Oregon Association of Clean Water Agencies (ACWA). ACWA members were also made privileged to early drafts of the permit by the permittee. Elements of the permittee’s WPCF permit that are applicable to other permits will be applied to other UIC permits. Elements specific to each permittee’s UIC system will be negotiated</p>

				independently.
45	Groundwater quality does not appear to have been harmed by stormwater discharge. The draft permit appears overly restrictive when compared to the March 2004 MS4 permit. Proposed permit restrictions appear unfounded and disproportional to the potential risk to groundwater quality. Current state UIC rules provide significant protection for groundwater.	1	Clackamas County	Oregon's UIC and ground water protection regulations are preventive and protection regulations. Oregon regulations require a permit when there is a likely adverse impact to groundwater. Although area-wide general groundwater quality does not appear to be significantly impacted, there are 8,460 active injections systems covering all land use activities within the permittee's jurisdiction poses a substantial risk to groundwater quality. As discussed in item #5, 6, 18, 27 and 30 above, Stormwater discharge to UICs is regulated under the federal SDWA.
46	Extend time frame to report and correct non-compliant UICs.	2	Clackamas County, Gresham	<p>A. Current state regulations governing UICs have been in effect since September 20, 2001. State regulations require either closure or placement under a permit UICs that do not meet rule authorization conditions, discharge directly to groundwater or meet other conditions that would otherwise prohibit underground injection activities. For known non-compliant UICs, the time frame specified in the permit is adequate to rank, report and provide a schedule to correct.</p> <p>B. Tying corrective action to the CIP allows some extended flexibility over the standard requirement of complying within 365 days which may be out-of-sync with funding cycles.</p> <p>C. Any discharge to a UIC that does not meet current state UIC or groundwater protection regulations are in violation of state and federal regulations and subject to independent enforcement actions by the state and EPA. To knowingly discharge to a non-compliant UIC constitutes a negligent action by the UIC owner/operator and is a Class 1 violation subject enforcement action under state regulations with penalties up to \$10,000 per day per event, i.e. each non-compliant drywell is subject to penalties dating back to September 20, 2001. Owners of non-compliant UICs are also subject to citizen lawsuit provisions of the federal SDWA.</p> <p>D. The permit allows three full annual Capital Improvement Project cycles to bring a non-compliant UIC into compliance with permit conditions. In addition, the permit allows the Permittee to request a one year extension, if compliance can not be met within the 3 full CIP cycle. Total time from discovery to completion of a corrective action may be as much</p>

				<p>as 5 years under permit conditions. Further, if the non-compliant condition is an area-wide issue which requires more than the 3 full CIP cycle to correct, the permit allows the Permittee to amend its compliance schedule by requesting a permit modification, or the Department may issue a Department Order to address the specific non-compliance issue. There is more than adequate time for an owner/operator of a non-compliant UIC to design a corrective action, fund it, contract it and implement the action. No additional time will be allowed under this permit or any other UIC WPCF permit. [OAR 340-040-0020; OAR 340-044-0014; OAR 340-012], [42 U.S.C., Chapter 6A, Subchapter XII, Part E, § 300j-8(a)(1)].</p>
47	Mixing zones need to be provided in the permit within the area immediately surrounding the UIC.	1	Clackamas County	<p>A. Neither Oregon groundwater protection regulations, nor federal UIC regulations provide for mixing zones. However, a pollutant naturally disperses with groundwater between the point of injection (UIC) and any downgradient monitoring well, unless the monitoring well is in groundwater directly below the UIC. Dispersion also occurs naturally within the unsaturated zone during infiltration. No other “mixing” zones will be allowed under the permit other than what is naturally created by installing a downgradient monitoring at a reasonable distance as determined by the Department from the UIC.</p> <p>B. If the permittee chooses to undertake groundwater monitoring, then the downgradient compliance monitoring must be established in accordance with state groundwater regulations. In addition, groundwater monitoring may be initiated for persistent, ubiquitous toxins such as pentachlorophenol.</p>

48	Establishing background in groundwater for many parameters in the permit is inappropriate.	1	Clackamas County	<p>The permit is designed to prevent pollution from entering groundwater by examining the quality of stormwater before it is discharged to UICs. Groundwater monitoring would be undertaken by choice of the permittee. In the event groundwater monitoring is undertaken, background is the required groundwater concentration limit. All permits for UICs are “new facilities” under state regulations. The permit-specific concentration limit at new facilities shall be established at the background water quality levels for all contaminants. Upon the request by the permittee, the Department of applicant, and after opportunity for public review and comment, a concentration limit variance may be granted as an alternative to the permit-specific concentration limit provided an existing, permit-specific concentration limit has not been exceeded at the point of compliance.</p> <p>[OAR 340-040-0030(3)(b); OAR 340-040-0030(4)(a)].</p>
49	New on-site systems allowed in areas of shallow groundwater conflict with UIC regulations.	1	Clackamas County	<p>Residential on-site septic systems and commercial/industrial on-site systems that serve less than 20 persons are specifically exempted from state and federal UIC regulations. In addition, state regulations also exempt large onsite systems that have a design volume of less than 2,500 gallons per day. In addition, on-site systems that have a design capacity of less than 2,500 gallons per day are specifically exempted from state UIC regulations. The WPCF permits for large on-site meets the state UIC regulations for permitted facilities because the On-site regulations require groundwater protection.</p> <p>[OAR 340-044-0013; OAR 340-044-0015; OAR 340-044-0035; OAR 340-071], [40 CFR 144.1(g)(2)(ii)]</p>
50	SDMP submittal date is too short.	1	Clackamas County	<p>The permittee must begin stormwater discharge monitoring under permit conditions beginning with the wet season starting October 1, 2005. Therefore, it is necessary to receive the SDMP no later than July 15, 2005 to review the SDMP and submit it for public review and comment, incorporate any changes from the review process and approve it before the start of the wet season. The date remains as specified in the permit.</p>
51	UICMP annual report language is overly prescriptive and should be removed.	1	Clackamas County	<p>The permit language addresses the UICMP elements of the permit. The UICMP language shall remain in order to clearly identify the Department’s requirements and expectations of the permittee to:</p> <ul style="list-style-type: none"> o Implement the UICMP, o Implement groundwater protection during operation of UICs, and

				<ul style="list-style-type: none"> o Report on the UIC system conditions and activities undertaken during the reporting period, including proposed actions to be implemented during the next reporting period.
52	UICMP should not have O&M (operation and maintenance) requirements as specified in Schedule D(7)(a)(ii) of the draft permit. The language should be replaced with O&M requirements of OAR 340-044-0018(3)(b)(C)(ii).	1	Clackamas County	<p>The operation & maintenance citation under the UIC rule authorization regulations not applicable. Federal regulations prescribe permit requirements. State UIC regulations for UICs under a permit must comply with the State's groundwater protection regulations. The permit is specifically designed to control stormwater discharge quality in a manner that groundwater compliance monitoring is not required. O&M of UICs and associated BMPs is a critical element to controlling the quality of stormwater discharge into the subsurface. Implementation of an aggressive O&M plan is a permit condition. Further, the UIC program is a federal program, which the state has primacy. The State of Oregon is required under Primacy conditions to assure that, at a minimum, all federal UIC requirements, either for rule authorization or permit conditions, are met. This includes federal conditions for a UIC permit.</p> <p>[OAR 340-044-0018(3)(a)(C); OAR 340-044-0035; OAR 340-040-0020; OAR 340-040-0030; ORS 468B.025], [40 CFR 144, Subpart E, Permit Conditions].</p>
53	Requirement for trend monitoring should be deleted.	1	Clackamas County	<p>Trend monitoring is part of the SDMP requirement. The statistically-valid sampling design must have fixed UICs sampled each year and randomly selected UICs sampled during the year of selection. Trend analyses is required from fixed UICs to demonstrate over time that BMPs are effective for the land use as represented by traffic volume. The requirement remains.</p>
54	It is not feasible to obtain legal authority to terminate or prohibit a stormwater discharge to a public system from a private facility. The condition should be eliminated.	1	Clackamas County;	<p>This is a general permit provision applicable to all permits issued by the State. .The permittee:</p> <ul style="list-style-type: none"> o Is responsible for any fluids discharged to a UIC owned or operated by the permittee whether the source of the fluid is from a private or public facility. o Must have the authority to take appropriate action against any party that endangers the permittee's UIC or groundwater through the permittee's UIC. <p>Any enforcement action by either the Department, EPA, or both will be against the owner of the UIC, as well as the source of the pollution. It is in the permittee's interest to have the authority. If the permittee does not</p>

				have the authority, it must obtain it or be in violation of the permit. The permit provision remains.
55	Permittee would have to check every facility that has a flow to a public UIC system, even if the flow is minimal or non-threatening.	1	Portland Stormwater Advisory Committee	Ultimately, the permittee is responsible for any fluids discharged to a UIC owned or operated by the permittee whether the source of the fluid is from a private or public facility. The burden is upon the permittee to demonstrate the fluids are minimal or non-threatening. The Department's expectations for a system-wide assessment are discussed in the Fact Sheet and Evaluation Report. The department expects the permittee to rank the types of facilities that pose a risk to the permittee's UICs. The Department expects those sites that handle SARA Title III materials to be among the highest ranked facilities. The Department expects reasonable due diligence on part of the permittee to assess its UIC system and those sources that pose the highest threat to the system. The Department also recognizes with limited resources, the system-wide assessment will be an on-going evaluation through the permittee's source control program during the permit's duration to address other potential sources in concert with source control efforts under the permittee's NPDES MS4 source control program. Because it is not feasible to assess every potential source within a one-year period with limited resources, the Department expects source control activity updates in each annual report.
56	Permit should be tiered to protect groundwater.	1	Portland Stormwater Advisory Committee	Regulations do not provide for a tiered permit. The SDWA is clear that groundwater must be protected. Federal regulations for authorization by rule and permit requirements are clear. Further, state regulations also are clear regarding underground injection activities. Neither 42 U.S.C. §300 of the SDWA, nor the state and federal regulations allow for an approach as suggested by the commenter.
57	Permit implementation, as written is cost prohibitive.	1	Portland Stormwater Advisory Committee	The Department disagrees with the cost estimate provided by the commenter. If the cost estimates are reasonable, it is still significantly less by orders of magnitude than the cost to construct storm sewer to accommodate all areas of the City served by UICs.
58	The monitoring provisions of the permit are inadequate and will not provide a representative sample of the stormwater that is being discharged to the underground.	1	NEDC	Please see response to Item #2.

59	Permittee's UIC system should be counted before the permit is issued.	1	NEDC	<p>A. The permittee's UICs have been counted and registered with the Department. There are 9,904 registered UICs, which 8,460 are active. The type of UIC construction, depth of UIC, and pretreatment when present are recorded in the Department's UIC registration database. The location of each UIC in the database is known.</p> <p>B. The system-wide assessment includes an evaluation of the stormwater volume and quality, depth to groundwater, local geology, density of injection systems, drainage area land use, and assessment that assessment of SARA Title III facilities and faculties that may drain to a permittee-owned do not endanger the UIC. Much of the system-wide assessment requirements have been completed. UIC design stormwater volume is known for each UIC (please refer to the response to Item #2); total annual stormwater volume to a UIC with a 1/2-acre drainage area is approximately 871,200 cubic feet. Sampling 5 storm events of 0.25 inches rainfall to generate runoff represents approximately 3 percent of the volume of stormwater to a UIC. (The level of stormwater monitoring for discharge to UICs far exceeds the stormwater monitoring required under the NPDES MS4 requirements of the CWA). Data on UIC BMP performance within various land use areas (i.e. traffic volumes) have been assessed by the permittee. These data are summarized in the Fact Sheet and Evaluation Report. The USGS and permittee are cooperatively assessing the depth to groundwater and local geology. The density of UICs is known and shown in figure 1 of the Fact Sheet and Evaluation Report. The permittee has assessed the number of UICs that are within 500 feet of a domestic (private) water well, within 500 feet of a or public drinking water well that has no DHS determined time-of-travel delineations and within the 2-year time of travel delineation as determined by the Department of Human Services for public water supply systems. The permit specifies the maximum time the permittee has to complete the remaining elements of the system-wide assessment.</p>
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60	The permit does not adequately protect groundwater.	1	NEDC	Please refer to response to Items #2, 5,6,18, and 27.
	A 10-year permit duration seems inappropriate. A temporary permit should be considered to allow the permittee to complete its system-wide assessment..	1	NEDC	State and federal regulations allow a permit up to 10 years in duration. State regulations allow the Department or the permittee to reopen the permit at any time. There are no federal or state provisions for a temporary permit. Specifying permit-specific time frame to complete the system-wide assessment is permitted. By setting a system-wide assessment completion date in Schedule C of the permit, establishes a Class I permit violation situation should the completion date be missed. [OAR 340-044-0037(7); OAR 340-012], [40 CFR 144.36].
61	42 U.S.C. 300h provide the regulations for state programs section of the SDWA. Does the State comply with those regulations when it grants a WPCF permit to a permittee who has not identified all the injection systems and researched the possible sources of contamination?	1	NEDC	Yes. 42 U.S.C. 300h are applied in 40 CFR Part 144 and 147. As a primacy state, the State's UIC regulations comply with and exceed the requirements of 40 CFR Part 144. The WPCF is a state, not federal, permit. the system-wide assessment provision applies to authorization by rule. The state has the authority and has applied that authority to establish permit conditions, including establishing a system-wide assessment and compliance due date for the requirement. [OAR 340-044-0035 and OAR 340-040-0030]
62	Isn't the permit issued exclusively under State authority and in accordance with standards that implement the requirements of the SDWA? This is an important distinction.	1	City of Portland	The UIC program is a federal Program. The state has primacy of the UIC program within Oregon. Under primacy requirements, the state must comply with federal UIC requirements. Federal regulations require a permit for UICs that can not be rule authorized. Federal regulations allow using an area-wide permit. There is not a federal area-wide permit for Class V UIC for stormwater. The State is applying its Individual Water Pollution Control Facilities permit as meeting the federal permit requirements. Therefore, the permit issued under state authority in accordance with Oregon statutes and regulations that meet the requirements of the SDWA.. [ORS 468B.050],[OAR 340-044-0035; OAR 340-045-0055], [40 CFR 144.33; 40 CFR 144.51; 40 CFR 144.52].
63	Preface language for Schedule F.3.f is missing.	1	Bidleman	Corrected, language added.
64	Definition for "non-compliant" missing Table F-1.	2	EPA, Bidleman	Fixed.
63	The definition of background water quality should be amended to delete reference to EPA Region 9 Preliminary Remediation Goals (PRGs) for laboratory minimum reporting	1	City of Portland	The term "Background water quality" is amended in the final permit to read "Background groundwater quality." This modification provides clarity that compliance with background applies to groundwater in Table 1 of Schedule A and associated text in Schedule A.2. The reference to

	limits (MRLs).			the EPA PRGs for the MRLs shall remain for groundwater. By establishing the level at which the Department expects the permittee's laboratory to achieve when analyzing groundwater samples as part of any UIC related groundwater monitoring program under this permit. [OAR 340-040-0010(1); OAR 340-040-0030(3)(b); OAR 340-044-0014(1)].
64	Revise Schedule A.2.a to clarify that exceeding a MADL does not cause a permit violation.	1	City of Portland	Schedule A has been modified to clarify MADL exceedance does not represent a permit violation. Failure to take an appropriate response action when the annual mean MADL concentration is exceeded is a permit violation.