ADMINISTRATIVE PENALTY DISCUSSION PURSUANT TO THE NOV ISSUED FOR LEHI CITY, SETTLEMENT AGREEMENT DOCKET N_0 . SAM15-03

Infractions of the Utah Water Quality Act are penalized up to \$10,000/day/violation for civil penalties (\$25,000/day/violation for criminal) according to guidelines established in the penalty policy (*Utah Administrative Code R317-1-8*).

<u>LEHI CITY Statutory Maximum of \$10,000/violation/day for 5 days for 2 violation(s) = \$100,000</u> (Calculated as required)

The principles that apply in the penalty policy are:

- 1) Penalties should be based on the nature and extent of the violation;
- 2) Penalties should at a minimum, recover the economic benefit of noncompliance;
- 3) Penalties should be large enough to deter noncompliance; and
- 4) Penalties should be consistent in an effort to provide fair and equitable treatment of the regulated community.

To determine a civil penalty the State will consider:

- 1) the magnitude of the violations;
- 2) the degree of actual environmental harm or the potential for such harm created by the violations;
- 3) response and/or investigative costs incurred by the State or others;
- 4) any economic advantage the violator may have gained through noncompliance;
- 5) recidivism of the violator;
- 6) good faith efforts of the violator;
- 7) ability of the violator to pay; and
- 8) the possible deterrent effect of a penalty to prevent future violations.

In the case of negotiated adjustments to penalties, arguments must be based on the considerations above.

Civil penalties for settlement purposes should be calculated based on the following formula:

CIVIL PENALTY = PENALTY + ADJUSTMENTS - ECONOMIC AND LEGAL CONSIDERATIONS

Penalties are grouped in four main categories:

- A. \$7,000 to \$10,000 per day. Violations with high impact on public health and the environment.
- B. \$2,000 to \$7,000 per day. Major violations of the Utah Water Quality Act, associated regulations, permits or orders.
- C. \$500 to \$2,000 per day. Significant violations of the Utah Water Quality Act, associated regulations, permits or orders.
- D. Up to \$500 per day. Minor violations of the Utah Water Quality Act, regulations, permits or orders.

Penalties are established within the penalty ranges shown above, based on the following criteria:

- History of compliance or non-compliance,
- Degree of willfulness or negligence, and
- Good faith efforts to comply.

Adjustments to the civil penalty include:

- The economic benefit gained as a result of non-compliance,
- Investigative costs incurred by the State and/or other governmental level,
- Documented monetary costs associated with environmental damage.

PENALTY - The penalty for LEHI CITY has been calculated as follows:

Gravity Component:

The gravity component of the penalty is based on the following citations:

- Utah Code Ann. § 19-5-107(1)(a) for causing pollution which could be harmful to wildlife, fish or 1. aquatic life, or impairs domestic, agricultural, industrial, recreational, or other beneficial uses of
- Utah Admin. Code R317-2-7.2 for discharging wastes which may have caused unnatural deposits or 2. other nuisances such as color; or may have caused conditions which produce undesirable aquatic life.

From November 2014 through July 2015, Lehi City (Lehi) was undertaking the project of drilling and development of the Sand Pit Well. The Sand Pit Well is located at approximately 2538 N 300 W in Lehi City, Utah.

On July 9, 2015, pumping for the development of the Sand Pit Well was begun and "various City staff member expressed concerns with the cloudiness of the discharges." The City states at this time staff researched the Division of Water Quality's (Division) Fact Sheet Regarding Water Discharges From Water Well Drilling and Operation (Fact Sheet). Based on the City's review of the Fact Sheet it was aware of the requirements for discharge of de minimis amounts of pollution. However, the City states "Without a clear definition of what sediment levels would constitute an excess of "de minimis" flows, project engineers chose to continue pumping while they continued to research various BMP alernatives." The well was also pumped on July 10 and July 13 thru July 15.

On the morning of July 15, 2015, the Division received a complaint of discharge of solids to Dry Creek. In response to this complaint at 4:00 pm on Wednesday, July 15, 2015, the Division conducted an inspection2 of Dry Creek in Lehi City. Division staff observed Dry Creek at Center Street. The upstream water was clear and flowing. Downstream of Center Street Dry Creek was solid laden. Underneath Center Street was a storm drain with significant amounts of water discharging to Dry Creek. Division staff checked the local area for possible projects, such as construction, which would discharge water. The City of Lehi Water Department at 2538 N 300 W Lehi UT 84043 had a drill rig on site operating. Division staff entered the site and requested to speak with a Lehi staff. Lehi staff was available onsite and informed Division staff water was being discharged from the site from a water well drilling and development project. The discharge was estimated by the driller to be approximately 1,400 gpm with over 1,000 mg/L total suspended solids (TSS). The Division collected a sample for TSS concentration of the discharge. The TSS was measured at a concentration of 950.7 mg/L2. No best management practices (BMPs) were in use at the time of inspection for control of TSS.

¹ Lehi City Response to Notice of Violation and Order, Docket No. M15-03, Lehi City (DWQ-2015-011209)

² Lehi City Culinary Water Well Development Project Inspection at 2538 N 300 W Lehi UT 84043 (DWQ-2015-009202) Page 2 of 5

After collecting the sample, Division staff discussed the use of BMPs for TSS control. Lehi staff was aware of the Fact Sheet requirement; however Lehi stated they were unclear as to what the standard for a de minimis discharge was. Frac tanks were onsite but not being used as it was stated the flow was too high and nothing would be achieved by the use of the tanks. The Fact Sheet states "It is the responsibility of the operator and/or owner to assure that BMPs are properly installed and operated in order to contain all fluids or to produce a de minimis pollutant discharge to waters of the State. Some BMP's are indicated below:...2. Pits or ponds used for settling; followed by filter cloth and/or straw bales which can be used for filtration prior to fluids entering surface waters of the state." Lehi City was informed they were not meeting the requirements of the Fact Sheet for use of BMPs to achieve discharge of de minimis pollutants. Upon being informed of this Lehi staff voluntarily, as soon as mechanically possible given pump constraints, ceased discharge until BMPs could be implemented.

On July 16, 2015, Lehi staff requested a meeting with Division staff to discuss a BMP proposal to get their project back on course. The BMPs proposal was to temporarily repurpose an existing sedimentation pond onsite to treat the discharge. On July 22, 2015, Lehi resumed pumping the Sand Pit Well and discharged the effluent to the sedimentation pond. At the request of Lehi staff, Division staff was onsite to observe the discharge from the sediment pond which began on July 28, 2015. Lehi and Division staffs were in agreement that the use of the sediment pond met the requirements of the Fact Sheet. In addition, Division staff accompanied by Lehi staff observed Dry Creek at Center Street. The storm drain was discharging, a small cloudy mixing zone within the concrete culvert was observed. However, within 20 ft downstream Dry Creek appeared consistent with upstream water quality. This observation affirmed Lehi through the use of this sediment pond was now in compliance with the Fact Sheet.

The Notice of Violation (NOV) was written on violations of 2 water quality standards *Utah Code Ann.* § 19-5-107(1)(a) and Utah Admin. Code R317-2-7.2. First, the Division finds the discharge of TSS at concentrations of 950 mg/L at 1,400 gpm could potentially cause harm to fish or aquatic life and potentially impair beneficial uses of the water as defined in *Utah Code Ann.* § 19-5-107(1)(a). Second, the Division finds the discharge of concentrations of TSS at 950 mg/L at 1,400 gpm may have cause unnatural deposits and nuisances such as color and may have caused conditions undesirable to aquatic lift as defined in Utah Admin. Code R317-2-7.2.

VIOLATIONS:

Based upon the information presented in Lehi City's report and observations and sampling by the Division, Lehi City was likely in violation for 5 days (July 9, 10, 13, 14, and 15, 2015). However, the Division only has data and observations documenting the violations on July 15, 2015. As a result, the NOV was written for violations of 2 citations of water quality standards.

Utah Administrative Code R317-1-8.3

Category C - \$500 to \$2,000 per day. Violations of the Utah Water Pollution Control Act, associated regulations, permits or orders to include:

- 1. Significant excursion of permit effluent limits.
- 2. Substantial non-compliance with the requirements of a compliance schedule.
- 3. Substantial non-compliance with monitoring and reporting requirements.
- 4. Illegal discharge containing significant quantities or concentrations of non-toxic or non-hazardous materials.
- 5. Any type of violation not mentioned previously which warrants a penalty assessment under Category C.

Both violations address the discharge of elevated levels of TSS. TSS is a non-toxic pollutant which at elevated levels can cause potential harm to aquatic life, impair beneficial uses of water, and cause nuisance to water quality. Thus, both violations will be assessed at Category C for discharge of significant quantities or concentrations of non-toxic materials. To evaluate the quality of the effluent to quantitatively determine if the discharge was de minimis the Division sampled the effluent for TSS. The Division measured a concentration of 950 mg/L for TSS in the effluent from the pumping of the Sand Pit Well. The flow rate at the time of sampling was estimated at 1,400 gpm. State of Utah secondary treatment standards, (Utah Administrative Code R317-1-3.2) require that the arithmetic mean shall not exceed 35 mg/L during any 7-day period. While the Sand Pit well is not required to meet secondary treatment standards but instead to implement BMPs to discharge de minimis quantities of TSS. However, the comparison of the measured effluent quality of 950 mg/L to the standard of 35 mg/L demonstrates how significant the concentrations of TSS discharged were.

Mitigation considerations are subdivided into three equal categories (1/3 each for History of Compliance, Degree of Negligence, and Degree of Cooperation).

Credit for degree of negligence

Lehi will be given 50% credit for degree of negligence in the penalty calculation. This credit is given because the Lehi staff were aware of the Division's Fact Sheet and were confused about the standard of water quality required. A greater percentage is not granted because the Division feels Lehi staff should have been able to determine the discharge of 950 mg/L of TSS would not be de minimis to Dry Creek.

Credit for history of compliance

Lehi will be given 100% credit for history of compliance in the penalty calculation. This was the first incident involving enforcement against Lehi City by the Division.

Credit for good faith efforts to comply

Lehi will be given 100% credit for good faith efforts in the penalty calculation. Lehi showed good faith with actions taken by Lehi staff once they were informed by the Division that their discharge was out of compliance for the Fact Sheet. Response of Lehi staff to respond and implement BMPs to be in compliance was prompt and excellent.

\$750/day/violation x 2 violations x 1 day = \$1,500 Total Category C Penalty

Economic Benefit Justification:

Economic benefit associated with LEHI CITY was calculated based on; 1) Capital investment delayed; 2) Delayed expenditures, and; 3) Expenses not incurred. Avoided and delayed expenses are based on a survey of recent construction, engineering and/or product costs as appropriate. The field entries for the Environmental Protection Agency (EPA) economic benefit model (BEN) were provided by LEHI CITY for the following categories, as appropriate:

Capital Investment:

This part of the calculation includes pollution items that were not bought to avoid the discharge such as treatment systems, silt fencing, gravel socks, etc. It was not found that Lehi deliberately avoided any capital investments.

Expenditures:

This part of the calculation includes costs of items such as inspections, monitoring, and record keeping set up that were delayed. It has not been found that Lehi was insufficiently inspecting, monitoring, or keeping records for the project.

O & M Costs:

Avoided operation and maintenance costs were used in the economic benefit calculation. Lehi City stated in the response to the NOV that a rental fee of \$3,500 per month is charged for the pipe used to convey the discharge to the sediment pond. Lehi could have thus avoided 6 days of rental fee or a prorated value of \$700. \$700 of additional O&M costs will be added to the penalty amount.

BEN is a program developed by EPA to determine the economic benefit a violator has gained by not complying with regulations. The economic benefit calculation was done with the current BEN program provided by the EPA. The penalty for the economic benefit portion of non-compliance is <u>\$700</u> as calculated.

TOTAL PENALTY AMOUNT: \$1,500 + \$700 = \$2,200

MITIGATION PROJECTS (SUPPLEMENTAL ENVIRONMENTAL PROJECTS)

Mitigation projects must fully adhere to *UAC R317-1-8.4*. LEHI CITY agrees not to attempt to gain or generate any positive publicity, and further agrees not to deduct or otherwise attempt to obtain a tax benefit from the foregoing funding of the mitigation project(s). Approved mitigation projects shall only be applied to the gravity component of the total penalty amount (\$2,200).

- (1) <u>Mitigation Project(s)</u> To be determined by LEHI CITY. These projects must be approved by the Executive Secretary and at least partially involve an area of water pollution control.
- (3) <u>Anonymous Donation(s)</u> Donations can be submitted to a nonprofit organization to be used for environmental education, improving the environment or other environmental purposes. The donation must be approved by the DWQ Director.