Environmental Plans and Procedures
OMM and SWPPP

Permit # VAG110072

1321 Delphine Ave. Waynesboro, Va. 22980
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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 wash rack 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. Nineteen inches from the top wall of the third basin is a pipe that directs water into a holding tank. Water from this holding tank is used in concrete production, drum washout, and (if needed) dust suppression. If this holding tank reaches capacity, water would no longer be able to flow into the holding tank and continue to collect in the third basin.

Chemical and material storage
Admixture tanks used in concrete production are located the basement of the Batch House and are protected with secondary containment. Admixtures may also be stored outside adjacent to the Batch House. Any admixtures stored outside are observed daily for potential leaks.

The fuel tank is under roof in secondary containment in the Fueling Station

Truck Cleaning Solution is stored adjacent to the wash rack and is observed daily for potential leaks.

Truck lubricants\(^1\) are stored in the Maintenance Shop Area which would provide containment.

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\textsuperscript{ii}.
- Once dry these solids are piled with other dried solids in the next bin.

Site housekeeping solids
We maintain a street model sweeper/vacuum truck that is shared across all sites. Once per week, if the facility has been in operation and the hard surfaces are dry enough, the sweeper is sent to each site for use in housekeeping on the hard surfaces (excluding loading areas). Loading area solids are collected with a loader bucket. Solids from all housekeeping activities are moved to the solids management area.

Returned concrete
Returned Concrete is be handled by
- Creating Yard Block
  - discharged in the returned concrete area to be broken up by the loader and stored in the returned concrete area

As needed the solids are sold/used as fill\textsuperscript{iii}. 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; a pH reading is taken and recorded immediately using a temperature compensating pH meter. 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 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. Results are kept in a log book located in the Batch House.

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 kept with this plan.

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 kept with this plan.

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 kept with this plan.

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, and the Flow Calculation Spreadsheet is used to calculate flow. 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 kept with this plan.

Any person sampling will have completed an Initial Demonstration of Capability for pH, the results of which are kept with this plan.

Annual Thermometer Calibration Records are kept with this plan

Training records and training outline are kept with this plan.

Duties and roles of responsible officials
Duties and Roles are outlined in the Pollution Prevention Team
Pollution Prevention Team

Team Leader: Pete Hawes, Safety Director

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

<table>
<thead>
<tr>
<th>Activity</th>
<th>Potential Pollutant</th>
<th>BMPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truck Maintenance</td>
<td>Lubricants, fluids x</td>
<td>Maintenance is performed in designated areas, and the area is cleaned no less than weekly. Absorbent material is available if needed.</td>
</tr>
<tr>
<td>Filling Bins/Unloading aggregates</td>
<td>Natural Sand, Crushed Stone, Manufactured Sand</td>
<td>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.</td>
</tr>
<tr>
<td>Truck Loading</td>
<td>Cement, Aggregates, Admixtures</td>
<td>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 that the 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.</td>
</tr>
<tr>
<td>Truck Washing</td>
<td>Process water, truck cleaning agents</td>
<td>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.</td>
</tr>
<tr>
<td>Unloading to Silo</td>
<td>Cement, Fly Ash</td>
<td>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.</td>
</tr>
<tr>
<td>Fueling</td>
<td>Diesel</td>
<td>Trucks are fueled offsite; the loader is fueled onsite at the fueling area. The loader operator is to monitor fueling to prevent overfill.</td>
</tr>
</tbody>
</table>
Solids Management

Cement, Aggregates, Concrete

The managed solids come from returned concrete, basin cleaning, and housekeeping. Returned concrete that cannot be resold or reused to create yard block is dumped in the Returned Concrete Area, allowed to harden, and pushed into a pile. Basin cleaning and housekeeping solids are put into the drying bin. Once dry it is moved beside the bin to a holding area. Solids are evaluated during quarterly inspections to determine if hauling or other action is needed. The material is sold for fill or if that is not available given to the landfill for fill material.

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.

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, 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
Storm water from the site enters either the Settling basin to Outfall 001 (Settling Basin 1) or the no outlet settling basin (Settling Basin 2). Storm water entering Settling Basin 1 exits to Outfall 001. Storm water that enters Settling Basin 2 exits via evaporation and ground seepage\textsuperscript{xiii}. A berm is in place along the fence line leading to Settling Basin 2 to prevent accidental discharge and the berm freeboard is monitored on the Freeboard Log.

A housekeeping procedure will be implemented as a means of reducing TSS. Housekeeping at Settling Basin 1, Settling Basin 2, and the Truck loading area cleaning will occur as needed, but no less than once per week of normal production. The basins are cleaned of solids as needed based on quarterly inspections. As well, the Aggregate Storage area piles will be maintained throughout the production day. Cleaning of travel areas of any aggregates spilled during the bin filling process will occur as needed but no less than once a week. \textit{(Additional details are in the Solids Management and Disposal Procedures section)}

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\textsuperscript{xiv} (along with a time frame for correction) with the evaluation.

\textsuperscript{i} Hydraulic Oil, Grease, Motor Oil, Gear Oil
\textsuperscript{ii} Evaporation
\textsuperscript{iii} Sold and used are based on demand
\textsuperscript{iv} 1L Plastic Container
\textsuperscript{v} Standards Method 4500–H+B-2011
\textsuperscript{vi} Thermometer calibrations are done annually. Results are available with this plan.
\textsuperscript{vii} Drainage area acreage and impervious factor is estimated and used with the precipitation amount to calculate flow.
\textsuperscript{viii} An effort shall be made to check the freeboard at the same time of day during consecutive operation days.
\textsuperscript{ix} EnviroCompliance Laboratories in Verona, Va.
\textsuperscript{x} $$\frac{\text{[(65\%\text{Concrete} @ .9 + 50\%\text{gravel} @ .4\times\text{Impervious Factor})\times253,999\times(\text{Total Area}[\text{ft}^2])\times(\text{Rainfall}[\text{ft}]\times7.48\text{[convert to gallons]})/1000000\text{[convert to MGD]}}}{}}$$
\textsuperscript{xi} Hydraulic Oil, Grease, Motor Oil, Gear Oil
\textsuperscript{xii} Corrective Action Form
\textsuperscript{xiii} The no-outlet basin is not sealed, so that collected water may seep into the ground.
\textsuperscript{xiv} Corrective Action Form