

### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

SC-6J

# CERTIFIED MAIL RETURN RECEIPT REQUESTED

Bill Cooper
Director, Operation Risk Management
Illinois American Water – Urbana East Plant
601 N. Lincoln Ave.
Urbana, IL 61801

RE: Complaint and Expedited Settlement Agreement ESA Docket No. RMP-07-ESA-006 Docket No.

CAA-05-2008-0009

Dear Mr. Cooper:

Enclosed please find a copy of the fully executed Expedited RMP Settlement Agreement (ESA). The ESA is binding on U.S. EPA and Respondent. U.S. EPA will take no further action against Respondent for the violations cited in the ESA. The ESA requires no further action on your part.

Please feel free to contact Monika Chrzaszcz at (312) 886-0181, or <u>Chrzaszcz.monika@epa.gov</u>, if you have any questions regarding the enclosed document or if you have any other question about the program. Thank you for your assistance in resolving this matter.

Sincerely yours,

Chemical Emergency

Preparedness & Prevention Section

Enclosure(s)



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590 REGIONAL PRINCIPING CLERK
2008 MAR 19 PM 2: 24

REPLY TO THE ATTENTION OF:

# EXPEDITED SETTLEMENT AGREEMENT (ESA)

DOCKET NO: RMP-08-ESA-006

This ESA is issued to: Illinois American Water - Urbana East Plant

At: 601 N. Lincoln Ave., Urbana, Illinois 61801

for violating Section 112(r)(7) of the Clean Air Act.

Bb#2750803A009

CAA-05-2008-0009

This Expedited Settlement Agreement (ESA) is being entered into by the United States Environmental Protection Agency (EPA), Region 5, by its duly delegated official, the Director, Division, and by Respondent pursuant to Section 113(a)(3) and (d) of the Clean Air Act, 42 U.S.C. § 7413(a)(3) and (d), and by 40 C.F.R. § 22.13(b). On November 13, 2007, EPA obtained the concurrence of the U.S. Department of Justice, pursuant to Section 113(d)(1) of the Act, 42 U.S.C. §7413(d)(1), to pursue this administrative enforcement action.

#### **ALLEGED VIOLATIONS**

On July 18, 2007 a representative of the EPA conducted a compliance inspection of the subject facility (Respondent) to determine compliance with the Risk Management Plan (RMP) regulations promulgated at 40 C.F.R. Part 68 under Section 112(r) of the Act. EPA found that the Respondent had violated regulations implementing Section112(r) of the Act by failing to comply with the regulations as noted on the attached RISK MANAGEMENT PLAN INSPECTION FINDINGS, ALLEGED VIOLATIONS AND PROPOSED PENALTY SHEET (FORM), which is hereby incorporated by reference.

#### SETTLEMENT

In consideration of Respondent's size of business, its full compliance history, its good faith effort to comply, and other factors as justice may require, and upon consideration of the entire record the parties enter into the ESA in order to settle the violations, described in the attached FORM for the total penalty amount of \$742.50

This settlement is subject to the following terms and conditions:

The Respondent by signing below waives any objections that it may have regarding jurisdiction, neither admits nor denies the specific factual allegations contained in herein and in the FORM, and consents to the assessment of the penalty as stated above. Respondent waives its rights to a hearing afforded by Section 113(d)(2)(A) of the Act, 42 U.S.C §7413(d)(2)(A), and to appeal this ESA. Each party to this action shall bear its own costs and fees, if any. Respondent also certifies, subject to civil and criminal penalties for making a false submission to the United States Government, that the Respondent has corrected the violations listed in the attached FORM and has sent a cashier's check or certified check (payable to the "Treasurer, United States of America") in the amount of \$742.50 payment of the full penalty amount to the following address:

US Environmental Protection Agency Fines and Penalties Cincinnati Finance Center PO Box 979077 St. Louis, MO 63197-9000

The DOCKET NUMBER OF THIS ESA must be included on the check. (The DOCKET NUMBER is located at the top left corner of this ESA.)

This original ESA and a copy of the check must be sent by certified mail to:

Monika Chrzaszcz Chemical Emergency Preparedness and Prevention Section (SC-6J) U.S. Environmental Protection Agency 77 West Jackson Boulevard Chicago, Illinois 60604-3590

Upon Respondent's submission of the signed original ESA, EPA will take no further civil action against Respondent for the alleged violations of the Act referenced in the FORM. EPA does not waive any other enforcement action for any other violations of the Clean Air Act or any other statute.

If the signed original ESA with an attached copy of the check is not returned to the EPA Region 5 office at the above address in correct form by the Respondent within 45 days of the date of Respondent's receipt of it (90 days if an extension is granted), the proposed ESA is withdrawn, without prejudice to EPA's ability to file an enforcement action for the violations identified herein and in the FORM.

This ESA is binding on the parties signing below.

This ESA is effective upon filing with the Regional Hearing Clerk.

	FOR RESPONDENT:
	Signature:
	Name (print): Bill Cooper
	Title (print): Director of Operational Risk Management
	Illinois American Water – Urbana East Plant
Fz	FOR COMPLAINANT:    Date: 3/1/08     Pilchard C. Karl, Director     Superfund Division     I hereby ratify the ESA and incorporate it herein by reference. It is so ORDERED.    Mary A. Gade,     Regional Administrator



### U.S. ENVIRONMENTAL PROTECTION AGENCY

### RISK MANAGEMENT PROGRAM INSPECTION FINDINGS, ALLEGED VIOLATIONS AND PROPOSED PENALTY SUMMARY CAA-05-2008-0009

**REASON FOR INSPECTION:** This inspection is for the purpose of determining compliance with the accidental release prevention requirements of Section 112(r)(7) of the Clean Air Act (Act), 42 U.S.C. § 7412(r)(7), and the regulations set forth at 40 C.F.R. Part 68. The scope of this inspection may include, but is not limited to: reviewing and obtaining copies of documents and records; interviews and taking of statements; reviewing chemical storage, handling, processing, and use; taking samples and photographs; and any other inspection activities necessary to determine compliance with the Act.

FACILITY NAME Illinois American Water – Urbana East Plant	x PRIVATE GOVERNMENTAL/MUNICIPAL # EMPLOYEES 16, in production, 60 in district POPULATION SERVED
FACILITY ADDRESS 601 N. Lincoln Ave. Urbana, IL 61801	INSPECTION START DATE AND TIME: 07/18/2007, 8:30 am
	INSPECTION END DATE AND TIME: 07/18/2007, 3:30 pm
RESPONSIBLE OFFICIAL, TITLE, PHONE NUMBER Monika Chrzaszcz, Environmental Engineer, (312) 886-0181	EPA FACILITY ID# 1000 0002 6296
FACILITY REPRESENTATIVE(S), TITLE(S), PHONE NUMBER(S) Peter Bastasich, Manager, Loss Control Central region, (219) 880-2361 Walter Vogel, Production Operations Superintendent, (217) 373-5532 Tim Lecher, Operations Maintenance Services Supervisor, (217) 373-5531 Bill Cooper, Director, Operation Risk Management, (314) 996-2255	INSPECTOR NAME(S), TITLE(S), PHONE NUMBER(S)  Monika Chrzaszcz, Environmental Engineer, (312) 886-0181
FACILITY REPRESENTATIVE, SIGNATURE DATE	INSPECTOR SIGNATURE MONTH (MALMA 121467
INSPE	ECTION FINDINGS
IS FACILITY SUBJECT TO RMP REGULATION (40 CFR 68)?	xYES □NO
DID FACILITY SUBMIT AN RMP AS PROVIDED IN 68.150 TO 68.185?	xYES • NO
DATE RMP FILED WITH EPA: 06/1999 D	ATE OF LATEST RMP UPDATE: 05/22/2006
PROCESS/NAICS CODE: 22131 Water Supply and Irrigation Systems	OGRAM LEVEL: 1 Q 2 Q 3 x
REGULATED SUBSTANCE: Chlorine MAX	. QUANTITY IN PROCESS: 10,000 lbs.
2) PROCESS/NAICS CODE:PI	ROGRAM LEVEL: 1 0 2 0 3 0
REGULATED SUBSTANCE: MA	AX. QUANTITY IN PROCESS:
3) PROCESS/NAICS CODE: PF	ROGRAM LEVEL: 1 🗆 2 🗆 3 🗆
REGULATED SUBSTANCE: MA	AX. QUANTITY IN PROCESS:
4) PROCESS/NAICS CODE: PI	ROGRAM LEVEL: 1 D 2 D 3 D
REGULATED SUBSTANCE: MA	AX. QUANTITY IN PROCESS:
5) PROCESS/NAICS CODE: PI	ROGRAM LEVEL: 1 0 20 30
REGULATED SUBSTANCE: MA	AX. QUANTITY IN PROCESS:
DID FACILITY CORRECTLY ASSIGN PROGRAM LEVELS TO PROCESSES?	x YES 🗓 NO
ATTACHED CHECKLIST(S):	
☐ PROGRAM LEVEL 1 PROCESS CHECKLIST ☐ PROGRAM LEVEL 2 PROCESS CHE	CKLIST x PROGRAM LEVEL 3 PROCESS CHECKLIST
OTHER ATTACHMENTS:	
INSPECTION SYMBOL KEY: Y - YES N - NO N/A - NOT APPLICABLE S - SATISFACTO	DRY, M - MARGINAL, U - LINSATISFACTORY

### Program Level 3 Process Checklist

Facility Name: Illinois American Water - Urbana East Plant, 601 N. Lincoln Ave., Urbana, IL 61801

Date RMP submitted: <u>Initial: 6/1999, Updates: 6/2001, 12/2004, 5/22/2006</u> All comments and suggestions are bold and italicized.  Date process(es) came online: <u>1967</u>				
Section A-Management [68.15]				
Management system developed and implemented as provided in 40 CFR 68.15?    Comments:   区  区  区  区  区  区  区  区  区  区  区  区  区	□М	□ U	□ N/A	
Has the owner or operator:				
Developed a management system to oversee the implementation of the risk management program elements? [68.15(a)]	⊠Y	□N	□ N/A	
<ol> <li>Assigned a qualified person or position that has the overall responsibility for the development, implementation, and integration of the risk management program elements? [68.15(b)]</li> <li>Dave Bray has been assigned overall responsibility for the development, implementation, and integration of the risk management program elements. Bill Cooper is also responsible for RMP at a Business unit level.</li> </ol>	⊠Y	□N	□ N/A	
<ol> <li>Documented other persons responsible for implementing individual requirements of the risk management program and defined the lines of authority through an organization chart or similar document? [68.15(c)]</li> </ol>	⊠Y	□N ·	□ N/A	
Section B: Hazard Assessment [68.20-68.42]				
Hazard assessment conducted and documented as provided in 40 CFR 68.20-68.42? □S Comments:	⊠M	u u	□ N/A	
Hazard Assessment: Offsite consequence analysis parameters [68.22]				
<ol> <li>Used the following endpoints for offsite consequence analysis for a worst-case scenario: [68.22(a)]</li> <li>a. For toxics: the endpoints provided in Appendix A of 40 CFR Part 68? [68.22(a)(1)]</li> <li>b. For flammables: an explosion resulting in an overpressure of 1 psi? [68.22(a)(2)(i)]</li> </ol>	⊠Y	□N	□ N/A	
or  c. For flammables: a fire resulting in a radiant heat/exposure of 5 kw/m² for 40 seconds?  [68.22(a)(2)(ii)]				
or  d. For flammables: a concentration resulting in a lower flammability limit, as provided in NFPA documents or other generally recognized sources? [68.22(a)(2)(iii)]		-		
<ul> <li>Used the following endpoints for offsite consequence analysis for an alternative release scenario: [68.22(a)]</li> <li>□ a. For toxics: the endpoints provided in Appendix A of 40 CFR Part 68? [68.22(a)(1)]</li> <li>□ b. For flammables: an explosion resulting in an overpressure of 1 psi? [68.22(a)(2)(i)]</li> <li>□ c. For flammables: a fire resulting in a radiant heat/exposure of 5 kw/m2 for 40 seconds? [68.22(a)(2)(ii)]</li> <li>□ d. For flammables: a concentration resulting in a lower flammability limit, as provided in NFPA documents or other generally recognized sources? [68.22(a)(2)(iii)]</li> </ul>	⊠Y	□N	□ N/A	
3. Used appropriate wind speeds and stability classes for the release analysis? [68.22(b)]	⊠Y	□N	□ N/A	
4. Used appropriate ambient temperature and humidity values for the release analysis? [68.22(c)]	⊠Y	ΠN	□ N/A	
5. Used appropriate values for the height of the release for the release analysis? [68.22(d)]	⊠Y	□N	□ N/A	
6. Used appropriate surface roughness values for the release analysis? [68.22(e)]	⊠Y	□N	□ N/A	
<ol> <li>Do tables and models, used for dispersion analysis of toxic substances, appropriately account for dense or neutrally buoyant gases? [68.22(f)]</li> </ol>	⊠Y	□N	□ N/A	

lity Name: Illinois American Water - Urbana East Plant, 601 N. Lincoln Ave., Urbana, IL 61801			
8. Were liquids, other than gases liquefied by refrigeration only, considered to be released at the highest daily maximum temperature, based on data for the previous three years appropriate for a stationary source, or at process temperature, whichever is higher? [68.22(g)]	ΠY	ΠN	⊠ N/A
Hazard Assessment: Worst-case release scenario analysis [68.25]			
<ol> <li>Analyzed and reported in the RMP one worst-case release scenario estimated to create the greatest distance to an endpoint resulting from an accidental release of a regulated toxic substance from covered processes under worst-case conditions? [68.25(a)(2)(i)]</li> </ol>	⊠Y	□N	□ N/A
10. Analyzed and reported in the RMP one worst-case release scenario estimated to create the greatest distance to an endpoint resulting from an accidental release of a regulated flammable substance from covered processes under worst-case conditions? [68.25(a)(2)(ii)]	ΠY	. □N	⊠ N/A
11. Analyzed and reported in the RMP additional worst-case release scenarios for a hazard class if the a worst-case release from another covered process at the stationary source potentially affects public receptors different from those potentially affected by the worst-case release scenario developed under 68.25(a)(2)(i) or 68.25(a)(2)(ii)? [68.25(a)(2)(iii)]	ΩY	□N	⊠ N/A
<ul> <li>12. Has the owner or operator determined the worst-case release quantity to be the greater of the following: [68.25(b)]</li> <li>☑ a. If released from a vessel, the greatest amount held in a single vessel, taking into account administrative controls that limit the maximum quantity? [68.25(b)(1)]</li> <li>□ b. If released from a pipe, the greatest amount held in the pipe, taking into account administrative controls that limit the maximum quantity? [68.25(b)(2)]</li> </ul>	ΣY	□N	□ N/A
13a. Has the owner or operator for toxic substances that are normally gases at ambient temperature and handled as a gas or liquid under pressure:			
13.a.(1) Assumed the whole quantity in the vessel or pipe would be released as a gas over 10 minutes? [68.25(c)(1)]	⊠Y	ΠN	□ N/A
13.a.(2) Assumed the release rate to be the total quantity divided by 10, if there are no passive mitigation systems in place? [68.25(c)(1)]	⊠Y	ΠN	□ N/A
13.b. Has the owner or operator for toxic gases handled as refrigerated liquids at ambient pressure:			
13.b.(1) Assumed the substance would be released as a gas in 10 minutes, if not contained by passive mitigation systems or if the contained pool would have a depth of 1 cm or less? [68.25(c)(2)(i)]	ΠY	□N	⊠ N/A
13.b.(2) [Optional for owner / operator ] Assumed the quantity in the vessel or pipe would be spilled instantaneously to form a liquid pool, if the released substance would be contained by passive mitigation systems in a pool with a depth greater than 1 cm? [68.25(c)(2)(ii)]	ΠY	□N	⊠ N/A
13.b.(3) Calculated the volatilization rate at the boiling point of the substance and at the conditions specified in 68.25(d)? [68.25(c)(2)(ii)]	ΠY	□N	⊠ N/A
13.c. Has the owner or operator for toxic substances that are normally liquids at ambient temperature:			
13.c.(1) Assumed the quantity in the vessel or pipe would be spilled instantaneously to form a liquid pool? [68.25(d)(1)]	ΩY	ΠN	⊠ N/A
13.c.(2) Determined the surface area of the pool by assuming that the liquid spreads to 1 cm deep, if there is no passive mitigation system in place that would serve to contain the spill and limit the surface area, or if passive mitigation is in place, the surface area of the contained liquid shall be used to calculate the volatilization rate? [68.25(d)(1)(i)]	ΩY	ΠN	⊠ N/A
13.c.(3) Taken into account the actual surface characteristics, if the release would occur onto a	ΠY	ΠN	⊠ N/A

ility Name: Illinois American Water - Urbana East Plant, 601 N. Lincoln Ave., Urbana, IL 61801			
surface that is not paved or smooth? [68.25(d)(1)(ii)]			
13.c.(4) Determined the volatilization rate by accounting for the highest daily maximum temperature in the past three years, the temperature of the substance in the vessel, and the concentration of the substance if the liquid spilled is a mixture or solution? [68.25(d)(2)]	ΠY	□N	⊠ N/A
13.c.(5) Determined the rate of release to air from the volatilization rate of the liquid pool? [68.25(d)(3)]	ΠY	□N	⊠ N/A
13.c.(6) Determined the rate of release to air by using the methodology in the RMP Offsite Consequence Analysis Guidance, any other publicly available techniques that account for the modeling conditions and are recognized by industry as applicable as part of current practices, or proprietary models that account for the modeling conditions may be used provided the owner or operator allows the implementing agency access to the model and describes model features and differences from publicly available models to local emergency planners upon request? [68.25(d)(3)]	ΠY	□N	⊠ N/A
13.d. Has the owner or operator for <u>flammables</u> :			
13.d.(1) Assumed the quantity in a vessel(s) of flammable gas held as a gas or liquid under pressure or refrigerated gas released to an undiked area vaporizes resulting in a vapor cloud explosion? [68.25(e)]	ΠY	□N	⊠ N/A
13.d.(2) For refrigerated gas released to a contained area or liquids released below their atmospheric boiling point, assumed the quantity volatilized in 10 minutes results in a vapor cloud? [68.25(f)]	ΠY	□N	⊠ N/A
13.d.(3) Assumed a yield factor of 10% of the available energy is released in the explosion for determining the distance to the explosion endpoint, if the model used is based on TNT-equivalent methods? [68.25(e)]	ΠY	□N	⊠ N/A
14. Used the parameters defined in 68.22 to determine distance to the endpoints? [68.25(g)]	⊠Y	ΠN	□ N/A
15. Determined the rate of release to air by using the methodology in the RMP Offsite Consequence Analysis Guidance, any other publicly available techniques that account for the modeling conditions and are recognized by industry as applicable as part of current practices, or proprietary models that account for the modeling conditions may be used provided the owner or operator allows the implementing agency access to the model and describes model features and differences from publicly available models to local emergency planners upon request? [68.25(g)] a. What modeling technique did the owner or operator use? [68.25(g)]	⊠Y	□N	□ N/A
16. Ensured that the passive mitigation system, if considered, is capable of withstanding the release event triggering the scenario and will still function as intended? [68.25(h)]	ΠY	□N	⊠ N/A
<ul> <li>17. Considered also the following factors in selecting the worst-case release scenarios: [68.25(i)]</li> <li>□ a. Smaller quantities handled at higher process temperature or pressure? [68.25(i)(1)]</li> <li>□ b. Proximity to the boundary of the stationary source? [68.25(i)(2)]</li> </ul>	ΠY	ΩN	⊠ N/A
Hazard Assessment: Alternative release scenario analysis [68.28]			
18. Identified and analyzed at least one alternative release scenario for each regulated toxic substance held in a covered process(es) and at least one alternative release scenario to represent all flammable substances held in covered processes? [68.28(a)]	⊠Y	ΠN	□ N/A
<ul> <li>19. Selected a scenario: [68.28(b)]</li> <li>☑ a. That is more likely to occur than the worst-case release scenario under 68.25? [68.28(b)(1)(i)]</li> <li>☑ b. That will reach an endpoint off-site, unless no such scenario exists? [68.28(b)(1)(ii)]</li> </ul>	⊠Y	□N	□ N/A

Fa	cility Name: Illinois American Water - Urbana East Plant, 601 N. Lincoln Ave., Urbana, IL 61801			
	<ul> <li>20. Considered release scenarios which included, but are not limited to, the following: [68.28(b)(2)]</li> <li>□ a. Transfer hose releases due to splits or sudden hose uncoupling? [68.28(b)(2)(i)]</li> <li>□ b. Process piping releases from failures at flanges, joints, welds, valves and valve seals, and drains or bleeds? [68.28(b)(2)(ii)]</li> <li>□ c. Process vessel or pump releases due to cracks, seal failure, or drain, bleed, or plug failure? [68.28(b)(2)(iii)]</li> <li>□ d. Vessel overfilling and spill, or overpressurization and venting through relief valves or rupture disks? [68.28(b)(2)(iv)]</li> <li>□ e. Shipping container mishandling and breakage or puncturing leading to a spill? [68.28(b)(2)(v)]</li> </ul>	⊠Y	□N	□ N/A
	21. Used the parameters defined in 68.22 to determine distance to the endpoints? [68.28(c)]	⊠Y	ΠN	□ N/A
	22. Determined the rate of release to air by using the methodology in the RMP Offsite Consequence Analysis Guidance, any other publicly available techniques that account for the modeling conditions and are recognized by industry as applicable as part of current practices, or proprietary models that account for the modeling conditions may be used provided the owner or operator allows the implementing agency access to the model and describes model features and differences from publicly available models to local emergency planners upon request? [68.28(c)]	⊠Y	□N	□ N/A
	23. Ensured that the passive and active mitigation systems, if considered, are capable of withstanding the release event triggering the scenario and will be functional? [68.28(d)]	ΠY	□N	⊠ N/A
	24. Considered the following factors in selecting the alternative release scenarios: [68.28(e)]  □ a. The five-year accident history provided in 68.42? [68.28(e)(1)]  □ b. Failure scenarios identified under 68.67? [68.28(e)(2)]	ΠY	ΠN	⊠ N/A
	Hazard Assessment: Defining off-site impacts-Population [68.30]			
	25. Estimated population that would be included in the distance to the endpoint in the RMP based on a circle with the point of release at the center? [68.30(a)]	⊠Y	□N	□ N/A
	26. Identified the presence of institutions, parks and recreational areas, major commercial, office, and industrial buildings in the RMP? [68.30(b)]	⊠Y	□N	□ N/A
	27. Used most recent Census data, or other updated information to estimate the population? [68.30(c)]  According to documentation reviewed at the time of the inspection, the facility used the online census information available. They accessed the site on 9/9/1998 (which would have used the 1990 census information).	ΠY	⊠N	□ N/A
	28. Estimated the population to two significant digits? [68.30(d)]	⊠Y	ΠN	□ N/A
	Hazard Assessment: Defining off-site impacts-Environment [68.33]			
	29. Identified environmental receptors that would be included in the distance to the endpoint based on a circle with the point of release at the center? [68.33(a)]	⊠Y	□N	□ N/A
	30. Relied on information provided on local U.S.G.S. maps, or on any data source containing U.S.G.S. data to identify environmental receptors? [ Source may have used LandView to obtain information ] [68.33(b)]	⊠Y	□N	□ N/A
	Hazard Assessment: Review and update [68.36]			
	31. Reviewed and updated the off-site consequence analyses at least once every five years? [68.36(a)]  At the time of the inspection, there was no evidence to show that the facility updated its off-site consequence analyses at least once every five years. The information in the originally submitted RMP and the most recent RMP is exactly the same, even though population has changed.	ΠY	⊠N	□ N/A
	32. Completed a revised analysis and submit a revised RMP within six months of a change in	□Y	□N	⊠ N/A

Facility Name: _Illinois American Water - Urbana East Plant, 601 N. Lincoln Ave., Urbana, IL 61801 processes, quantities stored or handled, or any other aspect that might reasonably be expected on	T .		
increase or decrease the distance to the endpoint by a factor of two or more? [68.36(b)]			
Hazard Assessment: Documentation [68.39] Has the owner/operator maintained the following records:			
33. For worst-case scenarios: a description of the vessel or pipeline and substance selected, assumptions and parameters used, the rationale for selection, and anticipated effect of the administrative controls and passive mitigation on the release quantity and rate? [68.39(a)]	⊠Y	□N	□ N/A
34. For alternative release scenarios: a description of the scenarios identified, assumptions and parameters used, the rationale for the selection of specific scenarios, and anticipated effect of the administrative controls and mitigation on the release quantity and rate? [68.39(b)]	⊠Y	ΠN	□ N/A
35. Documentation of estimated quantity released, release rate, and duration of release? [68.39(c)]	⊠Y	ПN	□ N/A
36. Methodology used to determine distance to endpoints? [68.39(d)]	⊠Y	ΠN	□ N/A
37. Data used to estimate population and environmental receptors potentially affected? [68.39(e)]  The owner or operator must make sure that the documentation the facility has on site reflects the information in the submitted RMP.	⊠Y	□N	□ N/A
Hazard Assessment: Five-year accident history [68.42]			
38. Has the owner or operator included all accidental releases from covered processes that resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage? [68.42(a)]  According to the owner or operator, the facility has not had an accident in the past five years.	ΠY	□N	⊠ N/A
39. Has the owner or operator reported the following information for each accidental release: [68.42(b)]  a. Date, time, and approximate duration of the release? [68.42(b)(1)]  b. Chemical(s) released? [68.42(b)(2)]  c. Estimated quantity released in pounds and percentage weight in a mixture (toxics)? [68.42(b)(3)]  d. NAICS code for the process? [68.42(b)(4)]  e. The type of release event and its source? [68.42(b)(5)]  f. Weather conditions (if known)? [68.42(b)(6)]  g. On-site impacts? [68.42(b)(7)]  h Known offsite impacts? [68.42(b)(8)]  i. Initiating event and contributing factors (if known)? [68.42(b)(9)]  j. Whether offsite responders were notified (if known)? [68.42(b)(10)]  k. Operational or process changes that resulted from investigation of the release? [68.42(b)(11)]	□Y ·	□N	⊠ N/A
Section C: Prevention Program			
Implemented the Program 3 prevention requirements as provided in 40 CFR 68.65 - 68.87?  N/A  Comments:	S ⊠M	□ U	. 🗖
Prevention Program- Process Safety information [68.65]			
1. Has the owner or operator compiled written process safety information, which includes information pertaining to the hazards of the regulated substances used or produced by the process, information pertaining to the technology of the process, and information pertaining to the equipment in the process, before conducting any process hazard analysis required by the rule? [68.65(a)]  Does the process safety information contain the following for hazards of the substances: [68.65(b)]	⊠Y	□N	□ N/A

acili	ty Name: _Illinois American Water - Urbana East Plant, 601 N. Lincoln Ave., Urbana, IL 61801			
	b. Permissible exposure limits? [68.65(b)(2)]			
	☑ c. Physical data? [68.65(b)(3)]			
	☐ d. Reactivity data? [68.65(b)(4)]			
	<ul> <li>e. Corrosivity data? [68.65(b)(5)]</li> <li>f. Thermal and chemical stability data? [68.65(b)(6)]</li> </ul>			
	g. Hazardous effects of inadvertent mixing of materials that could foreseeably occur? [68.65(b)(7)]			
1.00				
MS	DS were reviewed at the time of the inspection from Canexus, dated 8/18/2005.			
2.	Has the owner documented information pertaining to technology of the process?	□ Y	$\boxtimes N$	□ N/A
	☑ A block flow diagram or simplified process flow diagram? [68.65(c)(1)(i)]			
	☑ Process chemistry? [68.65(c)(1)(ii)]			
	☑ Maximum intended inventory? [68.65(c)(1)(iii)]			
-	Safe upper and lower limits for such items as temperatures, pressures, flows, or compositions?			
_	[68.65(c)(1)(iv)]			
Op	erating limits have been listed in P&ID's and in operating procedures.			
Th	An evaluation of the consequences of deviation? [68.65(c)(1)(iv)] cowner or operator did not have information on consequences of deviation.			
1 700	Does the process safety information contain the following for the equipment in the process: [68.65(d)(1)]			
	✓ Does the process safety information contain the following for the equipment in the process. [68.65(d)(1)]  ✓ Materials of construction? 68.65(d)(1)(i)]			
	Piping and instrumentation diagrams [68.65(d)(1)(ii)]			
	☑ Electrical classification? [68.65(d)(1)(iii)]			
	Relief system design and design basis? [68.65(d)(1)(iv)]			
	✓ Ventilation system design? [68.65(d)(1)(v)]			
	☑ Design codes and standards employed? [68.65(d)(1)(vi)]			
	☐ Material and energy balances for processes built after June 21, 1999? [68.65(d)(1)(vii)] - NA			
	✓ Safety systems? [68.65(d)(1)(viii)]			
3.	Has the owner or operator documented that equipment complies with recognized and generally accepted good	⊠Y	ПN	□ N/A
	engineering practices? [68.65(d)(2)]			
4.	Has the owner or operator determined and documented that existing equipment, designed and constructed in	ΠY	ΠN	⊠ N/A
•••	accordance with codes, standards, or practices that are no longer in general use, is designed, maintained,		٠.,	E IVA
	inspected, tested, and operating in a safe manner? [68.65(d)(3)]			
Pre	evention Program- Process Hazard Analysis [68.67]			
5.	Has the owner or operator performed an initial process hazard analysis (PHA), and has this analysis identified,	⊠Y	$\Box$ N	□ N/A
	evaluated, and controlled the hazards involved in the process? [68.67(a)]			
An	initial PHA was completed in 7/1995.			
6.	Has the owner or operator determined and documented the priority order for conducting PHAs, and was it	⊠Y		□ N/A
٠.	based on an appropriate rationale? [68.67(a)]			<b>—</b> 14/7
7.	Has the owner used one or more of the following technologies to conduct process PHA: [68.67(b)]	⊠Y	$\Box$ N	□ N/A
	☑ What-if? [68.67(b)(1)]			
	☐ Checklist? [68.67(b)(2)]			
	☐ What-if/Checklist? [68.67(b)(3)] ☐ Hazard and Operability Study (HAZOP) [68.67(b)(4)]			
	☐ Failure Mode and Effects Analysis (FMEA) [68.67(b)(5)]			
	☐ Fault Tree Analysis? [68.67(b)(6)]			
	☐ An appropriate equivalent methodology? [68.67(b)(7)]			
8.	Did the PHA address:	⊠Y	$\square$ N	□ N/A
	The hazards of the process? [68.67(c)(1)]			
	☑ Identification of any incident which had a likely potential for catastrophic consequences? [68.67(c)(2)]			
	☑ Engineering and administrative controls applicable to hazards and interrelationships?[68.67(c)(3)]			

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<ul> <li>☑ Consequences of failure of engineering and administrative controls? [68.67(c)(4)]</li> <li>☑ Stationary source siting? [68.67(c)(5)]</li> <li>☑ Human factors? [68.67(c)(6)]</li> <li>☑ An evaluation of a range of the possible safety and health effects of failure of controls? [68.67(c)(7)]</li> </ul>			,
9. Was the PHA performed by a team with expertise in engineering and process operations and did the team include appropriate personnel? [ 68.67(d)]	⊠Y	ΠN	□ N/A
10. Has the owner or operator established a system to promptly address the team's findings and recommendations; assured that the recommendations are resolved in a timely manner and documented; documented what actions are to be taken; completed actions as soon as possible; developed a written schedule of when these actions are to be completed; and communicated the actions to operating, maintenance, and other employees whose work assignments are in the process and who may be affected by the recommendations? [68.67(e)]  The 1995 PHA included a node entitled Chlorine Storage & Feeding #5, which specified that the facility must	ΟY	⊠N	□ N/A
"add procedure stop to plug the open ends of the container", which was never addressed. The owner or operator must make sure that all PHA findings and recommendations are resolved and addressed in a timely manner. The facility must make sure that for the July 2007 PHA conducted, the facility identified the findings and recommendations, assure that the recommendations are resolved in a timely manner and documented; document what actions are to be taken; complete actions as soon as possible' develop a written schedule of when these actions are to be completed; and communicate the actions to operating, maintenance, and other employees whose work assignments are in the process and who may be affected by the recommendation.			
11. Has the PHA been updated and revalidated by a team every five years after the completion of the initial PHA to assure that the PHA is consistent with the current process? [68.67(f)]	ΠY	⊠N	□ N/A
An initial PHA was conducted in 1995. A subsequent PHA was completed in July of 2007. There is no evidence of any additional PHAs being completed.			
12. Has the owner or operator retained PHAs and updates or revalidations for each process covered, as well as the	ΠY	ΠN	⊠ N/A
resolution of recommendations for the life of the process? [68.67(g)]	• •		
resolution of recommendations for the life of the process? [68.67(g)]	⊠Y	ΠN	□ N/A
Prevention Program- Operating procedures [68.69]  13. Has the owner or operator developed and implemented written operating procedures that provides instructions or steps for conducting activities associated with each covered process consistent with the safety information? [68.69(a)]  14. Do the procedures address the following: [68.69(a)]  Steps for each operating phase: [68.69(a)(1)]  Initial Startup? [68.69(a)(1)(ii)]  Normal operations? [68.69(a)(1)(iii)]  Temporary operations? [68.69(a)(1)(iii)]  Emergency shutdown including the conditions under which emergency shutdown is required, and the			□ N/A
Prevention Program- Operating procedures [68.69]  13. Has the owner or operator developed and implemented written operating procedures that provides instructions or steps for conducting activities associated with each covered process consistent with the safety information? [68.69(a)]  14. Do the procedures address the following: [68.69(a)]  Steps for each operating phase: [68.69(a)(1)]  Initial Startup? [68.69(a)(1)(ii)]  Normal operations? [68.69(a)(1)(iii)]  Temporary operations? [68.69(a)(1)(iii)]  Emergency shutdown including the conditions under which emergency shutdown is required, and the assignment of shutdown responsibility to qualified operators to ensure that emergency shutdown is executed in a safe and timely manner? [68.69(a)(1)(iv)]  Emergency operations? [68.69(a)(1)(v)]  Emergency operations? [68.69(a)(1)(vi)]			
Prevention Program- Operating procedures [68.69]  13. Has the owner or operator developed and implemented written operating procedures that provides instructions or steps for conducting activities associated with each covered process consistent with the safety information? [68.69(a)]  14. Do the procedures address the following: [68.69(a)]  Steps for each operating phase: [68.69(a)(1)]  Initial Startup? [68.69(a)(1)(ii)]  Normal operations? [68.69(a)(1)(iii)]  Emergency shutdown including the conditions under which emergency shutdown is required, and the assignment of shutdown responsibility to qualified operators to ensure that emergency shutdown is executed in a safe and timely manner? [68.69(a)(1)(iv)]  Emergency operations? [68.69(a)(1)(v)]  Normal shutdown? [68.68(a)(1)(vi)]  Startup following a turnaround, or after emergency shutdown? [68.69(a)(1)(vii)]  Operating limits: [68.68(a)(2)]  Consequences of deviations [68.69(a)(2)(i)]			
Prevention Program- Operating procedures [68.69]  13. Has the owner or operator developed and implemented written operating procedures that provides instructions or steps for conducting activities associated with each covered process consistent with the safety information? [68.69(a)]  14. Do the procedures address the following: [68.69(a)]  Steps for each operating phase: [68.69(a)(1)]  Initial Startup? [68.69(a)(1)(ii)]  Normal operations? [68.69(a)(1)(iii)]  Temporary operations? [68.69(a)(1)(iii)]  Emergency shutdown including the conditions under which emergency shutdown is required, and the assignment of shutdown responsibility to qualified operators to ensure that emergency shutdown is executed in a safe and timely manner? [68.69(a)(1)(iv)]  Emergency operations? [68.69(a)(1)(v)]  Emergency operations? [68.69(a)(1)(v)]  Startup following a turnaround, or after emergency shutdown? [68.69(a)(1)(vii)]  Operating limits: [68.68(a)(2)]			

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<ul> <li>☑ Quality control for raw materials and control of hazardous chemical inventory levels? [68.69(a)(3)(iv)]</li> <li>☑ Any special or unique hazards? [68.69(a)(3)(v)]</li> <li>☑ Safety systems and their functions? [68.69(a)(4)]</li> </ul>			
Chlorine safe handling and emergency procedures. Procedures need to be updated to indicate alarm set points at 5ppm not 3ppm.			
15. Are operating procedures readily accessible to employees who are involved in a process? [68.69(b)]	⊠Y	ΠN	□ N/A
16. Has the owner or operator certified annually that the operating procedures are current and accurate and that procedures have been reviewed as often as necessary?[68.69(c)] Reviewed certifications dated 8/2004, 8/2005, 9/2006.	⊠Y	□N	□ N/A
17. Has the owner or operator developed and implemented safe work practices to provide for the control of hazards during specific operations, such as lockout/tagout? [68.69(d)] Lockout/tagout procedures are followed.	⊠Y	□N	□ N/A
Prevention Program - Training [68.71]			
18. Has each employee involved in operating a process, and each employee before being involved in operating a newly assigned process, been initially trained in an overview of the process and in the operating procedures?[68.71(a)(1)]	⊠Y	□N	□ N/A
New employees have a check off list that must be completed. For operators: supervisor and experienced operators conduct training with new employees, hands on training. For maintenance: new employees work daily with experienced operators, respirator training and other maintenance and change out is conducted with trained maintenance until the operator is comfortable and knowledgeable enough to conduct change out on their own. Reviewed Darrel Vamorere plant operator training checklist dated 1/29/2001. This checklist included chlorinator operation, alarms, detection systems, emergency plant shut down procedures, MSDS and is combined with hand on and written procedures.			
19. Did initial training include emphasis on safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks? [68.71(a)(1)]	⊠Y	ПN	□ N/A
20. In lieu of initial training for those employees already involved in operating a process on June 21, 1999, an owner or operator may certify in writing that the employee has the required knowledge, skills, and abilities to safely carry out the duties and responsibilities as specified in the operating procedures [68.71(a)(2)]	ΠY	□N	⊠ N/A
21. Has refresher training been provided at least every three years, or more often if necessary, to each employee involved in operating a process to assure that the employee understands and adheres to the current operating procedures of the process? [68.71(b)]	ΠY	⊠N	□ N/A
RMP/PSM training is conducted and includes overview of programs, what is required under each program, explains PHAs, explained Audits. Review of operating procedures during refresher training is not documented. The owner or operator must make sure that review of operating procedures are clearly noted in refresher training and documented accordingly, even if training is conducted locally.			
22. Has owner or operator ascertained and documented in record that each employee involved in operating a process has received and understood the training required? ]	⊠Y	□N	□ N/A
At the time of the inspection, the following training schedule was reviewed: lockout/tagout – 3year, Respiratory protection – 1 year, HAZ Com- ½ years, confined space – 2years, PSM/RMP Program -3 years, Emergency Action plan and Chemical Spill reporting are annually reviewed and conducted by supervisors locally.  There are 2 full time trainers in the Region. The following training records were reviewed; Oscar Adams – operator, respirator training dated 4/1/97, 1/26/1999. 5/16/2000. 2/25/02, 1/27/03, 3/15/04, 9/16/05, 12/21/06, PSM/RMP training dated 4/9/98, 11/2/99, 5/12/04, 2/21/06; Steven Conrad – was maintenance now is operator, respirator training dated 8/28/97, 1/26/99, 5/16/00, 2/25/02, 1/27/03, 9/16/06, 9/15/05, 12/21/06, Action Plan training dated 2/13/03, 5/22/96, PSM/RMP training dated 5/20/04, Respirator			

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training dated 9/25/00, 2/26/02, 1/28/03, 3/5/04, 9/14/05, 12/20/06, Action plan training dated 8/23/00, 11/14/05' Timothy Lecher – maintenance as of 2005, Respirator training 9/14/05, 12/20/06, Action Plan training 11/14/05, PSM/RMP training 2/21/06; Timothy Wegrich – maintenance as of 2001, Respirator training 2/25/02, 1/27/03, 3/5/04, 10/4/05, 12/20/06, PSM/RMP training 5/20/04. 2/21/06, Action Plan training 11/14/2005. The owner or operator must make sure that they conduct training according to their training schedule.			
23. Does the prepared record contain the identity of the employee, the date of the training, and the means used to verify that the employee understood the training? [68.71(c)]	⊠Y	□N	□ N/A
Prevention Program - Mechanical Integrity [68.73]			
<ul><li>24. Has the owner or operator established and implemented written procedures to maintain the ongoing integrity of the process equipment listed in 68.73(a)? [68.73(b)]</li><li>Started recording maintenance schedule in 2006. Hope that by 2008, the owner or operator will have a new computer based system for tracking mechanical integrity and inspections.</li></ul>	⊠Y	□N	□ N/A
25. Has the owner or operator trained each employee involved in maintaining the on-going integrity of process equipment? [68.73(c)]	⊠Y	ΠN	□ N/A
26. Performed inspections and tests on process equipment? [68.73(d)(1)]	⊠Y	ΠN	□ N/A
27. Followed recognized and generally accepted good engineering practices for inspections and testing procedures? [68.73(d)(2)]	ΠY	□N	□ N/A
28. Ensured the frequency of inspections and tests of process equipment is consistent with applicable manufacturers' recommendations, good engineering practices, and prior operating experience? [68.73(d)(3)]	ΠY	⊠N	□ N/A
The owner or operator must make sure that their scales are calibrated. In addition, the owner or operator must follow their inspection and test schedule as written. At the time of the inspection, although inspections and test have been performed, they have not been performed in accordance to the schedule maintained. A new computer system will definitely help keep track of inspections and test and notify of upcoming inspections and tests required.			
29. Documented each inspection and test that had been performed on process equipment, which identifies the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test? [68.73(d)(4)]	⊠Y	□N	□ N/A
At the time of the inspection, the following mechanical integrity documents were reviewed: Chlorinators (1-3) annually disassembled; Evaporator was inspected on 11/28/06 by Sidener and replaced March 2007; Vacuum regulators (500 ppd and 300 ppd pressure reducer and relief valve) annually rebuilt and tested at break point, last inspected on 11/06; chlorine gas detector inspected on 11/06 by Sidener, Monorail Crane			
inspected on 1/19/2007 by Decatur Industrial Electric, 7/13/05 by Illinois Crane, Inc., annually scheduled; Exhaust fan is cleaned once a year and every time the cylinder is changed for annually run of fan; SCOTT Air packs inspected annually, 12/01 and 12/06, 5/03, 98 and 05; Injector inspected on 11/18/06 by Sidener, gaskets inspected also; Rupture Disks inspected by Sidener, new evaporator in 2007, so all new rupture disks, Hoses inspected every time change out of cylinders, Scales have not been inspected. The owner or operator also conducted hourly window, visual walk through.			
30. Corrected deficiencies in equipment that were outside acceptable limits defined by the process safety information before further use or in a safe and timely manner when necessary means were taken to assure safe operation? [68.73(e)]	ΠY	□N	⊠ N/A
31. Assured that equipment as it was fabricated is suitable for the process application for which it will be used in the construction of new plants and equipment? [68.73(f)(1)]	ΠY	□N	⊠ N/A

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32. Performed appropriate checks and inspections to assure that equipment was installed properly and consistent with design specifications and the manufacturer's instructions? [68.73(f)(2)]	ΣY	ΠN	□ N/A
<ol> <li>Assured that maintenance materials, spare parts and equipment were suitable for the process application for which they would be used? [68.73(f)(3)]</li> <li>Hoses, gaskets, general equipment.</li> </ol>	⊠Y	□N	□ N/A
Prevention Program - Management Of Change [68.75]			
34. Has the owner or operator established and implemented written procedures to manage changes to process chemicals, technology, equipment, and procedures, and changes to stationary sources that affect a covered process? [68.75(a)]	ΟY	ΠN	⊠ N/A
Management of Change procedures are in place at the facility, section 7, Rev. Jan. 2002, but the owner or operator stated that they have not had a need to follow management of change procedures.			
35. Do procedures assure that the following considerations are addressed prior to any change: [68.75(b)]  ☐ The technical basis for the proposed change? [68.75(b)(1)]  ☐ Impact of change on safety and health? [68.75(b)(2)]  ☐ Modifications to operating procedures? [68.75(b)(3)]  ☐ Necessary time period for the change? [68.75(b)(4)]  ☐ Authorization requirements for the proposed change? [68.75(b)(5)]	□Y .	□N	⊠ N/A
36. Were employees, involved in operating a process and maintenance, and contract employees, whose job tasks would be affected by a change in the process, informed of, and trained in, the change prior to start-up of the process or affected parts of the process? [68.75(c)]	ΠY	□N	⊠ N/A
37. If a change resulted in a change in the process safety information, was such information updated accordingly? [68.75(d)]	ΠY	□N	⊠ N/A
38. If a change resulted in a change in the operating procedures or practices, had such procedures or practices been updated accordingly? [68.75(e)]	ΠY	□N	⊠ N/A
Prevention Program - Pre-startup Safety Review [68.77]			
39. Did the pre-startup safety review confirm that prior to the introduction of a regulated substance to a process: [68.77(b)]  The owner or operator stated that the facility has not had to conduct a pre-startup safety review.  □ Construction and equipment was in accordance with design specifications? [68.77(b)(1)] □ Safety, operating, maintenance, and emergency procedures were in place and were adequate? [68.77(b)(2)] □ For new stationary sources, a process hazard analysis had been performed and recommendations had been resolved or implemented before startup? [68.77(b)(3)] □ Modified stationary sources meet the requirements contained in management of change? [68.77(b)(3)] □ Training of each employee involved in operating a process had been completed? [68.77(b)(4)]	- DY	□N ,	⊠ N/A
Prevention Program - Compliance audits [68.79]			
<ol> <li>Has the owner or operator certified that the stationary source has evaluated compliance with the provisions of the prevention program at least every three years to verify that the developed procedures and practices are adequate and being followed? [68.79(a)]</li> <li>The owner or operator stated that a compliance audit was completed in 2004, but documentation of a compliance audit was not present at the time of the inspection. The owner or operator did state that a compliance audit would be conducted in 2007.</li> </ol>	Y	⊠N	□ N/A
2. Has the audit been conducted by at least one person knowledgeable in the process? [68.79(b)]	ΠY	ΠŅ	⊠ N/A
3. Are the audit findings documented in a report? [68.79(c)]	□Y	ΠN	⊠ N/A

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4. Has the owner or operator promptly determined and documented an appropriate response to each of the findings of the audit and documented that deficiencies had been corrected? [68.79(d)]	ΟY	ΠN	⊠ N/A
5. Has the owner or operator retained the two most recent compliance reports? [68.79(e)]	ΟY	ΠŃ	⊠ N/A
Prevention Program - Incident investigation [68.81]			
<ol> <li>Has the owner or operator investigated each incident which resulted in, or could reasonably have resulted in a catastrophic release of a regulated substance? [68.81(a)]</li> <li>There is a procedure in place for Incident Investigations, Section 11, rev. May 2002. A chlorine leak incident</li> </ol>	⊠Y	ΠN	□ N/A
dated 10/31/2004 at 3:45 was documented. This incident released 1 pound approximately of chlorine and was a result of a diaphragm on the pressure gauge.			
<ol> <li>Were all incident investigations initiated not later than 48 hours following the incident? [68.81(b)]</li> <li>It is unknown as to whether or not incident investigations are initiated no later than 48 hours following an incident because the date the incident investigation is initiated is not documented.</li> </ol>	ΠY	□N	⊠ N/A
<ol> <li>Was an accident investigation team established and did it consist of at least one person knowledgeable in the process involved, including a contract employee if the incident involved work of a contractor, and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident? [68.81(c)]</li> </ol>		□N	□ N/A
4. Was a report prepared at the conclusion of every investigation?[68.81(d)]	⊠Y	ΠN	□ N/A
<ul> <li>5. Does every report include: [68.81(d)]</li> <li>☑ Date of incident? [68.81(d)(1)]</li> <li>☐ Date investigation began? [68.81(d)(2)]</li> <li>The report for the 10/31/2004 incident did not document the date the investigation began.</li> </ul>	ΠY	⊠N	□ N/A
<ul> <li>☑ A description of the incident? [68.81(d)(3)]</li> <li>☑ The factors that contributed to the incident? [68.81(d)(4)]</li> <li>☑ Any recommendations resulting from the investigation? [68.81(d)(5)]</li> </ul>			
No recommendations were noted.			
6. Has the owner or operator established a system to address and resolve the report findings and recommendations, and are the resolutions and corrective actions documented? [68.81(e)]	⊠Y	ΠN	□ N/A
<ol> <li>Was the report reviewed with all affected personnel whose job tasks are relevant to the incident findings including contract employees where applicable? [68.81(f)]</li> </ol>	⊠Y	□N	□ N/A
8. Has the owner or operator retained the incident investigation reports for five years? [68.81(g)]	⊠Y	□N	□ N/A
Section D - Employee Participation [68.83]			
<ol> <li>Has the owner or operator developed a written plan of action regarding the implementation of the employee participation required by this section?[68.83(a)]</li> </ol>	⊠Y	□N	□ N/A
An employee participation procedure is in place under Management System Section 1.4. The owner or operator stated that employees have familiarity training on RMP/PSM. Operators are also involved in PHA activities.			,
<ol> <li>Has the owner or operator consulted with employees and their representatives on the conduct and development of process hazards analyses and on the development of the other elements of process safety management in chemical accident prevention provisions? [68.83(b)]</li> </ol>		□N	□ N/A
<ol> <li>Has the owner or operator provided to employees and their representatives access to process hazards analyses and to all other information required to be developed under the chemical accident prevention rule? [68.83(c)]</li> </ol>	⊠Y	□N	□ N/A

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Section E - Hot Work Permit [68.85]						
<ol> <li>Has the owner or operator issued a hot work permit for each hot work operation conducted on or near a covered process? [68.85(a)]</li> </ol>	ΟY	□N	⊠ N/A			
A Hot Work permit procedures was available for review, Section 10, 10.4.1 Hot Work Permits. Hot work has not been conducted on the covered process equipment or near the covered process.						
<ol> <li>Does the permit document that the fire prevention and protection requirements in 29CFR 1910.252(a) have been implemented prior to beginning the hot work operations? [68.85(b)]</li> </ol>	ΟY	ΠN	⊠ N/A			
Recommend making sure that the permit documents that the fire prevention and protection requirements in 29 C.F.R. 1910.252(a) have been implemented prior to the beginning of hot work operations.						
3. Does the permit indicate the date(s) authorized for hot work and the object(s) upon which hot work is to be performed? [68.85(b]	ΟY	□N	⊠ N/A			
4. Are the permits being kept on file until completion of the hot work operations? [68.85(b)]	ΠY	□N	⊠ N/A			
Section F - Contractors [68.87]						
1. Has the owner or operator obtained and evaluated information regarding the contract owner or operator's safety performance and programs when selecting a contractor? [68.87(b)(1)]	⊠Y	ΠN	□ N/A			
Contract information in the Risk Management and Process Safety Manual should reflect procedures in Health and Safety Procedural manual on contractor safety requirements.						
<ol> <li>Informed contract owner or operator of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process? [68.87(b)(2)]</li> </ol>	⊠Y	ΠN	□ N/A			
<ol> <li>Explained to the contract owner or operator the applicable provisions of the emergency response or the emergency action program? [68.87(b)(3)]</li> </ol>	⊠Y	ΠN	□ N/A			
<ol> <li>Developed and implemented safe work practices consistent with §68.69(d), to control the entrance, presence, and exit of the contract owner or operator and contract employees in the covered process areas? [68.87(b)(4)]</li> </ol>	⊠Y	□N	□ N/A			
Section G - Emergency Response [68.90 - 68.95]						
Developed and implemented an emergency response program as provided in 40 CFR 68.90-68.95?   SMUNININININININININININININININININININI						
1. Is the facility designated as a "first responder" in case of an accidental release of regulated substances"	ΠY	⊠N	□ N/A			
1.a. If the facility is not a first responder:						
1.a.(1) For stationary sources with any regulated substances held in a process above threshold quantities, is the source included in the community emergency response plan developed under 42 U.S.C. 11003? [68.90(b)(1)]	⊠Y	□N	□ N/A			
1.a.(2) For stationary sources with only regulated flammable substances held in a process above threshold quantities, has the owner or operator coordinated response actions with the local fire department? [68.90(b)(2)]	ΠY	□N	⊠ N/A			
1.a.(3) Are appropriate mechanisms in place to notify emergency responders when there is need for a response? [68.90(b)(3)]	⊠Y	ΠN	□ N/A			
2. An emergency response plan which is maintained at the stationary source and contains the following? [68.95(a)(1)]	⊠Y	ΠN	□ N/A			

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	<ul> <li>a. Procedures for informing the public and local emergency response agencies about accidental releases? [68.95(a)(1)(i)]</li> <li>b. Documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures? [68.95(a)(1)(ii)]</li> </ul>			
,	図 c. Procedures and measures for emergency response after an accidental release of a regulated substance? [68.95(a)(1)(iii)]			
3.	Procedures for the use of emergency response equipment and for its inspection, testing, and maintenance? [68.95(a)(2)]	□Y	⊠N	□ N/A
Op	perators are responsible for monitoring their full face respirators. Monthly checklists are completed for the respirators and other equipment. The facility has 2 Scott's SCBA's, 6 full face dual cartridges, 1 spare bottle, Airpack 50. The following Airpack 50 records were reviewed 2005 (4/21, 4/28, 5/5, 5/13, 5/19, 5/30), 2006 (2/8, 4/13, 7/20, 7/27, 8/11, 8/3, 9/14, 10/7), 2007 (1/7, 1/13, 1/20, 2/3, 2/10, 2/17, 2/24, 3/3, 3/17, 3/24, 3/31, 4/7, 4/14, 2/1, 6/10, 7/12). Scott Air pack records dated 2/6/07, 3/15/07, 6/5/07, 6/19/07, 7/12/07. SCBA weekly operation inspection log is not being completed monthly as noted. Inspections of equipment are not being conducted according to schedule.			
4.	Training for all employees in relevant procedures? [68.95(a)(3)]	⊠Y	ΠN	□ N/A
	Procedures to review and update, as appropriate, the emergency response plan to reflect changes at the stationary source and ensure that employees are informed of changes? [68.95(a)(4)]	⊠Y	ΠN	□ N/A
Ac	cording to the owner or operator, the plans are reviewed annually. The facility has a corporate procedure and a facility specific Action Plan procedure. The owner or operator must update the plan to reflect the plan to reflect 5ppm, not 1 ppm as noted in the Action plan.			
6.	Did the owner or operator use a written plan that complies with other Federal contingency plan regulations or is consistent with the approach in the National Response Team's Integrated Contingency Plan Guidance ("One Plan")? If so, does the plan include the elements provided in paragraph (a) of 68.95, and also complies with paragraph (c) of 68.95? [68.95(b)]	ΠY	□N	⊠ N/A
7.	Has the emergency response plan been coordinated with the community emergency response plan developed under EPCRA? [68.95(c)]	⊠Y	□N	□ N/A
Sec	ction H - Risk Management Plan [68.190 - 68.195]			
_	Has the owner or operator reviewed and updated the RMP and submitted it to EPA [68.190(a)]? Reason for update.    Example 2	⊠Y	□N	□ N/A
(	<ul> <li>Within three years of a newly regulated substance listing. [68.190(b)(2)]</li> <li>At the time a new regulated substance is first present in an already regulated process above threshold</li> </ul>			
Ţ	quantities. [68.190(b)(3)]  At the time a regulated substance is first present in a new process above threshold quantities.  [68.190(b)(4)]	-		
	<ul> <li>Within six months of a change requiring revised PHA or hazard review. [68.190(b)(5)]</li> <li>Within six months of a change requiring a revised OCA as provided in 68.36. [68.190(b)(6)]</li> </ul>			
	Within six months of a change that alters the Program level that applies to any covered process.  [68.190(b)(7)]			
2.	If the owner or operator experienced an accidental release that met the five-year accident history reporting criteria (as described at 68.42) subsequent to April 9, 2004, did the owner or operator submit the information required at 68.168, 68.170(j) and 68.175(l) within six months of the release or by the time the RMP was updated as required at 68.190, whichever was earlier. [68.195(a)]	ΠY	ΩN	⊠ N/A
3.	If the emergency contact information required at 68.160(b)(6) has changed since June 21, 2004, did the owner or operator submit corrected information within thirty days of the change? [68.195(b)]	ΠY	ΠN	⊠ N/A

### U.S. ENVIRONMENTAL PROTECTION AGENCY

RISK MANAGEMENT PROGRAM INSPECTION REPORT

FACILITY NAME AND ADDRESS	INSP. START DATE / TIME	RMP SUBMITTAL DATE:			
Illinois American Water – Urbana East Plant	07/18/2007, 8:30 am	Initial: 6/1999			
601 N. Lincoln Ave.	INSP. END DATE / TIME	Updates/Resubmit: 06/2001, 10/2004, 5/2006			
Urbana, IL 61801	07/18/2007, 4:30 pm				
RESPONSIBLE OFFICIAL	TITLE	PHONE NUMBER			
Monika Chrzaszcz	Environmental Engineer	(312) 886-0181			
FACILITY REPRESENTATIVE(S)	TITLE(S)	PHONE NUMBER(S)	CONTACTED		
Peter Bastasich	Manager, Loss Control Central Region	(219)880-2361	x YES NO		
Walter Voegel	Production Operations Superintendent	(217)373-5532	•		
Tim Lecher	Operations Maintenance Services Supervisor	(217)373-5531			
Bill Cooper	Director, Operation Risk Management	(314)996-2261			
	INSPECTION FINDINGS				
10 0 10			,		

S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated, X = Not Applicable

1		(3	- Sausi	factory, ivi - iviai gidai, O - Olisausiac	-101	1y, 14-1	Not Evaluated, A = Not Applicable			
S	Management System	П	S	Haz Assess Back Up Docs		M	Training		X	Hot Work Permits
M	Hazard Assessment		X	Five Year Accident		M	Mechanical Integrity		S	Contractors
S	OCA Parameters			History		S	Management of Change		M	Emergency
S	Offsite Impact Analysis	11	M	Prevention Program		U	Compliance Audits			Response
S	Alternative Release	11	S	Process Safety		S	Incident Investigations		S	Certifications
	Scenario			Process Hazard Analysis		3			S	Implementation of
U	Review and Update		S	SOP'S		S	Employee Participation			Program
-	SECTION C: APPLICABILITY									

 Program Level
 Regulated Substance
 LEPC
 Attachments

 Program Level 3
 Chlorine
 Champaign County LEPC

SECTION D: PROCESS DESCRIPTION (attach additional sheets if necessary)

The Illinois American Water- Urbana East Plant was built in the 1960's, with the introduction of chlorine in 1967. The plant disinfects and treats drinking water for the local community. On average, the facility received a 1 ton (2,000 lb.) cylinder of chlorine a week, ordering 2 cylinders every 2 weeks. Both the West Plant (which services the City of Champaign) and the East Plant (which services the City of Urbana) feed into the same distribution city. The plant serves approximately 35,000 people, 5.1 mil. Gallons. The facility operated 24 hours a day, 7 days a week, with one operator per shift. There are 16 employees in production for both plants, which includes maintenance. There are approximately 55/60 employees total throughout the district, with 4 maintenance employees. There have been no major modifications or changes to the process since its existence.

SECTION E: SUMMARY FINDINGS?COMMENTS (Attach additional sheets if necessary)

On July 18, 2007, a Risk Management Program inspection was conducted at the Illinois American Water – Urbana East Plant in Urbana, Illinois. The purpose of the inspection was to determine the facilities compliance with the Risk Management Program, or CAA 112(r) regulations. Dave Bray has been assigned overall responsibility for the development, implementation, and integration of the Risk Management Program elements. Bill Cooper is responsible for RMP on a business unit level. Bill Cooper, Tim Lecher, Walter Voegel, and Peter Bastasich greeted the inspector and were notified that the inspector would need to see documentation as well as take a walk through of the facility; especially taking note of the RMP covered process equipment.

During the facility walk thru, the following observations and notes were made:

- -Chlorine lines are marked in yellow for chlorine gas or with yellow tags identifying chlorine vent lines and other lines.
- -The facility uses a Halogen Valve System.
- -Currently running from 1 cylinder, cylinder tagged and identified.
- -Regulators 1 and 2 are running tank.
- -Evaporators series 50-200, Siemens are used. Gas feed 75-80% of year, otherwise liquid feed.
- -The facility has 3 chlorinators, 2 usually are used and the third is used during break point. Current readings are 500 lbs (out 48%), 250 lbs, and 2,000 lbs.
- -Alarm set points at 1 and 5 ppm, Wallace and Ternin Chlorine monitors.
- -Production employees have access to chlorine room.

The following notes, recommendations, and violations are being noted as a result of reviewing documentation and interviewing individuals during the RMP inspection:

### **RMP Plan**

- -Update name and title of person or position responsible for part 68 implementation to reflect either Dave Bray or Bill Cooper.
- -Remove any OCA or volume totals from executive summary.

### Management

-Dave Bray has been assigned overall responsibility for the development, implementation, and integration of the risk management program elements. Bill Cooper is responsible for RMP at the business unit level.

### **Hazard Assessment**

-Both a worst case and alternative release scenario were conducted for chlorine.

### **Population**

-According to documentation reviewed at the time of the inspection, the facility used online census information to gather the necessary information to report in the submitted RMP for population affected. The owner or operator accessed the site on 9/9/1998 (which would have used the 1990 Census information). This Census information is not the most recent Census data, or other updated information, as required to be used under **68.30(c)**.

### Review and Update

-The owner or operator failed to review and update off-site consequence analysis at least once every five years, as required under **68.36(a)**. At the time of the inspection, there was no evidence to show that the facility updated its off-site consequence analyses at least once every five years. The information in the originally submitted RMP and the most recent RMP is exactly the same, even though population has changed.

#### **Documentation**

-The owner or operator must make sure that the documentation the facility has on site for population affected in regards to the worst and alternative release scenarios reflects the information submitted in the RMP.

### Five year accident history

-The owner or operator stated that the facility has not had any releases that qualify as an accident in the past five years.

### **Prevention Program**

### **Process Safety Information**

- -MSDS were reviewed at the time of the inspection, dated 8/18/2005.
- -Operating limits have been listed in P&ID's and in operating procedures.
- -The owner or operator did not have information on consequences of deviation, as required under 68.65(c)(1)(iv).

### Process Hazard Analysis

- -According to the submitted RMP, an initial PHA was completed in 7/1995, and subsequent PHA's completed in 1/2001 and 7/2007. The 2001 PHA could not be located, but apparently used the audit findings of the 1995 PHA as a basis.
- The 1995 PHA included a node entitled Chlorine Storage & Feeding #5, which specified that the facility must "add procedure stop to plug the open ends of the container", which was never addressed. The owner or operator must make sure that all PHA findings and recommendations are resolved and addressed in a timely manner, as required under **68.67(e).** The facility must make sure that for the July 2007 PHA conducted, the facility identified the findings

and recommendations, assure that the recommendations are resolved in a timely manner and documented; document what actions are to be taken; complete actions as soon as possible' develop a written schedule of when these actions are to be completed; and communicate the actions to operating, maintenance, and other employees whose work assignments are in the process and who may be affected by the recommendation.

- An initial PHA was conducted in 1995. A subsequent PHA was completed in July of 2007. There is no evidence of any additional PHA's being completed and therefore, the owner or operator failed to update and revalidate the PHA by a team at least every five years after the completion of the initial PHA to assure that the PHA is consistent with the current process, as required under **68.67(f)**.

### **Operating Procedures**

- -Reviewed all operating procedures relevant to the chlorine process. These procedures included changing out of cylinders, replacing full cylinders, startup, normal operating, temporary operating, emergency shutdown, emergency operations, normal shutdown, startup following a turnaround or after emergency shutdown, operating limits, safety and heal considerations, safety systems and their functions.
- -The changing out of cylinders procedures must reflect that 2 employees must be present at all times.
- Reviewed certifications dated 8/2004, 8/2005, 9/2006.

### **Training**

- New employees have a check off list that must be completed. For operators: supervisor and experienced operators conduct training with new employees, hands on training. For maintenance: new employees work daily with experienced operators, respirator training and other maintenance and change out is conducted with trained maintenance until the operator is comfortable and knowledgeable enough to conduct change out on their own. Reviewed Darrel Vamorere plant operator training checklist dated 1/29/2001. This checklist included chlorinator operation, alarms, detection systems, emergency plant shut down procedures, MSDS and is combined with hand on and written procedures.
- RMP/PSM training is conducted and includes overview of programs, what is required under each program, explains PHA's, explained Audits. Review of operating procedures during refresher training is not documented. The owner or operator must make sure that review of operating procedures are clearly noted in refresher training and documented accordingly, even if training is conducted locally, as required under **68.71(b)**.
- At the time of the inspection, the following training schedule was reviewed: lockout/tagout 3year, Respiratory protection 1 year, HAZ Com- ½ years, confined space 2years, PSM/RMP Program -3 years, Emergency Action plan and Chemical Spill reporting are annually reviewed and conducted by supervisors locally. There are 2 full time trainers in the Region. The following training records were reviewed; Oscar Adams operator, respirator training dated 4/1/97, 1/26/1999. 5/16/2000. 2/25/02, 1/27/03, 3/15/04, 9/16/05, 12/21/06, PSM/RMP training dated 4/9/98, 11/2/99, 5/12/04, 2/21/06;Steven Conrad was maintenance now is operator, respirator training dated 8/28/97, 1/26/99, 5/16/00, 2/25/02, 1/27/03, 9/16/06, 9/15/05, 12/21/06, Action Plan training dated 2/13/03, 5/22/96, PSM/RMP training dated 5/22/96, 4/9/98, 5/20/04, 2/22/06; Timothy Kinder maintenance operator as of 2000, PSM/RMP training dated 5/20/04, Respirator training dated 9/25/00, 2/26/02, 1/28/03, 3/5/04, 9/14/05, 12/20/06, Action plan training dated 8/23/00, 11/14/05, PSM/RMP training 2/21/06; Timothy Wegrich maintenance as of 2001, Respirator training 11/14/05, PSM/RMP training 2/21/06, PSM/RMP training 5/20/04. 2/21/06, Action Plan training 11/14/2005. The owner or operator must make sure that they conduct training according to their training schedule.

#### Mechanical Integrity

- Started recording maintenance schedule in 2006. Hope that by 2008, the owner or operator will have a new computer based system for tracking mechanical integrity and inspections.

- The owner or operator must make sure that their scales are calibrated. In addition, the owner or operator must follow their inspection and test schedule as written. At the time of the inspection, although inspections and test have been performed, they have not been performed in accordance to the schedule maintained, as required under **68.73(d)(3).** A new computer system will definitely help keep track of inspections and test and notify of upcoming inspections and tests required.
- At the time of the inspection, the following mechanical integrity documents were reviewed: Chlorinators (1-3) annually disassembled; Evaporator was inspected on 11/28/06 by Sidener and replaced March 2007; Vacuum regulators (500 ppd and 300 ppd pressure reducer and relief valve) annually rebuilt and tested at break point, last inspected on 11/06; chlorine gas detector inspected on 11/06 by Sidener, Monorail Crane inspected on 1/19/2007 by Decatur Industrial Electric, 7/13/05 by Illinois Crane, Inc., annually scheduled; Exhaust fan is cleaned once a year and every time the cylinder is changed for annually run of fan; SCOTT Air packs inspected annually, 12/01 and 12/06, 5/03, 98 and 05; Injector inspected on 11/18/06 by Sidener, gaskets inspected also; Rupture Disks inspected by Sidener, new evaporator in 2007, so all new rupture disks, Hoses inspected every time change out of cylinders, Scales have not been inspected. The owner or operator also conducted hourly window, visual walk thorough.

### Management of Change

-Management of Change procedures are in place at the facility, Section 7, Rev. Jan. 2002, but the owner or operator stated that they have not had a need to follow management of change procedures.

### Pre-Startup Safety Review

-The owner or operator stated that the facility has not had to conduct a pre-startup safety review.

### Compliance Audits

-The owner or operator stated that a compliance audit was completed in 2004, but documentation of a compliance audit was not present at the time of the inspection. The owner or operator did state that a compliance audit would be conducted in 2007. The owner or operator must certify that the stationary source has evaluated compliance with the provisions of the prevention program at least every three years to verify that the developed procedure and practices are adequate and being followed, as required under **68.79(a)**.

### **Incident Investigations**

- -There is a procedure in place for Incident Investigations at the facility. Section 11, rev. May 2002. A chlorine leak incident dated 10/31/2004 was documented. The incident released approximately 1 pound of chlorine and was a result of a diaphragm on the pressure gauge.
- It is unknown as to whether or not incident investigations are initiated no later than 48 hours following an incident because the date the incident investigation is initiated is not documented.
- -The report of the 10/31/2004 incident did not include the date the investigation began, as required under 68.81(d).
- -No recommendations from the incident were noted.

### **Employee Participation**

-An employee participation procedure is in place under Management System Section 1.4. The owner or operator stated that employee have familiarity training on RMP/PSM. Operators are also involved in PHA activities.

### **Hot Work Permit**

- -A Hot Work Permit procedure was available for review, Section 12, 10.4.1 Hot Work Permits. Hot work has not been conducted on the covered process equipment or near the covered process.
- -Recommend making sure that the permit document that the fire prevention and protection requirement in 20 C.F.R 1910.252(a) have been implemented prior to beginning hot work operations.

### Contractors

-Contractor information in the Risk Management and Process Safety Manual should reflect procedures in the Health & Safety Procedural manual on contractor safety requirements.

### **Emergency Response**

- The facility only responds to Class I and II releases, otherwise the local fire department and regional HAZMAT team respond to Class III releases, or releases above 5 ppm. The facility does have an Emergency Action Plan dated 8/30/2005 in place. This plan includes the Chemical Spill/release reporting Checklist and the Class I and II Chlorine Release Checklist.
- Operators are responsible for monitoring their full face respirators. Monthly checklists are completed for the respirators and other equipment. The facility has 2 Scott's SCBA's, 6 full face dual cartridges, 1 spare bottle, Airpack 50. The following Airpack 50 records were reviewed 2005 (4/21, 4/28, 5/5, 5/13, 5/19, 5/30), 2006 (2/8, 4/13, 7/20, 7/27, 8/11, 8/3, 9/14, 10/7), 2007 (1/7, 1/13, 1/20, 2/3, 2/10, 2/17, 2/24, 3/3, 3/17, 3/24, 3/31, 4/7, 4/14, 2/1, 6/10, 7/12). Scott Air pack records dated 2/6/07, 3/15/07, 6/5/07, 6/19/07, 7/12/07. SCBA weekly operation inspection log is not being completed monthly as noted. Inspections of equipment are not being conducted according to schedule, as required **68.95(a)(2).**

At the conclusion of the inspection, an exit interview was conducted, notifying company representatives of areas of concern of the inspector. In addition, the inspector notified company representatives of contact information as well as possible available enforcement actions.

Names(s) and Signature(s) of Inspector(s)
Monika Chrzaszcz

Agency/Office/Telephone Number US EPA/ERB#1/CEPPS/ (312) 886-0181 Date 11/28/2007