

Year of study: 2015

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Date: December 15th, 2015

Context: The below information is provided as per condition 5.8 of the EPA consent to Teagasc of July 25th, 2012 on the field release of cisgenic potato line A15-031.

Planting of the 2015 site was completed between May 29th (GM Desiree), with non-GM Desiree and Sarpo Mira tubers sown June 2nd and June 10th respectively. Prior to planting, the site was prepared by deep ploughing, followed by two passes of a rotovator before drills were machine prepared with GPS guidance. Plots (n = 54 per site) were then marked out for each of the two sites within the field, such that both sites were positioned to ensure they did not encroach on the 2012, 2013 or the 2014 plots. All research operations were successfully completed during 2015 as planned. Harvesting commenced October 12th and was completed by October 14th. As per 2013 and 2014, different colour bags (e.g. white for Sarpo mira, red for GM Desiree and orange for non-GM Desiree) were used to distinguish between plots and all bags were sealed and labelled prior to removal from field. A total of 4259kg of potatoes in 194 sealed bags were removed from the field in contained transport and brought to the secure storage area for weighing. After bag weights were recorded, tubers were transferred into larger half tonne bags for steaming, which is underway. As per before, tubers are to be steamed for a minimum of 16 hours after which manual inspection will confirm tuber destruction before the material is removed for composting. The composting cycle will be for a minimum of 10 months.

As this is the final year of the field work, no tubers are being retained and all stocks will be destroyed. In spring 2016, the site will be prepared for grass sowing and once established will be used by grazing animals. Volunteers will be kept in check by specialist herbicide applications. As per license requirements, the AMIGA field site will be monitored from 2016 – 2020.

The below additional information is provided in accordance with condition 5.8 of the consent for notification No. B/IE/12/01. Specifically, detail is provided in regards to condition 3.3, 3.5 and 5.6.5 as follows:

Condition 3.3:

During the growing season, the site was inspected twice weekly and there was no disturbance to the site before, during or after the 2015 growing season. There was no evidence of burrowing by animals within or around the perimeter of the site during the growing season. During the period of June-July no volunteers were observed from within the original 2012 plot. In contrast up to 39 volunteers / plot were noted from the 2013 plots and up to 54 were/plot were noted for the 2014 plots. As per previous years, no differences were recorded between varieties. To minimise the use of herbicide on site, volunteer populations were controlled by fortnightly mowing. This proved to be a very effective strategy as it checked the growth of the volunteers which allowed time for the sown grass to grow and out-compete the volunteers. As a result, counts made in October recorded no evident volunteers in the 2013 or 2014 plots. Continued observations will be made in 2016.

As per condition 3.2.1, no potato crops were sown within the 40m minimum distance.

Condition 3.5:

Harvesting was completed by mechanical means and all exposed tubers/tuber pieces were handpicked from the soil surface. As per condition 3.4.1, the tubers from each plot were collected in labelled bags which were then sealed on site before removal in contained transport to a secure storage area on the Oak Park campus, as verified by EPA inspector. All plots were repeat harvested (x2) in accordance with condition 3.4.2 to ensure the removal

of all visible tubers and/or tuber pieces. Material collected during the post-harvest inspections were placed in labelled bags and removed as per condition 3.5.1. Dependent on the weather conditions the site will be prepared for ryegrass sowing as early as possible in 2016 (condition 3.5.2). No tubers taken from the 2015 site have been used as animal feedstuff (condition 3.5.4).

Condition 5.6.5:

Post-harvest, monthly inspections have been ongoing (17/11/2015 and 9/12/2015) and no groundkeepers, volunteers were evident within or adjacent to the site. This monitoring will continue as required by the license.