

INDUSTRIAL MINERALS ADVISORY COUNCIL (IMAC)
MAY 28, 2008
MISSOURI DEPARTMENT OF NATURAL RESOURCES (MDNR)
DIVISION OF GEOLOGY & LAND SURVEY (DGLS)
111 FAIRGROUNDS ROAD
ROLLA, MISSOURI

MEMBERS PRESENT: Mimi Garstang, Chairperson, Department of Natural Resources; Scott Lacy, LaFarge Corp.; Dave Ahlvers, Missouri Department of Transportation; Daniel Rowe, Unimin Corp.; Steve Rudloff, Missouri Limestone Producers Association; Victor Nahlik, Winter Brother Materials; Chris Upp, Conco, Inc.; Cheri Summa, Fred Weber, Inc.

MEMBERS ABSENT: Dave Keller, Harbison Walker Refractories, Inc.

STAFF PRESENT: Mr. Bill Duley, Deputy Division Director; Mr. Joe Gillman, Geological Survey Program Director; Mr. Pat Mulvany, Industrial Minerals Unit Chief; Mr. Scott Kaden, Geologist; Ms. Jane Williams, Executive, Industrial Minerals Advisory Council Secretary; Nona Lancaster, Administration Program Director

The meeting was brought to order by Ms. Mimi Garstang at 10:08 a.m.

1. Mimi Garstang - Welcome, Introductions, Purpose of Meeting, and Organizational Background (see attached org charts)

Mimi:

- Gave an overview of her career with MDNR and introduced DGLS staff
- Asked other IMAC members to introduce themselves and briefly describe their responsibilities with their companies
- Expressed that the main focus of today's meeting will be to discuss what products and work activities we can provide for the industrial minerals industry
- Explained that the Council's function is not going to be regulatory
- Explained our Division's relation to the Department
- Explained the organizational chart of our Division
- Explained that she is the Chairperson of this group as appointed by MDNR Director, Doyle Childers
- Listed questions for the IMAC to consider
 - What can we do for the industrial mineral operators
 - How much detail do you want to know and do you want to be involved in
 - How often do you want to meet – we must, by law, meet once a year
 - What about public participation – any work that we do cannot be confidential
 - How could we better coordinate with MODOT

2. Bill Duley – Presentation on Industrial Minerals Advisory Council responsibilities – Section 256.700-256.710 RSMo (see attached copy of statutes)

Bill:

- Listed the Council membership as stated in the statutes
 - Three limestone members (terms of one, two, and three years)
 - One clay member (term of three years)
 - One sandstone member (term of three years)
 - One sand & gravel member (term of two years)
 - One granite member (term of one year)
 - One MODOT designee (indefinite membership)
 - One barite member (term of two years) – there is no active barite mining in Missouri at this time
 - Any one of these members can be reappointed after their term expires
- Explained that the Council chairperson is DNR Director or his or her designee, which will be Mimi Garstang, as appointed by the Director – she will convene the Council as needed
- Explained that the law states that the Council shall convene at least once per year to annually review income and expenditures of the Geologic Resources Fund that was established at the time of this legislation
- It is the Council’s duty to consider all information and advise the Director on the fees and to represent the best interests of the Missouri mining industry
- IMAC will advise the state geologist on:
 - All matters pertaining to the administration of RSMo 256.700 and 256.710
 - All matters brought before the Council by the MDNR Director
- Gave a brief explanation of the Geologic Resources Fund:
 - Shall be used by the Division of Geology & Land Survey of the MDNR
 - Shall be expended to collect, process, manage, and distribute geologic and hydrologic resource information pertaining to the mineral resource potential in order to assist the mineral industry and for no other purpose

3. Joe Gillman – Presentation on the Geological Survey Program Staffing Plan (see attached presentation)

Joe:

- Provided an explanation of the Geological Survey Program with an organizational chart and explained the objectives of each section of the program

Steve Rudloff – talked about the FutureGen coal project that he had heard about and asked why it ended up in Illinois instead of Missouri.

Mimi Garstang - it had national competition. Illinois had a very unique subsurface setting that allowed them to win the competition. Missouri is not ideal place to due this type of project. Western Missouri would be the best location for a major scale carbon injection project. We were going to work with Kansas but the governors decided that

other states were further ahead and ready to take on this project. Actually, at this time, the Illinois project is on the shelf. Smaller projects are springing up around the country. Scott Lacy - what about the 200 oil well permits DGLS has done this fiscal year. Does the homeowner benefit from this drilling. What is the process.

Scott Kaden - the process goes back to who owns the mineral rights on the property. Right now, larger companies are acquiring leases in Missouri to drill for oil wells. They then offer a percentage of the profit to the property owner. In Missouri, industry is drilling for oil and injecting steam to get the oil out of the ground. Average production is about 80,000 barrels a year in Missouri. We anticipate more than 80,000 for this year. Scott Lacy – does any of this oil stay local.

Scott Kaden - some of it is fairly local. There is a refinery in Kansas. Also, some pipelines are running through our state.

Daniel Rowe – is there natural gas in the southern part of the state.

Scott Kaden - there is not really any natural gas in the southern part of the state.

Mimi Garstang - all gas production is basically for personal home and business use in Missouri at this time.

4. Pat Mulvany – Overview of the DGLS Geological Collections (see attached list)

Pat:

- Provided an overview of all of the DGLS geological collections explaining that in years past, we had a lot of information, but it was not cataloged and organized in a way that made it usable.

Chris Upp – do we have a map of Missouri that shows where the drill core and drill cuttings are from.

Pat Mulvany - we have a core database that can be used to search by county, etc. We have MEGA (Missouri Environmental Geology Atlas) that contains a lot of geologic information and database information.

Chris Upp - would like to see access to this information on the internet.

Pat Mulvany - we have had a lot of questions regarding this. We have to go through our ITSD (computer) people, which make it a little difficult to do this. We are working on it and Pat feels like we are going to soon make headway.

Mimi Garstang - that is a great idea and if the Council feels like that is a priority, then maybe we could make it a priority.

Chris Upp - the availability of this information should be a main priority. Even the FTP Site would be helpful.

A lengthy discussion followed regarding the availability of web based information.

Break for lunch at 12:10. Cheryl Seeger did a 20 minute presentation on the Taum Sauk Reservoir event during the lunch hour.

5. Joe Gillman – Potential Work Categories and Products: DGLS Suggestions and IMAC Recommendations (see attached list of work concepts)

Joe:

- Web based GIS/database products are very important
- Real time access to information is very important
- It is important to know that all of the information we have out there is not all in usable format
- The concept of an industrial minerals section of our web environment is a very viable concept

Chris Upp - conveyed a concern that maybe the name Industrial Minerals might be deceiving to other people who would be looking for information. Maybe it needs to have the name "Mining" in it.

Steve Rudloff - maybe they need to be named mine products.

Joe Gillman - maybe on the web site the name could be something other than industrial minerals. Of course, the Council name can't be changed.

Mimi Garstang - wondered if anybody had a concern that the Council doesn't include metallic minerals.

Steve Rudloff - doesn't see it as a problem that it doesn't include metallic minerals.

Mimi Garstang - we could come up with some names to send out to you to see what you think.

Dave Ahlvers - suggested that we might have materials that could be used that MODOT could market.

Joe Gillman - does the industry have any ideas on how we might facilitate the knowledge of the availability of products or waste materials in certain areas of the state.

Dave Ahlvers - maybe our agency could help get these people together.

Mimi Garstang - maybe what you are saying is that we need to market the recycle of overburdens, etc.

Scott Lacy - how is information on materials communicated now.

Dave Ahlvers - in several different ways, and none of them are very good. That's why he is bringing this up to see if anybody has any ideas on how to do this.

Chris Upp - maybe you can take your projects, and work with DGLS to get a presentation together stating what projects have used non-traditional type products and MODOT jobs, these are ideas that MODOT is open to look into if you have jobs in your area.

Mimi Garstang - could we help by posting available resources for MODOT on a website.

Dave Ahlvers - MODOT is very open to changing their specs. MODOT would do spec changes and maybe this group could facilitate these changes.

Mimi Garstang - could we do a pilot project.

Dave Ahlvers - that would be no problem, we are doing that now with the sand.

Scott Lacy - does using these waste products help MDNR.

Mimi Garstang - the biggest environmental issue with a waste pile is run-off.

Joe Gillman - one advantage would be that you would reduce the need to mine it someplace else.

Chris Upp - what about on-line registration of certain amounts of available products with MDNR for public and MODOT to use to find available products.

Joe Gillman - wants to make sure we have these discussions because it is important what the industry wants, but we are going to have to prioritize what we want to do. We need to move forward with some of the ideas we have.

- Education and Outreach

Chris Upp - what we have brought to the table at their workshop is very valuable. Maybe we need to do more one day workshops in schools for teachers, etc. Maybe a package more focused on classroom exercises, etc. Including information about quarry's and mines that are available in the area you are doing the workshop.

Pat Mulvany - says that the workshops are a good idea. But you need the props to do the workshops and send with the teachers.

Joe Gillman - for instance, we go to Springfield and do a workshop with about 20 teachers and give them a kit and say go out and teach your youth with this information and in this way.

Chris Upp – maybe different kits for different age group teachers, high school, middle school, elementary school. Teachers are always looking for workshops to increase their accreditation numbers.

Steve Rudloff – at some of their workshops, they would hand out a little packet of mineral samples to the teachers.

Pat Mulvany - we currently give out complimentary rock and mineral sets to teachers, one per school. Unfortunately, we are unable to give out more than that because we just don't have the staff and the time to collect all of the samples, and put them together, etc. IMAC – all think that we should focus on teaching the teachers at this time and stay away from trying to teach the kids at this point.

Chris Upp - when did the fee start coming in and what is the projected income.

Mimi Garstang – August 28, 2007 was the first date that we started receiving the fee and that the projected income was somewhere around \$180,000. We were unable to actually start spending the money until May 1, 2008. Therefore, we have been collecting the fee for a while and we have a cushion.

Steve Rudloff – in the future a budget summary would be useful information.

Chris Upp - what type of small area investigations do we do.

Pat Mulvany - we do lots of small area type investigations that we call inquiries.

Scott Lacy - do we charge a fee for this service.

Pat Mulvany - we are not able to do something like that.

Mimi Garstang – we don't really have the authority to charge a fee.

Joe Gillman - we cannot step across the boundary with the private consulting businesses, but maybe we can help the industry to know where they should spend their consulting business money. Maybe we need to make it more widely known that we are available from a technical standpoint on the phone, etc. to the industry.

Dave Ahlvers – could MODOT fill in some of the gaps in our core information.

MODOT could offer up the fact that they could partner with us to fill those gaps in our information. That information could be made available for a preliminary investigation. Also, how could MODOT find out where the quality material is located and how can they get it economically.

Joe Gillman – MODOT would have to tell us what quality of material they want and we would have to find where those resources are located.

Chris Upp - not necessarily on a state-wide basis but on a project by project basis.

Chris Upp – DGLS could go into county commissioner meetings to let people know that mining is important for the state and that MODOT can use these materials cheaper if they were purchased locally.

Mimi Garstang – DGLS could help with educational process, like attending some of MODOT’s meetings, the industry meetings, or working with county government or local government. At their request, we could come in and provide them information on resource potential.

Steve Rudloff – why don’t we get together with MODOT to do a case study to show the dollars saved and the importance of high quality mine products.

Mimi Garstang - do we need to keep discussing this or should we move on.

Steve Rudloff – we probably need to review the original questions that Mimi had discussed. He suggested that maybe we review what we have discussed and maybe get back together in a few months to come up with something more formal to make some decisions.

Chris Upp – shall we get back together in possibly late September.

Pat Mulvany - discussed some things that he will be able to do in between now and our next meeting. These included, compiling annual production information, updating our mineral producer’s directory, thinking about how to expand our DNR website.

Mimi Garstang – from today’s conversation, maybe we will be able to get assistance from MODOT. DGLS understands that getting information available on the internet is a top priority.

Scott Lacy - what should we do and what will you be doing between now and our September meeting.

Mimi Garstang - we would be trying to figure out how we can get information on the web, starting with what we already have . Also work on the teacher kits and make some contacts from a minerals education standpoint. Work on creating the mineral resource portal or webpage, bringing back some suggestions to you on that. Be available to answer big-picture questions on resource potential, etc. and be available to assist on permitting processes. We also need to go through the process of hiring another person to assist Pat.

Victor Nahlik - wants to add that we are on the industries nickel. DGLS needs to convey to the industry what goes on here, possibly at the MLPA annual meeting.

Mimi Garstang - the Council members should go out and ask the industry what they think about our thoughts and ideas. Also, think about some of the ideas that we have thrown out and how to make them happen.

Joe Gillman - suggested that we would talk about the budget report at the next meeting.

Scott Lacy - suggested that we establish a policy that everybody gets copied on email communications between all of us.

Mimi Garstang – suggested that Jane Williams could be the person to make sure that everybody is kept in the loop. She reminded everybody that because we are not regulatory, we can be more casual. It is helpful to go by certain rules.

Mimi Garstang - suggested that Joe Gillman, Pat Mulvany, Bill Duley and Mimi Garstang should all be on the email list of IMAC.

Mimi Garstang – we didn’t talk about public participation in the meeting.

Steve Rudloff - suggested that we do not have to advertise, but any public person that expressed interest should be encouraged to attend.

Mimi Garstang – do any of you mind if Land Reclamation attends our meetings.

Steve Rudloff – had no objection to them attending but was concerned that if it's made too much a part of the public land reclamation agenda, we might be exposing us to people who are against quarrying and mining operations.

Meeting was adjourned at 2:57 p.m.

List of work concepts discussed:

- assist with public meetings
- web based GIS/database products (real time)
- industrial minerals mining/quarrying products
 - markets for waste materials
 - facilitating specification changes
 - web listing of waste sources (voluntary registry)
- education and outreach
- more single day workshops (focus on teachers)
- continuing education for teachers
- high school/middle school mineral kits
- mineral resource webpage with links to MLPA, MIC, MMEF, etc.
- technical assistance
- small area evaluations (on site or phone)
- cooperate with MODOT on filling in data gaps
- educate county/city planners on mineral availability
- case studies on value of higher quality resources