

ACC CHARLOTTESVILLE

Environmental Plans and Procedures

OMM and SWPPP

Permit # VAG110064

1000 Harris St. Charlottesville, Va. 22902

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OMM

O&M practices for wastewater treatment

Process water is generated on this site from truck cleaning, truck washout, and central drum washout. Truck cleaning and washout 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. Water from the third basin is used in concrete production, drum washout, and (if needed) dust suppression. Central drum washout water is dropped into a loader bucket or an empty mixer drum, which is then discharged into the recycle water basins. Basin 4 is a settling basin located behind the batching area to settle out any solids from the batching area, and is pumped into the series basins as needed.

Chemical and material storage

Admixture tanks used in concrete production and the fuel tank are located inside the batch building. This facility has an underground storage tank for truck fuel located in the fueling area.

Truck Cleaning Solution is stored at the washracks.

Truck lubricantsⁱ are stored in the Maintenance Shop Area which would provide containment.

Stone and Sand are stored either in silos or 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 basins.
- A Front End Loader is used to scoop out the solids and move them to the drying bin where they are allowed to dryⁱⁱ.
- Once dry these solids are piled with other dried solids in the next bin.

Site housekeeping solids are moved to the dry solids area.

Returned concrete can be handled by

- Creating Yard Block
- discharged in the returned concrete area to be broken up by the loader and stored in the dried solids area.

As needed the solids are sold/used as fillⁱⁱⁱ. If this is not possible, they are disposed of at the landfill.

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,

- Raw 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/ trespassing.

Testing requirements and procedures

Quarterly visual monitoring and Annual DMRs are required.

The DMR sample is taken within the first 30 minutes of discharge from Outfall 001 using the sample container^{iv}; a pH reading^v is taken and recorded immediately using a temperature compensating pH meter^{vi}. The sample is then stored in a cooler with ice and transported to the lab to be tested for TSS. These findings along with flow calculation^{vii} are recorded on the DMR and sent into DEQ on an annual basis.

Quarterly Visual monitoring is taken within the first 30 minutes of discharge, the sample is 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 will 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 Freeboard log^{viii}. Results are available on the batch PC.

The Quarterly Visual Sample is taken once per quarter during a qualifying storm event by a Pollution Prevention Team Leader. The results are recorded on the QV Form and are available on the batch PC.

Quarterly Site Inspections are conducted once each quarter by a Pollution Prevention Team Leader. Once per year this inspection should be conducted during a qualifying storm event. Results are recorded on the QI form and are available on the batch PC.

Annual Compliance/Unauthorized Discharge Evaluations are conducted once per year by a Pollution Prevention Team Leader with the Plant manager present if possible. Results are recorded on the Annual Comp Eval form and the Unauth Discharge Eval form and are available on the batch PC.

DMR samples are taken once per year during a qualifying storm event by a Pollution Prevention Team Leader. The sample data is recorded on the DMR Sample Log, and a Chain of Custody is completed for it to be delivered to the Lab^{ix}, and the Flow Calculation Spreadsheet is used to calculate flow^x. Once the results return a DMR form (from the permit) is completed and sent into DEQ no later than the 10th of January of the following year. All documents are copied and are available on the batch PC.

Any person sampling will have completed an Initial Demonstration of Capability for pH, the results of which are 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 Leader: BJ Barbrow, Safety Environmental Manager and Steve Subotnik, 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 be 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 ^{xi}	Maintenance is performed in designated areas, and the area is cleaned as needed. Absorbent material is available if needed.
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 pulls into the batching area. the concrete/material is put into the truck through a boot to ensure that the concrete/material goes into the truck. The shroud has a fugitive dust collection system. The area will be cleaned as needed but no less than once a week.
Truck Washing	Process water, truck cleaning agents	Process water from truck cleaning operations is directed into no discharge basins. The water from here is recycled into concrete production and used for dust control when needed.
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	Fueling occurs at the fuel pump in the fueling area. Employee is to monitor the fueling to prevent overfill

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. Team members should note any deficiencies in the containment areas and report them to the team leader. During the quarterly site inspections, containment areas are checked for deficiencies. During the quarterly site inspections all BMPs are checked to see if they are adequate or if maintenance is needed. Storm water catch basins are checked after each rain to see if they need to be cleaned.

Spill Prevention and Response Procedures

Chemicals that have the potential for spilling are stored indoors, under roof, or 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 manufactures recommendation, and in compliance with local ordinances. In the event of a spill contact:

Pete Hawes (540) 480-2763 Safety Director

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

Clay Hubbard (434) 249-2213 Operations Manager

Facility Inspections

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

Employee Training

Employee training is conducted annually for all Allied Concrete Ready Mix/Maintenance/Block/Sales employees.

Sediment and Erosion Control/Management of Runoff

In order to reduce TSS we have changed the sweeper brushes and serviced the sweeper as well as changed our snow removal policies. Snow piles from snow removal will be piled away from outfall areas. Sweeping occurs daily in dry conditions.

- 2017 updates
- In order to further reduce TSS we have built a wall on the lower yard (Outfall 005) that directs water into catch basins before exiting the property.(6/2017)
 - We have a new, more capable sweeper. (9/10/2017)
 - Catch basins have been installed at outfall 002 to reduce TSS (8/25/2017)

Outfall 001	Block Plant	Eliminated
Outfall 002	Road Hopper	After Outfall 2 has 2 catch basins that lead to a gravel bed
Outfall 003	Shop	Outfall 3 is concrete/drain/pipe, so erosion is not a concern. The sweeping regime is satisfactory in sediment control in this area.
Outfall 004	New Property	Eliminated
Outfall 005	Lower Yard	Outfall 5 is at the end of a series of catch basins

Comprehensive Site Compliance

Comprehensive site compliance evaluations will be conducted annually by a Pollution Prevention 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^{xiii} (along with a time frame for correction) with the evaluation.

ⁱ Hydraulic Oil, Grease, Motor Oil, Gear Oil

ⁱⁱ Evaporation

ⁱⁱⁱ Sold and used are based on demand

^{iv} 1L Plastic Container

^v Standards Method 4500-H+B-2000

^{vi} Thermometer calibrations are done annually. Results are available with this plan.

^{vii} Drainage area acreage and impervious factor is estimated and used with the precipitation amount to calculate flow.

^{viii} An effort should be made to check the freeboard at the same time of day during consecutive operation days.

^{ix} Environmental Systems Services in Culpeper.

^x Outfall 002 $((.9[\text{Concrete} [\text{Impervious Factor}]] * 43,560[\text{Total Area}[\text{ft}^2]]) * \text{Rainfall}[\text{ft}] * 7.48[\text{convert to gallons}]/1000000[\text{convert to MGD}])$

Outfall 003 $((.9[\text{Concrete} [\text{Impervious Factor}]] * 87,120 [\text{Total Area}[\text{ft}^2]]) * \text{Rainfall}[\text{ft}] * 7.48[\text{convert to gallons}]/1000000[\text{convert to MGD}])$

Outfall 005 $((.9[\text{Concrete} [\text{Impervious Factor}]] * 130,681[\text{Total Area}[\text{ft}^2]]) * \text{Rainfall}[\text{ft}] * 7.48[\text{convert to gallons}]/1000000[\text{convert to MGD}])$

^{xi} Hydraulic Oil, Grease, Motor Oil, Gear Oil

^{xii} Corrective Action Form

^{xiii} Corrective Action Form