Industrial Stormwater Success Stories: From Clueless to Superstars

18th Annual USEPA Region 6 SW/MS4 Conference Tuesday, Oct 4, 2016 Kerri McCabe, Inspector Supervisor mccabe@adeq.state.ar.us ADEQ – Office of Water Quality Compliance Branch

Part I: Overview of Arkansas' Stormwater Industrial General Permit (IGP)

INDUSTRIAL STORMWATER SUCCESS STORIES

- The State of Arkansas, as delegated by USEPA through the NPDES permitting program, requires the Stormwater Industrial General Permit (IGP) for regulated industrial activities that discharge stormwater.
- Arkansas does not utilize the Multi-sector General Permit (MSGP); however, facilities that fall under multiple sectors are covered under a single IGP, and each sector's activities are included with the facility's Stormwater Pollution Prevention Plan (SWPPP).







- Additionally, some facilities fall under regulated industrial sectors; however, discharged stormwater is not exposed to any of the industrial activities.
- These facilities are still required to obtain the IGP, but can apply for the conditional No-Exposure Exclusion certification; 40 CFR 122,26(g).

- Industrial activities are based on Standard Industrial Classification (SIC) Codes and Industrial Activity Codes; 40 CFR 122.26(b)(14)(i-ix, xi).
- Arkansas has thirty sectors (Sectors A-AD).
- Sector AD is Non-Classified Facilities, and only the Director of ADEQ can assign facilities to this sector.
- Additionally, ADEQ can require facilities to obtain an individual NPDES permit for contaminated stormwater and include conditions that are more stringent than the general permit.









- Once industrial activities are determined to fall under an applicable sector (eligibility), the facility is required to develop a SWPPP, complete a Notice of Intent (NOI), and pay the permit fee (per APC&EC Reg #9).
- Facilities not discharging industrial stormwater must complete the No-Exposure Certification Form and pay the permit fee.

Part II: Common Violations Associated with IGP Inspections INDUSTRIAL STORMWATER SUCCESS STORIES

- Violations with IGP inspections fall into two categories:
- (1) Immediate threat to the environment and waters of the State.
- Examples: inadequate spill prevention and response procedures, unpermitted facilities, lack of Best Management Practices (BMPs), etc.

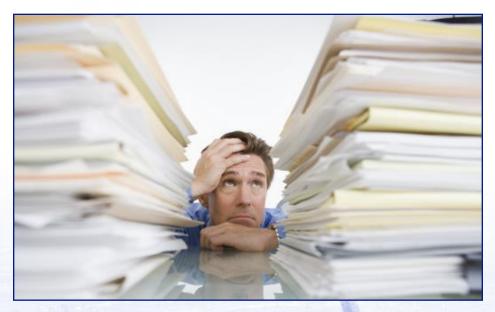




 (2) Self-monitoring conditions of the general permit.

Examples: not completing site inspections, not calibrating onsite sampling meters, inadequate employee training, etc.

- Both categories are equally important, but for different reasons.
- Although violations associated with immediate threat to the environment and waters of the State are usually more visual, the socalled "paperwork" violations demonstrate that the permittee isn't evaluating the site for potential issues or addressing issues when they arise.





 For the Compliance Branch in the Office of Water Quality at ADEQ, the District Field Inspector is the first step in compliance.

 The site is inspected, violations are cited in a letter to the permittee, and the permittee has a timeframe to correct the cited violations.

- If the permittee fails to adequately address the cited violations in the inspection report, the case is directed to the Enforcement Branch of the Office of Water Quality.
- Depending on the severity of the case, the Enforcement Branch may conduct a correspondence follow-up with the permittee or draft a Consent Administrative Order (CAO), which includes corrective action plans and civil penalties.
- The vast majority of stormwater inspections do not require formal enforcement.



Part III: Arkansas IGP Case Studies

INDUSTRIAL STORMWATER SUCCESS STORIES

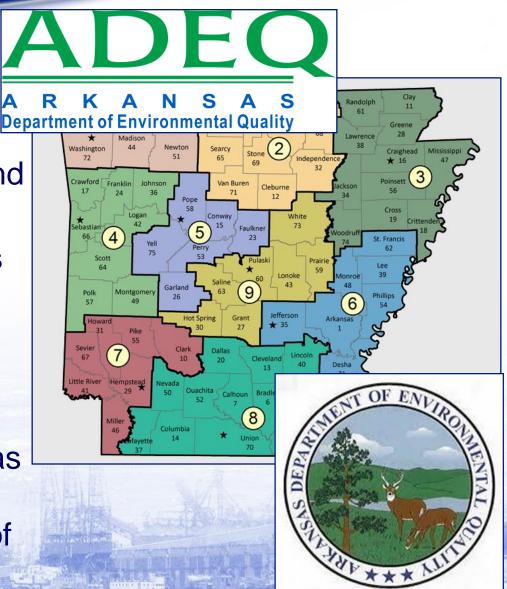
Part III: Case Studies



- The State of Arkansas has 2037 active IGPs.
- With an inspection frequency of once/five years, this is 407 permits per year that are required to be inspected per the Compliance **Monitoring Strategy** (CMS; Section 106).

Part III: Case Studies

- This frequency is not practical due to other
 Section 106 commitments (i.e., Major/Minor POTW and non-POTW).
- When fully staffed, ADEQ's Compliance Branch of the Office of Water Quality has 17 inspectors to cover 75 counties.
- The Compliance Branch has a goal to inspect 10% of all the active IGPs for a total of 204 inspections per year.



Part III: Case Studies

- Alvar Resins, Inc. (ARR000968): Sector C5
- Armstrong Harwood Flooring (ARR00C383): Sector A4
- Barfield's U Pull It Auto Parts (ARR000000; unpermitted): Sector M1
- Fish Holdings, LLC (ARR00A663): Sector R1
- Five Rivers Distribution, LLC (ARR000327): Sectors Q1 and O1
- Master Made Tanks, Inc. (ARR00A621): Sector E2
- PJ's Tank Wash, Inc. (ARR000693): Sector P1
- Rainbow Stone Co (ARR000000; unpermitted): Sector J2



Part III: Case Studies – Alvar Resins, Inc.

- Facility inspected April 5, 2016.
- Major concerns included:
 - SWPPP not updated,
 - Improper spill prevention and cleanup,
 - Failure to minimize exposure,
 - Non-stormwater discharges not allowed by the permit, and
 - Not sampling the most representative outfall.

Improper spill prevention and cleanup

the edition

2016 12:08

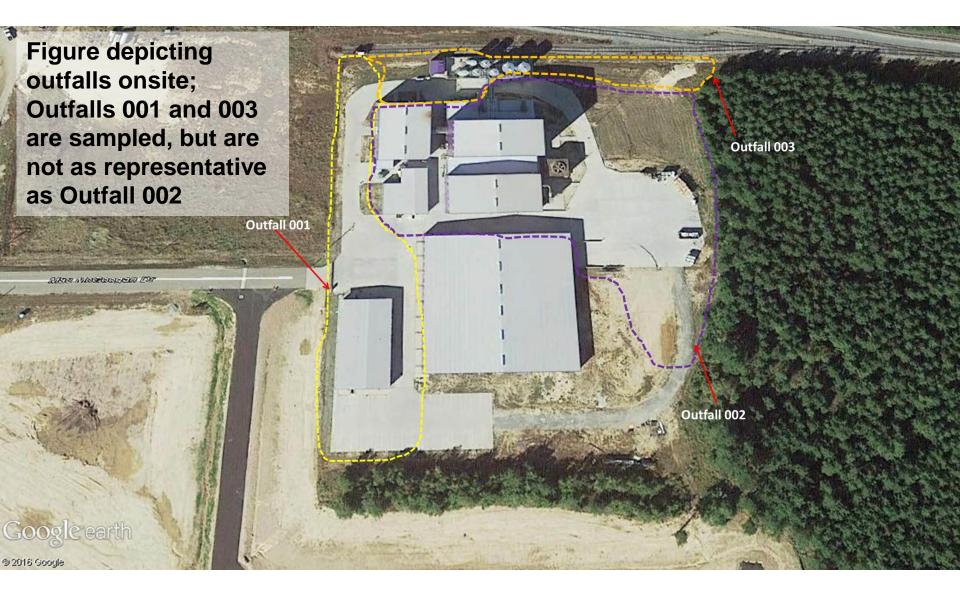
Failure to minimize exposure; loading resin into tanker trucks; containment inadequate

04.05.2016 12:09

Non-stormwater discharge not allowed by the permit; cooling tower water

04.05.2016 12:06

Non-stormwater discharge not allowed by the permit; pipe from interior bathroom sink; resin from employee hands



Part III: Case Studies – Alvar Resins, Inc.

- The permittee responded to the violations cited in the inspection report on May 12, 2016.
- Response included:
 - Updated SWPPP to be mailed May 16, 2016,
 - Updated Site Map,
 - Purchase of a pH meter to meet analysis holding time,
 - Proper labeling of containers,
 - Remediation of spill documented April 5, 2016,
 - Proper containment for loading of resin into tankers,
 - Future construction of containment for cooling tower pumps,
 - Potable water sink was completely removed, and
 - Sampling of Outfall 002.



Invoice for pH meter and calibration standards (4, 7, and 10)

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Shipped to	Mail Payment to	McMaster-Carr	
Alrez Inc 141 Macmegoogan Dr		PO 8x 7690 Chicago IL 60680-7690	
Crossett AR 71635	Your Account	278388700	

Chief Long placed this order.

Line		Product	Ordered	Shipped	Balance	Price	Total
1	1196T33	PH Meter	1 Each	1	0	68.86 Each	68.95
z	21315T397	Calibration Solution for Chemistry Sensor, 7.0 PH, 500 ml	1 Each	1	. 0	12.00 Each	12.00
				Merchand	ise		80.88
				Shipping			7.81
				Total	S		\$88.67

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1782902-01	4/11/16	2 lb	FedEx Priority	669591868966

New resin loading containment

New containment berm for cooling tower pumps Armstrong Hardwood Flooring (Sector A4); Warren, AR (Bradley Co)

1272 ft

2) 1994

© 2016 Google

8

Hwy 63

Imagery Date: 12/1/2015 lat 33.581992° lon -92.077529° elev 218 ft eye alt 5790 ft 🔘

Google earth

Part III: Case Studies – Armstrong Hardwood Flooring

- Facility inspected August 4, 2016 due to Hazardous Waste inspector's concern for discharge pipes and no NPDES discharge permit(s).
- Major concerns included:
 - SWPPP and Site Map missing components,
 - No control measures onsite,
 - Improper spill prevention and cleanup,
 - Allowable, non-stormwater discharges not identified in the SWPPP, and
 - Housekeeping issues.

Spill that is not properly cleaned

08.04.2016 12:13

Floor drain in kiln room for steam condensate; allowable, non-stormwater discharge not identified in SWPPP

08.04.2016 12:24

Drainage pipe for allowable, nonstormwater discharge not identified in SWPPP Sawdust and tire rubber at outfall; indicating housekeeping issues

Part III: Case Studies – Armstrong Hardwood Flooring

- The permittee responded to the violations cited in the inspection report on September 2, 2016.
- Response included:
 - Updated SWPPP,
 - Updated Site Map,
 - Added PM schedule to boiler operator and wheel shop mechanic positions,
 - Purchase of a pH meter to meet analysis holding time,
 - Identification of all allowable, non-stormwater discharges,
 - Remediation of spill documented August 4, 2016, and
 - Improved control measures and housekeeping.

Arkansas General Permit: ARR000000

General Permit Tracking Number: ARR00C383 SIC Code: 2426 NAICS Code: 321918

Revised SWPPP

STORM WATER POLLUTION PREVENTION PLAN FOR INDUSTRIAL ACTIVITY

Revision #1 December 2004

Revision # 2 November 2005

Revision #3 November 2006

Revision #4 November 2007

Revision #5 November 2008

Revision #6 October 2009

Revision #7 September 2010 Revision #8 January 2011

Revision #9 October 2011

Revision #10 September 2012

Revision #11 September 2013

Revision #12 September 2014

Revision #13 October 2015

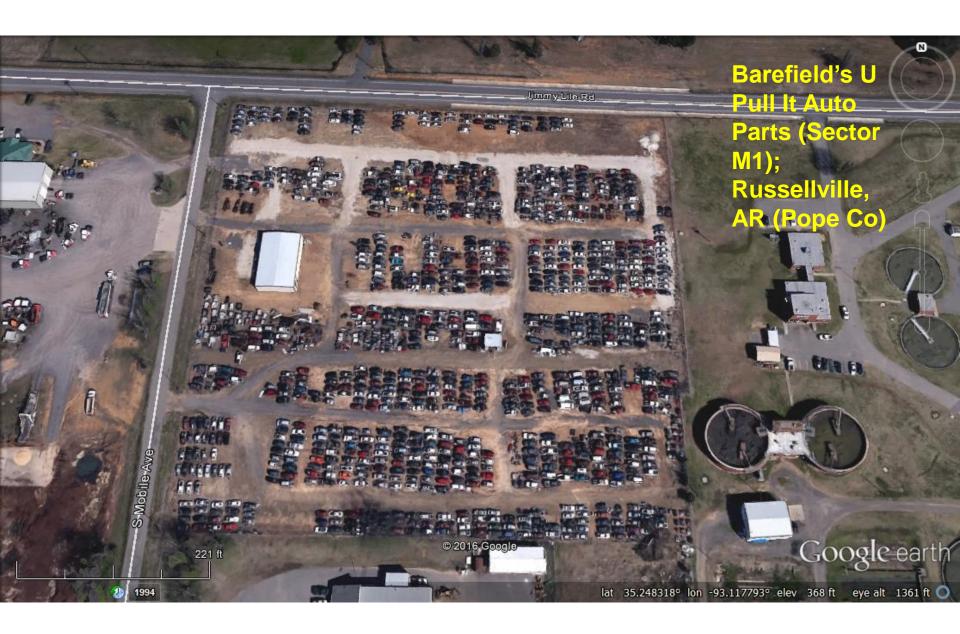
Revision #14 September 2016

Weekly PM Schedule

11	Clean truck bin in and	2nd shift of each week Inspect fans for noise	3rd shift of each week	4th shift of each week	Signature	Date
Henry Danley	around the outside. Check fluid in hydraulic tank	and any type of	Clean under silo 2	Blow down spider webs		
Gary Barnes	Clean outside around boiler house from wheel shop to ppc	Inspect feed system piping, gears for missing teeth, chains and check oil levels in gearbox	Clean under silo 3	Blow down spider webs		
Gary Zamora	Clean under silos from road to ramp	Inspect all control valves to ensure they are operating in automatic and no leaks		Blow down spider webs		
Michael Raney	relay fan from building	Inspect air compressors and make sure there are no noticeable air leaks	Ensure dust is picked up between silos and			

- *** Each operator will clean the office daily
- *** Report all dust leaks. Clean all spills before you leave
- *** Report all equipment that is not working properly
- *** Do not park vehicles next to boiler house
- *** Ensure to check ash hopper and dump if necessary
- *** All daily task must be completed (blowdowns, water test and low water cut outs)
- *** Take trash out daily

Revised PM schedule for housekeeping



Part III: Case Studies – Barfield's U Pull It Auto Parts

- Facility inspected September 14, 2016 due to City Corp (Major POTW) personnel concerned with stormwater discharges from site; City Corp is required to have an IGP under Sector T1.
- Major concerns included:
 - Unpermitted site; discharging industrial stormwater without a permit.
 - Facility was the scene of a double homicide on September 16, 2016; Tyler Barefield arrested and charged with capital murder September 22, 2016.
- Supplied facility with NOI, SWPPP template, and Stormwater Annual Report (SWAR) template.
 The permittee's response is due October 24, 2016.

Active salvage yard in operation; no IGP

Randy Barefield, President Barefield's Body Shop & Auto Salvage, Inc. P.O. Box 923 Russellville, AR 72811

RE: U Pull It Auto Parts Inspection (Pope Co) AFIN: 58-00000 NPDES Permit No.: ARR000000

Dear Mr. Barefield:

On September 14, 2016, I performed a Reconnaissance Inspection of the above-referenced 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. A copy of the inspection report is enclosed for your records.

POPE COUNTY, Ark.-- An arrest has been made in connection with the murder of two men whose bodies were found in the trunk of a vehicle at a local salvage yard.

Tyler Barefield, 35, of Russellville has been charged with two counts of Capital Murder for the killings of Aaron Brock and Beau DeWitt, both 22, of Yell County.

Authorities say Barefield will appear before a judge at the Pope County Detention Center on Friday for a bond hearing.

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Part III: Case Studies – Fish Holdings, LLC

- Facility inspected December 14, 2015.
- Major concerns included:
 - SWPPP not updated,
 - Numerous self-monitoring issues (i.e., site inspections, employee training, no documentation of stormwater sampling, etc.),
 - Sampling not conducted at specified locations, and
 - Housekeeping issues.

Metal resin discharged from baghouse

E.

12.14.2015 12:21

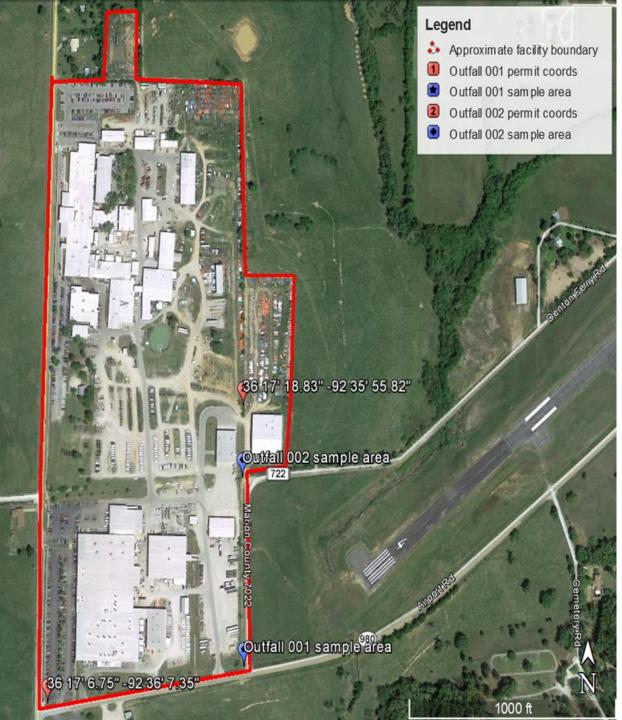
Resin from baghouse on ground 2

Figure used to describe permitted outfalls and sample locations

29

Google earth

© 2015 Google



Part III: Case Studies – Fish Holdings, LLC

- The permittee responded to the violations cited in the inspection report on January 29, 2016.
- Response included:
 - Updated SWPPP,
 - Updated Site Map,
 - Documentation of missing or inadequate selfmonitoring data, and
 - Cleaning of fugitive residuals from the baghouse.

Attachment A

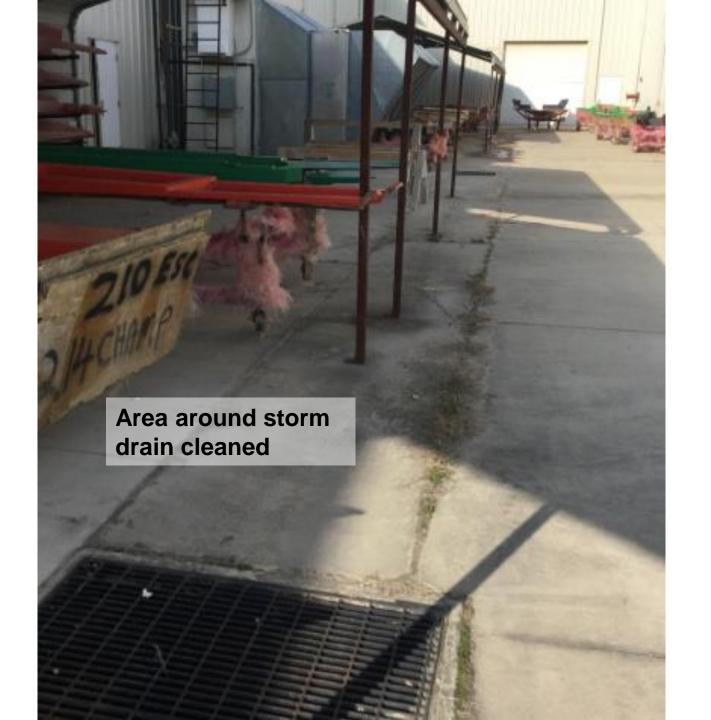
The following documentation is provided under separate cover to demonstrate the current compliance status of the Ranger Boats facility.

Appendix A-1:	NAICS Identification in SWPPP
Appendix A-2:	Outfall Modification Forms
Appendix A-3:	Certification of Non-Stormwater Discharge
Appendix A-4:	2015 Discharge Analysis Data
Appendix A-5:	Training Records
Appendix A-6:	2014 SWPPP Inspection Forms
Appendix A-7:	2013 Chain-of-Custody Documentation
Appendix A-8:	Site Map
Appendix A-9:	Change of Permit Authority Forms

Provided documentation of all missing selfmonitoring data







Five Rivers Distribution, LLC (Sectors Q1 & O1); Van Buren, AR (Crawford Co)

2) 1994

1355 (1

© 2016 Google

Google earth

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Part III: Case Studies – Five Rivers Distribution, LLC

- Facility inspected March 29, 2016.
- Major concerns included:
 - Failure to minimize exposure,
 - Inadequate housekeeping,
 - No documentation of self-monitoring data (i.e., no inspections or employee training, no sampling results, not sampling all required parameters, not sampling all outfalls, etc.),
 - SWPPP and Site Map not updated, and
 - Not sampling the most representative outfall(s).



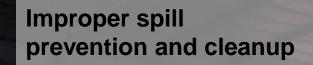
Leaking valve on fuel tank; secondary containment inadequate

03.29.2016 12.20

Secondary containment for fuel storage leaking during inspection

Unlabeled barrel with inadequate cover and containment

03.29.2016 12:24



9

03.29.2016 12.23

EZ

Figure used to depict inaccurate outfall coordinates provided with NOI

001

970 ft

© 2016 Google

Eye alt 4722 ft 🔘

Google earth

002

ARR000327

Part III: Case Studies – Five Rivers Distribution, LLC

- The permittee responded to the violations cited in the inspection report on April 19, 2016.
- Response included:
 - Purchase of a spill kit,
 - Contacting contracted lab for missing self-monitoring data (i.e., Chains of Custody, lab analyses sheets, etc.),
 - Implementing inspection template provided by EPA website,
 - Purchase of a pH meter and using pH bench sheet provided by ADEQ,
 - Verification that outfalls will be sampled and have been corrected on NOI,
 - Updated Site Map, and
 - Request for follow-up site visit from inspector.



Area cleaned of forklift washing residuals

27 500

05.23.2016 13:58

Leaking equipment removed and spill cleaned up Fuel tanks and secondary containment replaced; absorbent material cleaned up and disposed; open containers removed

05.23.2016 13:57



Part III: Case Studies – Master Made Tanks, Inc.

- Facility inspected January 8, 2015.
- Major concerns included:
 - Non-stormwater discharge not allowed by the permit,
 - Failure to minimize exposure, and
 - Some self-monitoring not occurring or being documented (i.e., no sampling at representative outfall, no annual comprehensive site evaluation, etc.).

Non-stormwater discharge not allowed by permit; equipment washing

MARA

3

Non-stormwater discharge routed to series of sediment ponds Series of sediment ponds ultimately discharge to waters of the State

Part III: Case Studies – Master Made Tanks, Inc.

- The permittee responded to the violations cited in the inspection report on March 1, 2015.
- Response included:
 - Minimizing exposure of bulk material with structural control measures,
 - Ceasing all non-stormwater discharges not allowed by the permit (installed tank and pump to store and recycle water for washing),
 - Modified outfalls located onsite (e.g., omitted original and updated most representative),
 - Updated components of the SWPPP and Site Map, and
 - Request for follow-up site visit from inspector.

Updated Site Map



Removed material stockpiles; improved BMPs

> Material stockpile has been removed and retention wall as well as silt fencing has been put in place.

Original outfall sealed and not in use

LISE I HAN M

FUEL

Tank is installed and fully operational to capture any non-storm water discharge. Water is recycled and used in batch operations.

Service.

Recirculation tank for process/wash water Pit has been constructed to capture any rinse off activities associated with the chute on the trucks. Waste water is recycled and used to do wash out... Another view of tank that will be used to capture any waste water

> Pump for recycling the water

- Alert

PJ's Truck Wash, Inc. (Sector P1); Crossett, AR (Ashley Co)

lat 33.139734° lon -91.987059° elev 132 ft eye alt 1101 ft 🔘

Google earth

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Imagery Date: 10/18/2014

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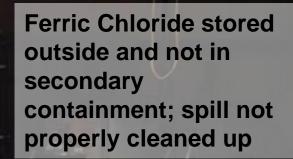
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Part III: Case Studies – PJ's Truck Wash, Inc.

- Facility inspected January 26, 2016 at the request of the Permits Branch Pretreatment Coordinator.
- Major concerns included:
 - Facility does not qualify for the No-Exposure exclusion:
 - · Scrap metal and waste materials exposed to stormwater,
 - Barrels of unknown contents,
 - Chemicals used in pretreatment process stored outside and not in secondary containment,
 - Evidence of spilled material not properly cleaned up, and
 - Secondary containment around pretreatment unit incomplete.

Scrap metal and waste materials stored onsite

Barrels with unknown contents



264640

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- 01 26 2016 10:26



Sawdust used to solidify pretreatment sludge dumped on ground

Part III: Case Studies – PJ's Truck Wash, Inc.

- The permittee responded to the violations cited in the inspection report on March 25, 2016.
- Response included:
 - Minimizing exposure of barrels of chemicals by moving inside building,
 - Removal of all scrap metal and waste material onsite,
 - Cleaning of spilled materials, and
 - A quote to have the pretreatment secondary containment wall repaired.

Spill cleaned up and chemicals moved inside building Scrap metal and waste material hauled offsite

Busted secondary containment wall for pretreatment unit

Contractor quote
to repair
secondary
containment wall
around
pretreatment unit

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Repairs made to secondary containment wall around pretreatment unit



- Facility inspected June 29, 2016 in response to a complaint.
- Major concerns included:
 - Discharging process water without a permit,
 - Discharging industrial stormwater without a permit,
 - Meth head brother of the operator is the complainant, and
 - Operator rather sassy.

Hydraulic spill onsite that has not been cleaned up

Saw slurry water; arrows indicate flow path

07.29.2016 10:37

Drainage cut to discharge saw slurry water

07.29.2016 10:36

Discharge of saw slurry water; ultimately leads to neighbor's pond

Part III: Case Studies – Rainbow Stone Co.

- The permittee responded to the violations cited in the inspection report on August 4, 2016.
- Response included:
 - Building of recirculation tanks to reuse saw slurry water,
 - Insisting with a drinking glass demo that they weren't polluting, and
 - Continued to be sassy about having to pay a permit fee for a No-Exposure Exclusion certification.

Building recirculation tank to reuse saw slurry water

Drinking glass demo to illustrate that the nearest stream isn't being polluted by their saw slurry water

NO EXPOSURE CERTIFICATION FORM For Exclusion from NPDES Stormwater Permitting

Application Type: N	ew 🔲 X	Renewal 🔲 Permit No. ARR0)	
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I. PERMITTEE/OPERATOR INFORMATION

Permittee (Legal Name)*:	Rainbow Stone Company, Inc.	Operator Type:			
Permittee Mailing Address:	P.O. Box 102	STATE PARTNERSHIP			
Permittee City:		FEDERAL X			
Permittee State:	AR Zip: 72865	SOLE PROPRIETORSHIP			
Permittee Telephone Number:	479-938-7134	PUBLIC			
Permittee Fax Number	479-938-7565	□ OTHER:			
Permittee E-mail Address	cory@rainbowstonecompany.com	**State of Incorporation: AR			
The legal name of the Permittee must be identical to the name listed with the Arkansas Secretary of State.					

Completed No-Exposure Certification Form

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Kerri. Please consider this my response to the inspection.

I have filled out the Non Exposure Certificate per your email. Please find it attached. I will send a hard copy and a check for the \$200.00 in the mail. We are halfway through construction of the retention ponds. In response to the inspectiv has not cooperated to pour concrete. Once constructed, saw slurry water, and storm

I do have a question though. Why is there an annual fee associated with a Nor Has the department ever thought of issuing a "Hey, that doesn't pollute

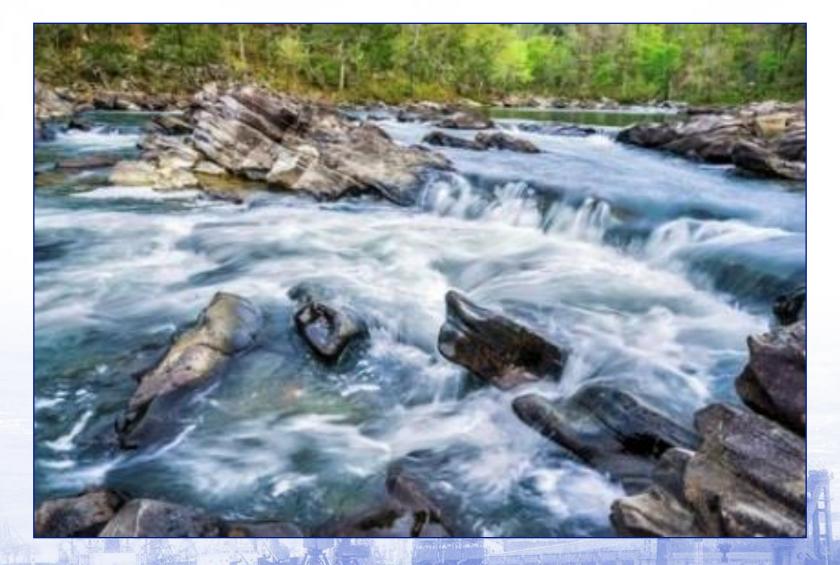
Thanks, Cory

Cory Hamilton President-Manager Rainbow Stone Company Subiaco, AR 72865

is constructed. I have personally been busy, and the weather

it up

Any Questions/Comments? Thank you!



Cossatot River Falls (Howard Co)