



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
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JAN 25 2008

REPLY TO THE ATTENTION OF:

E-19J

Mr. David Scott
Federal Highway Administration – WI Division
Highpoint Office Park
525 Junction Road, Suite 8000
Madison, Wisconsin 53717

Mr. Roberto Gutierrez
Wisconsin Dept. of Transportation
Southeast Regional Office
141 N.W. Barstow Street
Waukesha, Wisconsin 53187-0798

Re: Comments on the Draft Environmental Impact Statement (DEIS) for the Interstate-94, I-43, I-894, and WI-119 (Airport Spur) and I-94/USH 41 Interchange to Howard Avenue Project in Kenosha, Racine, and Milwaukee Counties in Wisconsin and Lake County, Illinois, EIS No. 20070484

Dear Mr. Scott & Mr. Gutierrez:

I am providing comments on the Draft Environmental Impact Statement (DEIS) for the I-94, I-43, I-894, and WI-119 (Airport Spur) and I-94/USH 41 Interchange to Howard Avenue Project, which will be referred to in this letter as the I-94 North-South Project. These comments are consistent with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

The proposed I-94 North-South Project is needed to address the deteriorated condition and obsolete design in this section of I-94. A full range of alternatives were evaluated and assessed considering the needs of the area. The Wisconsin Department of Transportation (WisDOT) has retained two build alternatives for the mainline work: (1) Safety and Design Improvements (6-lane freeway), and (2) Safety and Design Improvements with Added Capacity (8-lane freeway). The 6-lane alternative represents the alternative that doesn't add any new capacity on the mainline whereas the 8-lane alternative represents adding one lane in each direction. Modifications at several interchanges are under consideration as was the construction of new interchanges with I-94 at Drexel and a full interchange with I-94 at 27th Street at the Milwaukee/Racine County line.

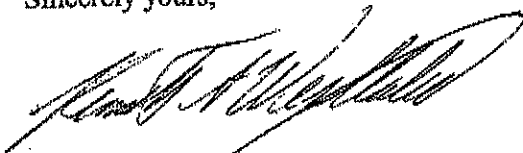
The U.S. Environmental Protection Agency Region 5 (U.S. EPA) agreed to be a participating agency for the I-94 corridor study. We provided our concurrence with the purpose and need for the project on July 17, 2006, and with the range of alternatives to be evaluated in detail in the DEIS on March 21, 2007. Both of these points are concurrence points under the merged NEPA and Clean Water Act Section 404 wetlands permit process. On August 13, 2007, we provided concurrence on the coordination plan and impact assessment methodology for this project.

WisDOT has identified Safety and Design Improvements with Added Capacity Alternative as the preferred alternative. No access from the 27th Street interchange with I-894/43 to and from I-94 is provided. Two options remain for the Drexel Avenue Interchange, either No Build or the Diamond Interchange alternative. As alternatives are further refined, we encourage WisDOT to fully explore options that minimize impacts. As stated in our previous comment letters, we are particularly concerned with avoiding impacts to wetlands and areas identified by the Southeastern Wisconsin Regional Planning Commission's environmental corridors.

Based on our review, we have rated the DEIS as Environmental Concerns – Insufficient Information” “EC-2”. The “EC” indicates that we have environmental concerns. Our concerns center on how wetland impacts and air quality concerns are characterized and how mitigation strategies will be evaluated. Additional information is required to support the analysis and findings stated in the document. The overall rating is based on our concerns with wetland impacts, especially Advance Identified (ADID) wetlands, wetland mitigation, cumulative impacts, and mitigation during construction. We are providing our comments regarding wetland impacts, including ADID wetlands and mitigation of those impacts. Our comments also provide clarification on mobile source air toxics and suggest air quality mitigation strategies that should be considered for this project. Our detailed comments are attached to this letter.

We appreciate this opportunity to review and comment on alternatives for this project. If you have any questions, please contact Sherry Kamke at (312) 353-5794 or via email at kamke.sherry@epa.gov.

Sincerely yours,



Kenneth A. Westlake, Supervisor
NEPA Implementation
Office of Enforcement and Compliance Assurance

cc: Donald Reed, SEWRPC

Detailed Comments on the I-94 North-South Draft Environmental Impact Statement (DEIS)

Impacts To Aquatic Resources (Wetlands and Streams)

We have concurred with the project's purpose and need and the range of alternatives brought forward for detailed study. These concurrences were based on our assessment of the project's clearly stated purpose and the background information provided by WisDOT that supported that need. Because of the linear nature of the project and the large number of resources in the area, it is unlikely that any alternatives could avoid impacting aquatic resources altogether. Any off-alignment alternative would likely have much more impact to aquatic resources. Although the DEIS states that the preliminary roadway design for the interchanges attempted to avoid and minimize wetlands impacts, measures taken to avoid and minimize impacts to wetlands for either the mainline or interchanges were not specifically stated. We recommend that the FEIS include a description of these avoidance and minimization measures that were taken. Continuing this minimization effort will be critical to future design efforts. For 404 permit application purposes, it will be important to document how the design efforts, in fact, did reduce potential wetland impacts. Further, as stormwater detention ponds are planned, these should be located outside of wetlands.

For this project, expanding existing facilities will impact a number of wetlands, including wetlands in Advance Identification (ADID) corridors in Southeast Wisconsin. Most of the wetland impacts will come from new and reconfigured interchanges, rather than by adding highway lanes. The DEIS estimates about 56 acres of wetland losses for the project, which is a high number, but reflects the length of the project and its linear nature. Seven of the 56 acres are in ADID wetlands. We note that throughout the DEIS several statements are made regarding the degraded floristic quality of the wetlands. Floristic quality is one indicator of quality but it alone doesn't determine functions and values. While many of the wetlands in the study area are limited in their floristic quality, they remain critical to the water quality health of the region. We elaborate on this point in our comments on wetland mitigation.

Impairments to existing water bodies have been noted in the DEIS. For example, the Root River is included on the Wisconsin impaired waters list under Section 303(d) of the Clean Water Act, due to problems with phosphorus, sediment and dissolved oxygen. These parameters are sensitive to construction projects, the loss of wetlands, and to poorly managed stormwater. Under the Clean Water Act, it is important to not further degrade impaired waters while also maintaining or improving the quality of water bodies that are meeting water quality objectives. Standard design measures should be implemented but may not go far enough to protect and enhance water quality. We recommend that WisDOT consider this project as an opportunity to improve water quality along the highway right-of-way by improving stormwater retention, restoring stream morphology, and removing barriers and impediments that separate wetlands and other resources from hydrological sources.

We suggest the following clarifications to the description of the ADID for Southeastern Wisconsin, especially in Section 4.7.5 on p. 4-61:

U.S. EPA Region 5 and the St. Paul District of the Army Corps of Engineers jointly announced the ADID determination for southeastern Wisconsin in 1985. ADID waters and wetlands are considered generally unsuitable for receiving fill. ADID designation does not limit an applicant from applying for a Section 404 permit, although the project is less likely to comply with the Section 404(b)(1) Guidelines. For southeastern Wisconsin, ADID lakes, streams and wetlands were those found in the 1980-designated Primary Environmental Corridors, based on the area-wide water quality planning process of the Southeastern Wisconsin Regional Planning Commission, conducted under Section 208 of the Clean Water Act.

Cumulative Impacts to Wetlands

In the "Description of Other Projects in the Area" section of the DEIS, WisDOT acknowledges the fact that they and the Federal Highway Administration (FHWA) completed a study of all 13 service interchanges with I-94 in Kenosha and Racine counties in 1996. Twelve (12) of those 13 interchanges were not included in the I-94 North-South Corridor DEIS because they were evaluated in separate NEPA analyses. WisDOT is currently preparing construction plans for these interchanges. Work on reconstructing these interchanges will begin in 2009 starting in Kenosha County. In the "Cumulative Effects" section of the DEIS, WisDOT addresses potential indirect impacts to wetlands in the area of new interchange access by disclosing the factors that influence development in these areas. The same section discloses 26 acres of wetlands would likely be impacted by the interchange reconstruction projects in Kenosha and Racine Counties. U.S. EPA recommends that the Final Environmental Impact Statement (FEIS) include more detailed information about wetland impacts in the I-94 corridor, both mainline and interchange work evaluated in this DEIS, and other WisDOT-sponsored projects along I-94 such as the previous interchange work evaluated in the EA and any frontage road work done along I-94 in these counties. The main purpose of this disclosure would be to more completely describe wetland impacts in this area due to any type of highway work yet to be done. This more complete description should provide more context for wetland mitigation decisions. As stated above, U.S. EPA is interested in ensuring that wetlands of all types are avoided. We are particularly concerned about impacts to ADID wetlands. We recommend that WisDOT enclose a table in the FEIS with this information in it.

Wetland Mitigation

Impacts to wetlands that cannot be avoided must have ample, timely, high quality compensatory mitigation to offset these losses. This is dealt with in a very basic fashion in the DEIS on pages 4-88 and 4-89; continued work will be necessary as the project progresses and in order to have clarity in the NEPA process and to have the Section 404 permit process proceed smoothly. The FEIS needs to report on this effort as specifically as possible. With the proposed losses documented in the DEIS, compensatory mitigation must be provided to address ADID wetlands and other wetlands. For the 49 acres of non-ADID wetlands, at the basic compensation ratio of 1.5: 1 of acres lost to acres replaced, about 73.5 acres of wetlands will need to be restored. The restoration project(s) need to replace the wetland types lost, such as riparian forested wetlands,

shrub swamps and wet meadows. The wetlands need to be provided for in one or more of the project's watersheds. For aviation safety purposes, we recommend that the project occur beyond 10,000 ft. from the Kenosha Regional Airport and other airports. Non-open-water wetlands are generally less attractive to large birds. Further separation may be warranted if a specific wildlife concern for aviation safety can be documented.

If impacts to the seven acres of ADID wetlands are unavoidable and must be filled, at a minimum ratio of 2:1 of acres restored to acres lost, 14 additional acres of compensatory mitigation must be found. It is *absolutely critical* that these 14 acres contribute to restoring wetlands in or next to the primary environmental corridors of the Des Plaines and/or Root Rivers, and to continue the water quality function of wetlands for this region. Wetland types to be achieved should also relate to the capacity of the restoration opportunity. If a suitable project site were to produce additional restoration acres, these would be ideal in meeting part or all of the 73.5 additional acres of wetland restoration needed for the project. All restoration sites need to include additional areas of non-wetland vegetated buffers to protect the restored wetland, in addition to the goal of the acres of restored wetland.

Two important tools are newly available for the mitigation site search, which should be most helpful in locating sites with high potential for effective restoration. The Wisconsin Department of Natural Resources (WDNR) has a Potentially Restorable Wetlands methodology and the Southeastern Regional Planning Commission is completing mapping of drained wetlands. These agencies may also be able to provide local expertise in finding potential candidate areas. In addition, revisions of the Wisconsin Wetland Inventory Maps for the study area are about to be released by WDNR.

Air Quality Mitigation During Construction

Exposure to diesel exhaust by construction workers and those nearby a construction site can have serious health implications. For this reason, the U.S. EPA recommends Best Available Diesel Retrofit Control Technology (BACT) on all significant construction projects. We believe this project is a significant construction project because of the size and duration of the project, the proximity to residential areas, including environmental justice areas, the use of diesel equipment for purposes of construction purposes, and the existing problems with ozone and fine particulate (PM_{2.5}) in the area.

Typically BACT requirements can be met through the retrofit of all diesel-powered equipment with diesel oxidation catalysts or diesel particulate filters, in addition to other strategies or technologies (for example, cleaner burning fuels or anti-idling policies). The statement below is reflective of a study U.S. EPA completed on diesel exhaust health effects:

Long-term (i.e., chronic) inhalation exposure to diesel exhaust is likely to pose a lung cancer hazard to humans, as well as damage the lung in other ways depending on exposure. Diesel exhaust is listed as a human carcinogen by the State of California and a likely human carcinogen by U.S. EPA. Short-term (i.e., acute) exposures can cause irritation and inflammatory symptoms of a transient

nature, these being highly variable across the population. The assessment also indicates that evidence for exacerbation of existing allergies and asthma symptoms is emerging. U.S. EPA recognizes that diesel exhaust, as a mixture of many constituents, also contributes to ambient concentrations of several criteria air pollutants including nitrogen oxides and fine particulates, as well as other air toxics.¹

These air quality mitigation measures for construction should be considered by WisDOT. While regional emissions of particulate matters of 2.5 microns or smaller (PM2.5) are trending downward, the project area's levels of ambient PM2.5 levels are close to causing the area to be designated as non-attainment for this pollutant. Everything possible should be done to improve ambient levels of PM2.5. In addition to being concerned about PM2.5 on a regional basis, U.S. EPA is concerned about the potential for localized impacts of PM2.5, especially from diesel equipment and trucks. We recommend that WisDOT include in the FEIS construction mitigation actions and strategies that will reduce PM2.5 emissions. We also recommend that WisDOT formalize their actions by developing and implementing a construction emissions reduction plan. Options to include in such a plan include:

- (a) retrofitting off-road construction equipment including re-power or engine upgrades
- (b) using ultra low sulfur fuels for all equipment
- (c) limiting the age of on-road vehicles in construction projects to 1998 and newer and 1996 and newer for off-road equipment
- (d) fugitive dust control plans
- (e) diesel particulate traps and oxidation catalysts
- (f) use of existing power sources or clean fuel generators rather than temporary power generators
- (g) encourage the use of off-road equipment that meets the Tier 3 standards

U.S. EPA is available to assist in efforts to select mitigation strategies that would be included in the final project. U.S. EPA has developed a compendium of contract specifications and language to assist State DOTs and other proponents of construction projects. Please see the following link for the specifications and language: <http://www.epa.gov/midwestcleandiesel/projects/index.html>

Mobile Source Air Toxics (MSATs)

The Mobile Source Air Toxics (MSAT) analysis points out that one alternative will move traffic closer to some homes, schools, and businesses and that there may be localized areas where ambient concentrations of MSATs could be higher. The MSAT analysis in the DEIS states that these potential increases "cannot be accurately quantified due to the inherent deficiencies of

¹ U.S. Environmental Protection Agency (EPA). (2002) Health assessment document for diesel engine exhaust. Prepared by the National Center for Environmental Assessment, Washington, DC, for the Office of Transportation and Air Quality; EPA/600/8-90/057F. Available from: National Technical Information Service, Springfield, VA; PB2002-107661, and <<http://www.epa.gov/ncca>>.

current models". The statements of technical limitations and the analysis presented in the DEIS are based on FHWA's "Interim Guidance on Air Toxics Analysis in NEPA Documents". We believe this guidance is not consistent with current academic literature and other published guidance. As an example, we point to the extensive report to the American Association of State Highway and Transportation Officials conducted as part of a National Cooperative Highway Research Program (NCHRP) project: "Analyzing, Documenting, and Communicating the Impacts of Mobile Source Air Toxic Emissions in the NEPA Process", March 2007, [http://www.trb.org/NotesDocs/25-25\(18\)_FR.pdf](http://www.trb.org/NotesDocs/25-25(18)_FR.pdf). This NCHRP document, commissioned by State DOTs, represents current professional practices of air quality experts and identifies air quality tools and approaches that would be appropriate for various NEPA settings and project levels. The NCHRP document also states that reasonable scientific evidence exists that indicates adverse impacts may occur as a result of MSAT emissions, particularly at locations in close proximity to concentrated motor vehicle activity. Although the MSAT analysis in the DEIS conforms to FHWA's Interim Guidance, we believe more could be done to quantify MSAT concentrations in those areas where potential higher concentrations may be expected.