Westward Environmental, Inc.

"Solutions for the Preservation of Industry and the Environment "

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Issue 13

IMPORTANT DATES TO REMEMBER!

By Julie Morelli

March 31, 2008:
Annual Discharge Monitoring Reports (DMRs) are due to the TCEQ. All permittees with TXG11 or TXR05 authorizations have to meet this annual requirement.

April 12th—13th, 2008: TACA Truck Driving Championships
Texas Motor Speedway, Fort Worth.

April 13th—15th, 2008: TACA Annual Short Course
Doral Tesoro Hotel (across from Texas Motor Speedway)

June 3, 2008: Construction Storm Water General Permit
Becomes effective on March 5, 2008. Existing permittees need to renew by June 3, 2008. Save $100 if you file your NOI on line.

June 24th—27th: Annual TACA Meeting
Los Cabos, Mexico

Summer 2008: Permit By Rule (PBR)
Under 30 TAC 106.142 for rock crushers is being replaced by new permanent standard permit sometime this summer. Owners/operators of crushers that want to obtain permanent status can utilize the new permanent standard permit for rock crushers or obtain a construction air permit. However, owners/operators of crushing facilities already authorized by the PBR may continue to operate under the PBR unless the crusher is moved or modified. Contact Melissa Fitts at mfitts@westwardenv.com or call 830.249.8284 should you have any questions on this or any other related issues.

July 1, 2008: Toxic Release Inventory (TRI) reports
Are due to the EPA.

If you have any questions regarding these deadlines or on any other related topic, please contact Julie Morelli at jmorelli@westwardenv.com or call 830.249.8284.

Inside this issue:

LIFE WITHOUT COINS?

by Michelle M. Lee, P.G.

This is the third in a series of articles that takes a look at the intriguing world of rocks and minerals and their role in our everyday lives. Everything is made of something and the reliance on our natural resources is critical for enjoying a comfortable way of life and even for survival. This article will take a little deeper look into something you have probably not stopped to wonder about – coins!

Modern day civilization would not exist as we know it today would not exist without money. Most currency is made of specialized paper with even more specialized inks and coins that are made of a mixture of various metals.

According to the Minerals Information Institute (MII), where this information is borrowed from, the United States Mint produces more than 100,000,000 pounds (50,000 tons) of coins each year. All U.S. coins are made of alloys, which are a mixture of metals. Long gone are the days when coins were made of pure gold, silver or copper.

The metals used to make coins are copper, zinc, nickel and manganese. Contrary to popular belief, the penny is only coated in copper whereas the dime, quarter and half-dollar are mostly copper. Here is a breakdown of the metals contained in some of our common coins:

Coin	Metals Used
Penny	97.5% zinc, 2.5% copper
Nickel	75% copper, 25% nickel
Dime	91.67% copper, 8.33% nickel
Quarter	91.67% copper, 8.33% nickel
Sacagawea Dollar	88.5% copper, 6%zinc, 3.5% manganese, 2% nickel

Now lets discuss how many coins are made each year and how much of these metals are needed to do so:

Coin	Number Made Annually	Weight
Penny	12,487,190,000	69,304,343 lbs. = ~34,652 tons
Nickel	1,638,174,110	18,364,639 lbs. = ~9,183 tons
Dime	2,378,518,110	12,215,719 lbs. = ~6,108 tons
Quarter	2,097,954,110	12,773,314 lbs. = ~6,387 tons

The first coin authorized by Congress was the one-cent coin in 1787. Next came the Indian Head penny in 1859 followed by the Lincoln penny still in use today. Gold was eliminated from coin making in 1933 and the use of silver was abandoned in 1965. There are three facilities, or mints, that make all the coins in the U.S. They are located in Denver, San Francisco and Philadelphia.

Think about this, copper does not naturally occur in large blocks or layers like limestone. It fills in small veins, nooks and crannies and is difficult to get out of the host rock. Usually an acid of some kind has to be applied to the rock in order to dissolve the copper out of the rock so it can be captured then purified.

The Kennecott Utah Copper mine located near Salt Lake City, Utah, is the largest open-pit copper operation in the United States and second in the world. At the Kennecott mine, approximately 493 tons of rock has to be mined to produce 1 ton of copper that is 99.999% pure.

Copper is essential to every day life. If it is electrical in any way, it probably contains copper which is an excellent conductor of electricity. It is even in your vitamins. Yes, take a look at the ingredients in your vitamins. Then you can really appreciate the importance of natural resources in our every day lives.

If it can't be grown,
It has to be mined. Period.

Maintenance, Startup and Shutdown Emissions
By Dave Knollhoff

Maintenance, Startup and Shutdown (MSS) activity emissions are defined in Title 30 Texas Administrative Code (TAC) Chapter 101.1 as unauthorized emissions (and/or excess opacity events), from the operation of a facility or an activity done to the facility, that exceed a specified reportable quantity of emissions. MSS activity emissions (30 TAC 101 Subchapter F) may be scheduled (routine) or unscheduled (not expected or unpredictable). Some examples of scheduled MSS are: 1) planned maintenance of fuel storage tanks or asphalt cement tanks with unauthorized Volatile Organic Compound (VOC) emissions from the use of cleaning solvents or paints, or unauthorized Particulate Matter (PM) emissions from the use of outdoor dry abrasive blasting products 2) incomplete combustion at startup or shutdown of a hot mix asphalt plant or generator set leading to opacity exceedances and/or higher than expected emissions. Some examples of unscheduled MSS with high opacity emission exceedances are 1) storage tank unexpectedly explodes 2) lightning strikes the dryer stack baghouse compartment of a hot mix asphalt plant and starts a fire.

A slurry of environmental regulation related to MSS emissions for temporary, permanent and portable facilities operating across Texas is currently being proposed or being implemented by the Texas Commission on Environmental Quality (TCEQ). The Environmental Protection Agency (EPA) has threatened to take away federal funding from Texas, if the TCEQ does not implement the proposed MSS regulation. According to TCEQ, scheduled startup and shutdown emissions "***should not***" be a major concern for the hot mix asphalt, rock crushing, concrete industries as well as the construction and construction material industries. However, scheduled maintenance emissions (not already authorized or represented) within your permit registration(s)/authorization(s) will need to be addressed within the above stated industries by 2013.

In preparation for the development of amendments to Title 30 TAC Chapter 106 (Air Quality Permits By Rule) and Chapter 116 (Air Quality New Source Review & Standard Permits), the following scheduled MSS regulation activities are currently being addressed by TCEQ to meet EPA demands:

1) The current Permit By Rule (PBR) 106.263 for authorizing MSS emissions is being proposed to represent only temporary maintenance emissions and a new PBR 106.268 is being proposed to authorize regularly scheduled MSS on a more permanent basis.

2) A new air quality standard permit is also being developed by TCEQ to authorize scheduled MSS.

We need your help to establish a list of scheduled maintenance activities that are typical for your operations. Our short-term goal is to work with TCEQ to develop a list of maintenance activities to place on a de minimis list to ease scheduled MSS regulation on the industries we serve. Please send comments or questions to David Knollhoff dknollhoff@westwardenv.com at Westward Environmental, Inc.

Save Energy, Save Water, and Save Money!

- Don't let your water dollars... and one of nature's most precious resources... run down the drain. Just turn off the water while you brush your teeth. The average bathroom faucet flows at a rate of two gallons a minute, according to the EPA's WaterSense initiative. That means you'll save up to 8 gallons of water a day per person.
- The best time to water outdoors is in the morning, both to reduce water waste and to promote healthy flora. Morning air is cooler, so less water is lost to evaporation than during the middle of the day. If you water in the evening, you run the risk of promoting fungi and bacterial diseases.
- It may surprise you, but commercial car washes use water more efficiently, typically using 45 gallons of water per car. Home washers typically use between 80 and 140 gallons. Commercial carwashes must also drain their wastewater into sewers, versus simply running it across your driveway into the land.
- Don't ignore that dripping faucet or leaky pipe joint. One faulty faucet wastes 3 gallons of water per day, reports the U.S. Geological Survey. So get a pipe wrench and tighten those seals, replace old and worn hardware, and call your neighborhood plumber if you need help. Every drop really does add up.

COURT VACATES EPA'S NEW 8-HOUR OZONE STANDARD

By Melissa Fitts

"Because EPA has failed to heed the restrictions on its discretion set forth in the Act, we grant the petitions in part, vacate the rule, and remand the matter to EPA for further proceedings."

– Opinion for the Court filed by Circuit Judge Rogers

In December 2006, the United States DC Circuit Court of Appeals unanimously vacated the Environmental Protection Agency's (EPA) Phase 1 Rule to implement the 8-hour ozone National Ambient Air Quality Standard (NAAQS).

The Federal Clean Air Act (FCAA) is the federal law passed in 1970, and amended in 1990, as part of the national effort to control air pollution. It identified six "criteria pollutants" that can injure health, harm the environment, and cause property damage. Those pollutants are: carbon monoxide, lead, nitrogen oxides, particulate matter less than or equal to 10 microns in diameter, sulfur dioxide, and ozone. The FCAA requires that local metropolitan areas be evaluated to determine if they meet NAAQS for these pollutants. If an area fails to meet the NAAQS for one or more of the pollutants, it is called a "nonattainment" area. EPA then classifies nonattainment areas based on the severity of their air quality problem. Classified areas fall into five categories: marginal, moderate, serious, severe, or extreme. Nonattainment areas with higher classifications must impose stricter requirements on local sources of air pollution and must meet additional requirements from EPA.

Regarding ozone, the standard was originally set in 1971 at 0.08 parts per million (ppm) over a 1-hour period not to be exceeded more than once per year. As a result of a review of new health effects data and national public comments, the standard was changed to a level that was considered to be sufficient to protect the public health and welfare. Thus in 1979, the standard was revised to 0.12 ppm over a 1-hour period not to be exceeded more than once per year when averaged over three consecutive years. However, subsequent scientific studies demonstrating that ozone causes adverse health effects at lower concentrations and over longer exposure times led the agency to conclude that the 1-hour standard did not adequately protect the public. Therefore, in 1997 the ozone standard was again revised to 0.08 ppm over an 8-hour period not to be exceeded by the 3-consecutive-year average of the 4th highest, daily 8-hour maximum for each year. This 'tougher' 8-hour standard was intended to replace the 1-hour standard, but numerous legal issues have hindered its implementation. The 1997 standard was challenged in court by industry argument resulting in the DC Circuit Court of Appeals sending the standard back to EPA for further study in 1999. EPA appealed and the U.S. Supreme Court ruled against industry in 2001 but ordered EPA to reconsider the standard. EPA moved forward with the nonattainment designation process and published its Phase 1 Rule for implementation of the 8-hour ozone standard in April 2004. One year later in June 2005, the 1-hour standard was revoked for all areas except the 8-hour ozone nonattainment Early Action Compact (EAC) areas.

In the April 2006 edition of our newsletter, we published an article titled "EPA Revokes One-Hour Ozone Standard." But a December 2006 court decision may result in the reinstatement of the previously revoked 1-hour standard. Many issues will need to be addressed since states have made recent permitting determinations on the now vacated 8-hour Phase 1 Rule. An October 2007 memorandum from EPA's Principal Deputy Assistant Administrator Robert J. Meyers states EPA will issue an immediately-effective final rule to restore the New Source Review applicability thresholds and emission offsets pursuant to classifications previously in effect for areas designated nonattainment for the 1-hour ozone standard. In response to this memo, the Texas Commission on Environmental Quality (TCEQ) is considering retroactive nonattainment review in order to comply with the court decision. Certain sites not triggering nonattainment requirements under the 8-hour standard may now trigger nonattainment review upon reinstatement of the 1-hour standard. However, EPA proposed in June 2007 to again strengthen the NAAQS for ozone and plans to issue final standards this month in March 2008. Therefore, it is important to carefully review any permitting actions in an attempt to avoid any future challenges.

Please contact Melissa Fitts at mfitts@westwardenv.com or at 830.249.8284 for more information.

Phase II NPDES – Storm Water Permits for Small Cities

By Kristin Urbanczyk

What is an MS4? A municipal separate storm sewer system (MS4) is defined by the TCEQ as a "conveyance or system of conveyances…owned by the United States, a state, city, county, town, or other public entity that discharges to waters of the U.S. and is designed to collect or convey storm water." It is not a combined sewer and not part of a publicly owned treatment work (POTW).

Who has to have a permit? The EPA and TCEQ began regulating large cities under the Phase I program in September of 1998. Phase I MS4s included cities with populations over 100,000 based on the 1990 census. The Phase II MS4 permit program includes small cities with populations fewer than 100,000 based on the 2000 census, and further limits the regulated community to include only towns within the jurisdictional boundary or urbanized area (UA) of other large cities. Therefore, cities such as San Marcos and New Braunfels are not included in Phase II MS4 permit program because they are not within an UA and their population is not great enough to be considered a medium or large city. If a city lies partially inside an UA, the portion of the city that is within the UA boundary is required to enact an MS4 plan if the total population of the city is above 1,000, even if the population of the portion of the city within the UA is below 1,000. Cities that have increased in population since the 1990 census and are now above 100,000 are included in the Phase II MS4 permit program. Also, cities that were incorporated into larger cities, such as Alamo Heights in San Antonio, may not have been included in the Phase I program so they are now going to be included in the Phase II program.

How does the TCEQ measure compliance? Just like with industrial storm water permitting, a city must first have a written storm water management program (SWMP). The SWMP explains how pollution in storm water will be reduced to the Maximum Extent Practicable (MEP). It also explains how the city intends to protect water quality and how they will meet the water quality requirements of the Clean Water Act and Texas Water Code. The SWMP is organized into six Minimum Control Measures (MCM) that define the program and controls to be implemented and the Best Management Practices (BMPs) selected to achieve water quality goals. The six MCMs that are required for an MS4 are as follows: ***Public Education and Outreach, Public Involvement/ Participation, Illicit Discharge Detection and Elimination, Construction Site Storm Water Runoff Control, Post-Construction Site Storm Water Management for New Development and Redevelopment, and Pollution Prevention/Good Housekeeping for Municipal Operations***.
A seventh option is also available for city construction projects because the permit includes all the required language of a construction permit. A city can include its construction projects within the UA on the MS4 permit. The SWMP will define measurable goals to demonstrate the effectiveness of the MCMs these goals must be regularly evaluated or assessed. Full implementation of these MCMs is mandatory by August 13, 2012, five years after the permit issuance date.

The Application Process: A paper Notice of Intent (NOI) must be submitted to TCEQ along with the original SWMP. An application fee of $100.00 must be submitted with the application. If a submitted NOI is found to be incomplete, a Notice of Deficiency (NOD) will be mailed and the receiving entity will have 30 days to respond. A NOD can result in the delay of the NOI approval or in denial of coverage. Denial of coverage could result into a compliance history impact.

And then…? TCEQ requires submittal of an annual report due 90 days from the end of the permit year. The report should include the following information: ***Changes to the SWMP, Status of Compliance with Permit, Assessment of BMPs for each MCM, Progress towards meeting MEP standards, Evaluation of measurable goals for each MCM, Changes in MCMs and measurable goals, Plan for the following permit year, Number of non-municipal construction activities, Notice that the MS4 Operator relies on another entity for portion of SWMP, if applicable, System-wide annual report for shared SWMPs, Each operator must sign a 30-TAC §305.128, MCM 1: information on activities conducted and materials used, and MCM 2: List of non-storm water discharges - changes during permit term.***

The first year annual report should include BMPs already implemented. The first year report is required even if the NOI has not yet been approved. If the NOI has not yet been approved, the statement "SWMP not implemented because NOI not approved" should be included in the report. The report should include compliance with schedules, milestones achieved, revisions to schedules along with NOCs where applicable. The fifth year report should state that all MCMs have been implemented and it should include the plans for the upcoming year.

For more information on Phase II MS4 permitting, please contact Julie Morelli at mailto:jmorelli@westwardenv.com.

Westward Environmental, Inc.

"Solutions for the Preservation of Industry and the Environment "

"YES, WE CAN DO THAT"

Westward Environmental has been providing unparalleled, quality consulting services to the aggregate, construction and mining industries for over 11 years. We started in the mining business and have seen the evolution of technology, increased awareness and involvement of both public and private entities, felt the sting of stricter regulations and gas prices, watched a giant almost brought to its knees by a tiny bug and stood on the steps of the Capitol and witnessed greatness and a circus almost at the same time. We have been there to.

Over the last 11 years, Westward has grown to meet the ever changing needs of industries that provide the quality of life that we all want. Many companies talk of needing vertical integration, turn key services, high level of knowledge, experience and responsive actions. We are here to tell you,

"Yes, We Can Do That"

Let us re-introduce ourselves. We are Westward Environmental Inc. and we are here for you. Our staff has worked for the big companies and the not so big companies and most everywhere in between. We have registered Professional Geologists, Engineers, Environmental Managers and a host of folks in training.

We can find a greenfield quarry site for you, explore it, drill it, map it, test it, get a mine permit for it, get an air permit for it, get a storm water permit for it, write the other required plans for it, look for species on it, look for wetlands on it, suggest the best way to mine it, predict the weather for it, train people to work safely in it, design a community relations program for it, make sure you are in compliance with it and draft a reclamation plan for it.

"Yes, We Can Do That"

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