



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

11 JAN 25 PM 2:49

ENVIRONMENTAL PROTECTION
AGENCY
REGIONAL HEARING CLERK

EXPEDITED SETTLEMENT AGREEMENT (ESA)

DOCKET NO.: CAA-07-2010-0033

This ESA is issued to: City of Dubuque Water Pollution Control Plant

At: 795 Julien Dubuque Drive, Dubuque, Iowa 52003

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

The United States Environmental Protection Agency, Region 7 (EPA), and City of Dubuque Water Pollution Control Plant, 795 Julien Dubuque Drive, Dubuque, Iowa 52003 (Respondent), have agreed to a settlement of this action before filing of a complaint, and thus this action is simultaneously commenced and concluded pursuant to Rules 22.13(b) and 22.18(B)(2) of the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties, Issuance of Compliance or Corrective Action Orders, and the Revocation, Termination or Suspension of Permits (Consolidated Rules), 40 C.F.R. §§ 22.13(b), 22.18(b)(2).

The Complainant, by delegation of the Administrator of EPA, is the Director of the Air, and Waste Management Division. The Respondent is City of Dubuque Water Pollution Control Plant, 795 Julien Dubuque Drive, Dubuque, Iowa 52003.

This is an administrative action for the assessment of civil penalties instituted pursuant to Section 113(d) of the Clean Air Act (CAA). Pursuant to Section 113(d) of the CAA, 42 U.S.C. § 7413(d), the Administrator and the Attorney General jointly determined that cases which meet the criteria set forth in EPA's policy entitled "Use of Expedited Settlements in Addressing Violations of the Clean Air Act Chemical Accident Prevention Provision, 40 C.F.R. Part 68," dated January 5, 2004, are appropriate for administrative penalty action.

ALLEGED VIOLATIONS

Facilities that produce, handle, process, distribute, or store certain chemicals are required to develop a Risk Management Program, prepare a Risk Management Plan (RMP), and submit the RMP to EPA in accordance with 40 C.F.R. Part 68. Facilities must fully update and resubmit the RMP, at a minimum, every five years or deregister the RMP facility within 6 months that it is no longer covered by the regulation. The EPA Risk Management Database, RMPInfo, indicates that your facility has failed to resubmit or update the Risk Management Plan by June 21, 2009. The City of Dubuque Water Pollution Control Plant's failure to update and resubmit the facility's RMP is a violation of 40 C.F.R. § 68.190.

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 enclosed RMP Findings, for the total penalty amount of **\$2,000**.

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 herein and in the RMP Findings, 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 CAA, 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 enclosed RMP Findings and has sent a cashier's check or certified check (payable to the "United States Treasury") in the amount of **\$2,000** in payment of the full penalty amount to the following address:

U.S. Environmental Protection Agency
Fines and Penalties
Cincinnati Finance Center
P.O. Box 979077
St. Louis, Missouri 63197-9000

The Docket Number of the ESA must be included on the check.

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

Deanna Smith
Office of Regional Counsel
U.S. Environmental Protection Agency, Region 7
901 North 5th Street
Kansas City, Kansas 66101.

A copy of the check must also be sent to:

Kathy M. Robinson
Regional Hearing Clerk
U.S. Environmental Protection Agency, Region 7
901 North 5th Street
Kansas City, Kansas 66101.

Upon Respondent's submission of the signed original ESA, EPA will take no further civil action against Respondent for the alleged violations of the CAA referenced in the RMP Findings.

The EPA does not waive any other enforcement action for any other violations of the CAA or any other statute.

If the signed original ESA with an attached copy of the check is not returned to the EPA Region 7 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 RMP Findings.

This ESA is binding on the parties signing below.

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

FOR RESPONDENT:


Jonathan Brown

Date: 12/28/2010

Name (print): JONATHAN BROWN

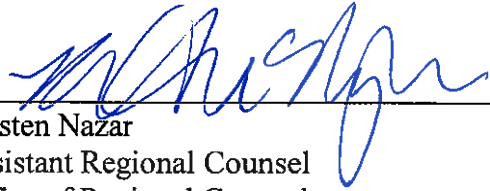
Title (print): Manager
City of Dubuque Water Pollution Control Plant

FOR COMPLAINANT:



Becky Weber
Director
Air and Waste Management Division
EPA Region 7

Date: 1/20/11



Kristen Nazar
Assistant Regional Counsel
Office of Regional Counsel
EPA Region 7

Date: 1/5/2010

I hereby ratify the ESA and incorporate it herein by reference. It is so ORDERED.

Karina Borrromeo

Karina Borrromeo
Regional Judicial Officer

Date: Jan. 25, 2011

Risk Management Program Inspection Findings
CAA § 112(r) Violations

City of Dubuque
Water Pollution Control Plant
795 Julien Dubuque Drive
Dubuque, Iowa 52003

Docket No. CAA-07-2010-0033

COMPLETE THIS FORM AND RETURN IT WITH THE ESA.

VIOLATIONS

PENALTY AMOUNT

Risk Management Plan

\$2,000

Required Corrections [§ 68.190]

The owner or operator failed to revise and update the RMP at least once every 5 years of its most recent submittal or deregistered within 6 months indicating the facility is no longer covered by the RMP regulations as required at § 68.190.

Please attach confirmation that the RMP resubmission/update has been received.

Total Unadjusted Penalty

\$2,000

Calculation of Adjusted Penalty

1st Reference the multipliers for calculating proposed penalties for violations found during RMP inspection matrix. Finding the row for service population of greater than 50,000 gives a multiplier factor of 1. Therefore, the multiplier for City of Dubuque = 1.

2nd Adjusted Penalty = \$2,000 (Unadjusted Penalty) X 1 (Size-Threshold Multiplier)
Adjusted Penalty = \$2,000

3rd An Adjusted Penalty of \$2,000 would be assessed to City of Dubuque for the violations found during the RMP submittal data review for the Water Pollution Control Plant. This amount will be found in the Expedited Settlement Agreement.

Total Adjusted Penalty

\$2,000

***** Risk Management Plan *****

***** Section 1. Registration Information *****

* Source Identification

Facility Name: Water Pollution Control Plant
Parent Company #1 Name: City of Dubuque, Iowa
Parent Company #2 Name:

* Submission and Acceptance

Submission Type: Re-submission
Subsequent RMP
Submission Reason: 5-year update (40 CFR 68.190(b)(1))
Description:
Receipt Date: 23-JUN-2004
Postmark Date: 21-JUN-2004
Next Due Date: 21-JUN-2009
Completeness Check Date: 13-AUG-2004
Complete RMP: YES
De-Registration/Closed
Reason: Source no longer uses any regulated substance
De-Registration/Closed
Reason Other Text:
De-Registered/Closed
Date: 09-NOV-2010
De-Registered/Closed
Effective Date: 05-NOV-2010
Certification Received: YES

* Facility Identification

EPA Facility Identifier: 1000 0013 4428
Other EPA Systems
Facility ID: IAD980633739

* Dun and Bradstreet Numbers (DUNS)

Facility DUNS:
Parent Company #1 DUNS:
Parent Company #2 DUNS:

* Facility Location Address

Street 1: 795 Julien Dubuque Drive
Street 2:
City: Dubuque
State: IOWA
ZIP: 52003
ZIP4: 7996
County: DUBUQUE

* Facility Latitude and Longitude

Latitude (decimal): 42.469966
Longitude (decimal): -090.660168
Lat/Long Method: Interpolation - Photo
Lat/Long Description: Administrative Building
Horizontal Accuracy
Measure: 25
Horizontal Reference
Datum Name: North American Datum of 1983
Source Map Scale Number: 24000

* Owner or Operator

Operator Name: Paul Horsfall
Operator Phone: (563) 589-4176

* Mailing Address

Operator Street 1: 795 Julien Dubuque Drive
Operator Street 2:
Operator City: Dubuque
Operator State: IOWA
Operator ZIP: 52003
Operator ZIP4: 7996
Operator Foreign State
or Province:

Operator Foreign ZIP:
Operator Foreign Country:

* Name, Title and E-mail Address of Person or Position Responsible for Part 68 (RMP) Implementation

RMP Name of Person: Jonathan Brown
RMP Title of Person or
Position: Chemist/Assitant Manager
RMP E-mail Address: jobrown@cityofdubuque.org

* Emergency Contact

Emergency Contact Name: Paul Horsfall
Emergency Contact Title: Manager
Emergency Contact Phone: (563) 589-4176
Emergency Contact
24-Hour Phone: (563) 589-4176
Emergency Contact Ext.
or PIN:
Emergency Contact E-mail
Address: phorsfal@cityofdubuque.org

* Other Points of Contact

Facility or Parent
Company E-mail Address:
Facility Public Contact
Phone: (563) 589-4176
Facility or Parent
Company WWW Homepage
Address:

* Local Emergency Planning Committee

LEPC: Dubuque County LEPC

* Full Time Equivalent Employees

Number of Full Time
Employees (FTE) on Site: 17
FTE Claimed as CBI:

* Covered By

OSHA PSM : YES
EPCRA 302 : YES
CAA Title V: YES
Air Operating Permit ID: 19-1474

* OSHA Ranking

OSHA Star or Merit
Ranking:

* Last Safety Inspection

Last Safety Inspection
(By an External Agency)
Date: 15-JAN-2003
Last Safety Inspection
Performed By an External
Agency: Fire Department

* Predictive Filing

Did this RMP involve
predictive filing?:

* Preparer Information

Preparer Name:
Preparer Phone: none
Preparer Street 1:
Preparer Street 2:
Preparer City:
Preparer State:
Preparer ZIP:
Preparer ZIP4:
Preparer Foreign State:
Preparer Foreign Country:
Preparer Foreign ZIP:

* Confidential Business Information (CBI)

CBI Claimed:

Substantiation Provided:

Unsanitized RMP Provided:

* Reportable Accidents

Reportable Accidents: No accidents meeting RMP reporting requirements were claimed.

***** Executive Summary *****

RMP Executive Summary

The City of Dubuque Water Pollution Control Plant is a publicly owned and operated wastewater treatment facility that serves the citizens and industries of Dubuque Iowa. The plant is located in a valley near the Mississippi River. The primary activity at this site is the treatment of wastewater. The Water Pollution Control Plant (WPCP) uses chlorine in 2000-pound cylinders for the seasonal disinfection of wastewater and magnesium bisulfite solution for dechlorination prior to discharge. Magnesium bisulfite is not listed as a chemical of concern under RMP. The plant has 17 employees and is staffed 24hrs per day 365 days a year. Chlorine is used on a seasonal basis to disinfect treated wastewater. The amount of chlorine on site is between 6000 and 12000 pounds during the chlorination season and up to 2000 pounds off-season. 150 to 300 pounds per day of chlorine gas are used during routine operation.

1. Prevention and Release Policies Summary - The prevention of a release is provided for by the following steps.

- a. All aspects of handling chlorine are limited to a small number of employees trained in the handling and operation of 2000-pound chlorine cylinders and associated chlorinating equipment.
- b. In addition all employees receive chlorine safety awareness training each year.
- c. The changing of chlorine tanks is limited to daytime working hours Monday through Friday when management supervision is available.
- d. Chlorine use is scheduled to allow for weekend and holiday chlorination without the need to change or add additional tanks of chlorine. In the unlikely case that additional chlorine would be needed a supervisor and a trained employee would be called in to perform the task as needed.
- e. Prior to the start of the chlorinating season the mechanical integrity of all lines and fittings is verified. Valves, yokes, pigtail lines, and controls are checked and replaced as needed.
- f. Chlorine is taken from the cylinder as a gas only by orienting the tank so that the valves are in a vertical position and then using the top valve for gas only use. Valves and pigtails are arranged so that using the top gas valve is the only possible choice without reorienting the valve position. Using gas only during normal operation limits the potential release of chlorine if there should be a valve or piping failure.
- g. Leak detection is provided for in the chlorine storage area and the chlorination control room. The leak detection devices are connected into the plant wide SCADA system for monitoring purposes and a local audible alarm. SCADA will also provide an onscreen alarm and an audible alarm throughout the entire plant in addition to the local audible alarm.
- h. In the event of a release employees of the WPCP have been trained in response procedures for communicating with the Dubuque Fire Department and HAZMAT team. This communication would include information relating to severity of the leak, current weather conditions, number of employees on site, and the location of employees. WPCP employees will also notify our only neighbor of the occurrence of a release so that precautions may take place at their facility.
- i. Management of the WPCP is very aware of the possible dangers associated with the use of chlorine and takes an active role in the day to day handling and use of chlorine. The record of over twenty-five years without an accidental release testifies to this commitment.

2. Release scenarios - the Water Pollution Control Plant (WPCP) is located in a valley close to the Mississippi River. The nearest resident is at least .4 miles away and at an elevation of approximately 80 feet above the level of the plant, any schools or hospitals are at least 120 feet above plant elevation. Do to these facts we feel confident in using the building enclosure as a mitigating factor to limit the worst case toxic endpoint distance for the release of chlorine. RMP Comp was used for the worst case, EPA lookup tables for the alternative case. Landview V was used to determine receptors. For the worst case scenario the population densities from Landview V were used. Population densities for the alternative case was determined by local knowledge, there are no residents within the alternative case radius.

Worst Case - The worst case would be the release of 200 pounds per minute of chlorine for a duration of ten minutes giving a total release of 2000 pounds. The release would be inside a structure limiting the release rate to 110 pounds per and the toxic endpoint to 0.9 miles. RMP Comp was used to determine the toxic endpoint. The receptors identified were residents, an industrial area, a state park, a girls softball complex, a wildlife refuge and a hospital (nursing home).

Landview V was used to determine population densities.

Alternative Case - The alternative case is the release of 15 pounds per minute of gaseous chlorine from a pipe leak for 60 minutes resulting in the release of 900 pounds. The scenario selected represents the most likely release from a 2000-pound cylinder using gas only. This type of leak could come from a failure in the pigtail, a crimped lead washer or a leaking packing in the chlorine valve. The toxic endpoint was determined using lookup tables in the 'Risk Management Program Guidance for Wastewater Treatment Plants' by the USEPA. The toxic endpoint is 0.1 miles. The receptors are a state park and an industrial area. There are no residents within the 0.1 mile radius of the toxic endpoint.

3. Compliance - The Dubuque WPCP is in compliance with OSHA PSM and USEPA RMP

4. Accidental Releases - There have been no accidental releases of chlorine at this location for over twenty years.

5. Emergency Response - Emergency response has been coordinated with the Dubuque County LEPC, City of Dubuque Fire Department and HAZMAT team. WPCP employees have been trained in response procedures for communicating with the Dubuque Fire Department and HAZMAT team. A WPCP staff person is a member of the LEPC and a resource person for the HAZMAT team.

6. Program Changes - The WPCP will continue to look for ways to limit the use of chlorine for treatment purposes. No program changes are foreseen in the near future.

* Process Chemicals

Process ID: 53702
 Description: Chlorination of Wastewater
 Process Chemical ID: 70938
 Program Level: Program Level 3 process
 Chemical Name: Chlorine
 CAS Number: 7782-50-5
 Quantity (lbs): 10000
 CBI Claimed:
 Flammable/Toxic: TOXIC

* Process NAICS

Process ID: 53702
 Process NAICS ID: 54937
 Program Level: Program Level 3 process
 NAICS Code: 22132
 NAICS Description: Sewage Treatment Facilities

***** Section 2. Toxics: Worst Case *****

Toxic Worst ID: 35267
 Percent Weight:
 Physical State: Gas liquified by pressure
 Model Used: EPA's RMP*Comp(TM)
 Release Duration (mins): 10
 Wind Speed (m/sec): 1.5
 Atmosphere Stability
 Class: F
 Topography: Urban

Passive Mitigation Considered

Dike:
 Enclosures: YES
 Berms:
 Drains:
 Sumps:
 Other Type:

***** Section 3. Toxics: Alternative Release *****

Toxic Alter ID: 41663
 Percent Weight:
 Physical State: Gas liquified by pressure
 Model Used: EPA's RMP Guidance for Waste Water Treatment
 Plants Reference Tables or Equations
 Wind Speed (m/sec): 3
 Atmosphere Stability
 Class: D

Topography: Urban

Passive Mitigation Considered

Dike:
Enclosures: YES
Berms:
Drains:
Sumps:
Other Type:

Active Mitigation Considered

Sprinkler System:
Deluge System:
Water Curtain:
Neutralization:
Excess Flow Valve:
Flares:
Scrubbers:
Emergency Shutdown:
Other Type:

***** Section 4. Flammables: Worst Case *****
***** Section 5. Flammables: Alternative Release *****
***** Section 6. Accident History *****

***** Section 7. Program Level 3 *****

** Description:

Program Level 3 Prevention Program Chemicals
Prevention Program

Chemical ID: 44885
Chemical Name: Chlorine
Flammable/Toxic: TOXIC
CAS Number: 7782-50-5

Prevention Program Level

3 ID: 30915
NAICS Code: 22132

* Safety Information

Safety Review Date (The
date on which the safety
information was last
reviewed or revised): 22-MAR-2004

* Process Hazard Analysis (PHA)

PHA Completion Date
(Date of last PHA or PHA
update): 24-MAR-2004

The Technique Used

What IF:
Checklist:
What If/Checklist: YES
HAZOP:
Failure Mode and Effects
Analysis:
Fault Tree Analysis:
Other Technique Used:
PHA Change Completion
Date (The expected or
actual date of
completion of all
changes resulting from
last PHA or PHA update): 30-MAR-2004

Major Hazards Identified

Toxic Release: YES
Fire: YES
Explosion:

Runaway Reaction:
 Polymerization:
 Overpressurization:
 Corrosion: YES
 Overfilling:
 Contamination:
 Equipment Failure: YES
 Loss of Cooling,
 Heating, Electricity,
 Instrument Air: YES
 Earthquake:
 Floods (Flood Plain):
 Tornado: YES
 Hurricanes:
 Other Major Hazard
 Identified:

Process Controls In Use
 Vents:
 Relief Valves: YES
 Check Valves:
 Scrubbers:
 Flares:
 Manual Shutoffs: YES
 Automatic Shutoffs:
 Interlocks:
 Alarms and procedures: YES
 Keyed Bypass:
 Emergency air supply:
 Emergency Power:
 Backup Pump:
 Grounding Equipment:
 Inhibitor Addition:
 Rupture Disks: YES
 Excess Flow Device:
 Quench System:
 Purge System:
 None:
 Other Process Control In
 Use:

Mitigation Systems In Use
 Sprinkler System:
 Dikes:
 Fire Walls:
 Blast Walls:
 Deluge System:
 Water Curtain:
 Enclosure: YES
 Neutralization:
 None:
 Other Mitigation System
 In Use:

Monitoring/Detection Systems In Use
 Process Area Detectors: YES
 Perimeter Monitors:
 None:
 Other
 Monitoring/Detection
 System In Use:

Changes Since Last PHA Update
 Reduction in Chemical
 Inventory:
 Increase in Chemical
 Inventory:
 Change Process
 Parameters:
 Installation of Process
 Controls:

Installation of Process

Detection Systems:

Installation of
Perimeter Monitoring
Systems:

Installation of
Mitigation Systems:

None Recommended:

None: YES

Other Change Since Last

PHA or PHA update:

Review of Operating Procedures

Operating Procedures

Revision Date (The date

of the most recent

review or revision of

operating procedures): 22-MAR-2004

* Training

Training Revision Date

(The date of the most

recent review or

revision of training

programs): 03-MAY-2003

The Type of Training Provided

Classroom: YES

On the Job:

Other Type of Training

Provided:

The Type of Competency Testing Used

Written Test:

Oral Test:

Demonstration:

Observation: YES

Other Type of Competency

Testing Used:

* Maintenance

Maintenance Procedures

Revision Date (The date

of the most recent

review or revision of

maintenance procedures): 23-MAR-2004

Equipment Inspection

Date (The date of the

most recent equipment

inspection or test): 31-MAR-2004

Equipment Tested:

(Equipment most recently

inspected or tested) Chlorine lines and valves

* Management of Change

Change Management Date

(The date of the most

recent change that

triggered management of

change procedures):

Change Management

Revision Date (The date

of the most recent

review or revision of

management of change

procedures): 25-MAR-2004

* Pre-Startup Review

Pre-Startup Review Date

(The date of the most

recent pre-startup

review): 25-MAR-2004

* Compliance Audits
Compliance Audit Date
(The date of the most
recent compliance audit):
Compliance Audit Change
Completion Date
(Expected or actual date
of completion of all
changes resulting from
the compliance audit):

Incident Investigation
Incident Investigation
Date (The date of the
most recent incident
investigation (if any)):
Incident Investigation
Change Date (The
expected or actual date
of completion of all
changes resulting from
the investigation):

* Employee Participation Plans
Participation Plan
Revision Date (The date
of the most recent
review or revision of
employee participation
plans): 28-APR-2004

* Hot Work Permit Procedures
Hot Work permit Review
Date (The date of the
most recent review or
revision of hot work
permit procedures): 28-APR-2004

* Contractor Safety Procedures
Contractor Safety
Procedures Review Date
(The date of the most
recent review or
revision of contractor
safety procedures): 28-APR-2004
Contractor Safety
Performance Evaluation
Date (The date of the
most recent review or
revision of contractor
safety performance): 29-APR-2004

* Confidential Business Information
CBI Claimed:

***** Section 9. Emergency Response *****

* Written Emergency Response (ER) Plan
Community Plan (Is facility included in
written community emergency response plan?): YES
Facility Plan (Does facility have its own
written emergency response plan?):
Response Actions (Does ER plan include
specific actions to be taken in response to
accidental releases of regulated
substance(s)):
Public Information (Does ER plan include
procedures for informing the public and

IN THE MATTER OF City of Dubuque Water Pollution Control Plant, Respondent
Docket No. CAA-07-2010-0033

CERTIFICATE OF SERVICE

I certify that a true and correct copy of the foregoing Expedited Settlement Agreement (ESA) was sent this day in the following manner to the addressees:

Copy hand delivered to
Attorney for Complainant:

Kristen Nazar
Assistant Regional Counsel
Region 7
United States Environmental Protection Agency
901 N. 5th Street
Kansas City, Kansas 66101

Copy by Certified Mail Return Receipt to:

Jonathan Brown, Manager
City of Dubuque Water Pollution Control Plant
795 Julien Dubuque Drive
Dubuque, Iowa 52003

Dated: 1/25/11



Kathy Robinson
Hearing Clerk, Region 7