

ACC CULPEPER

# Environmental Plans and Procedures

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OMM and SWPPP

Permit # VAG110315

**16273 Allied Way Culpeper, Va. 22701**

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## OMM

### **O&M practices for wastewater treatment**

Process water is generated on this site from truck cleaning and drum washout. Both of these operations are done at the washrack area, which directs the water into a series of no discharge basins. This series allows most solids to settle out before reaching the third basin. The water from the third basin is then used in concrete production, and reused in drum washout. If needed water from the third basin may be used in dust suppression.

### **Chemical and material storage**

Truck Fluids<sup>i</sup> are stored in an annex to the office.

Admixture tanks used in concrete production is stored inside a trailer.

Truck Cleaning Solution is stored inside the building beside the washrack area.

Stone and Sand piles are maintained in 3 wall bins to reduce carry off.

Cement and Flyash are stored in silos.

### **Methods for estimating process wastewater flows**

Process water is not discharged from this site, so no flow is estimated.

## Solids management and disposal procedures

Solids come from water basin cleaning operations, returned concrete, and site housekeeping.

### Water basin Cleaning

- Water from the basin to be cleaned is pumped into the other two basins.
- A Front End Loader is used to scoop out the solids and move them to the drying bin where they are allowed to dry<sup>ii</sup>.

Site housekeeping solids are moved to the dry solids bin.

Returned concrete can be handled by

- Creating Yard Block

If neither option is available, the concrete will be discharged in the drying bin area, broken up by the loader, and stored with the other dried solids.

As needed the solids are disposed of at the landfill or when possible sold/used as fill<sup>iii</sup>.

## Temporary and long-term facility closure plans

The site if operating infrequently will have personnel at the facility from time to time to check the condition of the site. Basin freeboard will be checked and recorded after a rainfall event.

In the event of a long term closure,

- The materials would be moved to another Allied Concrete site.
- Basins would be filled or covered as appropriate.
- Facility would be secured to prevent unauthorized access.

## Testing requirements and procedures

The site does not have an Outfall, so Annual DMRs are submitted as No Discharge.

If it was determined that there was an outfall the following procedure would be used:

The DMR sample would be taken within the first 30 minutes of discharge from Outfall using a sample container<sup>iv</sup>; a pH reading<sup>v</sup> would be taken and recorded immediately using a temperature compensating pH meter<sup>vi</sup>. The sample would then be stored in a cooler with ice and transported to the lab<sup>vii</sup> to be tested for TSS. These findings along with flow calculation<sup>viii</sup> would be recorded on the DMR and sent into DEQ on an annual basis.

QV monitoring would be taken within the first 30 minutes of discharge, the sample checked for clarity, odor, color, floating solids, settled solids, suspended solids, foam, oil sheen, and other indicators of storm water pollution. Also any probable sources of storm water contamination would be recorded.

## **Recordkeeping and reporting requirements**

Freeboard is done during each production day by the batcher. It is measured from the top wall and recorded on the online Freeboard log<sup>x</sup>. Results can be accessed through the batch PC.

Quarterly Site Inspections are conducted once each quarter by the Safety Environmental Manager. Once per year this inspection should be conducted during a qualifying storm event. Results are recorded on the QI form. They are then scanned and made available on the Batch PC.

Annual Compliance/Unauthorized Discharge Evaluations are conducted once per year by the Safety Environmental Manager with the Plant manager present if possible. Results are recorded on the Annual Comp Eval form and the Unauth Discharge Eval form. They are then scanned and made available on the Batch PC.

As there is no Outfall the DMR is filled out stating no discharge and sent in. In the event that an Outfall were determined, the procedure would be as follows:

DMR samples would be taken once per year during a qualifying storm event by the Safety Environmental Manager. The sample data would be recorded on a DMR Sample Log, and a Chain of Custody would be completed for it to be delivered to the Lab, and a Flow Calculation Spreadsheet would be used to calculate flow<sup>x</sup>. Once the results return a DMR form (from the permit) would be completed and sent into DEQ no later than the 10<sup>th</sup> of January. All documents would be scanned and made available on the Batch PC

Any person sampling would have completed an Initial Demonstration of Capability for pH, the results of which would be available on the Batch PC.

Annual Thermometer Calibration Records are available on the Batch PC.

Training records and training outline are available on the Batch PC.

## **Duties and roles of responsible officials**

Duties and Roles are outlined in the Pollution Prevention Team

# SWPPP

## Pollution Prevention Team

### Team Leaders:

**BJ Barbrow, Safety and Environmental Manager and the Plant Manager**

#### Team Leader Responsibilities

The Team Leader is responsible for overall content and implementation of the SWP3. Potential non-compliance areas or concerns are presented to the team leader by other team members. The Team Leader will ensure that changes to facility drainage, exposed materials, spill response, pollution control measures, inspections and training are incorporated into the plan.

### Team Members:

**Batch Person, Yard Man, Drivers**

#### Team Member Responsibilities

Team members will responsible for implementing and following the procedures outlined in this plan. This includes checking site condition, reporting any spills or releases with a potential to pollute storm water, directing and performing any housekeeping tasks, and report to the Team Leader any permit compliance issues or recommendations for improved BMPs.

## Potential Pollutant Sources

Activity	Potential Pollutant	BMPs
Truck Maintenance	Lubricants, fluids <sup>xi</sup>	Maintenance is performed offsite, but some routine fluids are stored indoors.
Filling Bins/Unloading aggregates	Natural Sand, Crushed Stone, Manufactured Sand	Aggregates are unloaded to aggregate holding areas, and materials are pushed into piles. Bin filling operations use a front end loader. The bucket should be filled and excess shaken off at the pile.
Truck Loading	Cement, Aggregates, Admixtures	The truck is backed into a shrouded area and (with proper truck alignment) the material is put into the truck through a boot to ensure the material goes into the truck. The shroud has a fugitive dust collection system. The area (including tracked materials) will be cleaned as needed, no less than once per week.
Truck Washing	Process water, truck cleaning agents	Truck cleaning operations are performed in a washrack that directs all process water (rinse water) into no discharge basins. The water from here is recycled into concrete production.
Unloading to Silo	Cement, Fly Ash	Silos are filled via a pipe that leads to the top of the silo. A tanker connects to this with a flexible rubber hose. The dust collector on the silo allows venting while filtering out any potential dust. The person unloading the tanker is responsible for ensuring that all dust filtration systems are operating properly during the unloading process.
Fueling	Diesel	Performed Offsite

## Spills and Leaks

No significant spills or leaks have occurred on this site.

## **Preventative Maintenance**

The loading shroud vacuum system and silo dust collectors are checked monthly by maintenance personnel.

## **Spill Prevention and Response Procedures**

Chemicals that have the potential for spilling are stored in secondary containment as outlined in Chemicals and material storage in the OMM portion. If a spill were to occur, sand would be used to control any spilled chemicals. It would then be disposed of according to the manufacturer's recommendation, and in compliance with local ordinances. In the event of a spill contact:

BJ Barbrow (540) 718-4862      Safety/Environmental Manager

Pete Hawes (540) 480-2763      Safety Director

Clay Hubbard (434) 249-2213      Operations Manager

## **Facility Inspections**

Facility Inspections are done quarterly. Any deficiencies noted from these inspections are documented<sup>xii</sup>, brought to the attention of the rest of the team, and taken care of in a timely manner.

## **Employee Training**

Employee training on the permit and this plan is conducted annually for all Allied Concrete Ready Mix/Maintenance/Block/Sales employees.

## **Sediment and Erosion Control/Management of Runoff**

Property borders should be checked for erosion during site inspection, and if needed a plan of action should be implemented to prevent further erosion.

Cleaning of the truck loading area and aggregate storage areas should occur as needed, but no less than once per week of normal production. This includes clearing the travel areas of any aggregates spilled during the bin filling process and restacking the aggregate piles as needed.

## **Comprehensive Site Compliance**

Comprehensive site compliance evaluations will be conducted annually by the Environmental Team Leader. Results of the evaluation as well as the results of the Annual sample lab results will be shared with the team, for any deficiencies found a plan of action will be determined and documented<sup>xiii</sup> (along with a time frame for correction) with the evaluation.

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<sup>i</sup> Hydraulic Oil, Grease, Motor Oil, Gear Oil

<sup>ii</sup> Evaporation

<sup>iii</sup> Sold and used are based on demand

<sup>iv</sup> 1L Plastic Container

<sup>v</sup> Standards Method 4500–H+B-2011

<sup>vi</sup> Thermometer calibrations are done annually. Results are available on the corporate server.

<sup>vii</sup> Environmental Systems Services in Culpeper

<sup>viii</sup> Drainage area acreage and impervious factor is estimated and used with the precipitation amount to calculate flow.

<sup>ix</sup> An effort should be made to check the freeboard at the same time of day during consecutive operation days.

<sup>x</sup> (((. [Impervious Factor]\* [Total Area[ft<sup>2</sup>]])\*Rainfall[ft])\*7.48[convert to gallons])/1000000[convert to MGD])

<sup>xi</sup> Hydraulic Oil, Grease, Motor Oil, Gear Oil

<sup>xii</sup> Corrective Action Form

<sup>xiii</sup> Corrective Action Form