

Division 5 and 7 Review of Draft Framework Workshop for Environmental Management Plan

ATTENDEES: Joey Hopkins/NCDOT DIV 5 Mike Mills/NCDOT DIV 7
 Brad Wall/ NCDOT DIV 5 Jon Nance/NCDOT DIV 5
 John Howell/ NCDOT DIV 7 Ehren Meister/NCDOT OEQ
 Barry Harrington/NCDOT REU Don DeWolfe/CH2M HILL
 Chris Murray/NCDOT DIV 5 Lauren Elmore/CH2M HILL
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FROM: CH2M HILL

DATE: November 10, 1:00 PM

Division 5 and 7 employees met on November 10th in the Division 5 conference room to review and discuss the Environmental Management Plan (EMP). The objectives of the meeting were to present the draft framework, obtain feedback from Division and District staff, and identify the environmental activities already being performed. The draft EMP framework was reviewed with the entire group and then the attendees split into small groups to discuss each draft framework objective in detail. This memorandum summarizes discussions from the group discussions.

Introductions and Meeting Objectives

Ehren Meister opened the meeting, introduced the CH2M HILL team, and provided a general summary of the meeting's objectives. Don DeWolfe with CH2M HILL introduced the CH2M HILL staff members and asked the NCDOT participants to introduce themselves. Don presented the goals for the Environmental Management Plan, noted that the purpose of the meeting is to obtain feedback from staff, and described how Division input will be used to develop the final EMP.

Project Background

Don identified the EMP sponsors and the core team at NCDOT that helped to develop the draft EMP framework. The draft framework is based upon existing NCDOT documents and additional information from benchmarked agencies that have excellent environmental management systems or programs. A few of the NCDOT documents were identified and a copy of the Environmental Stewardship Policy was distributed to the meeting attendees. The benchmarking agencies included other State Departments of Transportation, cities, and military facilities.

Don DeWolfe reviewed the main goals for the EMP:

- The EMP should be clear, concise, workable, realistic, and achievable for all levels of the organization.
- The EMP will provide a way to clearly document the cost effectiveness of investments made on environmental initiatives.
- The EMP will incorporate previous environmental initiatives where applicable.
- The EMP will include methods for communicating environmental performance measures to all levels so that employees recognize and understand what the Department is doing.
- Obtain broad acceptance of the EMP from the Board, employees, and the public.

The draft EMP framework was reviewed. The meeting participants were asked to think about the questions that they will be asked to answer in the small group sessions:

- What are you already doing that supports the draft EMP Framework?
- What are you doing that is missing from the draft EMP framework?
- What draft EMP objectives are not applicable to you?

After the objectives were presented Don, asked the group to identify anything missing and to share their initial thoughts about the draft framework. One employee noted that the Human Environment element seems to be missing from the draft framework. There were no immediate objections to the draft framework.

Break

Small Group Sessions

After the break the meeting attendees were split into two groups. Each group reviewed the individual draft framework pieces and identified the activities they are doing under each section and any activities that don't fit under the draft framework pieces. The small group discussions were led by CH2M HILL staff. Group comments were recorded on flip charts. After each draft framework piece was reviewed, the groups came back together and CH2M HILL presented the highlights of the small group discussions.

Objective A - Ensure employee compliance with the Environmental Stewardship Policy

- 1) Achieve zero notice of violations (NOV) on projects, facilities, and operations
- 2) Conduct root cause analysis and develop recovery plans for correction of NOV occurrences
- 3) Build upon and enhance internal programs which demonstrate NCDOT's commitment to the natural and human environment

Current Activities:

- Division 5 has a training program regarding environmental stewardship for maintenance activities

- Scoping meetings are held onsite to discuss what is going to be built
- Conduct pre-construction meetings where project permitting conditions and drawings are discussed
- Pipe stakes and orange fence are used to identify the permitted areas and environmentally sensitive areas
- Conduct monthly internal compliance audits (ICA) for erosion and sediment control and permitted sites
- If a site is close to receiving an NOV the ICA requires the implementation of corrective action within 5 days
- Inspection forms are utilized
- Sediment and erosion control staff conduct inspections and evaluate the work (1 to 10) for installation, maintenance, and implementation
- Inspection reports are given to the site superintendent and the division engineer in charge of the project
- The division uses a permit inspection team (workload dependent) to conduct permit compliance audits
- Conduct public meetings/hearings on some projects. Will occasionally attend neighborhood meetings to hear issues/needs.
- Contractor training includes information on how to manage permitted areas, BMPs, and environmental stewardship

Comments/Suggestions:

- Problem areas include contractor compliance, turnover of construction staff and lack of ramifications for contractor if DOT receives a NOV
- Environmental training should be conducted on at least an annual basis and is especially important for equipment operators and the TS1, TS2, and TS3 DOT staff, but should also include inspection staff, CEI staff, and contractors.
- Include human environment elements
- Change contractor agreements to include a financial penalty for receiving a NOV

Objective B - Ensure the compliance of NCDOT and industry partners with state and federal environmental laws, rules and regulations

- 1) Achieve zero NOVs on projects
- 2) Achieve zero contract violations related to or as result of adverse environmental impacts
- 3) Conduct root cause analysis and develop recovery plans for correction of NOV or contract violation occurrences

Current Activities

- The division conducts contractor training in the permitted area, BMP implementation, and environment stewardship

- Conduct yearly permitting training for TIP, construction management (DOT and CEI), maintenance staff, bridge maintenance staff, and now includes contractors

Comments/Suggestions

- Industry partner expectations should be increased and have clearer consequences
- One issue identified as a problem is inconsistent interpretation of regulations and policies
- NOVs do not impact Contractors; there are no consequences for them
- The only enforcement mechanism DOT has is to issue a suspension of operation

Objective C – Build upon and enhance environmental sustainability practices

- 1) Achieve government recycling mandates to reduce waste and reduce costs
- 2) Determine the technical feasibility and cost effectiveness of waste reduction measures
- 3) Evaluate and track additional reduction, recycling, and reuse efforts to continually improve environmental sustainability
- 4) Implement the Energy Policy

Current Activities

- Regular office recycling of aluminum cans and paper
- Other recycling efforts include concrete (aggregate base course), guardrail posts, tires, asphalt, and trees are turned into mulch
- Asphalt recycling is a contractor decision and is job specific
- Reuse some materials from bridge demolition
- Using alternative fuels, propane, bio-diesel and some electric cars
- Most Division vehicles are multi-fuel capable and use bio-diesel at this time
- Divisions recycles used oil, TCE and sell scrap metal
- Welcome center in Orange County and maintenance use wood from secondary construction projects for heat

Comments/Suggestions

- Suggest energy conservation measures such as a 4 day work week, flex hours and promoting carpooling
- Need to include sustainability in project design

Objective D – Enhance air quality management

- 1) Identify and measure air quality impacts produced by NCDOT activities
- 2) Complete air quality analyses in non-attainment and maintenance areas on time
- 3) Maximize the use of available congestion mitigation and air quality improvement program (CMAQ) funds each year

- 4) Organize effective regional collaborations with metropolitan and rural planning organizations (MPO's and RPO's)

Current Activities

- There is very little Division involvement in air quality measurements or modeling
- There is very little involvement by the Divisions in CMAQ funding decisions
- Annual review of the TIP process includes air conformity considerations (done by Division supervisor and NCDOT Board member)
- Division supervisor attends all monthly MPO/RPO meetings
- Have conducted signal timing studies
- Utilize alternate fuels
- Dust control measures are implemented on all TIP projects (vacuum and water trucks)
- Utilize message boards to alert the public to high ozone conditions
- Manage the time of day for vehicle fueling, numbers of vehicles to reduce ozone when levels are elevated

Comments/Suggestions

- Indoor air quality is an issue (mold, lead paint, and asbestos removal) and should be included
- Dust, lead, noise from interstates

Objective E - Enhance water quality management

- 1) Continue to implement enhancements and BMPs related to water quality at facilities and properties
- 2) Track enhancement and BMP implementation efforts at the project level
- 3) Identify and track opportunities to enhance water quality through partnerships
- 4) Cooperate with watershed based approaches where possible

Current Activities

- Utilize pre-construction and ongoing construction meetings to review permitting, BMPs, and specific water quality issues associated with each project
- Incorporate water quality management into project design
- Utilize wet detention ponds
- Implement BMP's that are not required by permitting in order to maintain relationship with DWQ
- Track implementation and maintenance of BMPs (level spreaders, grass swales, ponds etc.)
- Stormwater pollution prevention plans are developed for each facility and reviewed annually with twice a year inspections conducted by the County maintenance engineer

- Division is conducting water quality monitoring in one area in response to neighborhood sensitivity to sedimentation (NC State obtains the samples and conducts the analyses)
- Program to reduce illegal discharges in the ROW by identification of these

Comments/Suggestions

- Most of the time relationships, not partnerships, are formed
- Need to develop an inventory of sedimentation devices and other stormwater BMPs that notes location, maintenance needs, and status (this has been started)
- Drinking water quality for facilities testing should be included (requirement of Public water Supply Section)

Objective F – Enhance land resource management

- 1) Integrate local land use plans into the comprehensive transportation planning process to meet mobility, economic and environmental goals
- 2) Continue to manage facilities and property to enhance environmental stewardship and economical land management practices
- 3) Continue delegation of the erosion and sedimentation control and buffer programs

Current Activities

- The Division wants to continue managing the sediment and erosion control program and conducting monthly compliance inspections on all projects
- Maintenance tracts and road improvements completed in historic areas
- Each Division conducts landscaping projects
- Have enhanced butterfly and bird habitat and added wildlife crossings
- Have reduced the maintenance of right of ways to create more natural landscapes and minimize mow areas
- Have conducted more on-site mitigation than was required (increased land purchase)

Comments/Suggestions

- Increased integration of local land use decisions and DOT
- Conduct timber sales from maintenance yard
- Develop program to sell properties to developers, etc.
- Lease property for telecommunication towers
- Waste area management (borrow pits, construction debris, land clearing) that are District based to reduce haul costs, waiting in lines at landfill, etc.

Objective G - Accelerate/streamline the environmental component of the project delivery process

- 1) Zero project delays due to permitting
- 2) Identify impacts, fund, and monitor the expense allocation to the EEP and other mitigation efforts
- 3) Identify appropriate mitigation funding sources and allocation of funds in TIP
- 4) Identify and track opportunities to partner with local governments and agencies to enhance the project delivery process
- 5) Explore delegation of environmental programs

Current Activities

- Potentially make project decisions (traffic signal, etc) based on mitigation costs
- At the project level pre-construction and ongoing meetings discuss permitting needs and requirements
- Develop mitigation estimates for Division operations and maintenance activities

Comments/Suggestions

- Zero project delays due to permitting cannot be achieved
- Zero project delays might be achieved for small local projects
- Suggest involving other agencies earlier in the planning process (merger process)
- Would be interested in environmental training related to BMPs
- Would be interested in being delegated permitting responsibilities

Objective H – Implement and maintain the initiatives, programs and process improvements

- 1) Implement the Environmental Management Plan
- 2) Develop a comprehensive shared GIS database
- 3) Continue to enhance training and awareness of the environmental ethics of the Department
- 4) Develop a risk management plan

Current Activities

- Already conduct internal training and bring in other agencies to give the training
- Documenting BMP retrofits and evaluating performance and maintenance requirements

Comments/Suggestions

- Support division/district tracking of BMPs, maintenance responsibility and frequency but need money to support the BMP tracking effort

- Create a basic environmental training program that the districts can implement
- Require contractor training
- Would like additional training on BMPs
- Need further guidance on BMP operation and maintenance, especially for level spreaders
- Enhance and expand the BMP manual (this manual is being used)
- There are not enough people and money to support the BMP maintenance commitments
DOT is accepting through permits
- Need to focus on Contractor training and contractor enforcement
- Environmental training for “on the ground” employees that work for the contractors, possibly bi-lingual
- Require contractors to implement/conduct environmental training of all workers on a regular basis
- Combine environmental discussions with the regular safety meetings

Summary and Conclusions based on Small Groups

The draft framework items that were identified as having little application at the Division level were the distribution of CMAQ funds and air quality measurement and modeling. Contractor compliance with permit requirements is an issue for the Divisions. The District and Division staff would like the contractors to assume some financial responsibility for violations issued to DOT. Additional environmental training would be welcomed, particularly for the DOT equipment operators and TS1, 2, and 3 staff, as well as inspection, CEI and contractor staff. Maintenance of BMPs is an issue for the divisions, not enough staff are available to keep up with the required activities. Inconsistent interpretation of regulations by the regulators is a frustration for DOT staff. The human environment element seems to be missing from the draft framework. The overall implications of the draft EMP framework need to be fully understood and examined before the final implementation phases are completed.

Next Steps

Further comments can be provided to Ehren Meister with NCDOT or to J.D. Solomon with CH2M HILL. Employees interested in keeping track of the EMP development process can go to the NCDOT internet site: <http://www.ncdot.org/environment/development/management/>. After the Division workshops are completed, the input from staff will be incorporated into the framework and EMP implementation strategies.