The Permittee shall comply with and implement all of the following mandatory mitigation measures:

* Not involve the likely release of a polluting substance or sediments into surface water bodies or ground water.
* Not affect a species at risk, migratory bird, fish, and/or their habitat.
* Not affect any known cultural/historic resources.
* Not involve any other federal authorities.
* Not involve the development of works for the purpose of draining agricultural land.
* Chemicals must be stored in accordance with Government of Saskatchewan recommendations for on farm chemical storage.
* Spraying operations must be conducted as per the manufacturer’s application directions for both herbicide and pesticide (follow label directions).
* Nutrients must be applied according to soil tests, or recommendations for specific crop type.
* Care must be taken to ensure wildlife are not injured or killed or their habitat destroyed.
* All wastes including chemical containers must be collected and disposed of through an approved recycling facility or chemical retailer.

The Permittee shall comply with and implement the following mitigation measures that are applicable to the Permit Area and the activities authorized by the permit:

**Soil**

* Cultivate and plant on the contour rather than up and down slope to reduce soil erosion.
* Low to no-till should be performed to minimize soil erosion.
* Keep steep slopes (greater than 16% permanently covered in grass to minimize soil erosion.
* Crop residue should not be burned and a 35%-50% residue cover should be maintained.
* Saline areas should be converted to perennial forage or be continuously cropped and monitored every 4 or more years.
* Avoid seeding onto wet soils to reduce potential compaction.

**Vegetation**

* Any machinery entering the project area should be clean and weed free.
* Annual soil test should be performed in order to ensure proper rates of fertilization and prevent off site impacts such as nutrient leaching or surface water impacts.
* Broadcast application is not recommended, side banding or seed placement is preferable.
* Residual impact of herbicides cannot extend beyond the end of the permit period.

**Wildlife**

* Low to no-till should be performed to minimize habitat loss.
* Consider leaving marshy cover around the edge of wetlands, ideally in strips of 25-50 ft. This practice leaves habitat for wildlife and buffer strips of grasses, trees and other vegetation help to filter soil particles out of runoff.
* No treated seed should be stored within the project area to reduce wildlife mortality.

**Surface Water**

* Always maintain as great a distance as possible between a potential contaminant and a water source. At a minimum, fertilizer should not be stored within 150ft of a water source or waterbodies.
* Manure should not be stored within 300m of a watercourse.
* Mixing/loading of chemical and/or fertilizer should not occur within 150ft of the nearest waterbody.
* No containers are to be brought or handled at any water source. Mixing and loading should occur at the application site and water should be brought to the site with a nurse tank/water truck.
* Sprayer rinsate should be used as mix water following application directions or rinsate should be applied by spraying over treated areas following label instructions.
* Spraying operations should not occur on windy days (more than 20km/hr) without adequate drift protection.
* Spills are to be reported immediately to the Provincial Spill Control Line.

**Air Quality**

* Equipment to be maintained in proper working order.
* Crop residue is not to be burned unless properly authorized, and appropriate fire prevention equipment is in place.

**Human Health and Safety**

* Manure should not be spread within 800m of a residence.
* Application of insecticides within and near residences can be highly toxic to humans. Before application of insecticides information must be posted before and after application as per manufacturers and/or provincial guidelines.