



Winter Conference

Environmental and Regulatory Update

Presented by: Joseph E. Quandt, Esq.

ABOUT THE FIRM

Kuhn Rogers, PLC represents a unique confluence of knowledge, experience and professionalism. Our lawyers deliver competent and ethical legal advocacy with prompt, personal attention to all of your personal and business concerns. A broad range of expertise among our attorneys allows us to guide clients through both straightforward and complex legal matters, and our counselors are dedicated to finding long-term and cost-effective solutions. Kuhn Rogers, PLC is uniquely experienced and qualified to represent the MCA and its members.



Biography



JOSEPH E. QUANDT is a principal of Kuhn Rogers, PLC, with offices in Traverse City and Lansing, Michigan.

Mr. Quandt is a contributing author on environmental matters to The Business News and publishes and lectures frequently in the area of environmental law. Mr. Quandt has served as faculty and commentator to the State Bar of Michigan and the Institute for Continuing Legal Education on environmental matters and is the past Chair of the Natural Resources Committee of the State Bar Environmental Law Section. Mr. Quandt has achieved a peer review rating of A/V Preeminent from Martindale Hubbell, is listed in *U.S. News & World Report's* "The Best Lawyers in America", and *Thompson-Reuters* Michigan Super Lawyers.

Mr. Quandt is a member of the Environmental Law and Real Property Law Sections of the State Bar of Michigan and the Grand Traverse-Antrim-Leelanau County Bar Association and is admitted to practice in all Michigan State and Federal Courts.

Mr. Quandt has been environmental counsel to the MCA for over twenty years.

Presentation Overview



- Silica Implementation Update
- New Part 201 Environmental Remediation Rules
- Other Regulatory Issues Related to Concrete
- City of Detroit Particulate Ordinance

Updated Silica Rules



Silica Implementation Update - Overview

- **Respirable Crystalline Silica (RCS)**
 - Updated in Fall 2017
 - Part 590 General Industry
 - ✦ Must comply by June 23, 2018
 - ✦ Must Offer Medical Examinations to Employees At or Above Action Level for 30 Days beginning June 23, 2020
 - Part 690 Construction
 - ✦ Must Comply With All Obligations Except Sample Analysis – September 23, 2017
 - ✦ Must Comply With Methods for Sample Analysis - June 23, 2018
- **Affected Industries**
 - Concrete, Foundries, Oil and Gas Operations, Ready-mix Concrete, Cut Stone and Stone Products, Abrasive Blasting, Structural Clay Products, Construction, and many others

RCS – Exposure Assessment

- The employer must assess exposure of each employee who is or may be expected to be exposed to RCS at or above the action level for 30 or more days per year
- Categories of Exposure Responses
 - Action Level (AL)
 - ✦ 25 µg/m³ at 8-hour Time Weight Average
 - Permissible Exposure Limit (PEL)
 - ✦ 50 µg/m³ at 8-hour Time Weight Average

RCS – Exposure Assessment (Continued)

- Sampling Options:
 - 1) Performance Option
 - ✦ Assess the 8-hour TWA for each employee on basis of air monitoring data or objective data to categorize employees exposure
 - 2) Scheduled Monitoring Option
 - ✦ Monitor the employee doing a specific job that is most greatly exposed to RCS
 - ✦ If initial monitoring results are:
 - Below AL ----- Resample within 6 months
 - If second consecutive sampling event is below AL then cease sampling
 - At or above AL but below PEL ----- Resample within 6 months
 - At or above PEL ----- Resample within 3 months

RCS – Exposure Assessment (continued)

- **Exposure Reassessment**
 - Must occur whenever there is a change in the:
 - ✦ Production;
 - ✦ Process;
 - ✦ control equipment;
 - ✦ Personnel; or
 - ✦ work practices
 - that may be reasonably expected to result in new or additional exposures at or above the AL
 - Or whenever the employer has any reason to believe that new or additional exposures have occurred above AL
- All samples must be taken to a laboratory that analyzes air samples for RCS in accordance with these rules

RCS – Exposure Assessment (continued)

- **RCS Sampling**
 - Dust Cyclones and Sample Pump
 - ✦ Worn throughout work shift up to 8 hours
 - ✦ Installed and removed by a certified industrial hygienist



Image from: OSHA.gov

RCS – Notice to Employee of Assessment

- Must notify each employee in writing within 5 days (Construction) or 15 days (General Industry) after completing an exposure assessment
- If assessment is above PEL
 - ✦ Must describe in notification the corrective actions being taken to reduce exposure below PEL
- Employees must be provided the opportunity to observe monitoring and be provided protective equipment during such monitoring

RCS – Methods of Compliance

- Different types of controls can be used to reduce exposure levels including:
 - Engineering and Work Practice Controls
 - ✦ Must be used unless employer can demonstrate that such controls are not feasible
 - ✦ If unable to reduce levels below PEL, Employer must reduce to lowest feasible exposure level and provide respiratory protection
 - Abrasive Blasting
 - ✦ Must be conducted in accordance with OSHA standards including: ventilation, mechanical paint removers, and PPE

RCS – Methods of Compliance (continued)

• Written Exposure Control Plan

- Employer shall establish and implement a plan containing at least the following:
 - ✦ A description of the tasks in the workplace that involve exposure to RCS
 - ✦ Description of engineering controls, work practices, and respiratory protection used to limit employee exposure
 - ✦ Description of housekeeping measures used to limit employee exposure to RCS
- The plan shall be reviewed and evaluated for effectiveness annually
- The plan must be available for examination and copying, upon request, to each employee, their designated representatives, the Assistant Secretary and the Director

RCS – Methods of Compliance (continued)

• Respiratory Protection

- When required, it must be in compliance with the rules and 29 C.F.R. 1910.134
- Where required:
 - ✦ Where exposure exceeds PEL when installation of engineering and work practice controls are implemented
 - ✦ Where exposure exceeds PEL for maintenance and repair tasks
 - ✦ When in a regulated area
 - ✦ Where other controls cannot reduce exposure to levels below PEL
- Construction
 - ✦ Table 1 requirements also require specific instances where respiratory protection is needed

RCS – Methods of Compliance (continued)

- **Table 1:**

- Construction Specific
- Numerous construction activities have specific requirements that must be followed
- Activities include, but are not limited to:
 - ✦ Stationary masonry saws; handheld power saws; walk-behind saws; rig-mounted core saws or drills; handheld and stand-mounted drills; jackhammers and handheld powered clipping tools; specific milling machines; crushing machines; heavy equipment

RCS - Housekeeping

- **Employer shall not allow:**

- Dry sweeping or dry brushing
 - ✦ Unless:
 - Wet sweeping, HEPA-filtered vacuuming, or other methods that minimize the likelihood of exposure are not feasible
- Compressed air to clean surfaces
 - ✦ Unless:
 - It is used in conjunction with a ventilation system that effectively captures the dust cloud created, or
 - No alternative methods are feasible

RCS – Medical Surveillance

- **Medical Surveillance**
 - Must be provided at no cost by employer to employees who will be occupationally exposed to RCS at or above action level for 30 or more days per year
- **Initial Baseline Assessment**
 - Must be made available to employee within 30 days after initial assignment

RCS – Medical Surveillance (continued)

- **Initial Examination**
 - Consists of:
 - ✦ **Medical and work history**
 - Focused on past, present, and expected exposure to RCS and any history of respiratory issues or causation issues (smoking)
 - ✦ **A physical examination**
 - Focused on respiratory system
 - ✦ **A chest X-ray**
 - ✦ **Pulmonary function test**
 - Must include: Forced vital capacity (FVC); Forced expiratory volume in one second (FEV1); and FEV1/FVC ratio
 - Must be administered by a spirometry technician with a certificate from a NIOSH-approved spirometry course
 - ✦ **Testing for latent tuberculosis infection**
 - ✦ **Any other test deemed appropriate by the Physician or Licensed Health Care Professional (PLHCP)**

RCS – Medical Surveillance (continued)

- **Periodic Examinations**
 - Employer must make available examinations at least every 3 years or more frequently as recommended by the PLHCP
- **Information Provided to PLHCP**
 - The employer must provide:
 - ✦ A description of the employees former, current, and anticipated duties as they relate to RCS exposure
 - ✦ The employees former, current, and anticipated levels of exposure to RCS
 - ✦ Description of any Personal Protection Equipment (PPE) that will be or may be used
 - ✦ Records of employment related medical treatment

RCS – Medical Surveillance (continued)

- **PLHCP Report for Employee**
 - Must be explained by PLHCP to employee
 - Must be provided to employee within 30 days of the examination (ensured by employer)
 - Must include:
 - ✦ A result of medical examination and conditions that would place employee at risk of exposure
 - ✦ Must include any recommended limitations of employee
 - ✦ Must include recommended limitations on exposure
 - ✦ Must include a statement whether employee needs to be reviewed by a medical specialist

RCS – Medical Surveillance (continued)

- **PLHCP Report for Employer**
 - Must be received within 30 days of examination
 - Must include:
 - ✦ The date of examination
 - ✦ Statement that examination has met requirements of the rule
 - ✦ Any recommended limitations on employee's use of respirators
 - With Employee's written authorization it can also include:
 - ✦ Recommended limitations on exposure to RCS
 - ✦ Recommendation to see a specialist based on chest X-ray

RCS – Medical Surveillance (continued)

- **Additional Examinations**
 - If a specialist examination is recommended:
 - ✦ Availability shall be made available by employer within 30 days after receipt of written opinion
 - ✦ Employer must provide the specialist with all information as required under the normal examinations
 - ✦ Employer must ensure that specialist explains the results of the examination to employee
 - ✦ Employer shall receive written opinion under the same rules as the initial PLHCP examination

RCS – Communication of RCS Hazards

- **Employer Must:**
 - Ensure all employees have access to label information and MSDS's
 - Ensure all employees are trained and understand the following:
 - ✦ Cancer
 - ✦ Lung effects
 - ✦ Immune system effects
 - ✦ Kidney effects

RCS – Communication of RCS Hazards (continued)

- **Signs**
 - Must be posted at the entrance to all regulated areas
- **Training**
 - Must provide training so each employee can demonstrate knowledge and understanding of at least the following:
 - ✦ Health hazards associated with RCS exposure
 - ✦ Specific tasks in the workplace that could result in exposure
 - ✦ Contents of the communication section
 - ✦ The purpose and description of medical surveillance program

RCS – Record Keeping

- **Air Monitoring Data**

- Employer shall make and maintain an accurate record of all exposure measurements taken to assess employee exposure
- Shall include at least:
 - ✦ Date of measurement for each sample
 - ✦ Task monitored
 - ✦ Sampling and analytical methods used
 - ✦ Number, duration, and results of samples taken
 - ✦ Type of PPE worn by employees monitored
 - ✦ Name, SSN, and job classification of all employees represented by such monitoring, indicating who was actually monitored
- Must ensure records are maintained and available pursuant to 29 C.F.R. 1910.1020

RCS – Record Keeping (continued)

- **Objective Data**

- Employer shall make and maintain an accurate record for all objective data relied upon to comply with requirements of this section
- This record must include:
 - ✦ Crystalline silica-containing material in question
 - ✦ Source of objective data
 - ✦ Testing protocol and results of testing
 - ✦ Description of process, task, or activity on which the objective data were based
 - ✦ Other data relevant to the process, task, activity, material, or exposures on which the objective data were based
- Must be maintained and available in accordance with 29 C.F.R. 1910.1020

RCS – Record Keeping (continued)

- **Medical Surveillance**
 - Employer shall make and maintain an accurate record for each employee covered by medical surveillance
 - The record shall include:
 - ✦ Name and SSN
 - ✦ Copy of PLHCPs' and specialists' written medical opinion
 - ✦ Copy of information provided to PLHCPs and specialists
 - Must be maintained and available in accordance with 29 C.F.R. 1910.1020

RCS – Fixed Facilities/Batch Plants

- Need to assess employees who are exposed to or likely to be exposed to RCS at or above the Action Level (AL)
- Monitoring must occur in accordance with the rules
 - 2 Options:
 - ✦ Performance Monitoring
 - Assess 8-hour TWA exposure based on air monitoring and objective data
 - ✦ Scheduled Monitoring
 - Initial monitoring
 - If below AL resample within 6 months
 - If second sampling is below AL → Cease sampling unless reassessment is needed (see below)
 - If above AL but below PEL resample within 6 months
 - If above Permissible Exposure Limit resample within 3 months
 - Reassessment
 - When change in production, process, control equipment, personnel, work practices, or reasonable belief by employer that exposure has changed

RCS – Fixed Facilities/Batch Plants

- **Medical Monitoring**

- Must occur according to these rules
 - ✦ Need not force a medical examination, but need to be made available
 - ✦ Initial Assessment:
 - Within 30 days after initial assignment
 - ✦ Subsequent Assessments:
 - Made available every 3 years or less if recommended by the Physician or Other Licensed Health Care Professional
 - ✦ No medical examination is required to be offered if:
 - The employees are not exposed to RCS at or above the AL for 30 days or more per year

RCS – Fixed Facilities/Batch Plants

- **Regulated Areas**

- If an employee will be exposed to airborne concentrations of RCS that is above the permissible exposure limit or reasonably expected to be so then the employer must:
 - ✦ Demarcate the regulated area from the remaining work environment
 - ✦ Regulate access to only authorized persons
 - ✦ Provide respirators to each employee or representative who is authorized to enter the regulated area

- **Record Keeping**

- Must maintain records for monitoring data and medical examinations for time periods set out in 29 C.F.R. 1910.1020

New Part 201 Rules



Updates to Part 201

- Rule 1
 - Deletion of “Applicable Criterion” as a defined term
 - ✦ It provided important guidance to the public and MDEQ staff that criterion is only relevant and should be utilized if an exposure pathway to a hazardous substance is complete
 - ✦ A criterion is not relevant if the exposure pathway is incomplete as a result of an appropriate land or resource use restriction

Updates to Part 201

- Rule 1 (continued)
 - Utilization of “other information sources” under the definition of “Best Available Information”
 - ✦ New language
 - ✦ Allows for adjustment of future criteria based on other information sources that are recognized by the risk assessment community
 - ✦ Does not establish which risk assessment community will be used
 - ✦ Does not guarantee the same level of public participation
 - Creates a lack of transparency

Updates to Part 201

- Rule 1 (continued)
 - New definition of “Chronic Toxicity”
 - ✦ Definition was amended to remove the requirement to include circumstances where repeated or long term exposure will result in an injurious or debilitating effect
 - ✦ Revised to include any “adverse effect”
 - ✦ Adverse Effect is not defined in the Rules and may include effects that are not injurious but merely aesthetic
 - ✦ Redefinition takes the definition outside the realm of what may truly create health-based concerns

Updates to Part 201

• Rule 2

- Assurance that land or resource use restrictions meet MDEQ expectations
 - ✦ Wording like “Assure” almost always forces a response in MDEQ staff that the result will be 100% guaranteed
 - MDEQ will likely deem a land or resource use restriction unreliable if the staff decides the elimination of an exposure pathway is not 100% guaranteed
 - May allow influence from third parties to control the outcome in deciding whether or not a land or use restriction can be employed

Updates to Part 201

• Rule 2 (continued)

- Rule 2(l) provides a seemingly innocuous change which could have substantial consequences
 - ✦ Previously had a known established risk assessment data and sources
 - ✦ Now includes “including but not limited to” language in the definition of “weight of evidence”
 - Allows an unknowable universe of data sources, whether scientifically meritorious or not
 - All of which could be relied upon by the MDEQ

Updates to Part 201

- **Rule 4 – Generic Criteria Diminishment in Ongoing Project Administration**
 - Changes evidence a continued policy shift away from part 201 based upon application of general exposure assumptions to a more site-specific approach
 - Changes in this part could allow MDEQ staff to dictate exhaustive and unnecessary investigation work simply to obtain more robust documentation than is necessary to demonstrate adequate characterization
 - Other changes will result in more facilities being moved out of the generic program and required to meet site-specific scrutiny
 - ✦ Concern in the lack of departmental resources for enforcement

Updates to Part 201

- **Rule 8 – Abandonment of Reasonable and Relevant Standard**
 - Includes an allowance for the establishment of criteria which may be relevant but not reasonable and relevant
 - “reasonable and relevant” are words utilized in Part 201 and should remain together
 - Rule 18 also had this change

Updates to Part 201

- **Rule 20 – Applicability of Generic Direct Contact Criteria for Soil**
 - Issue language, “direct contact with soil shall be considered a relevant pathway for all facilities”
 - ✦ Contradicts the plain language of Part 201 in the statute which requires pathways to be reasonable and relevant
 - ✦ Automatically assumes the existence and relevance of the pathway and assumes that the pathway is complete to an exposure point and must be managed
 - Cannot simply be eliminated as an option by institutional or engineering controls
 - Will likely result in unnecessary costs for evaluation of a pathway which may not be reasonable, relevant or exist at all

Updates to Part 201

- **Rule 26 & 27 – Vapor Intrusion – new math**
 - Contains ~60 pages of assumptions and criteria
 - ✦ Does not have scientific or institutional community consensus
 - ✦ Calculation errors continue to persist with minimal amount of review
 - ✦ Has bugs that cannot be worked out of the process without requiring a rule change

Updates to Part 201

- **Other General Changes**

- MDEQ appears to continue to utilize exposure assumptions which are impracticable
 - ✦ Assumptions include:
 - Time frames
 - Body mass
 - Skewed assumption related to sensitive exposure populations
- Algorithms present in updated rule appear to assume overwhelming exposure to sensitive populations rather than the populations present in the represented community

Other Regulatory Issues



Stormwater

- **Issues relating to stormwater permits**
 - Large facilities generally know how to handle process water but routinely violate stormwater permits resulting in violations
 - Should implement Best Management Practices
 - ✦ Keep the facility clean
 - ✦ Conduct monthly inspections
 - ✦ Sample the water by a person who has stormwater training
 - Make sure you have a stormwater permit unless the facility is completely enclosed

SPCC Plans

- **Spill Prevention, Control, and Countermeasure plans (SPCC)**
 - Either need one or not
 - When needed:
 - ✦ When you have over 1,320 gallons of oil or chloride materials on site above ground
 - ✦ When you have underground tanks in excess of 42,000 gallons
- Plans simply discuss the oil you have on site, how it is handled, inspected, taken care of, and what happens during an accident or emergency
- **Michigan Part 5 Rules**
 - Spillage of Oil and Polluting Materials

City of Detroit – Particulate Ordinance



Particulate Ordinance

- **Presentation overview:**
 - Purpose
 - Penalties
 - Bulk Solid Materials
 - Bulk Solid Material Facilities
 - Carbonaceous Bulk Solid Material Facilities
 - Outdoor Storage of Bulk Solid Materials other than Carbonaceous Bulk Solid Material
 - Variances
 - Implementation and Compliance

Particulate Ordinance

- **Purpose**

- To prevent the release of fugitive dust into the public environment from a facility or transportation unit

- **Penalties**

- Violation of this provision results in a fine \$1,000.00 for a first offense and a minimum of \$2,500.00 for a subsequent offense
- Violations are issued on a per day basis

Particulate Ordinance

- **Bulk Solid Materials - Alternative Compliance**

- An owner or operator of a facility that processes, handles, or transfers on-site, loads, unloads, stockpiles, or stores qualified solid bulk material shall be deemed in compliance if all the following are met:
 - × 1) the owner has submitted a state operating plan for the facility pursuant to section 5524 NREPA;
 - × 2) the state operating plan is effective and the operation is in compliance with the state operating plan;
 - × 3) the state operating plan includes the required NREPA information and any groundwater permits required by MDEQ or included with any supplemental information filed with the Building, Safety, and Environmental Department (BSEED) with an application for certificate of alternative compliance
 - (must include: site map, description of operations, description of controls, description of record keeping, description of containment decisions, etc.)
 - × 4) must submit a copy and description of compliance to with BSEED for review of the plan and site within 45 days of receipt; and
 - × 5) Owner must submit a copy of the state issued permit with BSEED and allow 45 days for review and inspection of the facility to be issued a compliance certificate

Particulate Ordinance

• Alternative Compliance – Scrap Processors

- Five requirements for compliance:
 - ✦ 1) holds a business license issued by BSEED under division 2 of article VIII of chapter 49 of this code
 - ✦ 2) the scrap processor does not handle or transfer on-site, transfer, store, load, unload, stockpile, or process carbonaceous bulk solid material
 - ✦ 3) that the scrap processor is in compliance with this article, the scrap metal regulatory act, and any applicable standard for emissions
 - ✦ 4) that the scrap processor does not engage in any milling activity at the facility that would generate fugitive dust
 - ✦ 5) that the scrap processor uses measures to mitigate out-going vehicles transference of dust or other materials to the public roadway

Particulate Ordinance

• Bulk Solid Material Facilities – General

- To obtain a certificate of operation, one must submit an application to BSEED and create a fugitive dust plan
- The fugitive dust plan helps guide compliance and must be approved by Michigan and BSEED
- The fugitive dust plan must be submitted for approval at least 30 days prior to changes in activity and 180 days after the effective date of this ordinance for existing facilities

Particulate Ordinance

- **Fugitive Dust Plan requirements**

- Name and address of the facility and of a contact person
- Site map drawn to scale depicting facility boundaries, all buildings, roadways within, and roadways within ¼ mile of the facility used to transport material, all floor drains, all potential emissions points, and location of all control devices
- Description of facilities operations including a list of all bulk material handled at property
- A description of truck routes
- Calculation showing facilities maximum total indoor outdoor material in cubic yards or tons
- Description of control measures
- A dust monitoring plan describing placement, operation, and maintenance of PM10 monitors and testing plans
- A contingency plan for when PM10 monitors malfunction
- Description of record keeping system
- Other information deemed necessary by BSEED
- A fact sheet or summary of the fugitive dust plan designed to inform the public of the facilities plan to control dust

Particulate Ordinance

- **Conveyors and Transfer Points**

- Must implement measures including:
 - ✖ 1) total enclosure;
 - ✖ 2) water spray system sufficient to control fugitive dust;
 - ✖ 3) vented air to pollution control equipment which is in full operation; or
 - ✖ 4) transfer only moist material with minimum 8% moisture by weight

Particulate Ordinance

- **Transport**

- **By Truck**

- ✦ Exterior must be cleaned prior to leaving facility
 - ✦ Must be covered
 - ✦ Must pass over rumble strips
 - ✦ Must pass through wheel washing stations
 - ✦ Must travel on paved roads for first ¼ mile
 - ✦ Must follow posted speeds within facility not to exceed 8 mph

- **Roadway Cleaning**

- ✦ Must occur not less than one time daily when facility is open or once every 8 hours or 100 trucks

Particulate Ordinance

- **Carbonaceous Bulk Solid Material Facilities**

- **Compliance requires an enclosure plan which includes:**

- ✦ A construction schedule
 - ✦ A fugitive dust plan
 - ✦ A site map drawn to scale showing all boundaries of any associated carbonaceous bulk solid material facility
 - ✦ A description of facilities operations and control measures
 - ✦ A contingency plan for dust levels that exceed reportable action levels
 - ✦ A spill control and pollution prevention plan for response activities
 - ✦ Description of facility record keeping system

Particulate Ordinance

- **Outdoor Storage of Bulk Solid Material (excluding carbonaceous bulk solid material)**
 - Requirements to be in compliance:
 - ✦ 1) must abide by setback requirements
 - ✦ 2) must not exceed 50 feet in height
 - ✦ 3) must screen all piles from view of adjacent right-of-ways
 - ✦ 4) minimum of 25 feet from any waterway
 - Operation Limits
 - ✦ High wind conditions must result in no loading, unloading or processing
 - Unless other measures to suppress dust are implemented and effective

Particulate Ordinance

- **Variances**
 - Must be made in writing and include:
 - ✦ Statement of what requirement the variance is sought
 - ✦ Description of the process or activity the variance is requested of including pertinent data
 - ✦ The quantity and types of materials used in the process or activity which variance is sought
 - ✦ A demonstration that issuance of a variance will not create a public nuisance or adversely impact the surrounding area
 - ✦ A statement explaining why compliance with regulations imposes unreasonable and arbitrary hardship
 - ✦ Description of proposed methods to achieve compliance
 - ✦ Discussion of alternative methods of compliance and the factors influencing the choice of a variance
 - ✦ Statement regarding the current status as related to the subject matter of the request
 - ✦ All other requirements for new owners or operators after enactment of this ordinance

Particulate Ordinance

- **Implementation and Compliance**

- **Immediate Effect:**

- ✦ All new facilities; all variance requests; operating and maintenance practices; certificate of operation; change in operations; record keeping; vehicle leaking; roadway cleaning; spilled material; inspections; enclosure reporting; penalties

- **180 Day Delayed Effect:**

- ✦ Fugitive dust; fugitive dust plan; dust monitoring; wind monitoring; conveyors and transfer points; transport; vehicle covering and other dust controls; enclosure; record keeping of dust monitoring