Exhibit No. (DMP-14) Docket No. UW-060343 Witness: Derek M. Pell

## BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

**DOCKET NO. UW-060343** 

Complainant,

v.

ILIAD WATER SERVICE, INC.,

Respondent.

## EXHIBIT TO RESPONSE TESTIMONY OF

DEREK M. PELL Assistant Manager, NW Office of Drinking Water Washington State Department of Health

> ON BEHALF OF STAFF OF WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOH Strategic Directions, Compliance Matrix, GWI Program Compliance Strategy dated July 6, 2006

October 4, 2006



Fact Sheet

## Office of Drinking Water

# **Strategic Directions**

#### GOALS:

1. Respond to and handle public health emergencies/ threats, relative to unsafe drinking water from any size public water supply:

### Highest priority activities:

- Maintain a 24-hour on-call emergency line and respond to all calls within 30 minutes
- Follow up on all emergencies such as acute coliform violations, acute risk surface water treatment technique violations, acute chemical violations, backflow incidents, security incidents, water outages, etc. in a timely and consistent manner. Follow-up actions are clearly documented.
- Provide good information and guidance to water systems on emergency preparedness and planning. This includes issues related to natural disasters such as drought, floods, and earthquakes, as well as intentional acts such as security related problems.
- Provide accurate risk communication to the public, in coordination with other involved parties.
- Log and respond to complaints on Group A systems consistent with priorities outlined in this document, with the response being clearly documented.

### Medium priority activities:

None identified

### Lower priority activities:

- Ensure that all Group A systems have completed the emergency response portion of their water system/small water system management plan.
- Investigate potential contamination sites in coordination with Department of Ecology; information is provided to appropriate federal, state, and local entities.
- 2. Make important information accurate and easily accessible about drinking water topics, data, and the DW-related work DOH conducts:

### Highest priority activities:

 Maintain effective support for on-going ODW data needs during migration from DWAIN to SENTRY.



- Complete DWAIN migration to SENTRY and assure on-going maintenance of the new system.
- Maintain ODW intranet and Internet Web sites.
- Deploy and maintain water quality and geographic data in Web-accessible forms.
- Answer public disclosure and other informational requests in a timely manner, focused on readily available, existing information.

#### Medium priority activities:

- Analyze and refine ODW data to evaluate priorities and effectively communicate with stakeholders and the general public on drinking water issues.
- Enhance and promote ODW Intranet and Internet Web sites.

### Lower priority activities:

• Participate in interagency/private partnership WQ/DW educational forums and training opportunities that are not part of our key ODW priorities.

## 3. Have a basic understanding of how water is being provided by all Group A public water systems in this state:

### Highest priority activities:

- Conduct sanitary surveys on all Group A water systems and develop a baseline on water system status, deficiencies, and needs.
- Collect and maintain accurate information pertaining to Group A systems in the ODW data system via the WFI process.
- Review and approve project reports and construction documents in a timely manner for Water Quality and Source-related projects.
- Deal with transfer of ownership issues in a timely and accurate manner.

### Medium priority activities:

- Review and approve distribution-related (pumps, pipes, and tanks) project reports and construction documents in a timely manner (establishing approved number of connections).
- Issue operating permits in a timely manner, accurately portraying the compliance status of the system, and reflecting ODW's priorities.

#### Lower priority activities:

Address adequacy requests in a timely manner according to adopted policy

## 4. Know the basic quality of water being delivered by systems, particularly in regards to microbial and acute chemical parameter:

### Highest priority activities:

- In coordination with the Department of Ecology, implement and maintain a credible laboratory certification program to assure quality of the data reported.
- Receive and enter laboratory data into a reliable data management system in a timely manner
- Implement fully, and track the coliform program plan.

- Make GWI determinations in accordance with the GWI implementation plan, and conduct follow-up activities as appropriate.
- Conduct and track monitoring of acute chemical contaminants (e.g., nitrate) with follow-up action taken as appropriate.
- Review and track surface water-related operations reports with follow-up action taken as appropriate.

### Medium priority activities:

- Track chemicals with chronic health concerns (e.g., lead, SOC/VOC, DBPs, arsenic) and take follow-up action as appropriate, including on-going maintenance of the monitoring waiver program.
- Review and track operations reports, take follow-up action as appropriate.
- Lower priority activities:
- Track copper monitoring results, take follow-up action in accordance with the Lead/Copper Implementation Plan.
- Monitor for and track information about other, non-acute inorganic compounds.
- 5. Make it clear to purveyors what their responsibilities are, and position water systems as best we can to successfully meet their responsibilities:

### Highest priority activities:

- Provide effective training and outreach to public water systems, their consultants and governmental entities, targeting key ODW priorities and informing water purveyors of their basic responsibilities for owning and operating a public water system.
- Implement program activities for operator certification to promote the operation of public water systems by trained and qualified operators.
- Promote development of cross-connection control programs, with emphasis on addressing high hazard cross-connection risks.
- Produce and distribute an annual, system-specific Water Quality Monitoring Report, informing systems of their monitoring requirements for the coming year.
- Implement the State Revolving Fund program and other sources of potential revenue to assist water systems to be in compliance with regulatory requirements.

### Medium priority activities:

- Assist targeted systems, identified under the Small Community Initiative, in their efforts to comply with regulatory requirem ats.
- Assist unapproved existing systems in obtaining water system approval when requested by purveyors.

### Lower priority activities:

- Promote Consumer Confidence Report requirements (and follow-up on targeted systems) so
  water systems inform their customers about their regulatory compliance status.
- Provide technical assistance to local governments in their efforts to deal with Group B water system issues.
- Maintain the Satellite Management Program.

## 6. Take appropriate compliance actions against priority violations, and clear cases of fraudulent operation/ reporting:

### Highest priority activities:

- Take appropriate compliance actions on those systems identified as high priority for microbial or acute chemical risks in accordance with ODW's adopted compliance strategy/matrix.
- Take appropriate compliance actions on those systems not in compliance with Operator Certification requirements.
- Take appropriate compliance actions on those systems identified as high priority based on chronic water outages or losses of pressure.
- Address all unfiltered surface water sources (in accordance with the Surface Water Implementation Plan) and Treatment Technique Violations for high-risk surface water; ensure that action is being taken to have those sources/plants meet regulatory requirements.
- Notify the system owner, in a timely and clearly documented manner, when water quality and/or reliability of operation issues are found.
- Take enforcement action against any water system conducting fraudulent operating/reporting activities.

### Medium priority activities:

• Take appropriate compliance action on those systems identified as high priority based on other criteria on our targeting lists.

### Lower priority activities:

• Pursue appropriate compliance action on other ODW priorities as resources allow.

### 7. Assist water systems in future system planning and development:

#### Highest priority activities:

- Review and follow up on critical issues (public health & safety and system-specific significant issues) in water system plans for utilities identified as high priority for planning.
- Promote and encourage water-use efficiency by water utilities, with particular emphasis on medium-sized systems (those with 100 5,000 connections), and promote and manage a reclaimed water program.
- Encourage development and review of Small Water System Management Programs required for SRF funding, and problem systems.
- Promote and encourage use of WSPs and SWSMPs by purveyors as a tool for maintaining compliance with state and federal DW regulations.
- Streamline review of non-key utilities' WSPs with a critical issue (public health & safety and system-specific issues).

### Medium priority activities:

- Promote and assist source-wa'r protection efforts; focus on highly susceptible sources.
- Encourage development of Small Water System Management programs for non-expanding systems.

### Lower priority activities:

Provide more comprehensive reviews of water system plans that are submitted.

# 8. Participate in long-range strategies relative to future delivery of water in the state:

### Highest priority activities:

- Support legislative/executive priorities; work with local entities to collect baseline information on priority Group B systems.
- Evaluate and address water resource and infrastructure related issues that potentially impact long-term water system adequacy and reliability.
- Promote and encourage regionalized consolidation of small water systems.
- Assist with implementing and maintaining critical elements of CWSP planning program.
- Assist local governments in developing watershed management plans, when funding is provided for these efforts.

### Medium priority activities:

• Assist in focused, regional efforts for utility planning and development.

### Lower priority activities:

None identified.

(Note: These strategic directions reflect activities that are externally delivered by the Office of Drinking Water, and do not address or include other priority business processes internal to the ODW, such as financial management, personnel management, staff development, etc. Those internally focused issues remain on a priority track of their own.)



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### Final 08/12/02

### Compliance Strategy Decision Matrix based on PUBLIC HEALTH RISK

PUBLIC HEALTH RISK				
Low	Medium High			
Health Risk Violation	Health Risk Violation	Health Risk Violation		
Prescribed Compliance Process  Notification - Compliance letters ⇒ "Targeting" to Active Enforcement	Prescribed Compliance Process Notification, Compliance letter  ⇒ NOV; will offer "Bilateral Compliance Agreement" (BCA)  ⇒ State Significant Non- complier (SSNC) ⇒ Red Operating Permit ⇒ Targeting to Active Enforcement	Prescribed Compliance Process  Notification, Compliance letter ⇒  *NOV, will offer BCA ⇒ SSNC ⇒  Red Operating Permit ⇒ Active Enforcement (Orders, Penalties and Receivership)  *(Note certain violations where high heath risk is imminent may go directly to a state health order and bypass the NOV process.)		
Examples: Lack of documents and other low health risk violations.	Examples: Chronic Contaminants and other problems affecting the safety and/or reliability of the system	Examples: Microbial risk Acute chemical risk Fraudulent operation and reporting Operator Certification Issues		
Secondary contaminant maximum contaminant level (MCL) violation Failure to have a Wellhead Protection Plan Lack of Consumer Confidence Report Failure to Have a Cross-Connection Control (CCC) Plan **Lack of Water System Plan – where appropriate Lack of Small Water System Management Program – where appropriate Failure to retain a Satellite Management Agency, when required **Failure to have approved engineering documents, where applicable	<ul> <li>Lead and/or Copper action level exceedance</li> <li>Lead Public Education violation</li> <li>Lead and Copper Monitoring and Reporting (M/R)</li> <li>Chronic chemical MCL violation</li> <li>Source Monitoring M/R</li> <li>Failure to provide CCC protection to high risk premises (Table IX) in accordance with written requirement</li> <li>Failure to submit to a Sanitary Survey (will include increased coliform monitoring)</li> <li>Failure to provide disinfection (CT6) when source determined to be hydraulically connected to surface water</li> <li>Monitoring and Reporting for Disinfection Requirements</li> </ul>	<ul> <li>Coliform monitoring violations</li> <li>Coliform MCL (acute and non-acute) violations</li> <li>Nitrate MCL violations</li> <li>Nitrate M/R violations</li> <li>Surface Water Treatment Rule (SWTR) and confirmed Ground Water Under the Influence of a SW (GWI) M/R violations</li> <li>SWTR/GWI Treatment Technique Violations (TTV)</li> <li>Confirmed backflow incident</li> <li>High Public Health Risk (HPHR) Sanitary Survey findings that go uncorrected</li> <li>Chronic water outages (no SSNC - RO discretion to be used)</li> <li>Failure to complete GWI determination</li> <li>**Failure by system to meet Operator Certification requirements</li> <li>Construction without DOH approval that poses an imminent health threat.</li> <li>PN Rule — Tier 1 violations</li> </ul>		
** Note that these violations may lead to a yellow (conditional) operating permit if not resolved.		**NOTE: The department will also pursue formal enforcement against certified operators for documented inadequate operations and management		

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### GWI Program Compliance Strategy July 6, 2006

<u>GWI PROGRAM PURPOSE</u>: Determining whether potential GWI sources – springs, shallow wells near surface water, and other groundwater-derived sources – are under the direct influence of surface water (GWI), groundwater hydraulically connected to surface water (HC), or groundwater (GW).

COMPLIANCE STRATEGY: An approved procedure for pursuing and achieving compliance with potential GWI-related requirements currently does not exist. This compliance strategy provides the tools needed to monitor and measure compliance with GWI determination requirements. This compliance strategy is based on milestones specific to individual GWI determination process steps or Bilateral Compliance Agreements (BCAs). Each milestone has a timeline that is to be considered a starting point. The compliance strategy supports expeditious remediation of surface influences on drinking water sources, and assists ODW with identifying problematic steps or strategies which helps focus staff resources and compliance efforts. It allows ODW to enforce sooner, if determined necessary, and therefore achieve more protective public health measures.

MONITORING COMPLIANCE: The GWI database is used to track source-specific GWI determination process steps. Sentry is used to record source status and coliform monitoring requirements, and to track and monitor compliance and enforcement actions. Currently, Sentry is not capable of tracking specific steps in the determination process necessary to measure progress and compliance; however, work is underway to create such capability.

<u>GWI PROGRAM IMPLEMENTATION</u>: Prior to October 2003, GWI determinations were managed by Regional Office (RO) staff. In October 2003, the backlog of uncompleted GWI determinations became managed by Headquarters staff under contract; ROs continued to manage selected sources.

PROGRAM WORKLOAD: As of March 2006, 87 Group A systems statewide are in the process of completing GWI determinations. Historically, 419 Group A systems have completed the GWI determination process (72 under contract; 347 by the ROs). The contract will end in December 2006. Currently, there are 18 Group A and 26 Group B sources that have not been notified of the requirement to complete the GWI determination process. The table below summarizes the number of potential GWI sources remaining to complete the GWI determination process.

Active Potential	Managed	Managed	Not yet notified at
GWI Sources	by Contractor	by Regional Office	Group A (B)
ERO	25	4	2 (7)
NWRO	8	8	4(3)
SWRO	27	15	12 (16)
Total	60	27	18 (26)

### **STAFF RESPONSIBILITIES:**

- HQ Lead: contract management; GWI database/Sentry upkeep; performance measures; support ROs
- GWI staff / Engineers: identify existing potential GWI sources; GWI database upkeep; complete determination process; evaluate projects/construction reports
- RO Compliance staff: track compliance; issue compliance instruments; Sentry upkeep

NOTE: Sources determined to be GWI transition to the Surface Water Source Monitoring Program

<u>POLICY AND DIRECTIVE</u>: Policy F.12 addressing hydraulic connection disinfection requirements was finalized on December 27, 2005. A draft Directive Memorandum requiring hand pumps to complete the GWI determination process was determined unnecessary and will not be finalized.

VIOLATIONS AND STATE SIGNIFICANT NON-COMPLIER (SSNC) DEFINITION: The ODW Strategic Directions identifies failure to complete the GWI determination process and failure to install disinfection on a hydraulically connected source as High Priorities. The Compliance Strategy Decision Matrix (August 12, 2002) defines these two violations as high and medium public health risks, respectively. It is recommended by this compliance strategy that failure to install disinfection (CT6) be elevated to a high public health risk. Consideration of this recommendation to occur when the office takes a holistic view when considering modifications to the compliance matrix in the future.

The February 2001 GWI Program Plan does not prioritize individual GWI determination process steps for compliance purposes. The determination process is flexible to accommodate system conditions, situations and capacity. In general, with ODW consult, the purveyor chooses a strategy for completing the process within ODW expected timelines. If step-specific timelines are not met or revised, a BCA is negotiated (or an existing BCA is revised). If a BCA is not negotiated in timely fashion or a BCA milestone is not met, then the system is designated a SSNC.

The Compliance Matrix Procedure for High Health Risk Violations starts with a directive (notification) and, for non-compliant cases, leads to a Notice of Violation (NOV) and BCA. If directive or BCA milestones are not met, then a system is designated a SSNC, is issued a red operating permit, and active enforcement (orders, penalties) is pursued.

Violation	Strategic Direction	Compliance Strategy Decision Matrix Public Health Risk	WAC Authority	SSNC Trigger (replaces Policy J.05)	Return to ! Compliance : (RTC)	Sentisy Support
Failure to complete GWI determination (or otherwise remedy risk to public health)	Goal 4 High Priority	High Public Health Risk	246-290-640	Milestones established in BCA	Complete determination or otherwise remedy the high risk to source	Yes
Failure to install disinfection (CT6) when hydraulically connected to surface water	Goal 6 High Priority	Medium Public Health Risk (may be elevated to High Risk)	246-290-451(3) and -640(4)(b)	Milestones established in BCA	Install disinfection or otherwise remedy the high risk to source	Yes

### VIOLATIONS, MILESTONES AND COMPLIANCE ACTIONS

The following violations result from failure to meet either fixed or flexible milestones established for each step in the GWI determination process. The timelines established below for each milestone are ODW's initial expectation; however, they are to be considered targets and may be adjusted to meet source-specific needs.

Milestone with FIXED Timeline				
Milestone	Timeline	Compliance Action		
	ormation necessary to determine whether Authority: 246-290-640(3) and (4)(c)	the source is under direct.		
Complete a source evaluation.	60 days after date of Directive.			
Requires purveyor to make arrangements for ODW or contractor to confirm whether potential GWI definition is met.  Submit purveyor's choice form.	The directive notifies the purveyor of potential GWI source status and requirements to complete the GWI determination process.  45 days after the source evaluation.	If purveyor fails to meet a milestone within the timeframe specified in a Directive (notification), then a BCA with established		
Purveyor decides how to begin the GWI determination process.		If the purveyor does not sign the BCA within 30 days,		
Submit first 6 months of water quality monitoring (WQM) data.	9 months after ODW acknowledges WQM data will be collected. (Allows 3 months to train purveyor.)	RO Compliance staff issue an NOV (notice to correct/sign the BCA).		
Submit second 6 months of WQM data.	15 months after ODW acknowledges WQM data will be collected.	If purveyor does not sign BCA within another 30		
Submit Action Plan.	90 days per Policy F.12.	days, SSNC status is imminent, the Operating		
Submit first two microscopic particulate analysis (MPA) samples.	9 months (for both samples) after DOH approves MPA sample collection schedule proposed in Action Plan.	Permit is turned red, and the system is subject to formal enforcement		
Submit additional MPA samples.	6 months after previous MPA sample (or within 30 days of date/month specified by ODW for sample to be collected).	If the purveyor fails to meet a milestone established in a BCA, the system becomes a SSNC, the Operating Permit		
Submit Hydrogeologic Report.	15 months after ODW approves elements of purveyor's proposal to conduct hydrogeologic assessment.	is turned red, and the system is subject to formal enforcement.		

### Milestone with FEBXIBLE Timeline Milestone **Timeline** Activity/Process Violation: Failure to complete project report when purveyor elects to modify the source and comply with WAC -640(3). WAC Authority: 246-290-640(2)(a) and (23(b) Modify source. Flexible timeline is necessary to ODW negotiates BCA and Decommission source. accommodate system-specific situations. establishes timelines. Replace source. If the purveyor does not sign the BCA within 30 days, RO Compliance staff issue an NOV (notice to correct/sign the BCA), the Operating Permit is turned Red, and the system is subject to formal compliance. If purveyor does not sign BCA within another 30 days, SSNC status is imminent. If the purveyor fails to meet BCA milestones, the system becomes SSNC. Violation: Failure to provide disinfection treatment when designated groundwater hydraulically connected to surface water. WAC Authority: 246-290-640(4)(a) and (4)(b) Install disinfection (CT6).

### **RETURN TO COMPLIANCE**

Purveyor complies with all elements of the Bilateral Compliance Agreement and compliance schedule. SSNC status ends when BCA is complied with, even if GWI determination process is not yet completed.

Flexible timeline is necessary to

accommodate system-specific situations.

(Same as violation

immediately above.)

GWI Determination Process Step	Compliance Actions/Tracking	Responsible Person	
		n the GWI database and Sentry by the aftive or Engineer (non-contracted work).	
SOURCE DESIGNATION (Potential GWI)	DIRECTIVE Notify purveyor of potential GWI source status and requirement to complete GWI process.	GWI Program Lead (contracted work) or RO GWI representative or Engineer (non-contracted work)	
SITE VISIT Confirm source status. Explain process to purveyor.	DOH Form #331-189 (completed by person who visited source)	GWI Contractor (contracted work) or RO Engineer (non-contracted work)	
PURVEYOR SELECTS STEP TO INITIATE PROCESS	DOH Form #331-190 (completed by purveyor)  DIRECTIVE Confirm purveyor's choice.	GWI Program Lead (contracted work) or RO GWI representative or Engineer (non-contracted work)	
WQM DATA/MPA SAMPLES Train purveyor to collect WQM	Indicate possible BCA.  DOH Forms #331-191, 331-192 and 331-193 (completed	GWI Contractor (contracted work) or RO Engineer (non-contracted work)	
data or MPA samples.  WQHYDRO	by purveyor with DOH assistance for WQM data) DOH Forms #331-194 and	GWI Contractor or	
Analyze WQM data DISINFECTION	331-195 (completed by WQM data analyzer)  DIRECTIVE	GWI Program Lead (when contract ends)  GWI Program Lead (contracted work) or	
WQM data indicates hydraulic connection. MPA samples required.	Summarize results of previous steps and next requirements. Include possibility for BCA.	RO GWI representative or RO Engineer (non-contracted work)	
ACTION PLAN (Purveyor acknowledges disinfection and MPA sample requirements, consumer notice)	APPROVAL LETTER	GWI Program Lead (contracted work) or RO GWI representative or RO Engineer (non-contracted work)	

(table continued below)

NOTE. The following <b>complian</b> GWI database by the GWI Progra contract):	ce actions are tracked in Sentry I in Lead <i>(contracted work) <mark>OR</mark> F</i>	by the RO Compliance staff, and in the RO GWI tepresentative or Engineer <i>non-</i>
IMPLEMENT BCA GWI determination process step	BCA Negotiate with purveyor.	GWI Program Lead (contracted work) or RO GWI representative or RO Engineer
is not met.	Acquire signed BCA.	(non-contracted work) in coordination with RO Compliance staff
INFORMAL ENFORCEMENT BCA not signed on time.	NOV Issued, giving system 30 days to sign BCA, if not Rep Op Permit	RO Compliance staff in coordination with GWI Program Lead, RO GWI representative, and RO Engineer
ACTIVE ENFORCEMENT BCA milestone is not met.	ORDERS/PENALTIES	RO Compliance staff in coordination with GWI Program Lead, RO GWI representative, and RO Engineer
RETURN TO COMPLIANCE/ GWI PROCESS COMPLETED	NOTIFICATION Inform purveyor of compliant status or completion of GWI determination process.	GWI Program Lead (contracted work) or RO GWI representative or RO Engineer (non-contracted work) in coordination with RO Compliance staff

###