

ADEQ

ARKANSAS
Department of Environmental Quality

March 29, 2012

Ms. Catherine Cook / City Manager
City of Hope POTW
PO Box 667
Hope, AR 71801

RE: Reconnaissance Inspection

AFIN: 29-00034

NPDES Permit No.: AR0038466

Dear Ms. Cook:

On February 22, 2012, I performed a reconnaissance inspection of the waste water treatment facility in accordance with the provisions of the Federal Clean Water Act, the Arkansas Water and Air Pollution Control Act, and the regulations promulgated thereunder. This inspection revealed the following violation:

1. **The Equalization Basin was overflowing. This is considered an un-permitted discharge.**
2. **10 States Standards 93.415 states "Minimum freeboard shall be 3 feet (0.9 m.), except that for small systems 2 feet (0.6 m.) may be acceptable". At the time of the inspection your pond did not have any freeboard.**

The above items require your immediate attention. Please submit a written response to these findings to the Water Division Enforcement Branch of this Department. This response should be mailed to the address at the bottom of the first page of the letter or e-mailed to Water-Enforcement-Report@adeq.state.ar.us. This response should contain documentation describing the course of action taken to correct each item noted. This corrective action should be completed as soon as possible, and the written response with all necessary documentation (i.e. photos) is due by April 9, 2012.

For additional information you may contact the Enforcement Branch by telephone at 501-682-0639 or by fax at 501-682-0880. If I can be of any assistance, please contact me 870-777-7585 ext. 2 or smithron@adeq.state.ar.us.

Sincerely,



Red Smith
District 10 Field Inspector
Water Division

cc: Water Division Enforcement Branch
Water Division Permits Branch

 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Washington, D.C. 20460 <h2 style="margin: 0;">NPDES Compliance Inspection Report</h2>	Form Approved OMB No. 2040-0003
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Section A: National Data System Coding

Transaction Code	NPDES	Yr/Mo/Day	Inspec. Type	Inspector	Fac. Type
1 <input type="text" value="N"/> 2 <input type="text" value="5"/> 3 <input type="text" value="A"/> <input type="text" value="R"/> <input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="3"/> <input type="text" value="8"/> <input type="text" value="4"/> <input type="text" value="6"/> <input type="text" value="6"/> 11 <input type="text" value="1"/> 12 <input type="text" value="2"/> <input type="text" value="0"/> <input type="text" value="2"/> <input type="text" value="2"/> <input type="text" value="2"/> 17 18 <input type="text" value="R"/> 19 <input type="text" value="S"/> 20 <input type="text" value="1"/>	Remarks				
Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved	
67 <input type="text" value="."/> <input type="text" value="6"/> 69	70 <input type="text" value="N"/>	71 <input type="text" value="N"/>	72 <input type="text" value="N"/>	73 <input type="text"/>	74 <input type="text"/>
80					

Section B: Facility Data

Name and Location of Facility Inspected (<i>For industrial users discharging to POTW, also include POTW name and NPDES permit number</i>) City of Hope POTW 2 miles west of Hope & 1 mile south of Hwy 67	Entry Time/Date 0930 / 2-22-2012	Permit Effective Date October 1, 2007
	Exit Time/Date 1300 / 2-22-2012	Permit Expiration Date September 30, 2012
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Kim Holston / WW Superintendent / 870-722-2549	Other Facility Data PDS #064730	
Name, Address of Responsible Official/Title/Phone and Fax Number Catherine Cook / City Manager / 870-777-6701 City Of Hope PO Box 667 Hope, AR 71801	Contacted Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	


Section C: Areas Evaluated During Inspection
 (S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

S	Permit	S	Flow Measurement	U	Operations & Maintenance	N	Sampling
N	Records/Reports	N	Self-Monitoring Program	N	Sludge Handling/Disposal	N	Pollution Prevention
N	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
N	Effluent/Receiving Waters	N	Laboratory	N	Storm Water	N	Other: Effluent Limits

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

Violations:

1. At the time of the inspection the Equalization Basin was overflowing due to rainfall and had been overflowing since 2/14/2012. This was reported as required, when it happened.
2. The facility exceeded minimum freeboard standards according to 10 States Standards. The E.Q. Basin did not have any Freeboard.

Name(s) and Signature(s) of Inspector(s)  Red Smith	Agency/Office/Telephone/Fax AR Dept. of Environmental Quality / Hope 870-777-7585 ext. 2 / 870-777-7560 (fax)	Date March 23, 2012
Signature of Reviewer	Agency/Office/Phone and Fax Numbers	Date

Water Division NPDES Photographic Evidence Sheet

Location:	AR0038466							
Photographer:	Red Smith			Witness:	None			
Photo #	1	Of		1	Date:	2-22-2012	Time:	12:41
Description:	Looking at the south side of EQ basin across basin. Highlighted area is lowest point in levee. Water was over the top.							



Photographer:	Red Smith			Witness:	None			
Photo #	2	Of		2	Date:	2-22-2012	Time:	12:41
Description:	Another view of Basin.							



City of Hope

P. O. Box 667 • Hope, Arkansas 71802-0667 • (870) 777-6701 • Fax (870) 722-2579

April 9, 2012

Red Smith,
District 10 Field Inspector,
Water Division Enforcement Branch
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock AR 72218-5317

Re: Reconnaissance Inspection

NPDES Permit No.: AR0038466

Dear Mr. Smith:

This letter is written in response to your letter of March 29, 2012. I do want to note as an initial response to your letter that our Wastewater Department reported the overflow at the EQ pond on February 15, 2012 to ADEQ and also reported when the overflow ceased on February 24. . This is the procedure that we have been instructed to use to ADEQ. If it is not correct, please let us know.

While I do realize that this overflow covered an extended period of time, I would also note that overflows at our treatment plants are not a common occurrence.

At the time of your inspection, the EQ pond at the Bois D'arc plant was indeed overflowing. The pond began overflowing February 14, 2012 after a relatively small ½ inch rainfall over a 24 hour period. It was indeed true that there was no freeboard at the pond at that time. Prior to this particular rainfall event, we did not have adequate freeboard as previous rainfall events had used all the holding capacity at the EQ pond. We had been pumping at maximum capacity for the preceding two months in an effort to catch up with the rainfall events that totaled almost 11 inches since December 1, 2011. On that date, we had more than 5' of freeboard. I have attached rainfall records as well as records detailing our pumping efforts and freeboard as they are recorded at the wastewater treatment plants. (See Exhibit 1).

The City of Hope recognizes that we are experiencing an increased inflow & infiltration problem in our wastewater collection lines that is negatively impacting our wastewater operations. We established a wastewater rehabilitation line crew (4 persons) to deal primarily with I & I problems more than 15 years ago. At that time we completed a comprehensive I & I study and repair program over a 3-4 year period. We have continued to dedicate ~\$200,000 per year in subsequent years to wastewater line and manhole repairs. Two main factors negatively impact

Hope's wastewater collection lines: (1) the age of the wastewater collection system and (2) Hope's notoriously poor soil conditions, consisting of soils with high shrink-swell potential (See Exhibit 2, Soil Survey of Hempstead County, Arkansas). In addition the weather conditions over the last 3-4 years have exacerbated the soil conditions (70 inches of rainfall in 2008, 39 inches in 2011).

Since the fall of 2011, in addition to our regular wastewater rehabilitation work, we have dealt with or are dealing with seven major wastewater line failures. Collectively, those repairs cover more than 2060' of wastewater collection lines and have cost more than \$60,000 dollars and 180 employee hours. We have also replaced a portion of the outfall line at this plant at a cost of \$ 2,000 that may have been constricting our outfall. These emergency repairs have led us to recognize that it is time to take on an additional program of I & I work.

We applied for and received a \$252,000 grant from the Arkansas Department of Economic Development that will be used to place an additional gravity flow line from the EQ pond to the influent station, hopefully aiding in restoring freeboard at that plant in a more timely fashion. We will also use part of that grant for repairs of 50 manholes and a major line repair on West 3rd Street.

Also along this line, we are beginning discussion of the topic of an additional I & I program with our City of Hope Board of Directors, who would have to approve any comprehensive program and expenditures such as this and the wastewater rate structure that would support such expenditures. We believe that it will be necessary to engage a professional engineer and contractor to perform a comprehensive I & I study of this plant system that will result in a prioritized set of repairs necessary. Then construction contract plans & specifications will be developed, contracts bid and let. We would envision this program lasting 3-4 years.

In the meantime, we intend to continue both our wastewater plant programs and our wastewater rehabilitation line repairs in an effort to avoid EQ pond overflows.

Please let me know if I may provide you with any further information.

Sincerely,



Catherine Cook
City Manager
Hope, Arkansas

**2011 HOLDING POND REPORT
FOR
December 2011**

"WEST PLANT"

"EAST PLANT"

DATE	FREE BOARD		FREE BOARD	RAINFALL
1	61"		59.5"	.0
2	"		"	.02
3	"		"	
4	"		"	.61
5	44"		50"	2.10
6	30"		43"	.33
7	"		"	.11
8	"		"	
9	"		"	
10	31"		"	
11	"		"	
12	32"		45"	
13	36"		46"	
14	38"		47"	
15	36"		46"	.69
16	21"		37"	1.30
17	11"		"	
18	9"		"	
19	"		34"	
20	10"		"	.25
21	11"		"	
22	"		"	.36
23	6"		31"	.05
24	"		"	
25	"		"	.32
26	1"		"	.03
27	0"		22"	.60
28	"		21"	
29	4"		"	
30	"		26"	
31	-		"	
TOTAL				6.77

**2012 HOLDING POND REPORT
FOR
January 2012**

"WEST PLANT"

"EAST PLANT"

DATE	FREE BOARD	FREE BOARD	RAINFALL
1	6"	0"	
2	8"	"	
3	10"	27"	
4	11"	"	
5	12"	"	
6	13.5"	28"	
7	15"	"	.03
8	16"	"	
9	16"	30"	.27
10	10"	27"	.21
11	0"	19"	.42
12	0"	17"	
13	0"	"	
14	0"	"	
15	2"	19"	
16	4"	21"	
17	5"	23"	
18	4"	25"	
19	4"	27"	
20	4"	29"	.02
21	4"	30"	
22	6"	31"	
23	6"	30"	
24	6"	31"	.17
25	5"	30"	.49
26	0"	17"	1.02
27	0"	12"	.06
28	0"	"	
29	0"	"	
30	0"	10"	
31	0"	10"	.04
TOTAL			2.73

**2012 HOLDING POND REPORT
FOR
February 2012**

"WEST PLANT"

"EAST PLANT"

#	DATE	FREE BOARD		FREE BOARD	RAINFALL
	1	1"		10"	.04
	2	3"		12"	
	3	2"		13"	.15
	4	0"			1.11
	5	0"			
	6	0"		Flooded Out	
	7	0"		"	.02
	8	0"		0"	
	9	0"		0"	
	10	0"		0"	.12
	11	0"		1"	.05
	12	0"		2"	
	13	0"		3"	.17
	14	Over Flow	↑	0"	.22
	15	0"		0"	.05
	16	0"		0"	1.11
	17	0"		0"	
	18	0"		0"	
	19	0"		0"	.96
	20	0"		0"	
	21	0"	↓	0"	.21
	22	0"		0"	
	23	0"		0"	
	24	0"		0"	
	25	0"		0"	
	26	0"		0"	
	27	3"		4"	
	28	3"		7"	
	29	4"		10"	
	30				
	31				
	TOTAL				4.21

septic tank absorption fields. This limitation can be partially overcome by increasing the size of the absorption field. Seasonal wetness is a moderate limitation for dwellings and small commercial buildings. This limitation generally can be overcome by installing a drainage system. Low strength is a moderate limitation for roads and streets. This limitation can usually be overcome with proper engineering design. Capability unit IIIe-1; woodland suitability group 3o7; pasture and hayland group 8A.

43—Sawyer loam, 1 to 3 percent slopes. This soil is deep, moderately well drained, and nearly level. It is on broad hilltops of the Coastal Plains. The areas are about 15 to 200 acres in size.

Typically, the surface layer is dark grayish brown loam about 6 inches thick. The upper part of the subsoil extends to a depth of about 29 inches; it is yellowish brown silty clay loam and has gray mottles in the lower part. The lower part of the subsoil extends to a depth of 72 inches or more; it is mottled red, gray, and yellowish brown silt loam and silty clay.

This soil is low in natural fertility and in organic matter content. It is very strongly acid or strongly acid throughout, except where the surface layer has been limed. Permeability is slow, and the available water capacity is medium. A seasonal water table is within 24 inches of the surface late in winter and early in spring. Tilth is easy to maintain, and crops respond well to fertilizer.

Included with this soil in mapping are a few small areas of Savannah, Mayhew, and Sacul soils. Also included are a few small areas that have slopes greater than 3 percent.

Some areas of this map unit are in a former munitions-impact area, the boundaries of which are shown on the soil maps, and are marked with craters. There may be unexploded munitions in these areas.

This soil has fair potential for cultivated crops. Runoff is slow to medium, and erosion is a moderate hazard. The main cultivated crops are grain sorghum and soybeans. Other suited crops are small grains. If contour cultivation, minimum tillage, and good management are used, clean tilled crops that leave a large amount of residue can be grown yearly. Seasonal wetness is a slight limitation, which can generally be overcome by drainage. This soil has good potential for pasture, which is the main use (fig. 8). Adapted pasture plants include bermudagrass, bahiagrass, tall fescue, and white clover.

This soil has good potential for loblolly pine. Wetness is a moderate limitation to equipment use in managing and harvesting the tree crop. Using special equipment or logging and planting during the drier seasons generally can overcome this limitation.

This soil has poor potential for most urban uses. Slow permeability is a severe limitation for septic tank absorption fields and is difficult to overcome. Low strength and moderate to high shrink-swell potential are severe limitations for dwellings, small commercial buildings, and roads and streets. Proper engineering design generally can

overcome these limitations. Capability unit IIe-1; woodland suitability group 2w8; pasture and hayland group 8C.

44—Sawyer loam, 3 to 8 percent slopes. This soil is deep, moderately well drained, and gently sloping. It is on hillsides and hilltops of the Coastal Plains. The areas are 5 to 50 acres in size.

Typically, the surface layer is dark grayish brown loam about 6 inches thick. The upper part of the subsoil extends to a depth of about 29 inches; it is yellowish brown silty clay loam and has gray mottles in the lower part. The lower part of the subsoil extends to a depth of 72 inches or more; it is mottled red, gray, and yellowish brown silt loam and silty clay.

This soil is low in natural fertility and in organic matter content. It is very strongly acid or strongly acid throughout, except where the surface layer has been limed. Permeability is slow, and the available water capacity is medium. A seasonal, perched water table occurs within 24 inches of the surface late in winter and early in spring. Tilth is easy to maintain, and crops respond well to fertilizer.

Included with this soil in mapping are a few small areas of Savannah, Sacul, and Mayhew soils. Also included are a few eroded areas and a few small areas that have slopes of less than 3 percent.

Some areas of this map unit are in a former munitions-impact area, the boundaries of which are shown on the soil maps, and are marked with craters. There may be unexploded munitions in these areas.

This soil has fair potential for cultivated crops. Runoff is medium, and erosion is a severe hazard. The main cultivated crop is grain sorghum. Other suited crops are small grains. Minimum tillage, contour cultivation, and terracing of long slopes reduce the erosion hazard. Clean tilled crops that leave large amounts of residue reduce the erosion hazard and help to maintain tilth. This soil has fair to good potential for pasture, which is the main use. Adapted pasture plants include bahiagrass, bermudagrass, tall fescue, and white clover.

This soil has good potential for loblolly pine. Wetness is a moderate limitation to equipment use in managing and harvesting the tree crop. Logging in the dry seasons helps to overcome this limitation.

This soil has poor potential for most urban uses. The slow permeability is a severe limitation for septic tank absorption fields and is difficult to overcome. Low strength and moderate to high shrink-swell potential are severe limitations for dwellings, small commercial buildings, and roads and streets. Proper engineering design can help to overcome these limitations. Capability unit IIIe-1; woodland suitability group 2w8; pasture and hayland group 8C.

45—Smithdale fine sandy loam, 3 to 8 percent slopes. This soil is deep, well drained, and gently sloping. It is on ridgetops and hillsides of the Coastal Plains. The areas are 2 to 150 acres in size.

CITY OF HOPE

PO BOX 667

HOPE AR 71802-0667



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0003967547 APR 09 2012

MAILED FROM ZIP CODE 71801

Red Smith,
District 10 Field Inspector,
Water Division Enforcement Branch
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock AR 72218-5317

72118#5317

