

ENVIRONMENTAL MANAGEMENT POLICY COMMITTEE

NIRPC AUDITORIUM, PORTAGE, IN

August 1, 2013

Members/Guests Present: Lee Botts, Andrew Pelloso, Dorreen Carey, Mark Reshkin, Michelle Caldwell, Lauri Keagle, Charlotte Read, Maggie Byrne, Kay Nelson, Nicole Barker, Geof Benson, Pat Wisniewski, Dennis Rittenmeyer, Ron Shimizu, Mike Molnar, Jedd Anderson, Jim Pinkerton, Jennifer Kharchaf, Steve Barker, Ashley Snyder, Jim Keating, Matt Mikus, Jim Earl, Carl Nash, John Ross, Linda Wilson, Tom Keilman, James Webb, Douglas Bley, Kevin Doyle, Chandra Viswanathan, Denise Turner, Jim Novak, Daniel Goldfarb, Jeff Stoakes, Brian Wolff, Tara Gnagy, Tom Easterly, Dan Goldblatt, Jody Melton, Catherine Mitchell, Scott Deloney, Jim Alexander, Joe Hanning, Rob Maciel, Robert Crookston, Bert Passalacqua, Kevin Breitzke, Greg Quartucci

NIRPC Staff: Kathy Luther, Joe Exl, Mitch Barloga, Steve Strains, Kevin Garcia, Meredith Stilwell

Call to order and Pledge of Allegiance

Past Chairman Geof Benson called the meeting to order at 9:08 with the Pledge of Allegiance. After the Pledge, Kevin Breitzke joined the meeting and began chairing the meeting by asking for self-introductions.

Approval of June 6, 2013 EMPC Minutes

On motion by Lee Botts, second by Mark Reshkin and no opposition the June 6, 2013 EMPC meeting minutes were approved.

NIRPC Business:

a. CMAQ funding timelines

A stakeholder meeting involving various groups was held to discuss allocations. 17% or roughly \$700k of the CMAQ pool for Lake and Porter counties was allocated to the environmental project/other category which includes public education, diesel retrofits, and public/private partnership. The monies are programmed for two years and could end up around \$800k. There will probably be no CMAQ for La Porte County because they are in attainment. Kathy will be assembling the committee that volunteered to help with the criteria. A second mixed stakeholder meeting will be held to review decisions that were made and create instructions on how criteria is set. The date of the meeting has not yet been determined.

Kathy announced a stakeholder meeting for the Marquette Plan update would be taking place after the EMPC meeting.

Presentations:

a. Lakeshore Air Toxics Study – *Jeff Stoakes, Senior Environmental Manager, IDEM Office of Air Quality*

The northwest Indiana lakeshore is a highly industrialized and heavily travelled area that includes major mills and expressways. The 2005 US EPA National Air Toxic Assessment (NATA) estimated the area may have elevated air toxics concentrations. The main things found from this recent study were, every modeled census tract had similar to lower additional lifetime cancer risks than the NATA for permitted stationary sources; the greatest level of additional lifetime cancer risk and non-cancer hazard is attributable to on-road mobile sources (cars and trucks); and evaluation of comparable ambient air toxics monitoring data available show the lakeshore area measured similar air toxic concentrations as other U.S. cities. IDEM is working with permitted sources to explore opportunities for pollution prevention. The Study Framework involved compiling a refined detailed modeling air toxics inventory; analyzing data using Regional Air Impact Modeling Initiative (RAIMI); Calculating concentrations to determine: additional lifetime cancer risk, non-cancer hazards, contributing permitted source or mobile sources and contributing air toxics; Comparing results to: existing monitoring data and the 2005 NATA. Criteria pollutants whose measured concentrations currently meet National Ambient Air Quality Standards (NAAQS) in the area were not included in the study.

Inventory verification and results data were a result of sending emissions data to permitted sources for verification. Verified emissions data were returned by 95% of the permitted sources in the study and 65 operating stationary permitted sources verified emissions. The on-road mobile emissions methodology, as well as a map of the lakeshore traffic count data was presented. Emissions for lakeshore emitted pollutants of Benzene, Formaldehyde, Hexane, Toluene, Acrolein and Chromium compounds were shown with Benzene and Formaldehyde being the highest.

Lakeshore modeling was completed using RAIMI, which was established by the U.S. EPA Region 6 to evaluate the potential for health impacts as a result of exposure to multiple contaminants from multiple sources, at a community level of resolution. In addition, the Industrial Source Complex Version 3 (ISC3) dispersion model was used, meteorological data

processed through RAIMI was from South Bend surface air station, and coke batteries were modeled based on methods used in the Indianapolis Public Schools, School 21 Air Toxics Study. There are more air ambient air toxics monitors in the lakeshore area than throughout the rest of Indiana and are in East Chicago, Hammond, Whiting High School Gary, and Ogden Dunes. Data from 2009-2011 was analyzed and also compared to monitors in Indianapolis and monitors around the country. Graphs of results for air toxics monitored and metals monitoring were shown. Metals are only monitored at the Gary and Hammond locations.

Additional lifetime cancer risk is the estimated probability of developing cancer from respiratory exposure over a lifetime per million people: under 1 is negligible; between 1 and 100 may warrant future action and over 100 may warrant immediate action. Risk characterization modeling results showed the additional lifetime cancer risk per million people to be averages of 17.3 additional over the study area; 18.6 for on-road mobile sources and 4.6 for permitted sources. Benzene formaldehyde and chromium compounds were the modeled additional lifetime cancer risk drivers. Non-cancer hazard is the ratio of the exposure concentration to the reference concentration: if the hazard is less than 1, no adverse health effects are expected; over 1 then adverse health effects may be possible. Risk characterization modeling results showed the total averages for non-cancer hazard as 4.2; on-road mobile sources as 7.2 and permitted sources as .26. Acrolein, a common pollutant found in many urban areas, was the non-cancer hazard driver and the only pollutant ranging over one. Acrolein monitored concentrations have recently become a national concern because current methods appear to bias results high so actual concentrations are likely lower than those recorded. Evidence indicates that new procedures may need to be developed in order to better quantify these concentrations in monitoring data. One way results are figured is to complete a model to monitoring comparison to assess if there are any potential gaps with the emissions and modeling data. A model to monitor ratio of 1 indicates the concentrations are the same and U.S. EPA considers modeled to monitored ratios from .33 to 3 as acceptable and from .5 to 2 to be good. The lakeshore air toxics results showed the average ratio for benzene, acetaldehyde, formaldehyde and chromium compounds are in the acceptable range and while acrolein's ratio is outside of the acceptable range it is believed to be due to monitoring issues. Modeling results compared to the 2005 NATA reflected the total average modeled cancer risk 2.2 lower; on-road risk 11 higher and point source 15.8 lower. The on-road 2005 NATA cancer risk figures were based on a county-wide number and proportionate based on population throughout the area while the air toxics study used actual traffic count data in the area. Comparison averages for non-cancer hazard were 4.9 higher; on-road risk 6.1 higher and point source .09 lower. Health protective assumptions made during the study to ensure numbers would not be higher than the modeled numbers included health protective cancer risk and non-cancer hazard factors; ISCST3, which over predicts, was used instead of AERMOD; 95% Upper Confidence Limit (UCL) was used to analyze monitoring data and only high risk receptors were analyzed.

Next steps and future considerations covered were the greatest level of cancer risk and non-cancer hazard is attributable to on-road mobile sources and Mobile Source Air Toxics (MSAT) regulations are expected to lower on-road mobile emissions and risk; opportunities for pollution prevention may be explored since there is still off-property risk from permitted sources; and the enhanced modeling/risk characterization tool will continue to be refined.

In conclusion, a better emissions inventory was a key factor in the Lakeshore study's additional lifetime cancer risk estimation being lower than previous estimates; the greatest level of cancer risk and non-cancer hazard is attributable to on-road mobile sources; permitted stationary sources had similar to lower modeled additional lifetime cancer risks than the previous estimates and comparable monitoring data indicates the Lakeshore area contains similar air toxic concentrations as those measured at other United States cities.

A brief question and answer period followed the presentation. Cumulative impacts were questioned and Jeff noted all pollutants from all monitoring and modeling data are added together. IDEM is trying to gain access to the Department of Health database to correlate the information. In order to help lower the higher numbers for on-road sources, new cars are developed with more control equipment and fuels are less toxic which lower risk and emission rates. For other sources, work is being done and sometimes is part of control equipment that might be in place to control air toxic emissions. Although there is currently no reference to asthma, there is hope to provide that information. When asked about the speciation of coke oven emission levels that were lower than the 2005 NATA, it was noted that there are around 45-50 components to coke oven emissions that are broken down, and using theoretical stats and buoyance factors on the coke batteries produces a more accurate model. When plants share a boundary with a residential area, it was attempted to establish the best numbers as possible along the fence line and those numbers were not found to be overly alarming. Times reporter, Laurie Keagle asked Jeff to put into terms for people what the information provided means to them and the health and safety of themselves and their families. Jeff stated that in previous reports the main reference is the 2005 NATA, which is very good at pointing out which areas are high and need to be paid more attention. The air toxics study was done to look at the NATA and does a more refined comprehensive study to show that some of the numbers are better than what was expected. Although not completely safe or perfect, trend numbers for this area show that the air is getting better over time and is expected to continue to improve. Linda Wilson from BP stated their fence line monitoring project is required to be done by May of 2014 and Joe Hanning from US Steel spoke briefly about a

new carbon alloy synthesis process facility that while not completely replacing coke ovens will be an alternative source of coke and is a completely different type of technology.

b. Illiana – Phase II Corridor Study Update – Jim Earl, INDOT

Jim and representatives from the environmental consulting team for the Illiana attended the meeting to update the group and provide answers for questions brought up in the previous meeting. During the Tier One process, just the center line of the corridor was looked at as the analysis plan for the project. During Tier Two, the center line is being adjusted based on potential impacts and the actual alignment will be finalized fall 2013. Proposed interchange alternatives at US-41, RTE 55 and I-65 were detailed. The US-41 interchange would be a diamond interchange with a frontage road to the north connecting to 163rd St. Wet areas to the northwest would be avoided and some points will need to be mitigated. Work will be done with agencies on minimizing impacts on some stream crossings to the west. The Route 55 interchange will be a tight diamond with a ramp system that misses a significant number of waters and quite a few impacts avoided. The I-65 interchange has streams to the west where impacts have to be minimized. The proposed configuration is a trumpet interchange to minimize forested impacts to the north and substantially reduce water impacts to the west. Currently the Tier Two process is in the stage of presenting alternatives to carry forward. For some locations there are not many alternatives due to environmental, utilities, and property impacts. Some of the proposed alternatives were presented. A forum was held on June 24 & 25 regarding the P3 development process where several industry people provided feedback. A Request for Qualifications (RFQ) for potential bidders and contractors is anticipated for fall 2013 and a Request for Proposals (RFP) will follow in winter 2013/spring 2014 after which commercial options can be evaluated and a bidder decided on.

The Tier Two EIS study evaluates a variety of factors to determine environmental impacts and is reviewed throughout the process by different stakeholder agencies. The goal is to avoid environmental impacts altogether. If avoidance is not feasible, the impact will be minimized by limiting the degree or magnitude of the action and lastly mitigation for the impact by replacing or providing substitute resources or environments will be done. In Indiana, the consultant team completed field studies on wetland/waters of the U.S. delineations; aquatic resources; Indiana bat; Eastern prairie fringed orchid and a riparian corridor tree study is ongoing. The area is around 85% human land use, 15% natural land use; forest prairies and wetlands. Around 100 acres of wetlands are in the project area and no endangered species or bats were found. The waters delineations are the part of the aquatic system that is mostly unvegetated. An aquatic resource assessment was also done and boundaries of waters and wetlands limits were both GPSd and combined into one report. On February 21, 2013 IDEM issued a letter stating that the project corridor is not located within any wellhead protection areas. In addition, the corridor is not located within karst topography or within a designated sole source aquifer. Based on comments received by U.S. Fish and Wildlife, U.S. EPA and U.S. Army Corps of Engineers, an analysis of impacts and minimization strategies was completed for grassland birds which are considered to be an imperiled group of birds. It appears that distance is the leading criteria for what impacts would be to birds. The accepted study by the federal agencies indicates that for the level of traffic anticipated on the Illiana there might be an impact zone of around 700 meters around the roadway. Some impacts are still being assessed. JF New is working on riparian corridor evaluation for best management practices and would like to have water quality buffers. They are also analyzing wildlife crossings and identifying where to install wildlife crossings. The consultants met with IDEM, U.S. EPA, DNR, U.S. Fish and Wildlife and took them on a tour of the entire route from east to west in June.

Before the presentation was complete, Mark Reshkin asked to comment since he needed to leave early. He commented the area being developed cannot access Lake Michigan water and is an unconfined aquifer and shouldn't be fooled with. Overuse is causing many wells to dry out and the increased cost of having to go deeper to get drinking water is not addressed by the Illiana project team and should be. He spoke on his suggestion for a water study to the Indiana Department of Natural Resources and remarked they are willing to support the study. He stated he has also received support from the Northwest Indiana Forum and the State Chamber of Commerce. He would like to hear how the loss of that water is going to be mitigated and it needs to be set aside in the project to be fair to the people who are losing their water. Kay Nelson responded to the comment about the IDNR water study and clarified it is in response to Senate Bill 132 and not singularly for the Illiana project and since the Forum and State Chamber supported Senate Bill 132, they are supporting the study on a basis of statewide resources and not just the Illiana. Chairman Breitzke responded when the road is built the landowners and the governments need to be aware of the limitations of the water supply. Mark responded that it costs money to dig deeper wells and could be part of the project. The representatives at the meeting could not readily respond to the concerns, but noted the roadway itself does not use the wells unless for maintenance. They also noted that the overall EIS has a cumulative impact section and water is an important part of the study and they are looking at how to not affect the quality of water. The consultants and EIS team are focusing on cumulative impacts which include the growth from the roadway and how it will affect the existing water supplies in the low area. What is being compared is the no build situation in the 2040 and build situation which reflects 10 persons per square mile of

growth in population. Work has been done with the communities and several land use task force meetings have been held.

To establish BMPs for mitigation opportunity areas, topographic, wetland, water and soils mappings were added and an overlay created. From that, locations for high level review ideal to put in BMPs were established. A variety of BMP types were identified. Cedar creek was detailed and a picture of what naturalized stormwater management facilities would be expected to look like was shown. Design model graphics for a typical water quality wetland/detention pond, bioswale and infiltration catch basin were shown and explained. The pollutant load analysis encompassed a study area of 18 rivers/creeks and their tributaries and used approved methods of Driscoll and Driver, as well as a USGS method to determine potential chloride impacts. What the effects would be if the roadway was built with no BMPs was looked and modeled and determine what reduction in pollutants there would be with the incorporation of the BMPs. Final results for the potential impacts are not yet available but should be within the next few weeks. Potential waters mitigation activities include coordination with many different groups to identify potential sites within the Kankakee River Basin and consideration of mitigation sites that could improve impaired waters. Final decisions regarding approach & site selection will be completed during section 401/404 permitting process. The Corps of Engineers, IDEM and EPA desire mitigation sites that will improve impaired waters. Regardless of alternatives chosen there will be stream and wetland impacts and mitigation. US Fish and Wildlife is discussing mitigation for forest and prairie impacts. Currently, agencies are suggesting all mitigation impacts to wetlands in Indiana be mitigated in Indiana. A feasibility study on how to accomplish that is being conducted. As much information as possible is being gathered by working with various agencies, Lake County Parks, industries and landowners and by looking at parcels. Next steps include The NIRPC Illiana conformity determination in August which will include a public comment period in September. A public hearing will most likely be held in fall 2013 which will be in conjunction with the proposed NIRPC 2040 CRP amendment in October. The proposed record of decision will be spring 2014. A lot of the information presented will be included in the draft EIS which should be available around September.

Geof Benson commented that there are still various hurdles that still have to be overcome including the air quality conformity and the fact that the funding has to be in place before it can be put in the Comprehensive Regional Plan. He noted the requirement for a project to be fiscally constrained to qualify to be put into CRP and questioned if asking to include the Illiana into the CRP in October 2013 when the P3 determination is into next year is out of sync. Jim Earl responded that the RFP happening this fall is when the funding mechanisms and procurement process have to be settled. Staffs for both IDOT and INDOT have been in talks within the last month or so to attempt to nail down the process and a lot of the dates cannot be pinpointed until the executives at those agencies make those determinations. The October date is the goal but fiscal constraints must be met to qualify. NIRPC will host the public meetings regarding the Illiana request to be put into the CRP and Nicole Barker encouraged those that are highly concerned about the project to attend the meetings and express their concerns. A mitigation open house was questioned and it was noted that there will not necessarily be an open house but there has been a lot of contact with various stakeholder agencies who were asked if there are sites available to use as mitigation. Mitch Barloga updated the Committee on NIRPC's involvement in the Illiana issue and the CRP Update. NIRPC staff will closely examine the Illiana compared to the 40 steps listed in the CRP regarding project selection criteria. The project was not included initially because it was not fiscally constrained. Now that it is coming on board as a possible amendment, staff will be preparing a white paper to give perspective on how the Illiana works against the criteria that is in place and hope to have it to the NIRPC Commissioners by the beginning of September. Joe Exl voiced that from an environmental standpoint using NIRPC's checklist, the only reference available to look at will be the final EIS and a lot of the information presented is not included on the website. Mitch noted a meeting would be held with the consultants after the EMPC meeting and they should know after the meeting what is needed by NIRPC.

Announcements:

Various upcoming events and activities were announced. The announcements will be forwarded to the Committee in an email.

After the announcements were given, Lee Botts asked IDEM Commissioner Tom Easterly to summarize the significance of the information given on air quality and the risk of living in northwest Indiana. Commissioner Easterly responded that the risk of living in northwest Indiana is no higher than the risk of living in many other communities around the country that also measure air toxins. The purpose of the Air Toxics study is to look at the results of the 2005 NATA and what it would be if conducted in a refined method and the risks are not high and are even lower than originally thought. While that is good that doesn't mean work should stop.

On motion by Charlotte Read and second by Geof Benson, meeting adjourned at 10:47 a.m.