



STATE OF NEVADA

Department of Conservation & Natural Resources

Brian Sandoval, Governor

Leo M. Drozdoff, P.E., Director

DIVISION OF ENVIRONMENTAL PROTECTION

Colleen Cripps, Ph.D., Administrator

FACTSHEET (pursuant to NAC 445A.236)

Permittee Name: APPLE INC
1 INFINITE LOOP, MS89-1MS
CUPERTINO, CA - 95014

Permit Number: NS2013510

Location: PROJECT MILLS, WASHOE
21575 EAST INTERSTATE 80, SPARKS, NV - 89434
LATITUDE: 39.541552, LONGITUDE: -119.726345
TOWNSHIP: T19N, RANGE: R20E, SECTION: S3

| Outfall / Well Num | Outfall / Well Name | Location Type | Well Log Num | Outfall City | Outfall State | Outfall Zip | Outfall County | Latitude | Longitude | Receiving Water |
|--------------------|-------------------------|------------------|--------------|--------------|---------------|-------------|----------------|----------|-----------|---------------------------|
| 001 | MAIN COLLECTION POND | Internal Outfall | | SPARKS | NV | 89434 | WASHOE | 39.5680 | -119.54 | GROUNDWATERS OF THE STATE |
| 002 | LANDSCAPE IRRIGATION | Internal Outfall | | SPARKS | NV | 89434 | WASHOE | 39.5680 | -119.54 | GROUNDWATERS OF THE STATE |
| 003 | DUST CONTROL ACTIVITIES | Internal Outfall | | SPARKS | NV | 89434 | WASHOE | 39.5680 | -119.54 | GROUNDWATERS OF THE STATE |
| 004 | FIRE SUPPRESSION | Internal Outfall | | SPARKS | NV | 89434 | WASHOE | 39.5680 | -119.54 | GROUNDWATERS OF THE STATE |

General:

Apple Incorporated is seeking coverage under a Nevada Division of Environmental Protection (NDEP) groundwater discharge permit to start operation of its new data storage facility located in Washoe County, Nevada. The proposed data storage facility project requires an equipment cooling process that will generate approximately 1.52 acre-feet of non-contact cooling water per year.

It is estimated that the cooling water flow will average up to 200 gallons per day. Cooling water will be conveyed to a double-lined (HDPE) leak-detected storage pond for seasonal storage. The pond-stored water will be used for on-site landscape irrigation during the irrigation season, dust control activities during the construction phase of the project and fire suppression.

The collection pond design is consistent with Water Technical Sheet WTS-37 - Guidance Document for the Design of a Lined Wastewater Holding Pond - and was approved by NDEP. Applicable Best Management Practices (BMP) will be employed throughout the project site in order to reduce erosion and dissipate energy. Water quality monitoring is required by this permit.

Discharge Characteristics:

The cooling water will be provided by a local potable water source. Therefore, the quality of the process water discharge from the facility is anticipated to be relatively high. The majority of the water quality degradation associated with increases in Total Dissolved

Solids (TDS) and scaling from the heat exchangers. It is estimated that the TDS of the process water entering the pond will be approximately 500 ppm.

Receiving Water:

Authorized discharges under this permit would be to Groundwater of the State of Nevada during landscape irrigation, construction dust control activities and fire suppression. Current ground water levels are at 60 feet below ground surface (bgs) and general groundwater flow direction is South-East towards the Truckee river.

Summary of Changes From Previous Permit:

New Permit

Proposed Effluent Limitations:

Testing protocol includes annual testing for NDEP profile 1 parameters and leak detection limits for the double lined pond.

Re-use Discharge Limitations Table for Sample Location 002 (Internal Outfall) To Be Reported Quarterly

| Parameter | Discharge Limitations | | | Monitoring Requirements | | | |
|-----------------|-----------------------|----------------------------|---------------|-------------------------|------------|-----------------------|------------------|
| | Base | Quantity | Concentration | Monitoring Loc | Sample Loc | Measurement Frequency | S a m p l e Type |
| Flow, total [1] | Quarterly Total | M&R Million Gallons (Mgal) | | Prior to Reuse | 002 | Quarterly | ESTIMA |

Notes (Re-use Discharge Limitations Table):

1. Report total water used for irrigation during the quarter

Re-use Discharge Limitations Table for Sample Location 003 (Internal Outfall) To Be Reported Quarterly

| Parameter | Discharge Limitations | | | Monitoring Requirements | | | |
|-----------------|-----------------------|----------------------------|---------------|-------------------------|------------|-----------------------|-------------|
| | Base | Quantity | Concentration | Monitoring Loc | Sample Loc | Measurement Frequency | Sample Type |
| Flow, total [1] | Quarterly Total | M&R Million Gallons (Mgal) | | Prior to Reuse | 003 | Quarterly | ESTIMA |

Notes (Re-use Discharge Limitations Table):

1. Report total water used for dust control during the quarter

Re-use Discharge Limitations Table for Sample Location 004 (Internal Outfall) To Be Reported Quarterly

| Parameter | Discharge Limitations | | | Monitoring Requirements | | | |
|-----------------|-----------------------|----------------------------|---------------|-------------------------|------------|-----------------------|------------------|
| | Base | Quantity | Concentration | Monitoring Loc | Sample Loc | Measurement Frequency | S a m p l e Type |
| Flow, total [1] | Quarterly Total | M&R Million Gallons (Mgal) | | Prior to Reuse | 004 | Quarterly | ESTIMA |

Notes (Re-use Discharge Limitations Table):

1. Report total water used for fire suppression during the quarter

Ponds / Rapid Infiltration Basins for Sample Location 001 (Internal Outfall) To Be Reported Monthly

| Parameter | Discharge Limitations | | | Monitoring Requirements | | | |
|-----------------------------------|-----------------------|--|---------------|---------------------------|------------|-----------------------|-------------|
| | Base | Quantity | Concentration | Monitoring Loc | Sample Loc | Measurement Frequency | Sample Type |
| Flow rate | Daily Maximum | M&R Million Gallons per Day (Mgal/d) | | Internal Monitoring Point | 001 | Continuous | METER |
| Flow, total | Monthly Total | M&R Million Gallons (Mgal) | | Internal Monitoring Point | 001 | Monthly | CALCTD |
| Liner Leakage Rate ^[1] | Average | <= 500 Gallons per Acre per Day (gal/acre/d) | | Receiving Water | 001 | Twice Per Month | CALCTD |

Notes (Ponds / Rapid Infiltration Basins):

1. See the action leakage rate schedule in part 4.F. of WTS-37, Guidance Document for Design of Wastewater and Other Detention Basins.

Ponds / Rapid Infiltration Basins for Sample Location 001 (Internal Outfall) To Be Reported Quarterly

| Parameter | Discharge Limitations | | | Monitoring Requirements | | | |
|------------------------------------|-----------------------|---------------|---------------------------------|-------------------------|------------|-----------------------|------------------|
| | Base | Quantity | Concentration | Monitoring Loc | Sample Loc | Measurement Frequency | S a m p l e Type |
| Depth of pond or reservoir in feet | Value | M&R Feet (ft) | | Receiving Water | 001 | Quarterly | VISUAL |
| pH | Value | | M&R Standard Units (SU) | Effluent Gross | 001 | Quarterly | DISCRT |
| Solids, total dissolved | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Quarterly | DISCRT |

Ponds / Rapid Infiltration Basins for Sample Location 001 (Internal Outfall) To Be Reported Annually

| Parameter | Discharge Limitations | | | Monitoring Requirements | | | |
|---|-----------------------|----------|------------------------------------|-------------------------|------------|-----------------------|-------------|
| | Base | Quantity | Concentration | Monitoring Loc | Sample Loc | Measurement Frequency | Sample Type |
| Alkalinity, bicarbonate (as CaCO ₃) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Alkalinity, total (as CaCO ₃) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Aluminum, total (as Al) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Antimony, total (as Sb) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Arsenic, total (as As) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Barium, total (as Ba) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Beryllium, total (as Be) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Cadmium, total (as Cd) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Calcium, total (as Ca) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Chloride (as Cl) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Chromium, total (as Cr) | Value | | M&R Milligrams per Liter | Effluent Gross | 001 | Annual | DISCRT |

Ponds / Rapid Infiltration Basins for Sample Location 001 (Internal Outfall) To Be Reported Annually

| Parameter | Discharge Limitations | | | Monitoring Requirements | | | |
|--|-----------------------|----------|---------------------------------|-------------------------|------------|-----------------------|-------------|
| | Base | Quantity | Concentration | Monitoring Loc | Sample Loc | Measurement Frequency | Sample Type |
| | | | (mg/L) | | | | |
| Copper, total (as Cu) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Fluoride, total (as F) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Iron, total (as Fe) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Lead, total (as Pb) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Magnesium, total (as Mg) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Manganese, total (as Mn) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Mercury, total (as Hg) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Nickel, total (as Ni) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Nitrite plus nitrate total 1 det. (as N) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Nitrogen, total | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| | | | M&R | | | | |

Ponds / Rapid Infiltration Basins for Sample Location 001 (Internal Outfall) To Be Reported Annually

| Parameter | Discharge Limitations | | | Monitoring Requirements | | | |
|---------------------------------|-----------------------|----------|---------------------------------|-------------------------|------------|-----------------------|-------------|
| | Base | Quantity | Concentration | Monitoring Loc | Sample Loc | Measurement Frequency | Sample Type |
| Phosphorus, total (as P) | Value | | Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Potassium, total (as K) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Selenium, total (as Se) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Silver, total (as Ag) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Sodium, total (as Na) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Sulfate, total (as SO4) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Thallium, total (as TI) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Solids, total dissolved | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Cyanide, weak acid, dissociable | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |
| Zinc, total (as Zn) | Value | | M&R Milligrams per Liter (mg/L) | Effluent Gross | 001 | Annual | DISCRT |

Special Conditions:

SA – Special Approvals / Conditions Table

| |
|---|
| There are no Special Approval / Condition items |
|---|

Reasonable Potential Analysis and Antidegradation Review:

The water used in this project meets drinking water standards, it's potential to degrade existing groundwater aquifers is minimal. Non-contact process water will be stored in a double lined (HDPE) pond with leak detection. Authorized discharges under this permit would be to Groundwater of the State of Nevada during landscape irrigation, dust control activities and fire suppression. Current groundwater levels are at 60 feet below ground surface (bgs) and general groundwater flow direction is South-East towards the Truckee river.

Flow:

It is estimated that the cooling water flow will average up to 200 gallons per day. Cooling water will be conveyed to a double-lined leak-detected storage pond for seasonal storage. The permittee is requesting a maximum 30 day average flow of 41,300 gallons.

Discharges From Future Outfalls:**Corrective Action Sites:**

The wastewater treatment system permitted under this discharge permit is located outside of the 6,000 feet Drinking Water Protection Area (DWPA) and not within a delineated wellhead capture zone for any public supply well.

Wellhead Protection Program:

There is no Bureau of Corrective Actions remediation site located within a five-mile radius from the center-point of the permittee's property.

Schedule of Compliance:

SOC – Schedule of Compliance Table

| Item # | Description | Due Date |
|--------|---|----------|
| 1 | The Permittee shall submit for review and approval two copies of an Operations and Maintenance (O&M) Manual, compiled in accordance with the appropriate sections of Nevada Division of Environmental Protection (NDEP) guidance document WTS-2, "Minimum Information Required for an O&M Manual for a Wastewater Treatment Plant." The O&M Manual shall be prepared by a Nevada Registered Professional Engineer or Division-approved qualified person. If prepared by a Nevada Registered Professional Engineer, the O&M Manual shall be wet stamped. | 8/1/2013 |
| 2 | The Permittee shall submit for review and approval two copies of an Effluent Management Plan (EMP), compiled in accordance with the appropriate sections of NDEP guidance document WTS-1B, "General Design Criteria for Preparing an Effluent Management Plan." The EMP shall be prepared by a Nevada Registered Professional Engineer or Division-approved qualified person. If prepared by a Nevada Registered Professional Engineer, the EMP shall be wet stamped. | 8/1/2013 |

Deliverable Schedule:

DLV– Deliverable Schedule for Reports, Plans, and Other Submittals

| Item # | Description | Interval | First Scheduled Due Date |
|--------|-------------|----------|--------------------------|
|--------|-------------|----------|--------------------------|

| | | | |
|---|---------------|-----------|-----------|
| 1 | Quarterly DMR | Quarterly | 7/28/2013 |
| 2 | Annual Report | Annually | 1/28/2014 |

Procedures for Public Comment:

The Notice of the Division's intent to reissue a permit authorizing the facility to discharge to groundwater of the State of Nevada subject to the conditions contained within the permit, is being sent to the **Reno Gazette Journal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. **5/27/2013**, a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator of EPA Region IX or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted to accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.650.

Proposed Determination:

The Division has made the tentative determination to issue / re-issue the proposed 5-year permit.

Prepared by: **Jason Ferrin, E.I.**

Date: **12/19/2012**

Title: **Staff I Associate**