

ENVIRONMENTAL COMPLIANCE WORKSHOP PLANNED

The Maine Aggregate Association invites you to attend an Environmental Regulatory Informational Workshop on March 10, 2009 at Washington County Community College.

The Workshop will provide gravel pit & quarry owners and operators information about the Maine Department of Environmental Protection rules as well as other valuable information on pit operations.

For many different reasons, some pit owners and operators have avoided obtaining the required DEP licensing. However, with today's technology and available aerial photography, The DEP can easily measure the size of excavations and if a pit has been expanded more than 5 acres since 1970, the pit must be licensed.

Our goal is to help inform pit owners and operators of this licensing process and requirements so they can avoid enforcement **and fines**.

Speakers include representatives from the aggregate industry, MAA and Maine DEP.

The workshop schedule is:

Date: **March 10, 2009**
Time: **1:00 to 3:00 PM**
Place: **Washington County Community College Calais, Maine**

For more information visit MAA at: www.maineaggregate.org,

Army Corps Clarified Wetlands Jurisdiction
From the National Sand, Stone & Gravel Association

The US Environmental Protection Agency (EPA) and the US Army Corps of Engineers (ACOE) has issued revised guidance to the 10 EPA regions and 38 Corps districts which clarifies the geographic scope of jurisdiction under the federal Clean Water Act (CWA). The revised guidance replaces the previous policy issued and clarifies a June 2006 Supreme Court decision in *Rapanos v. United States*. The agencies decided not to address these issues via rulemaking.

Summary of Key Points

The agencies will assert jurisdiction over the following waters:

- Traditional navigable waters
- Wetlands adjacent to traditional navigable waters
- Non-navigable tributaries of traditionally navigable waters that are relatively permanent where tributaries typically flow year-round or have continuous flow at least seasonally (e.g. typically three months)
- Wetlands that directly abut such tributaries

The agencies will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a traditional navigable water:

- Non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to, but that do not directly abut, a relatively permanent non-navigable tributary

The agencies generally will not assert jurisdiction over the following features:

- Swales or erosion features (e.g. gullies, small washes characterized by low volume, infrequent, or short duration flow)
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water

The agencies will apply the significant nexus standard as follows:

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters. Significant nexus includes consideration of hydrologic and ecologic factors

More detailed information on the guidance can be found at:

www.epa.gov/owow/wetlands/guidance/CWAwaters.html

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All Directors are elected for one year terms that expire June 30, 2009. New directors will be elected at the Annual Meeting on April 29, 2009

Overview of Soil Testing

By Darrell A. Gilman

Pit owners and operators need to understand soil testing and specifically grain size analyses to make their businesses more productive and profitable. This short article will discuss the purpose of testing, how samples are collected, and finally what do the reports mean.

Soil testing services fall under the category of Quality Assurance, a simple definition would be the process of “making sure the quality of a product is what it should be”. Because the distribution of a soil’s particles affects its performance, Engineers will place limits (specification ranges) on materials to meet their design objectives. A grain size analysis is one method to characterize the material and show whether the product conforms to the engineer’s specifications and/or requirements of a project. These specifications can be simple or very stringent dependent on the engineering use of the soil. The grain size is one indicator of quality, the suitability of a soil to meet its intended use whether it is for proper drainage, bearing, compatibility, etc...

The testing and inspection company follows industry-adopted procedures for performing all field sampling and laboratory tests. The guidelines for sampling stockpiles of aggregates are covered under AASHTO T2 and ASTM D75 “Standard Practice for Sampling Aggregates”. The amount of the sample obtained depends on the maximum particle size of the soil sample, and the lab tests to be performed. The person obtaining field samples for laboratory testing should always attempt to obtain unbiased samples representative of the material collected. Following standard procedures helps to minimize errors caused by variations in individual sampling techniques.

Once the sample is back in the lab, the field sample will be reduced as a matter of necessity in complying with machinery constraints: a mechanical shaker that uses 8” sieves can hardly be expected to grade 40 lbs of material. It is therefore necessary to reduce field samples while minimizing the chance of variability during handling. The splitting of field samples to lab test size can be found in ASTM C702 “Reducing Samples of Aggregate to Testing Size”.

Test method ASTM C136 & C117 “Sieve Analysis of Fine & Coarse Aggregates” covers the proper procedures for testing the particle size distribution of fine and coarse aggregates by sieving. The grain size test consists of separating a sample of soil through a nest of sieves arranged from largest to smallest to obtain its particle size distribution. Typically the screens (sieves) used will start with a 3 inch squared sieve and reduce to ¼ inch in size, after which the screen size will be called out by the number of openings per inch. For example, a No. 40 sieve will have 40 openings per inch.

The testing laboratory will prepare a report showing the distribution of the soil based on particle size and the cumulative percentage passing (percentage finer) of each sieve used to perform the grain size analysis. From this report we can see the proportions of gravel (3 inch to No.4 sieves), sand (No.4 to No.200 sieves), and silts & clays (particles smaller than No. 200 sieve). When the silt and clay portion of a sample is tested, the particle sizes will commonly be reported in millimeters or micrometers. The grain size may also be plotted showing the distribution of particle sizes on a logarithmic scale.

The grain size analysis is a major part of pit owners and operators qual-

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What is the Cost of Not Following MSHA Regulations?

By Chip Laite

The highest cost of not following the MSHA regulations could be the death or injury of a valued employee. Another costly factor that I will discuss could be the penalties assessed for violations of the Health and Safety Standards.

The Mine Safety and Health Administration was authorized by the Federal Mine Safety & Health Act of 1977 and the MINER Act of 2006. The purpose of these Acts was to establish mandatory health and safety standards to protect the health and safety of the Nation's miners, and to require that each mine operator and every miner comply with the safety standards.

If a Mine or Gravel Pit owner/operator ignores these regulations and fails to follow the standards the cost could be in the thousands of dollars. If an operator does not have a good safety program and makes sure that ensures that all equipment guards are in place, all back-up alarms and horns work, all fire extinguishers, and berms are in good shape, there could be at least ten violations and each one could carry a penalty of \$100.00. The most common violations are in the following areas:

46.3 Training Plan. You must develop and implement a written plan, approved by us under either paragraph (b) or (c) of this section, that contains effective programs for training new miners and newly hired experienced miners, training miners for new tasks, annual refresher training, and site-specific hazard awareness training.

56.1000 Notice of Operations. The owner, operator, or person in charge of any metal and nonmetal mine shall notify the nearest Mine Safety and Health Administration and Metal and Nonmetal Mine Safety and Health District Office before starting operations, of the approximate or actual date mine operation will commence

56.18010 First Aid training. An individual capable of providing first aid shall be available on all shifts.

56.18002 Workplace Examinations. A competent person designated by the operator shall examine each working place at least once each shift for conditions which may adversely affect safety or health

47.31 HazCom Program. Each operator must, Develop and implement a written HazCom program, Maintain it for as long as a hazardous chemical is known to be at the mine, and Share relevant HazCom information with other on-site operators whose miners can be affected.

56.15001 Adequate first-aid materials, including stretchers and blankets, shall be provided at places convenient to all working areas. Water or neutralizing agents shall be available where corrosive chemicals or other harmful substances are stored, handled, or used.

41.13 Legal Identity. Failure of the operator to notify the Mine Safety and Health Administration, in writing, of the legal identity of the operator or any changes thereof within the time required under this part will be considered to be a violation of section 109(d) of the Act and shall be subject to penalties as provided in section 110 of the Act.

50.30 Quarterly Employment information. Each operator of a mine in which an individual worked during any day of a calendar quarter shall complete a MSHA Form 7000-2 in accordance with the instructions and criteria in §50.30-1 and submit the original to the MSHA Office of Injury and Employment Information, P.O. Box 25367, Denver Federal Center, Denver, Colo. 80225, within 15 days after the end of each calendar quarter. These forms may be obtained from the MSHA District Office. Each operator shall retain an operator's copy at the mine office nearest the mine for 5 years after the submission date.

46.8 - Annual Refresher Training, you must provide each miner with no less than 8 hours of annual refresher training

These violations and costs can be avoided by following the regulations. It may look like a lot of work and expense to comply, but the Small Mines Office of MSHA will assist with becoming compliant. They will come to your site and walk you through the items that are required.

MSHA has a long-established policy that entities should not fear retaliation for comments regarding actions by MSHA personnel conducting compliance or enforcement activities. This policy reflects the fact that the agency's objective is to help prevent and reduce workplace fatalities, illnesses and injuries.

For more information on what is required and help in developing a training program contact; Joseph Kania from the Small Mine office at 603-703-6958 or Kania.joseph@dol.gov

Chip Laite serves as Vice President of MAA and is Aggregate Manager for Sargent Corporation.

A Message from MAA President Paul Labbe

As we all wait for the upcoming construction season, and especially during these unstable times it is more important than ever to support our industry with our trade associations, and their member company's. Often during economic downturns association memberships decline, involvement and participation seems to falter. With the challenges we face it is even more important to work together. MAA is fortunate to have maintained a consistent and steady roster of member. Many of our Directors have served tirelessly since the inception of MAA and we have been fortunate to have some great new faces joining us on the Board.

In 2008, MAA worked with the Maine DEP, State Fire Marshall's Office and member companies on issues related to regulations and developed Blasting Guidelines to help our members. We closely monitored the attempt to rewrite and greatly expand the federal Clean Water Act and met with Governor John Baldacci and informed our Congressional Delegation in Washington, D.C. of our concerns that this was a misguided attempt to greatly expand the Army Corps of Engineers authority to include all water, not just navigable waters, including stormwater control structures, drainage ditches, swales, process water sources and reclamation

ponds (see story on ACOE new guidelines on page 1). We worked with the DEP Air Bureau to simplify licensing requirements for rock crushers and helped established a Statewide General Air Emission License that greatly simplifies and streamlines the application process. We continue to work with the Maine Geological Survey Mapping project, and maintain good working relationships with associated trade organizations to promote greater acceptance and use of recycled concrete.

This winter MAA is hosting an educational workshop focusing on environmental regulations of gravel pits and quarries. Our goals are to provide a valuable service to our existing members, attract new members and promote industry compliance with Maine DEP environmental regulations. MAA has been aggressive in fighting against more burdensome and onerous regulations. However, our success could easily be jeopardized if industry compliance is not maintained..

Finally, I invite all our members to our Annual Meeting on April 29, 2009 and encourage you to bring a guest; a potential new member, your local legislator, or another member of your team. The meetings are always informative and we do have a good time.

Paul Labbe serves as MAA President and is Senior Vice President of Ray Labbe & Sons of Bruns-

16th Annual MAA Membership Banquet

April 29, 2009 is the date for the Maine Aggregate Association 16th Annual Membership Meeting & Banquet at the Italian Heritage Center in Portland. Annual election of Directors and Officers top the business agenda, followed by a special evening program.

Mark Stebbins from the DEP Mining Unit will provide the annual summary of inspections and industry compliance. The report alerts us to issues of concern to the DEP and provides direction on ways to adjust our practices to avoid enforcement and penalties. Ted Johnston of Resource Policy Group & MAI Environmental is MAA's Lobbyist and he will provide an overview of issues and legislation of interest to the aggregate industry. MAA continues to maintain a strong and effective presence in Augusta to advocate for our industry.

The Annual Meeting is more than just business. Good friends meet and old acquaintances are renewed over refreshments at the Reception; a 50:50 raffle raises money for the Marlee Fund; and once again we will cap the evening with lots of laughs from entertainment provided by Portland's Comedy Connection. All MAA members are invited.

Look for the advance registration in this newsletter. See you there!

Soil Testing

(Continued from page 2)

ity assurance programs. Regular inspections and testing of soil products will help keep materials in compliance with project specifications, and helps control the consistency of the product produced. If you have any questions or additional information is required, please do not hesitate to call a local testing company.

Darrell Gilman is the Construction Materials Testing Laboratory Manager for Summit Environmental Consultants in Augusta and can be reached at (207) 621-8334

Sand & Gravel News

Sand & Gravel News is a periodic publication of the Maine Aggregate Association and is available free as a service to its membership. For a membership information contact us:

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Groundwater Monitoring as a Performance Standard

The Maine Department of Environmental Protection (DEP) Chapter 378 Variance Criteria for Excavation of Rock, Borrow, Topsoil, Clay or Silt and the Site Location of Development Law may require groundwater monitoring as part of a permit application and for gravel pits and quarries when mining activities may affect the subsurface aquifer system.

Operations filing permit applications under Site Law and the Gravel Pit program that will be in close proximity and/or below the seasonal high groundwater table typically require the following actions and submittals:

- A Subsurface Investigation is conducted, which includes the installation of groundwater monitoring wells to provide water level and quality data for the site. Typically a year of background data is collected as part of the Subsurface Investigation.
- Establish a groundwater level monitoring plan, which documents where and when groundwater table elevations will be recorded.
- Establish a groundwater quality monitoring plan, which documents where and when groundwater samples will be collected for water quality measurements.

Facilities permitted to operate within 5 feet of the seasonal high groundwater table and/or below the seasonal high groundwater table are typically required to adhere to the established groundwater level and/or quality monitoring plan for the life of the operation. At the start, groundwater water levels are typically required to be measured biweekly during April, May, and June, and once in September, December, and March. Groundwater quality testing typically starts out on a quarterly basis. In addition to the required field measure-

ments, groundwater level and quality data must be submitted to the DEP on an annual basis unless otherwise specified by the DEP. *As of 2007, the Maine Uniform Electronic Transaction Act, 10 M.R.S.A. §9418 (2) (A), requires Electronic Deliverable Data (EDD) also be submitted to the DEP annually.*

According to Maine DEP Mining Coordinator, Mark Stebbins, it is not uncommon to find facilities in non-compliance with regard to their groundwater monitoring program. Typical non-compliance groundwater monitoring issues include, water levels taken at the wrong times, water levels/quality not monitored as required by the permit, or not submitting the data to the DEP on an annual basis.

Groundwater monitoring is viewed as an important part of the DEP performance standards. A site specific database is created over time to evaluate whether the hydrogeologic predictions made during the application process are correct and to determine to what extent, if any, mining operations are impacting the natural resources of the State.

With all the regulatory compliance issues associated with the licensing and operation of an extraction operation, it is not a surprise that some operators have not maintained the required groundwater monitoring programs. However, it is important to remember that groundwater monitoring can be beneficial to the operator, since complete groundwater level and quality data can be used as a defense if the facility operations are accused of off-site surface water and/or groundwater impacts.

It is important to review your facility permit, determine the required groundwater monitoring and perform field data collection and submittals in accordance with the permit requirements. Some operators choose to perform the monitoring with "in-house" personnel while others contract out their groundwater monitoring program. Regardless of the personnel utilized to complete the requirements, it is beneficial for the operator in the long run to ensure that field data collection and submittals are done consistently and in a timely manner.

Don McFadden serves on the MAA Board of Directors and is a Certified Geologist with MAI Environmental of South Portland



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Maine Aggregate Association

Maine Aggregate Association is a statewide, member-based group of businesses and individuals involved with the gravel and rock industries. Established in 1994, MAA has become an effective and respected voice for the industry.

MAA membership includes gravel pit owners, quarry operators, aggregate processors and truckers as well as equipment dealers, banks, insurance agencies and consulting firms that serve the aggregate industry. 44 percent of MAA membership is comprised of companies with less than 5 employees, another 34% of our member companies have less than 35 employees, and the remaining

22% have 36 or more employees. Only a handful has more than 100 employees.

MAA led the drive to reform the gravel pit regulations, helped write the new laws, and then lobbied hard to get them passed. Today MAA continues its advocacy on behalf of the aggregate industry. Ensuring the rules regulating gravel and rock extraction remain effective and practical is a top priority (see stories on pages 1).

Other issues include truck weights, transportation and highway issues, and environmental and land use regulations. Air emission license and compliance requirements for rock crushers and regulation of air emissions diesel engine are also issues of concern.

MAA also works with the rest of

the Business Community to help control the rising costs of workers compensation, which like state spending and taxes continue to rise out of control.

The MAA Board of Directors, elected annually at the Annual Membership Meeting, slated for April 30, 2008 at the Italian Heritage Center in Portland, stays on top of issues by maintaining a full-time lobbyist in Augusta. In addition, many of the directors serve as volunteers on various state boards and task forces focused on the issues that affect us all.

For more information, contact any of the Directors listed on page 2 of this newsletter, or visit us online at:

www.maineaggregate.org

Sand & Gravel NEWS

MAINE AGGREGATE ASSOCIATION

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