

Environmental Inspections at the Concrete Plant – The 5 Ws

By Douglas Ruhlin, Principal Environmental Consultant, Resource Management Associates

The concrete industry knows that inspections of environmental matters are required, or a good idea or that we should be doing them, right? But if you're not sure, if you're not conducting regular, then it might pay to consider the "5 Ws" of environmental inspections – Why, When, Where, What, Who - at the concrete plant:

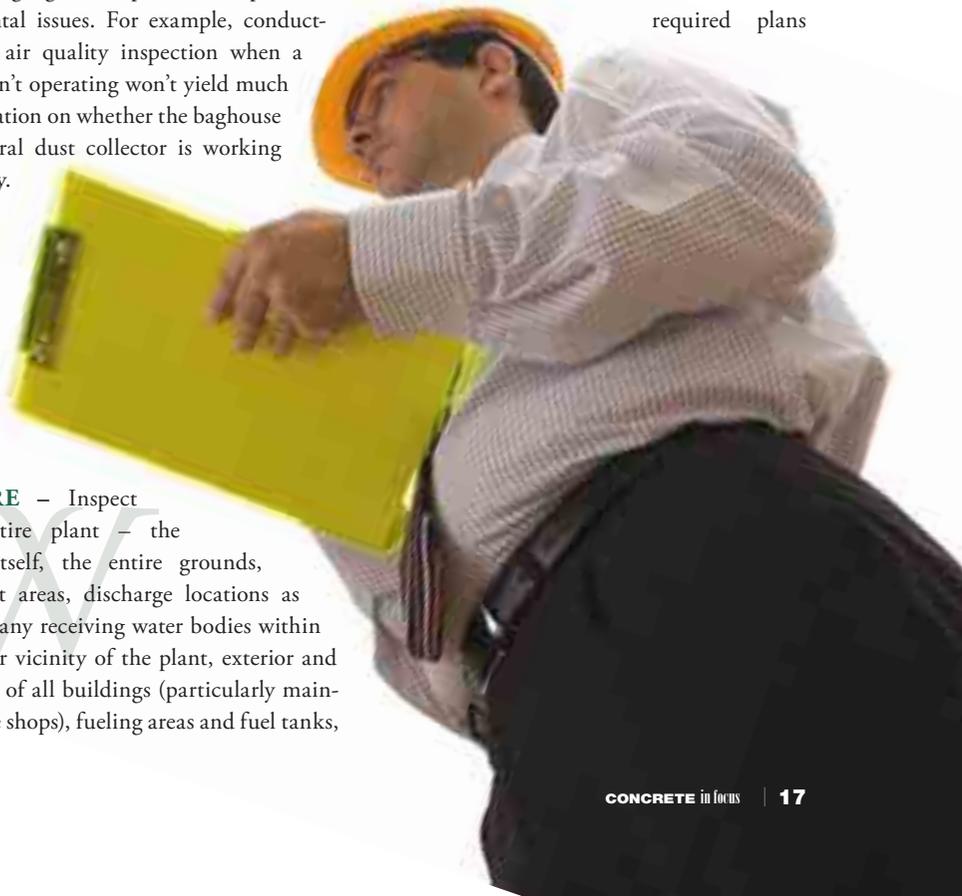
WHY – Environmental inspections of your concrete plant grounds and operations are essential in today's tough regulatory climate. Most environmental permits require some type of regular, often comprehensive, inspection of the plant and operations. For example, nearly every concrete has an NPDES stormwater discharge permit, most of which require some type of comprehensive site inspection. These are often required to be conducted annually at a minimum (but often more regularly), and are usually directed toward potential contaminant sources and water quality management features. Likewise, SPCC plan requirements generally require monthly inspections of all petroleum storage tanks, secondary containment areas, fueling areas, etc. be conducted. Regular environmental inspections can also provide a useful benchmarking tool toward evaluating progress toward meeting environmental goals, as might be required under an environmental management system or "EMS" (for example, the NRMCA Green-Star program requires the demonstration of a regular comprehensive compliance evaluation program in order to achieve certification). Environmental inspections can also serve as a useful tool for corporate performance benchmarking ("are we meeting our corporate environmental goals?"). Finally, regular inspections can provide a means to evaluate how the plant looks to others, such as the neighboring community, visitors, regulators and others.

WHEN – Environmental inspections should be done regularly and often! As previously mentioned, some regulatory programs will require inspections be conducted; however, the required frequency is often fairly low (for example, annual stormwater inspections). More regular inspections can provide better feedback on site conditions, and allow potential problems to be found and addressed quickly before they get out of hand. A comprehensive monthly or quarterly inspection is a good idea, while shorter monthly inspections directed at specific areas (such as the petroleum tank inspections required by SPCC regulations) may also be needed. In all cases, ensure that required inspections are being done at least according to the permit or regulation mandated frequency, and try to combine inspections when it makes sense. It's also a good idea to conduct inspections during normal working conditions, in order to gauge how operations impact environmental issues. For example, conducting an air quality inspection when a plant isn't operating won't yield much information on whether the baghouse or central dust collector is working properly.

WHERE – Inspect the entire plant – the plant itself, the entire grounds, adjacent areas, discharge locations as well as any receiving water bodies within the near vicinity of the plant, exterior and interior of all buildings (particularly maintenance shops), fueling areas and fuel tanks,

outdoor equipment and parts storage areas, stockpile areas, plant perimeter, roadways in the immediate vicinity of the plant driven by plant vehicles, etc. Be comprehensive and leave nothing out. In particular, don't avoid any areas known to be "problem areas" of the site – these may be the most important areas to inspect.

WHAT – Inspect everything. Certain types of environmental inspections may need to be targeted toward certain aspects of the operation, such as monthly petroleum tank inspections. However, comprehensive environmental inspections should cover all activities at the plant, including batching operations, fueling areas and activities, discharge locations and all water management areas, returned concrete management areas, the maintenance shop interior and activities, the plant perimeter (including how the plant looks from outside of the plant boundaries), entrance and exit drives, required plans



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and documentation, sample results, etc. Often, environmental inspectors at concrete plants tend to focus just on the concrete plant and its operations – don't fall into this trap! Evaluate all activi-



ties and operations on the plant site. Look for conditions both good (such as BMPs operating as designed, or water management systems working correctly, clean shop conditions), and bad (such as stained soils, sediment buildup at discharge locations, spills at fueling areas, overflowing process water settling basins, etc.).

WHO – Environmental inspections should be conducted by trained, knowledgeable personnel, preferably those who can be as impartial about the results as possible. Often, using personnel from one plant or division to conduct inspections at another plant can provide a reasonable measure of impartiality. Regardless of how it's done, the inspections have to be conducted by someone who has been trained on what to look for and how to conduct the inspection.

Finally, it's important to realize that environmental inspections, regardless of the type, should be documented in writing or other similar means. This would include the date, name and signature of inspector, checklist of areas or activities inspected, findings, as well as required action to correct any issues observed. This documentation may come with some peril – failure to correct (or report) a regulatory issue found during an inspection may carry severe penalties, so proceed carefully. You may wish to discuss your inspection program with a qualified consultant or legal counsel before proceeding.

Environmental inspections are required at all concrete plants in one form or another, and can provide a worthwhile and beneficial exercise toward environmental compliance and excellence. By following the "5 Ws" listed above, your environmental inspection program can meet these goals as well. ■

For further information on any of the issues in this article, Doug Rublin can be contacted at Resource Management Associates, PO Box 512, Forked River, NJ 08731; (609) 693-8301; www.resourcemanagementassoc.com or via e-mail at drublin@resourcemanagementassoc.com.

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